Georgia State University

ScholarWorks @ Georgia State University

Film, Media & Theatre Dissertations

School of Film, Media & Theatre

8-9-2022

Bosses, Mobs, and Trash: A Transactional Approach to Videogame Narrative through Cooposition

William Kemp-Wilcox wkemp2@student.gsu.edu

Follow this and additional works at: https://scholarworks.gsu.edu/fmt_dissertations

Recommended Citation

Kemp-Wilcox, William, "Bosses, Mobs, and Trash: A Transactional Approach to Videogame Narrative through Cooposition." Dissertation, Georgia State University, 2022. https://scholarworks.gsu.edu/fmt_dissertations/21

This Dissertation is brought to you for free and open access by the School of Film, Media & Theatre at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Film, Media & Theatre Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

BOSSES, MOBS, AND TRASH: A TRANSACTIONAL APPROACH TO VIDEOGAME NARRATIVE THROUGH COOPOSITION

by

ANDREW KEMP-WILCOX

Under the Direction of Dr. Greg Smith, PhD

ABSTRACT

This dissertation project presents a novel approach to videogame narrative studies through the lens of the active opposition of enemies, from boss monsters and villains down to the lowliest encounters with irritating "trash" enemies. Using transactionism—a theory of existence and aesthetics that claims all experience moves across a single physical plane—this dissertation coins and defines the concept of cooposition, a phenomenon in videogames that allows for narrative activity as co-constituted by the player and the game through active, productive antagonism. After identifying and exploring the lingering difficulties in accounting for videogame narrative in a complete and satisfying theory, this project establishes cooposition as an essential and powerful force of videogame experience before breaking down four permeable categories of videogame enemies. Through extensive examples, key texts, and gameplay experience, this project explores ideas related to how videogame narratives construct player identity, set aesthetic rhythms, and establish and manipulate narrative space and time. At issue is how games use enemies as narrative technique, how narrative in videogames emerge through cooposition, and how players co-create narrative phenomenon by "defeating" the game, productively. This is a first step towards a new theory of game narrative that emerges from gameplay experience, rejecting cognitive theories of literary narratology and suggesting new design strategies for game narrative that fully capitalize on coopositional dynamics.

INDEX WORDS: Game studies, Narrative studies, Transactionism, Game aesthetics

BOSSES, MOBS, AND TRASH: A TRANSACTIONAL APPROACH TO VIDEOGAME NARRATIVE THROUGH COOPOSITION

by

ANDREW KEMP-WILCOX

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

PhD in Moving Image Studies

in the College of the Arts

Georgia State University

2022

Copyright by William Andrew Kemp-Wilcox 2022

BOSSES, MOBS, AND TRASH: A TRANSACTIONAL APPROACH TO VIDEO GAME NARRATIVE THROUGH COOPOSITION

by

ANDREW KEMP-WILCOX

Committee Chair: Greg Smith

Committee: Ethan Tussey

Jennifer Barker

Daniel Reynolds

Electronic Version Approved:

Office of Academic Assistance

College of the Arts

Georgia State University

August 2022

DEDICATION

For Merrill, for her outsized and unconditional support during this difficult process, for feigning interest in my long-winded rants about cognition, for providing insightful and exciting new ideas to pursue, for sparring with me when I felt inadequate, and for choosing to share her life with a husband who insists that playing videogames is, in fact, his work.

For my mother, Susan, whose financial and emotional assistance through this project cannot be overstated or overappreciated. She made it possible to continue my education, and for that there can never be thanks enough.

And for my daughter, Harriet, who was born in the middle of this project and can only assume daddies just live in a room with the books and computers. My pencil's down, little mess. Let's play.

1 ACKNOWLEDGEMENTS

This project would not be half of what it is without the assistance, guidance, and patience of my PhD advisor, Greg Smith. His voluminous insight into both the theory surrounding this project and the functions of the academic world have formed the basis of my understanding of the rigors of research, writing, and the professional standards of the job. While I struggled, as of course I would, he never failed to encourage me and urge me forward.

I also want to acknowledge the members of my dissertation committee, each of whom has provided invaluable assistance and gave of their time and energy to see my succeed: Ethan Tussey, Jennifer Barker, and Daniel Reynolds, whose work inspired much of what follows.

I want to extend thanks to the staff and faculty at Georgia State University and the School of Film, Media and Theatre for providing support and knowledge along the way, all of which contributed to this project in immeasurable ways. In particular, I want to thank my teachers Phil Lewis, Alessandra Raengo, Angelo Restivo, Ted Friedman, and Cynthia Hoffner for mentorship, both inside and outside of the classroom.

Special thanks are in order for the faculty and staff at the Creative Media Industries

Institute at Georgia State University, especially David Cheshier and Brennen Dicker, for
allowing me to work with the students who will drive the game industry in the coming years.

And finally, I would like to acknowledge the graduate students at GSU for their friendship and vigorous discussions, and who stood in the trenches alongside me as this project came together: Tanya Zuk, Ashley Jones, Ahmet Yuce, Shady Radical Patterson, Derrick Jones, Daren Fowler, Christopher Minz, Christopher Cox, Brooke Sonenreich, Cameron Kunzelman, Colin Wheeler, Jayson Quearry, Michael Bass, Geoffrey Henry, and many more. Thank you to all.

2 TABLE OF CONTENTS

1	AC	KNOWLEDGEMENTSV	ΊΙ
2	TA	BLE OF CONTENTSVI	ΙΙ
I	IST C	OF FIGURES	ΧI
1	TR	ANSACTIONISM AS AN ALTERNATIVE TO COGNITIVE MODELS O	F
VIDEO	GAMI	E NARRATIVITY	. 1
	1.1	Introduction: Toriel	. 1
	1.2	Narratology and Videogame Theory	. 7
	1.3	Videogames and Performance Theory	21
	1.4	Transactionism as Alternative to Dualism	30
	1.5	Design and Critiques of Subjectivity	35
	1.6	Rhythms of Narrativity	43
	1.7	Enemies and Cooposition	54
2	VII	LLAINS: COOPOSITIONAL AVATARS OF NARRATIVE	
ORIEN'	ГАТІС	ON	62
	2.1	Introduction: Vaas	62
	2.2	The Role of the Videogame Villain	66
	2.3	More Than Just a Mountain	74
	2.4	The Problem of the Avatar	79
	2.5	Villains as Coopositional Avatars	83

	2.6	Identity and Inverse Orientation	90
	2.7	The Point on the Diagonal	94
3	во	OSSES: UGLY EXPERIENCE THROUGH LUDIC ARRHYTHMIA	96
	3.1	Introduction: The Pigs	96
	3.2	The Boss Monster	100
	3.3	Ludic Rhythm and Arrhythmia	107
	3.4	Ugly Bosses, Ugly Rhythms	117
	3.5	The Pigs, Overcome	126
4	MO	OBS: THE FEELING-THROUGH OF NARRATIVE SPACE	129
	4.1	Introduction: The Night Folk	129
	4.2	Mobs in Spatial Regimes	133
	4.3	Videogame Space Through Cooposition	139
	4.4	Feeling-Through Narrative	144
	4.5	The Night Folk and the End of Day	157
5	TR	ASH: THE PERIPATETIC TASK OF KILLING TIME	163
	5.1	Introduction: Kefka's Tower	163
	5.2	Trash, the Time Between Here and There	167
	5.3	Peripatetic Event Time	170
	5.4	Videogame Time, in Brief	174
	5.5	Killing Time	181

5.6	Peripatetic Temporal Presence	
5.7	Narrative Dilation and Dead Time	187
6 C	ONCLUSION	193
REFE	ERENCES	196
APPF	ENDIX: LUDOGRAPHY	206

LIST OF FIGURES

Figure 1: Graphing "Some Narrative"	14
Figure 2: Csikszentmihalyi's Flow	46
Figure 3: Toriel's Complex Fight Pattern (Undertale)	53
Figure 4: Goomba/Mushroom Designed Confusion	56
Figure 5: Far Cry 3 Front Cover	62
Figure 6: The villain on the cover and in-game in Frankenstein's Monster	70
Figure 7: Frobozz on the cover of Zork II	71
Figure 8: The mountain guides the player in Journey	75
Figure 9: The Companion Cube in Portal	77
Figure 10: The Pigs	98
Figure 11: Kefka as an early boss in Final Fantasy VI	103
Figure 12: Kefka as a final boss in Final Fantasy VI	103
Figure 13: The first three boards of the Donkey Kong cycle	105
Figure 14: The "final boss" board of Donkey Kong	106
Figure 15: David Szymanski's Elden Ring rhythm tweet	118
Figure 16: Internet joke about Elden Ring's arrhythmia	120
Figure 17: Fallingstar Beast. Yellow boxes indicate vulnerable areas.	121
Figure 18: Fallingstar Beast. The boxes have vanished with no explanation	122
Figure 19: The Night Folk	130
Figure 20: Final Fight's 2D regime	137
Figure 21: Sifu and the 3D regime	137
Figure 22: 3D Monster Maze (1981)	150

Figure 23: Alien: Isolation (2014) updates the maze	151
Figure 24: Westworld's maze of actualization	155
Figure 25: The World Map in Final Fantasy VI	165
Figure 26: Penny-Arcade for June 22, 2022	173
Figure 28: A note in the present about the past in DreadOut	186
Figure 29: The space of temporal labor in FNAF	190

1 TRANSACTIONISM AS AN ALTERNATIVE TO COGNITIVE MODELS OF VIDEOGAME NARRATIVITY

1.1 Introduction: Toriel

I had an accident while climbing Mt. Ebott. Through sheer bad luck, I tripped and fell into a deep chasm populated by monsters, where a strange talking flower immediately threatened my life. I escaped certain death thanks to a kind, motherly monster named Toriel who guided me to her home in the underground. Along the way, Toriel taught me how to resolve a conflict with a grumpy Froggit and demonstrated how to navigate spike fields and other traps. Eventually, Toriel asked me to wait alone in a safe spot. I wandered off, of course, and stumbled into a fight with a pathetic little flying creature called a Whimsun. Without Toriel's guidance, I wasn't sure how to shoo the critter away safely. I thought back on some of my previous adventures in other worlds and remembered a trick I'd learned for hunting Pokemon—to make them compliant, you usually needed to attack. So I took aim at the poor Whimsun, hoping a little pain might shoo it away. I miscalculated and swung too hard, killing the creature. I was crushed; I didn't want to kill anything. I dismissed the Whimsun's death as a regretful learning experience.

I finally found Toriel, who had run ahead to prepare her house for a guest. She offered me baked snacks and told me it would be OK if I called her "mother." I liked her, but after resting in her cozy guest room I came to realize that she considered my quest to be over, when I knew it was just beginning. I didn't belong here and had to get home. I hadn't started this adventure to just end it eating cookies, and so I made a break for the back door. She blocked my path, crestfallen. She told me I would have to go through her if I wanted to explore the rest of the underground, because it was too dangerous. I would have to prove my skills.

I recognized this, a test to make sure I was ready for adventures ahead. I thought about that poor Whimsun and tried a diplomatic approach. I pleaded with Toriel and complimented her, but Toriel brushed all of that off. She attacked me, and her strikes were terrifying, much more complex than any I'd yet seen in the underground. Finally, I decided Toriel must have *wanted* me to strike her, and so I did. My hits were weak; I barely scratched her. After every tiny hit, I tried again to calm her down. When that didn't work, I hit again. Then, suddenly, one strike went very wrong. Instead of barely scratching her, I cut her deep. Toriel dropped to one knee, mortally wounded. Even while dying she called me her "child" and offered advice on navigating the underground. And then she was gone.

I sat with that moment for a while, trying to figure if I could bring her back. Maybe if I went back into the house, I would find her recuperating in her bed. But the house was empty. She wasn't coming back, and it was my fault. I finally left, guilty that I'd been careless and destroyed a person who had shown me kindness. Toriel had stopped me because she said it wasn't safe for me to be loose in the underground. I assumed she was protecting me from the monsters, but now realization creeped over me that she may have been protecting the monsters from me, a person who had now committed two murders in the underground through ignorance of how the world worked. Killing Toriel hung over the rest of my quest. Suddenly, monster lives meant more than my own. Toriel's death taught me to respect the creatures I found and changed the trajectory of my journey. I never killed again.

This story describes my early moments with the videogame *Undertale* (2015) from developer Toby Fox, which has sold over a million copies and cultivated a sizeable, passionate community of fans who discuss the narrative, characters, and lore in countless forums and groups. The specifics of my encounter with Toriel aren't the same for every player; there *is*, in

fact, a way to spare her life and still continue your adventure. Although her attacks are designed to appear scary, they're ultimately harmless as Toriel avoids actually landing any blows. All a player has to do to end the encounter is *nothing*—choose not to attack (through an option called "spare"), round after round, and if you do, she eventually decides to let the player go out into the world. There are no definite numbers on how many *Undertale* players have the same experience I did, or how many successfully spared her or how many intentionally killed her (the game is well-known for its possible "Pacifist" and "Genocide" play routes). Based on the design of the fight, I imagine my experience is typical. The encounter is a clever inversion of what players understand as a typical boss fight: a big, powerful creature at a threshold, placed to gate progress to the next phase of the game. A new *Undertale* player receives very little information about sparing monsters, and the textual feedback in the encounter deliberately misleads ("Ironically, talking does not seem to be the solution to the situation," is the response when the player chooses the Spare command. This choice will save Toriel, but explicitly lies to the player and claims it to be ineffectual.) Players are also likely experienced with other games and will assume their attacks will land with a standard amount of damage, an assumption that extends from traditional level progression models. But in the Toriel encounter one strike suddenly and unexplainably hits for much more damage with no warning or contextual feedback—it just happens. A strike that appears to be just another in a low-damage string inexplicably turns lethal.

In other words, despite the easily accessible pathway to sparing Toriel, the encounter is purposely designed to mislead the player into unintentionally killing her. If, like me, the player developed emotional attachment to Toriel, the encounter is therefore designed to produce an affective response of shock or guilt or regret, giving the Toriel encounter enormous importance in the narrative of *Undertale*. It not only changes the game state to allow for player advancement,

but directly constitutes the emotional weight that will run throughout the play experience. The player character is a human being, and the human ability to kill the monsters of the underground motivates the actions of the other characters the player will meet along the journey. The player's emotional response to the death of Toriel will orient and define the player character's choices as the game progresses. If the player does not care about what happened to Toriel, then the monsters ahead are in for a rough time as the player may choose to embark on a genocidal conquest. If, like me, the player regrets their actions, then the story becomes one of tragedy and sorrow and, perhaps, hopeful redemption.

But where are these narrative paths in *Undertale* located? I am not simply asking about the scripted events of the game, pre-coded encounters that trigger or don't based on particular player actions. There are no dialogue or backstory options to define the player character's personality and motivation. The story of a playthrough of *Undertale* develops and unfolds largely through carefully-designed encounters with enemies—encounters as significant as the Toriel confrontation all the way down to that random, sad Whimsun. The story, in large part, is *about* the player's relationship with videogame enemies, and assumptions and expectations like those I experienced. *Undertale*'s story, then, is constituted somewhere in the space between traditional rigid elements we might identify as game narrative and a more fluid set of elements such as player belief, experience, perception, and physical skill. These latter elements are essential to the narrative the player experiences, without seeming to belong to traditional definitions of narrative at all.

This dissertation project is about videogame enemies and the ways in which they are conceived, designed, perceived, and ultimately experienced as phenomena of videogame narrative, which I will argue is a permeable, contingent, and co-constituted phenomena of the

world through a naturalist model of transactionism. Videogames, both narrative and nonnarrative, are in many ways defined and classified by the nature of their enemies, but
surprisingly little attention has been paid to enemies throughout the history of game studies as a
discipline, despite their ubiquity. Select almost any game at random from the shelves at a box
store, or from the game catalog on the digital distribution platform Steam, or from the old and
broken arcade cabinets gathering dust in warehouses, and you are likely to find anywhere from a
handful to hundreds of unique, proprietary enemies built and designed to oppose to the player's
actions, provide diverse challenges, and generate fun and excitement through active antagonism.
Tabulating the history of videogames, it seems no exaggeration to say the majority of all
collective play time has been spent by players navigating enemies of some kind. Despite that,
game studies scholars have shown little interest in analyzing what it means that videogames are
willing to put a face onto its oppositional strategies and techniques.

Certainly, important work has been done on the nature of videogames to require effort and provide obstacles to completion. Espen Aarseth famously categorized videogames as ergodic texts, a category of media that require nontrivial effort to traverse, altering the relationship between the text and the user in meaningful ways (Aarseth 1997). Jesper Juul wrote about games as an artform that not only can be failed and invite failure, but also promote an expectation of failure on the part of the user, so that *not* failing at any point while navigating the text might be considered a mark against the game (Juul 2016). Mia Consalvo explored the culture and unique pleasures surrounding cheating in videogames, a phenomenon that is both encouraged by and irrelevant without the active opposition of the game's enemies or other players (Consalvo 2007). But these are explorations of difficulty, not of the game's enemies themselves, which, again, *is* the primary mechanism of most play.

Before embarking on a serious look at videogame enemies, I must address two issues, one definitional, the other theoretical. First, it must be stated clearly that there are many different varieties of oppositional activity in videogames, of which enemies are only one. I will demonstrate the necessity for separating enemies, but for now suffice to say that I am defining "enemies" as figures expressing agency that appear in videogames in an active role opposing player progress, goals, pleasure, experience, or other affective, narrative, and experiential phenomena that emerge during a gameplay session. In narrative games, enemies are typically associated with a particular world or situation the player navigates or encounters as part of the narrative experience, and it is generally understood that enemies must be defeated, avoided, or otherwise neutralized through available game mechanics for the player to progress. The phrase "expressing agency" is critical to my definition, as enemies express the suggestion of a mind working on behalf of the game against the player, whether or not that is true of the underlying code. For example, in *Donkey Kong* the barrels that roll toward the player have been set in motion by the title monster and are perceived to have no agency of their own. This is not precisely true, as the barrels are programmed to react to the player's directional inputs in certain situations, to increase the likelihood of a collision, but we are not only speaking here of the game's programming and code, but of the emergent narrative phenomena that depends on the player's expectation and understanding of the game world. Since players initially encounter barrels as inanimate obstacles, we will not treat them as enemies, whereas the fireballs in *Donkey* Kong, which contain markings that indicate the presence of eyes and appear to chase after Mario according to their own will and agency, are enemies. I will expand upon this distinction and its importance at length in Chapter 2.

As for my theoretical approach, one possibility for studying videogame enemies is to look at them through a lens popular in other media disciplines: the literary. Certainly literary narratology (as distinct from other forms, such as film narratology) has shown no such hesitation of theorizing the role, function, power, position, construction, and constitution of the villain in narrative. However, here we run into a major difficulty, because the discussion of literary narrative theory and videogames together is so historically fraught in game studies that even describing how it came to be fraught in the first place comes with its own tricky protocols. Therefore, before diving seriously into enemies, this chapter is instead going to take a long look at what I see as the continued struggle to define videogame narrative. I will briefly touch upon game studies' past arguments—while relitigating them as little as possible—and examine the ways in which the field has attempted to move beyond them on unsatisfactory paths. I'll then outline an alternative theoretical approach I'm calling *cooposition*, a critical element of videogame experience which emerges from the model of transactionism found in the work of Daniel Reynolds, itself drawn from the naturalist and anti-dualist philosophies of, among others, John Dewey. Cooposition describes the co-constitution of narrative through cooperative antagonism. Before getting to that, however, it's important to take an extended look at how dualism has thoroughly confused the issue of how, or even whether, videogames produce narrative at all.

1.2 Narratology and Videogame Theory

Undertale is just one example of a robust developing tradition of ambitious videogame stories. In recent years, titles as diverse as *Undertale*, *Red Dead Redemption 2*, *Disco Elysium*, *The Last of Us Part II*, *Control*, *Death Stranding*, *Deathloop*, *It Takes Two*, and others have offered rich and rewarding stories within and throughout the mechanics of play. As writers like

Janet Murray have predicted, videogame designers are beginning to move beyond early, fumbling attempts at game stories which relied on remediating earlier narrative forms and have now more fully embraced techniques seemingly natural and native to games as a means for crafting stories (Murray 1997). *Undertale*'s exploration of monsters, guilt, and hatred is an example of a story that *only* works as a videogame, relying as it does on the relationship between players and the standard cannon fodder videogame enemies the game hopes they'll reconsider.

And yet as videogame narrative thrives, experiments, and expands, the academic accounting of videogame narrative in recent years has not. In the last decade, relatively few significant books have addressed the many questions that remain about videogame narrative, likely because many game scholars have understandably gravitated towards gaming's more visibly-pressing problems, from the turbulence in player communities to the economic and social growth of esports, alt and indie games as rising avenues of expression for marginalized communities, and exploitative industry practices. Humanities scholars may also find themselves reluctant to step back into the arena of videogame narrative, a topic that holds historical weight in the development of the field. But today, nearly two decades after Gonzalo Frasca argued that the so-called "narratology vs. ludology" argument was overblown (Frasca), the stalled study of how games build and communicate narrative, and especially how players perceive and reveal that narrative, suggests a lingering anxiety in scholarship around investigating those questions lest scholars be perceived as out-of-touch with contemporary developments in the field or, worse, as a novice. At many academic conferences, game studies panels warn young scholars not to waste time discussing such an exhaustively argued topic. Aarseth, fed up with young scholars cracking open the argument to prove their bonafides, made it point one in his primer on the field that new games scholars shouldn't mention 'the war.' "Without exception," Aarseth argues, "the

writer doesn't have a clue, and the paper is typically about something entirely unrelated to the issue of whether games are narratives or not" (Aarseth 2019).

My concern with the history of narrative debate in videogames is, thankfully, not with the particulars of the ludology/narratology debate, but rather its lingering effects within the community. In Aarseth's talking points, he argues that the relationship between games and narrative is a topic worthy of discussion, preferably in a way that breaks fresh ground, rather than rehashing the past. In my view, the limited writing in recent years on game narrative has done neither, precisely because the question of game narrative has become a pan hot enough that Aarseth felt compelled to tell newcomers not to touch it. I believe that "hot pan problem" is why there appears to be a disparity between videogames stories, which have been expanding, innovating, and diversifying, and academic attention to narrative, which has failed to produce a satisfying resolution for fundamental questions despite—or rather, because—the starting point for discussion was classical and literary narratology.

It's true that many of the ludologists were trained in classical narratology and developed their theories about the medium affordances of videogames accordingly. But many found classical narratology to be an uncomfortable fit with the stories games offered, and especially with the types of stories that games had the *potential* to offer. Some concluded that games were not delivering narrative in any traditionally understood sense, leading to such strange bedfellows as Eskelinen and Roger Ebert, both of whom argued in different ways that games could *contain* narrative without *being* narratives. Eskelinen infamously attacked Murray's hopeful discussion of the possibility for game stories by arguing that "Outside academic theory people are usually excellent at making distinctions between narrative, drama and games. If I throw a ball at you I don't expect you to drop it and wait until it starts telling stories" (Eskelinen). Ebert, meanwhile,

while debating with game designer Kellee Santiago, wrote: "one obvious difference between art and games is that you can win a game. It has rules, points, objectives, and an outcome. Santiago might cite a immersive game without points or rules, but I would say then it ceases to be a game and becomes a representation of a story, a novel, a play, dance, a film" (Ebert). These are functionally identical positions.

To respond to these points, game narrative scholars had to overcome that essential dilemma, the presumed gap between player agency and narration. Narratology has long granted that the receiver of the text is an active participant in narrative construction but holds that the receiver's role is limited to mental activity required for perceiving and building meaning. But videogame stories are powered by affordances that allow players active generation of narrative content. In Disco Elysium, a player's choices determine the skills and politics of the lead character, the fate of numerous side characters, the resolution of the central detective mystery, and whether political violence will erupt in the city streets of Martinaise. Videogames are defined by, and in fact rely on, variation, interaction, agency, and in many (but nowhere near all) cases, difficulty. It's insufficient to say that these affordances are incongruous with classical, structuralist, and dualist models of narratology; in fact, they are often outright incompatible to those models. The original debates about videogame stories outlined these problems at length, and the small group of scholars who have continued to investigate game narrative in the years since have spent significant time and energy attempting to bridge the gap, to redraw the videogame medium inside the circle of narratology, or to redraw the circle to include videogames, with varying results. The most notable of these is Marie-Laure Ryan, who concedes that games do not provide narratives in the classical sense, citing player agency, choice, and branching pathways as incompatible with models of narrative told by a narrator, even the

possibility of an implied narrator often associated with film narration. In her book Avatars of Story, Ryan works to marry studies of narrative with digital technology by acknowledging and embracing fluidity and agency, suggesting that games and digital media do not explicitly narrate stories, which she defines as fixed cognitive constructs containing certain mandatory elements, but instead contain varying degrees of narrativity (Ryan 2006 9-10). This adds what amounts to a volume slider—or, more accurately, a series of sliders—to classical semantic narrative models. Ryan's highly structuralist proposal is to consider how much narrative is present in a digital text based on categories such as spatiality, temporal organization, intelligent agents, and causal chains. A digital text that rates highly in these categories would contain high degrees of narrativity, even when player agency is present. It follows that as player choice and possibility spaces expand, narrativity would decrease in opposite correlation, making the rigid narrative of Red Dead Redemption 2 an example of high narrativity, and Mario Paint an example of low (or nonexistent) narrativity. Ryan offers even more granular classification options to help researchers identify a game's narrativity in the form of mostly binary scales—is a game more fictional or nonfictional, more scripted or emergent (Ryan 2006 12-16)?

Ryan's book contains a tidy, structural solution that allows narratology to enter into the digital realm, or not, as the reader sees fit. But, consequently, despite its attempts at clarity, Ryan's expansive ideas about narrative leave open the possibility that those invested in the non-narrativity of videogames can dismiss a game narrative through interpretation. For example, one of Ryan's many proposed scales of narrativity measures diegetic to mimetic content, a distinction she notes goes back to Plato and generally maps the dichotomy of telling and showing. "As the definition indicates, diegetic narration presupposes language, either oral or written... A mimetic narration is an act of showing, a visual or acoustic display" (Ryan 2006 13). For Ryan, mimetic

narration relies on the narrator's voice receding behind the mimetic act, such as voiced character dialogue that is designed and coded into the game as a triggered narrative event, but which elides its designer to appear natural and embedded in the game's story. Written character dialogue might also be considered mimetic, albeit closer to the diegetic end of the scale. When Toriel in *Undertale* says I must prove I'm ready for the catacombs, that is a semi-mimetic act driven by the game's hidden narrator deliberately designed to disorient and confuse me into making a fateful decision to attack or not, depending on my level of suspicion. Those semi-mimetic dialogues are combined with fully diegetic (and unreliable) prompts that explain to me that talking won't resolve the conflict. The double whammy of diegetic and mimetic dialogues is the source of my confusion as a player.

But the choice of what happens next is still mine, to at least some extent: to spare or attack Toriel. My action creates a narrative event, but is my action mimetic in the game's narrative? Is it a narrative event at all? When I attacked and killed Toriel, I created an irrevocable narration event that altered my path through the game and my interpretation and experience of the game's story. Critically, I chose an event that the narrator not only accounted for but *designed*, a formative event in the story of *Undertale* that is neither fully the game's decision nor my own, but fully designed to allow my informed choice to alter the narrative path. It's this feature of videogames, the player's role in the story and power to decide what happens next, that gives skeptical critics an opening to deny videogames the narrativity they appear to contain, in large part because it seems counterintuitive and paradoxical that the receiver of the story could expand beyond the limits of their active mental processing of the story and into a direct role choosing the direction of that story. How, then, can we even call them the receiver?

Writers as far back as David Sudnow have observed the phenomenon of becoming "one" with the game, with growing so familiar with bodily movements and manipulations required to play that the controller and even the characters on screen seem to become extensions of the body (Sudnow). The player recedes behind the physical action that stands between the player decision and the on-screen action. A trigger on a controller ceases to be the mediator of the on-screen gun, it *becomes* that on-screen gun, or in the case of the Toriel fight, a press of the A button becomes a violent strike. Does that mean my actions are diegetic in Ryan's account, because of the communication that pulses through the controller, or mimetic because of my physical movement and exertion? Or, as a third option, do we remove my action entirely from the narrative causal chain? The objection, for proponents of this option, is that the player cannot be telling the story since the player does not know how the story will end, or even what the next immediate event will be, or the result of this one strike or action. The player is living the story *now*, not choosing a discourse in a retelling.

The problem with this belief that games contain "some narrative" becomes apparent in the Toriel example. The game's diegetic and mimetic narration forces me into a situation where I must make a choice. I do so, and then the result of my action becomes the business of the game once again. But if my actions are denied narrativity because I am doing, not making, then the best a videogame narrative can hope for is a dotted line of narrative actions (Figure 1), where the game's narration presents choice points that wait for my action, which are removed from the narrative causal chain because I performed them. In this construction, my button press that killed Toriel would not fall into the game's narrative at all. It's an event that happened, the game recognized it, but it somehow breaks the game's narrative chain, leaving a tattered and scattered mess of narrative fragments that can only be assembled through cognition as a coherent

narrative. This possibility resembles the cognitive limitations placed on receivers in literary narratology and offers a path to resolving the narratological paradox of videogames without altering narrative theory but is unsatisfying because it ignores intentional actions. When I fight Toriel and choose which buttons to press, I attempt to progress the narrative in the direction of my choosing. My actions hold narrative intent. I am trying to tell the story, and my narrative events are part of the narrative chain. Faced with the difficulty of such a radical reversal of narrative theory, many scholars have decided on a different path, that of denying videogames narrativity at all.

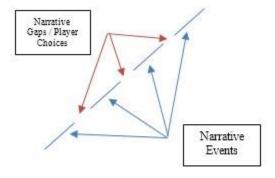


Figure 1: Graphing "Some Narrative"

By claiming that narrative events are produced and driven by the player, skeptics of game narrative are free to conclude that the kind of mimetic player action found in game narrative is not narration, creating a theoretical trap: the more a game relies on player mimesis (i.e., the doing), the less like a narrative a game is; the more rigidly the game tells its story (the making), the less it appears to be a game, since most definitions of videogames offered by scholars tend to assume player agency as a central component of the form.

And, yet, games appear to tell stories. Ask most players if they've ever played a videogame with a good, meaningful story, and you'll hear a canon of known classics: *Final Fantasy VI* and *VII*, *Planescape: Torment, Spec Ops: The Line, The Last of Us*, and many more.

That's why other scholars like Ryan who have invested in the clear narrativity of videogames have attempted to overcome the problems of player action with their own version of the "some narrative" proposal. For another example of this, we can look to Henry Jenkins and his writing on videogame narrative design as what he refers to as "narrative architecture." Jenkins immediately identifies the difficulty in giving videogames narrativity under classical narrative models, but holds firm that videogames are "story-like" in a manner closely aligned with Ryan's scales of narrativity. Jenkins's solution to bridging the narrative gap is to treat games as designed architectural spaces that must be navigated and explored. Designers might thread narrative story elements (either mimetic or diegetic) throughout the architectural space, using software triggers to create causal event chains as the player progresses. Jenkins ties this kind of environmental videogame storytelling to the experience riders enjoy on some higher-end theme park attractions and distinguishes between two kinds of narrative experiences. The first, embedded, refers to fixed narrative elements that are told directly to the player, elements like cut scenes, character dialogue, audio logs, and other standard game story elements. The second, *emergent*, refers to the story the player develops across their gameplay sessions (Jenkins 2006 123). If Player A struggles with Lakitu in Super Mario Bros. and Player B does not, their respective emergent narratives are superficially different, with Player A remembering how the flying enemy tormented Mario on the journey and Player B not remembering them much at all.

Of Jenkins's two terms, emergent narration has had the most life in discussions of game experience. Some scholars have used the concept of emergent narrative to bypass thorny discussions of game narrative entirely, while others have adopted it to explain the narrativity of games that would appear to contain little direct narration at all. Examples include *Dear Esther*, *Gone Home*, or *Everybody's Gone to the Rapture*, signature games in the genre known

(sometimes derisively) as "walking simulators." *Dear Esther*, in particular, provides little to nothing in the way of a challenge, opposition, or direct diegetic narration. The player simply walks from one end of a long map to the other, listening to fragmented poetry and bits of prose that hint at a story of loss and regret. The story seems to concern the narrator's wife, who has died, perhaps in an accident, but a player must traverse the game multiple times to hear every line of dialogue, but even with all of the pieces, the full picture never becomes clear. Instead, players of *Dear Esther* tend to speculate and intuit their own theories on the game's story. But is that enough to call *Dear Esther* a narrative game? Not according to Ian Bogost, who wrote in *The Atlantic* that environmental storytelling is not storytelling at all, but just a strategy for designing environments. "Are the resulting interactive stories really interactive, when all the player does is assemble something from parts? Are they really stories, when they are really environments? And most of all, are they better stories than the more popular and proven ones in the cinema, on television, and in books?" (Bogost)

Even for those who acknowledge games may tell stories, and Bogost is among them, this question of whether or not videogames tell "good" stories or merely remediate narrative fiction from other forms into an awkward assembly of narrative technique and dynamic, algorithmic gameplay has been asked by many skeptical game scholars. Even Marie-Laure Ryan has conceded that games may simply only be capable of inferior stories at this point, which seems to me a disappointing claim. For writers who wish to focus their research on other areas of interest, Ryan's claim provides ammunition in the argument that game stories simply aren't of interest, bracketing them off from the field of study as someone studying refrigerators might ignore the child's drawing stuck to its front. As someone who once spent considerable professional effort attempting to think of the best way to tell stories in different engines and game genres, and how

to reach players emotionally and intellectually, I am well aware of the challenges of using games as a storytelling medium. However, I take the optimistic view that not only may game narrative grow and develop in complexity over time, but that it has already come very far because designers have learned how to design for players who have learned how to play. Most importantly, my position is that the quality of the game story is of negligible importance at this stage. Stories may not be the primary feature of games, or even the most natural fit, but nevertheless stories are told, and the marriage of narrative to code, algorithms, branching causation, player agency, active competition, environmental design, and other affordances of the videogame medium represents an important cultural movement and moment. As television and cinema viewership declines in young people who are drawn to non-narrative influencers and attractions on digital platforms, I don't find it outrageous to suggest a possibility that for some people, games might deliver a sizeable portion—or even the majority—of their narrative input within a foreseeable time frame. Therefore, it is incumbent on game scholars and narrative scholars to account for how games deliver narrative, and how players consume it, to fully account for the ongoing cultural conversation and human engagement with storytelling, regardless of whether or not these stories are "bad." Such discourse only reanimates the outdated and quixotic quest for the "Citizen Kane of videogames" and forestalls our obligation to account for the storytelling games provide, rather than the storytelling we wish they would or could. The stakes are simple: players experience games as narratives, and increasingly consume more games than other narrative media. If games produce a different kind of narrative than narratological models can account for, then as scholars we risk falling behind in understanding how people will increasingly encounter and consume narrative cultural content.

Some writers are doing just that, attempting to solve the problem of "some narrativity" by offering entirely new approaches that allow researchers to approach game narrative dynamically. Noah Waldrip-Fruin published *How Pac-Man Eats* in 2020, proposing a bridge across the designer-player divide through a digital form of semiotics he calls operational logics. Waldrip-Fruin explains that operational logics "combine an abstract process and a communicative role, each refined through implementation to drive an ongoing state presentation and play experience" (Waldrip-Fruin 7). Essentially, an operational logic is an intersection point between the game's design, rules, and code on the one side, and the player's existing cultural and experiential understanding of the expression of those elements within the game. Waldrip-Fruin uses *Pac-Man* as an example of a game that relies on code to establish the boundaries of the field of play, the precise location on that field of the playable character as well as the ghosts, pellets, and fruit, to account for pellets or fruit to disappear as the player maneuvers Pac-Man across the element, and to stay gone until the level is completed or failed. But it's the *player's* role in the process to recognize pellet erasure as Pac-Man "eating," prompted by sprite animations that show Pac-Man opening and closing his "mouth" and the famous wakka-wakka sound effects that players are meant to interpret as sounds of Pac-Man chomping and gobbling. The result is an operational logic of consumption, that allows players to think of Pac-Man as more than a set of yellow sprites on a raster screen. Crucially, Waldrip-Fruin sees operational logics as functioning largely through player experience and understanding of previously encountered logics. Players who become used to Pac-Man eating, for example, might come to see other 2D arcade titles in which a figure passes over and collects dots as also eating or otherwise consuming them. Operational logics designed into Pac-Man might therefore have some connection to later games like Gauntlet that designed health and power-ups as items of food. Operational logics, Waldrip-Fruin goes on

to explain, can even be used to subvert or defy player expectations—for example, his reading of the walking simulator *Gone Home* as a game that intentionally uses the language and design of first-person shooters (the game was designed by alumni from the shooter hit, *Bioshock*) and horror games to belie its true purpose in revealing a story of coming-of-age within a queer identity (Waldrip-Fruin 19). Operational logics, then, can be designed to prime players for particular experiences, subvert their expectations, or could even be linked together or nested within each other to create richer and more complex meanings. Complex combinations of operational logics can therefore develop richer and more detailed story worlds and character activity, from *Pac-Man* all the way up to *Undertale* and beyond.

I admire Waldrip-Fruin's attempt to bring the player into the narrative experience of the game while retaining the essential designed reality of a videogame, but one difficulty with Waldrip-Fruin's model is that it doesn't overcome the issue that "some narrativity" was trying to solve. If the problem of "some narrativity" is that it creates gaps in the causal chain of events, leaving a perforated narrative and allowing ample space for skeptics to attack videogame narrative or deny videogames narrativity altogether, operational logics leave those causal gaps wide open. Waldrip-Fruin's model is a one-way conversation, creating experiences in the player's mind that are then triggered or toyed with as the designers see fit. This is, at its heart, a dualist, cognitive model that minimizes the lived, active experience of the player in the game. Operational logics, in this way, are not far removed from David Bordwell's cognitive film theory and his description of cognitive *schema* (Bordwell) that govern viewer understanding of how films organize their narrative spaces and aesthetic information to communicate—a one-way, top-down path of meaning that fits perfectly into classical narratological models that have proven so frustrating for narratologists to apply to videogames. In a cognitive structure, the player is only

given access to the narrative in order to make sense of what is being told. Operational logics, like cognitive schema and Barthes's five codes of meaning (Barthes 1975), transform the videogame into a writerly text that prompts the player to construct the meaning in her mind by making sense of what is presented to her. These processes describe how players might "read" a videogame but fall short of explaining how a player can contribute fundamentally to a told story. Cognitive theories like this are incredibly helpful in classical narratology, which has been heavily concerned with the making of meaning—the act of deciphering and constructing the narrative while committing the active task of participating with the text. But, while understanding how players make sense of what they see, hear, and encounter in a game is invaluable, it's only one part of the exchange.

As we've discussed, what has made videogames such an uncomfortable fit for narratology is that the player is unbound from the fixed limitations of mental activity present in most narrative models. For example, returning to my *Undertale* playthrough, I made some initial decisions based on games I had previously played. I assumed *Undertale* functioned like most games tend to function. In that respect, operational logics could be argued to have a role in my initial understanding of the tasks I faced. But much of my experience fell well outside the cognitive boundaries of that model. I didn't want to kill Toriel—I didn't want to *fight* Toriel—and my lived, active perception of the moment mattered in building the narrative moment of her death. When the combat began, I felt inadequate and overwhelmed by the sudden complexity of her challenge. I experienced confusion when I noticed her attacks weren't hurting me. Time seemed to quicken and press in around me as I realized I needed to solve this encounter and quickly before something bad happened. And most importantly, when I accidentally killed her, and realized I had lost control of my own strength, I felt *guilt*, and that guilt hung over me

the game. I wasn't simply constructing meaning and reading a text in a cognitive sense, but sharing in a complex transaction with the game, a transaction the game's developer had designed. My experience in *Undertale* was created by a multi-layered exchange between myself and the game, an exchange that cannot be analyzed by cognitive, narratological theories alone. In no other medium can a player find themselves acting out a story intentionally designed for them to experience, while simultaneously being made to feel responsible (in my case, through my inadequacy) for the events that occur. In *Undertale*, I was being told a story *and* telling that story at the same time. Neither the affect that drove my decision, nor the effect of the decision itself on the game narrative can be fully appreciated through cognitive theories alone.

1.3 Videogames and Performance Theory

This opens up another possibility that some narrative and game scholars have begun to explore: that videogame narratives can be analyzed and explored as active performances of a narrated text. Performance theory has been offered into the conversation by various writers over the years, nearly all in seeming attempts to reconcile the problem of agency and narration.

Interestingly, this idea has taken root in at least a few game studios and design teams, such as the team behind *Far Cry 3*. In their book *Slay the Dragon*, authors Robert Denton Bryant and Keith Giglio quote *Far Cry 3*'s lead writer Jeffrey Yohalem, who argues that narrative designers should "understand a character's psychological motives, perform their actions, and connect their experiences with your own. The same can be said of a character and its player." Bryant and Giglio read Yohalem's directive as a call to treat players like method actors living through a great performance, feeling their way across the world of the game and their character's actions as if it were really happening to them (Bryant & Giglio 130).

"As if?" Are the players experiences *not* happening to them? Did Toriel's murder not really occur for me? These questions risk bringing us back to the trap of the perceived distance between the player and the game, as if the events are hallucinations, and my experience of them merely ephemeral. How can we account for our active sensation of a videogame if it is a construction that isn't really happening at all? For Brian Upton, this is a problem that can be resolved by thinking of videogames as scripted performance that allow players room to inhabit and modulate their role and to define their own space within the text. Upton proposes that we think of the various possibility spaces of the videogame—all of the *potential* branches and results that the game's algorithms allow—in the same way we might consider a stage play or film script. The script constrains the action by defining the boundaries of where it can go. Hamlet, for example, cannot allow for the audience to weigh in with their opinion on his famous question his existence or nonexistence because he must speak the next line and the next, inevitably and inexorably advancing towards his fatal confrontation with Claudius. Hamlet cannot stray from the script; it will be the same set of events in the same order every time the play is performed. And yet those who have seen different interpretations of Hamlet as a character know that there is room to maneuver for a performer within the text. Upton thinks of videogame performance in this way, as an ongoing set of modulations that the player executes while heading to the game's inevitable end (or ends—even if a game has multiple possible conclusions, any one playthrough is nearly certain to depict just one) (Upton 202). In Upton's model, two actors might perform the same first line of *Hamlet*, but one actor might depict Hamlet as capricious and flighty, while the other might modulate his performance differently to suggest a guilt-ridden prince, with the weight of the world on his shoulders. The choice of how to utter this first line then informs the reading of the next line—the performer attempting levity isn't going to shift suddenly to the

heavier reading, or vice versa. Upton argues that a similar set of modulations happens during a videogame playthrough. A player might try aggression in the early levels of a game, and the success or failure of that approach allows for them to reassess and tinker with their performance of the text as the game goes along, all without ever straying from the boundaries set by the game's code (Upton 204). And yet, no matter how the player performs in their role, as long as they achieve the game's goals (i.e., hit their lines) the story will advance toward its conclusion.

Upton's performance analogy is compelling, but there is one major difference between videogame players and a stage performer. A good actor is trained to exist fully within every single moment of the play, bracketing off as much foreknowledge as possible about what comes next so that his performance gains authenticity and presence in the eyes of the audience. But even the best actor is always at least dimly aware that they are executing a script. They know that when they hear a particular cue, they must reply with a particular response. But the videogame player experiences a game's story as it happens, or, more accurately, the player constitutes the game's story as it happens. The improvisational element of performance is a key part of Darshana Jayemanne's own attempt to marry videogame play and performance. Jayemanne outlines a theory of how different media cultivate desired performances from users by use of framing, critically noting how framing devices fit within the text while also extending beyond, reaching toward the user. "Frames are paradoxical: they demarcate real and depicted space, but do not properly belong to either" (Jayemanne 55). In Jayemanne's reading, art relies on framing, from the literal frame surrounding art hung in a gallery, to rhetorical and visual framing devices, to encourage and create performative readings, guided by the design of the art object. The purpose is to lead the user into experiencing the art object in a *felicitous* manner (Jayemanne 3). For example, in the 2002 videogame *Gungrave*, the framing begins on the back of the game box.

"Use your twin guns to dispatch thousands of foes with artistic grace," the copy promises. "Send wave upon wave of enemy thugs to their graves." In a features list located below the copy, the box explains that the player will be up against "disposable enemies and destructible environments." When playing the game, the player discovers the avatar has unlimited ammunition with no need to ever reload their guns. As promised, enemies attack by the dozen, and the player dispatches them all. If she chooses to stand still while firing, the player doesn't even have to aim—the game will send her bullets flying at individual enemies automatically (what a burn deal for them). When the player does take damage, it's barely a scratch against her massive health bar. The framing is clear: enemies are no match for the player. Keep shooting, keep moving, and revel in the power. The path forward, in fact, is literally framed by walls on both sides, creating tracks like long hallways. The framing doesn't invite exploration, instead demanding only forward movement and carnage. Therefore, through framing, Gungrave encourages *felicitous* violent performance. If the player responds to the frames and performs accordingly, she will deliver a convincing performance as Gungrave's lead character, an unstoppable, bullet balletic assassin. Like Upton's Hamlet example, she has been cast and has a script to execute. Felicitous play gets the player to the end of the script as written and designed, while most nonfelicitous play does not. If she, say, refuses to shoot her gun, or tries carefully to slowly aim at each individual enemy, or futilely search for a way off the path, she will fail in her performance of *Gungrave*'s lead character. The game tries to frame the player's performance, but if the frame is ignored the game is being performed "wrong," the videogame equivalent of reading a book backwards or staring at the museum wall instead of the art in the frame.

If it is true that most single-player videogame experience involves a player attempting to complete a game, then it follows that almost all play is a non-felicitous performance, because almost all game sessions end in failure. As comedy writer Luke McKinney once observed:

Mario has set out on a quest to defeat Bowser billions of times, and his winning percentage has to be somewhere well below .001 percent. Mario has died millions, maybe billions of pointless, futile deaths. His incredibly mortal coil is repeatedly flung into everything from medieval spiked pits to relativistic black holes -- everything human technology has ever achieved has been used to kill Mario (McKinney).

Then again, not all nonfelicitous play is failure. Many players intentionally push games to the limits of their code, seeking ways to modify or break apart intended gameplay performances for various effects, most notably in the speedrunning community, whose only goal is to complete games as fast as possible. But when thinking about successful videogame narrative, Jayemanne's contribution is significant. Years after Jesper Juul published the landmark game studies book *Half-Real*, in which he asserted that most videogames were a combination of "real" elements, such as rules, algorithms, boundaries, and code, and "fictional" elements that obscure or represent the real (Juul 2011), Jayemanne's performativity theory suggests that some elements of videogames can belong both to the rules and to the story, and to the game and the player, at the same time. For Jayemanne, the frame exists at an intersection point between the allegorical (i.e., "non-real") and tautological (i.e., "real") elements of gameplay, creating a merged *tautegorical* function (64)—for example, the enemies in *Gungrave* performing their "disposable" roles serve as framing devices directing the player's performance of the controls and coded encounters,

while also establishing the fictional world of the game and emphasizing the main character's prowess.

Jayemanne's model of narrative performativity through the framing of felicitous action extends beyond the videogame medium to many kinds of art, from the gallery to the novels of Thomas Pynchon, and I tend to agree with many of Jayemanne's positions. Jayemanne recognizes that the player experience is just as much a part of the gameplay as anything happening on screen, including the experience of the lived and active body, bringing everything from the controller to the couch into the play experience. Still, I argue that Jayemanne does not go nearly far enough, stopping short of the full implications of this idea. For all of Jayemanne's work in creating the tautegorical as a functioning game element, the concept remains too cognitive and dualist to fully account for the player contribution to game narrative. Let's return to the *Undertale* fight with Toriel and the guilt I experienced when I killed her. I have argued that her death was by design. I am meant to kill her, and therefore killing her is felicitous in Jayemanne's terms. It's also accurate to say that the game used what Jayemanne would describe as framing to accomplish this goal. *Undertale* frames the fight as a boss battle, shocks the player with fast-moving, seemingly lethal attacks, and uses the system supposedly meant to save Toriel to mislead the player into believing that the fight must happen. And yet, it is not accurate to say that the game created my guilt through framing. Nothing in the game specifically tells me that guilt is the correct emotion that I'm meant to experience. In fact, using Jayemanne's model, it is equally felicitous for me to feel not guilt, but glee. A genocide playthrough in which the player murders every single creature in the game is considered by fans one of the standard ways to play the game. *Undertale* contains a programmed ending and enemy encounters designed to reward that choice. If the player chooses "genocide," the game alters character dialogue to

accommodate. The framing devices alter to meet the player, creating an alternative, but equal, stream of felicitous play. Therefore, although the game does provide some framing that could be interpreted as intentionally evoking sadness (for example, calling Toriel on her phone and being reminded by a text box that she won't answer), I could choose to feel a different way about that text and I wouldn't be wrong to do so. The game moves where I move and reorients based around my subsequent actions. What *Undertale* considers felicitous is fluid and reactive, as is true of most videogames with narratives that adjust based on player decision. Jayemanne's model, despite actively working to include the player experience into the account of performativity, is still mostly flowing in only one direction. The model accounts for what the game asks of the player, but it does not account for what the player asks of the game.

When it comes to narrative videogames and performativity, it might be more productive to think of them as forms of improvisation rather than scripted performances the player is prompted to complete. Beginning theater and improv students are often asked to play a game called Speak In One Voice. To play, some number of students are joined together. If it's two students, they might make close eye contact. If it's more than two, they might link arms in a circle. Someone is designated as the leader, and the goal is for the leader to speak a word and for all other players to speak the same word at the same time. Typically, the leader will start with a sound, perhaps the first phoneme of the word. The leader speaks slowly, and the other player or players chime in by making the same sound. Eventually, the leader might make a move to the next sound, to prompt the other players, but at this point the players may misunderstand and take the word in a different direction. Perhaps the leader meant to say "salmon," but the other players took over and it became "Santa." The object of the game is not for the leader to enforce his or her will and tell the other players they're wrong. Instead, the object is to listen and react. The

collective result is more important than the original intent. Sometimes students play a silent version of the same game, called "Mirror," with the object to make identical motions simultaneously. In these games, the leader's initial sounds or movements can be thought of as framing devices that invite felicitous performance, and certainly a player can perform non-felicitously, deciding to ruin the game by breaking it entirely, perhaps barking "train set" when the leader started towards "salmon." But, crucially, the player who is not the leader does not know the goal word and may inadvertently divert the entire group in his own direction. The leader has been circumvented but recovers and alters course. Many games of Speak In One Voice result in players laughing while discussing what words each player almost said, or meant to say, or thought they were going say. In a game with no troublemakers, any successful run through the game can be considered felicitous, no matter the leader's intention.

The simple exercises of Speak in One Voice or Mirror are beginning games because they teach essential skills for advanced improvisational performance. Performers learn to react dynamically to the information they are receiving from their partners and, importantly, they are learning that in a shared performance there may be intention and even a framework, but nobody leads. This basic skill is foundational for the much larger, richer, and complex improvisational performances enacted by experienced troupes, who can even create entire narrative experiences improvisationally on stage in a single performance—for these performers, they are *telling* the story while simultaneously *creating* a story that they don't know in advance. We can think of videogames this way. Certainly, many writers have already noted the ways in which videogames can absorb attention, alter the senses, and seem to move in unison both with and against a sensing user. One of the very first serious works of videogame analysis, David Sudnow's *Pilgrim in the Microworld*, begins as an obsessive lark as Sudnow tries to make sense of the grip

videogames appeared to have on an arcade full of children, and evolves into a phenomenological dissection of the relationship between the player's fingers, the controller, and the screen. After spending countless hours, days, and weeks attempting to clear an entire screen in the Atari 2600 game Breakout, Sudnow, a trained pianist, came to see the screen itself as more than a field of colored blocks, but rather a grid of trajectories and possibilities, musing that a meaningful gaze could allow the player to see those points for what they were. "The calculating video look [emphasis mine] gradually comes into isomorphic correspondence with nodes of the program, the eye-hand connection geared in increasingly rational alignment with the graphic tracing of the numbers in a way eyes and hands have never before been cooperatively scheduled... a video neuron drafting table with you as the paper" (Sudnow 186-187). Sudnow, writing in the early 1980s, saw immediately that there was a complex exchange happening between he and the game, something more than simple interactivity, and far too complex to be a one-way solicitation of performance. Sudnow recognized that his "video look," originating in his mind and heavily informed by his history and training as a pianist, was attempting to map and translate the information on the screen, but also that the game was working on him, rewriting his mind and hand to meet the challenges of the game, and that these forces were occurring simultaneously, affecting one another. *Breakout* offered framing devices for felicitous play, while also feinting, moving, and reacting to Sudnow's reactions. In fact, when Sudnow's play was at peak felicitousness, that is when he became the most dissatisfied. "Strategically best moves are ultimately reductive, tailoring participation down to its absolute minimum in keeping with the times, giving you 'command' from afar and behind the scenes, so to speak, with nothing much to do" (Sudnow 192-193).

Sudnow, writing before the official birth of game studies as a discipline, a Hugo Munsterberg of the arcade, already understood that videogames offered something more than most critics had yet acknowledged. And yet Sudnow couldn't yet see how complex the relationship between the player and the game could truly become because, frankly, *Breakout* and the games of its era were not up to those demands. The simplicity of early games, and of early game narratives which go back at least as far as *Ms. Pac-Man* in the arcade and much earlier in the text and graphical adventure games on the personal computer, obscured the complexity of the relationship between the player and the game, a dynamic relationship that lays foundation for the rich and complex shared narratives in contemporary gaming. Upton and Jayemanne's particular uses of performance theory still leave us with that dualist gap and, therefore, seem to fall short of fully accounting for videogame narrative.

1.4 Transactionism as Alternative to Dualism

Thinking of video games as an improvisation exercise, with no participant fully sure of where the experience is going to go, or what path it will take, does not solve all the problems I have spent this chapter unspooling. For one thing, in the exercise, the parties could collectively take the game in any direction, while a videogame can only arrive at the destinations made possible in its programming, what game writer Nick Montfort calls "potential narrative" (3). A videogame can pivot with the player's actions, but only so far as the designers foresaw. Much improvisational performance would also fail this test.

Perhaps we can work towards resolving this dead end by using one problem to resolve the other. It is the very nature of the first problem—that the narrative videogame is designed, constructed, and planned to produce a variety of stories within programmatic limits—that separates the experience of the videogame from mere emergence or improvisation. The

videogame player knows that she is in working in concert with a videogame. She sits across from the game screen and presses keys or buttons on the controller to communicate her intent. She hopes her actions will be felicitous, and she learns as she goes to interpret what the game expects of her. Meanwhile, the game is responding to inputs within the boundaries of the programming, moving and adjusting to the player's hopeful actions, using the boundaries of the code to restrain the player and keep a story on track. The specific story told, however, depends on some collaboration of player choice and the designed framework, a complex transaction in which both entities seamlessly and simultaneously adjust to the other moment by moment. When the player finishes the game, a single story has been told, but a story constituted and determined by these transactions. Thinking about narrative in this way is an uncomfortable fit for traditional cognitive narratology.

Rick Altman has long been a proponent for discarding classical lines of thought rather than constantly attempting to reroute around the gaps that arise. "It is time to break free from the traditional understanding of narrative and the limited forms of analysis that it has produced," Altman writes in *A Theory of Narrative*. "Once narrative itself is redefined, the way lies open to revise our notions of narrative analysis, narrative kinds, and narrative history (2)." To be clear, I'm making no move to dismiss literary narratology altogether. Countless scholars over many years have produced valuable work through structuralist frameworks of storytelling. My argument, however, is that narratology was developed and refined specifically for the media that it was designed to analyze. In that way, narrative media and narratology co-evolved over the 20th century in harmony, each side defining and influencing the other until the arrival of digital media and storytelling created a rupture that, as we have seen, game studies scholars have worked to mend. Making matters worse, narrative videogames have spent their formative years attempting

to mimic and remediate classical storytelling technique, confusing the issue for those who might wish to incorporate videogame storytelling into existing models. Daniel Punday is the first I have seen to identify this issue, arguing that digital storytelling media emerged in the world as narratological theory was cresting in academic interest in the mid-20th century. Therefore, Punday observes, videogames developed on campuses among intellectuals and academics who, often inadvertently, sometimes intentionally, steered the medium to work through the philosophical and theoretical project of structuralist narrative work (Punday). But Punday appears to overlook one critical rupture inherent in this idea: while digital technology is malleable and can be programmed to mimic the characteristics of dualist media theory, the affordances of videogames defy dualist description. The essential problem I've been outlining throughout this chapter remains unchanged.

My proposal is to forge a new possible pathway towards investigating this continuous and co-constitutive process of videogame narrative by looking outside of traditional models of dualist and cognitive narratology, specifically cognitive anti-representationalism, which Chemero calls (admittedly, with some suspicion) a "dynamical stance," which proposes that cognition emerges from the active and perceived engagement of a vast collection of simple evolved mental processes activating and receding in dynamic relationship with stimuli (Chemero). Daniel Reynolds in his book *Media in Mind* proposes a model that takes this idea even further. Reynolds argues that dualist cognition has the tendency to draw an imaginary barrier around the individual, a barrier we habitually think of as rigid, but voluntarily permeable, to which we occasionally allow access, to food, to air, or to media. When we consume a piece of media, we believe that we allow the text (be it a film, a book, or a videogame) passage into our mind where we engage with it cognitively. But Reynolds, further drawing from a neglected

tradition of naturalism and pragmatic philosophy, primarily from John Dewey, seeks to collapse the dualist gap between the body and the mind, between the text and the individual. Reynolds argues that "the spatiotemporal boundaries of media content, media technology, and media use are always contingent and conceptual" (2), never entirely stable, but coming into being through a process of active perception and constitution by the user. Essentially, the goal of transactionism is to overcome the human tendency to see ourselves as minds inside a body inside a world, but to see all elements of the natural world as existing on a single unbroken plane or, as Reynolds describes it, a "continuous material sphere" (4). Objects within the single physical sphere are never truly discrete, but permanently entangled and distinguished only by action. For Reynolds, videogames provide a unique and powerful opportunity to examine this approach, not because videogames provide a fundamentally new or different kind of experience than other media, but because the physical contingencies that power our relationships with literature and film are obscured by the properties of those media, while videogames emphasize or even rely on those contingencies. Put another way, there is nothing fundamentally unique about how videogames tell stories compared to legacy media, the effect is simply "louder" than in the media we think of as primarily cognitive.

We can immediately see the implications for classical narratology under transactionism. If, as Reynolds proposes through transactionism, there is only one natural plane of existence, then it necessarily follows that many of the elements of experiencing narrative that we tend to think of as cognitive must instead be thought of as physical and present. This concept is so unorthodox to our usual, learned way of seeing the world that it can sometimes seem to defy common sense. For example, Reynolds argues that videogames demonstrate how our bodily, active perception creates the world in which we live by allegorizing that process through the

bodily actions of adjusting the controller, moving the sticks left and right under our thumbs, learning the weight and contours of the digital space, while the space offers itself to that perception, actively bursting into being by our very act of perceiving it just as the game's responses constitute our understanding of it (Reynolds 19-23). The player and the game are engaging in a complex transaction, reaching *across* the unified physical space to constitute one another. The idea that the game constitutes the player seems counterintuitive, but Reynolds helpfully explains with a simple analogy: "Media are in our minds as events are in history" (Reynolds 26). Our minds are the accumulation of experience; our media make us who we are, and we likewise make media what it is. Therefore, in transactionism, all media phenomena are physical, existing in the co-constitution of the user and the text. Phenomena that we have learned to think of internal and separate—phenomena like affect and emotion—are therefore theorized as existing not in the body alone but in the (weakly) emergent phenomena of user and text.

What, then, of the narrative text? As we've seen, classical narratology is built around the concept of the telling and the told. An imaginary story is created, and the individual tellings indicate the choices and the expression of the narrator. The story exists outside and informs the telling but is otherwise unaffected. As we've seen, this is a fundamental issue with videogame storytelling because a text that hands agency and decision-making to a narratee cannot be drawing from the outside story (*fabula*). The player doesn't know what story is being told, and therefore cannot be telling it. Transactionism, on the other hand, would toss this construction out completely. A narrative doesn't exist inside the text, or inside the player's cognitive engagement, but somewhere outside of the text and the user, constituted by them both through their active perception and engagement with one another.

A narratologist might object to this point by saying that transactionism overextends its argument by suggesting that, with no *fabula* to draw from, the idea of telling a story ceases to have any meaning at all, since all stories would necessarily only exist in the telling, coconstituted by the narrator and narratee, throwing all fiction into an existential series of "one-offs," but this is precisely the argument of transactionism, that existing models were designed in tandem with the media they were intended to study, and therefore have missed essential truths about a person's relationship with media. "This is not to say that we do not see ourselves as being in the world, but rather that we tend not to see the world as being in us" (Reynolds 22).

1.5 Design and Critiques of Subjectivity

Reynolds devotes much of his book to exploring how videogames reveal the transactional nature of all media consumption, but he does not pay any particularly close attention to the implications of narrative in a dynamic and transactional model other than to dismiss the idea that media consumption in general, and videogames specifically, are representational in nature. Therefore, if videogames produce narrative, meaning that a designer programs a game to communicate a given story, and through play a user experiences that story, then it must follow in a transactional model that story can be constituted non-representationally. I am proposing here to advance that line of thought on naturalist, transactional narrative, a contingent phenomenon through which stories are co-constituted and experienced through active perception, creating nonrepresentational narrative phenomena. This is not "some narrative" by another description, for the player's active perception and constitution of the narrative through agency and choice is as essential to the creation of the narrative as the work of the designer, author, or videogame algorithms. The essential idea is that through constituting the experience, the videogame and

player create a story together, with no firm boundary between player or game, teller or told, action or reaction.

Before I take my first steps into exploring and defining the parameters of this approach, I must add an important caveat. I believe that videogames do not create a radically new relationship with media, but rather reveal previously unseen characteristics that dualist models were not designed to locate. Dualism can provide tremendous insight into the creation and delivery of narrative information from the side of the designer but are ill-equipped to explore the player's involvement in the constitution of the text because of the need to assume the player's limited role in constituting the narrative strictly through mental activity. However, it is quite difficult to speak of narrative at without relying on terms that carry with them dualist meanings that exist in contradiction to the argument I'm using them to build, not the least of which is the word "narrative" itself, which implies the pre-constituted representation of story that is parceled out by the single narrator. Plenty of work in narratology has complicated that idea, but not by using the contingent, co-constitutive model that transactionism offers. There simply isn't language available to discuss videogame storytelling without either relying on dualist terminology or creating havoc by inventing an entirely new set of terms that must be defined and defended within the text of this project. I have chosen to use existing narratological terms within limits for the sake of clarity, while simultaneously seeking to complicate or expand those terms by rethinking them through a transactional lens. Although I will make every effort to avoid confusion in my meanings, no doubt I will occasionally fail and leave a seeming paradox or contradiction in my terms. In those (hopefully rare) moments, please know that my intention, always, will be to position a term through transactionism and not through its classical origin.

With that established, in *Media in Mind* Reynolds names narrative comprehension as one of the many elements co-constituted by the media text and the media user, a list that also includes perception, emotion, and interpretation (106). This is a potentially confusing claim in Reynolds's work, because it seems counterintuitive to our natural perception of the event, and yet transactionism holds that narrative comprehension and meaning—as well as emotion and affective response to that narrative—do not exist solely within the user, belonging neither fully to the user or to the text, but existing outside of both. To make sense of this claim, it's important to explore how Reynolds defines the relationship between the user and the text as a weakly emergent platform, a departure from traditional thinking of platforms that dominates game studies and popular subfields like platform studies. In the dualist model, a platform and a user are thought of as two discrete, separate units with rigid, firm borders surrounding their forms. When the user reaches out to the platform, those borders merge to create a new, third entity of strong emergence, with a firm border that has expanded to surround all parties. Within this structure, a free exchange of information and interactivity creates the experience that the user takes away when the session ends and the game console is turned off. "To designate a platform is to draw a boundary, in space and in time, around part of a boundless dynamic and assert that what is within that line is stable and self-contained. It naturalizes that thing, not in the sense of claiming that it always was, but in urging us to take its wholeness and utility for granted going forward" Reynolds writes (99). Those familiar with game studies might see the immediate similarities to Huizinga's magic circle, a firm boundary within which play is allowed to happen, free and clear of the world outside, and from which Huizinga supposes the player can simply walk away, consequence free when the play session is over because that constituted the condition of play to begin with (Huizinga). But just as Mia Consalvo identifies the problems with thinking of the

magic circle as impermeable and sacred (2007), Reynolds likewise pokes holes in notions of the platform—nearly literally—by disputing the very existence of a strongly emergent platform by describing the permeable and unstable boundaries that surround them. In thinking of experience as dispersed across a single, physical plane of existence, rigid boundaries cannot exist. When I play *Undertale*, my mind reaches across to the game, to the controller, and to the images on my screen. The game likewise reaches out to me, requiring my senses to constitute its existence, needing me for it to be seen. We are both affected by our physical positioning in the room. We both breathe the same air to maximize performance—mine through respiration, the machine's through its fans and air filter. My previous experiences with video games, my values, and my beliefs all affect my bodily perception of the text, just as the game is affected by its institutional memory written into its code, placed there by a designer with ideas, beliefs, agendas, and mandates. These permeable boundaries mean that we do not create a new, strongly defined entity defined by what it is when it comes together, but rather that we reach across to one another to coconstitute a weakly emergent platform defined by what experience the platform creates, not by a perceived set of innate characteristics defined by a redrawn set of borders. The experience of a videogame, from the active play itself to the comprehension of the narrative to the emotions associated with that experience do not exist solely within the user, locked away behind an impermeable border of the body. These elements are co-constituted by the text and belong to both—and to neither.

This raises one concern in terms of narrative analysis, which is a major task of narrative studies. How can we even hope to approach narrative study in a transactional sense if we think of narrative in these terms? This model risks drawing many of the same criticisms of subjectivity levied against phenomenology, related to the perceived difficulty in analyzing personal and

individual experience. The narrative constituted by transactional play would belong only to the player and the game, making it impossible to analyze, ending study of transactional poetics before it starts. And while it's true, in the transactional model outlined above, the experience of play and narrative comprehension includes my own personal contexts, living room space, console setup, and other environmental factors that affect my perception, and in that way, we might assume there as many different experiences of *Undertale* as there are players of *Undertale*, I disagree with that objection. Instead, I argue that we in fact can grasp the narrative qualities of videogames through particular shared elements found in the contributions of the text and the user, elements of design. These elements refer to the specific and identifiable means (perhaps we can think of them as "soft frames," to modify Jayemanne) through which the user of the text and the text itself reach across to purposefully tell or be told a story through the particular affordances of the medium at hand. As a phenomenon of the weakly emergent platform, there is no fixed boundary here, and the line between who or what is doing the telling may be crossed freely on a spectrum defined by media affordances, but the essential point is that both the text and the user must *intend* the story for the story to exist. This idea opposes the concept of emergent narrative as the user-focused account of experience in the game as Jenkins describes it, or in the way Janet Murray suggests *Tetris* could be considered as a narrative in her work. *Tetris* does not intend to tell a narrative, no matter how actively a user may intend to read one into it, nor do the multiplayer battles of Call of Duty: Warzone, which takes place in a rich setting of the fictional Eastern European city of Verdansk that appears replete with history, tragedy, and livedin verisimilitude, the kind of theme park-esque environment that *could* evoke a narrative, but makes no effort beyond suggesting the idea of one. Storytelling isn't the point of Warzone. Verdansk is simply a vast arena where players hunt one another to death, like the artificial

landscapes of *The Hunger Games*. No matter what an environment suggests, successful narrative requires active and constructed effort on the part of the text, designers, and players.

Narrative activity requires the willing extension from the player and the game text, what Reynolds calls "reaching across" a continuous plane. The "reach" implies activity. There is an intention to reach across to a connected entity. The narrative text reaches across through designed narrative content and through the tools and methods by which the narrative content is intended and programmed to reach across to the user. In older games with fewer tools at their disposal, designers often remediated the tools of legacy media when trying to grab players with narrative content. Text adventures remediated the novel and the roleplaying game. Cutscenes remediated cinema. Bioshock's audio logs remediated voice recorders. Steadily, however, designers have developed more proprietary and sophisticated tools for delivering narrative, tools that have co-evolved with digital technology and are now widely adopted and incorporated in narrative games, built into the worlds, characters, challenges, and enemies players encounter to co-constitute narrative experience. These elements protect game narrative from the accusations that player agency makes the game's narrative too personal, and therefore unfit for study. Designers think and plan for narrativity. They know the technology and the limits of that technology. During my time as a designer, I worked for a prominent social gaming company and knew I had only minutes of a person's day, at best, to communicate story content, so I designed content to grab them fast, with large images and big f/x, to convince them to make a quick choice, with instant feedback. Players were then encouraged to return later in the day for the next stage in the story. The player had agency to complete the story, to choose the story that was told, but it was still a story that fit within the design I offered, a design that relied on the

understanding and assumption that the player was part of the storytelling experience. I reached across to tell them the game's story, but the choices in that story remained theirs to make.

But all of my storytelling efforts would be meaningless if the player failed to reach across to the game, with the purpose of receiving and participating in the creation of that story. Did every player who encountered my story on their lunch break engage with it? Likely not. Guessing even fifty percent engagement would almost certainly be a massive overshoot. A truth about videogame play and players is that while videogames can tell stories, videogame players do not have to listen to those stories, and in fact quite a few choose not to, rapidly pushing buttons to blow past cutscenes to get back to the action. There is nothing wrong with this style of play, and in fact we should think of it as simply a different co-constituted experience that emerges from the transaction between user and text. Examples are everywhere. Every day on the video game streaming platform Twitch, or in popular charity speedrunning marathons, players attempt to twist, contort, and stretch games into barely recognizable versions of themselves, pushing the limits of the code to access glitches to complete specialty runs, hoping to traverse games that take dozens of hours to complete in a fraction of the time—sometimes in minutes. These feats often require the player to execute certain actions that "break" the game's narrative, such as skipping events, experiencing chains out of order, killing important NPCs for some calculated benefit, skipping dialogue and cutscenes whenever possible, and generally ignoring every potential piece of story offered by the game, even in some of the most beloved narrative games of all time. Although the words "skipping" or "bypassing" seem appropriate when discussing speedrunning narrative games, they are really misnomers. Players are not skipping the narrative activity. Narrative is not occurring at all, because the player is not reaching across to the narrative content. The game is reaching across as designed, but without the player's

reciprocal movement, the narrative phenomena cannot emerge, and therefore cannot be skipped. Story, then, becomes a weakly emergent phenomenon within the emergent platform created by the user and the text, meaning that they must necessarily permeate one another. Story and play are inseparable and non-discrete.

I want to take a short aside here to address a word that I've been avoiding in this discussion: interactivity. Reynolds critiques the word for its dualist assumptions of separation, suggesting that the player and the game are distinct from one another and act upon one another in turn, one after the other. Reynolds makes a compelling case against this concept by exploring the hand and eye movements of high-level *Tetris* players, arguing that at the peak of videogame play the speed is too fast for cognition to account for the implied turn-taking of interactivity, and indeed *Tetris* players appear to process information through the act of play itself, extending cognition into their fingers, the controller, and the screen to shave precious seconds from their reaction times (Reynolds 75-78). Therefore, I prefer a useful term offered by Gordon Calleja digital *involvement*—which Calleja uses to complicate what he calls the "unidirectional" concept of player immersion in a game space. Instead of thinking of a game as a discrete environment within which the player immerses herself, Calleja offers involvement as a way of thinking through "fluid intermingling of players' experiential intensities" (Calleja). I repurpose the term here to apply it in a more transactional sense, suggesting the digital game involves itself with the player as much as the player involves herself with the game, and I believe it is a more accurate term overall to explore how players and games tell narratives together near simultaneously, leading one another at the same time, each reading the others' cues of intention.

1.6 Rhythms of Narrativity

Once the videogame and the user have reached across, the narrative elements and information have to be transacted. Time and space must be co-constituted, characters and events offered for perception and sorted for their importance to the narrative. Cognitive theory is the standard tool for analyzing this process, but in a transactionist account that places narrative as a permeable phenomenon belonging not solely to the mind, this cannot suffice. Reynolds draws transactionism heavily from John Dewey and Arthur F. Bentley's Knowing and the Known and its complications of the epistemological assumption of preexisting, pre-constituted reality, but I am taking significant cues in this work from Dewey's earlier aesthetics lectures, Art as Experience, which likewise refuses the idea of the art object as pre-constituted. The art object, for Dewey, sits within its context, within its milieu, and the aesthetic appreciation of the object relies on what resembles a complex transaction—although Dewey rarely uses that word as directly—between the object and the observer. For Dewey, as in Reynolds's work, the purpose of the art object is its function, not what it is but what it does, because art emerges in context with its environment and acts upon the observer, which is no passive brain, but an active, sensing being who acts upon the object in return to perceive it and constitute its meaning (Dewey 1-19). This is accomplished through what Dewey describes as a kind of deciphering of the art object's aesthetic rhythm. Dewey argues that all existence is a series of natural rhythms that our bodies and minds have learned to interpret—the rise and fall of the sun, sleepfulness and wakefulness, the tides, seasons, aging, and many more. We are, in fact, in a constant state of attuning (or, in Calleja's term, involving) ourselves with the rhythms around us (Dewey 15). Dewey describes the aesthetic appreciation of art in precisely the same terms. When confronted with a painting, what we actually see are an initially haphazard and random collection of paint strokes on a

canvas, but by perceiving the gradual shifts of the browns, or strokes of white against blue, we bring order and natural rhythm to the initial chaos of the art object. Part of the aesthetic pleasure we receive from perceiving art is through this process of attuning to it and involving our attention into it and being rewarded by the fact that there *is* a rhythm, that our attention was rewarded and we discovered what the artist designed. Rhythm is the means through which the act of reaching across reaches culmination. (This presents the possibility of failed aesthetic art, in which both the text and the user reach across, but a failure in design or some other issue causes the observer to rescind the approach, either because the piece is rejected or because the observer believes they are mistaken in believing there is information there to receive. Likewise, a novice observer might reach across but be unable to attune with particular techniques and thus not perceive the narrative content on offer. In both cases, some minor aesthetic appreciation may occur, but not the transactional experience of the weakly emergent platform—and no narrative, if the text were a narrative text).

Dewey considered rhythm in terms of equilibrium. "We live in an environment, but not just in it. We live through direct interaction with it. We are part of the environment, it is a part of us. Our well-being depends on equilibrium with that environment. If the gulf between our bodies and our environmental conditions grows too wide in either direction, we will die" (12). To be what Dewey calls a "live creature" in the world, one must maintain a balance, ignoring neither the conditions of the environment nor the needs of the body, nor how these states influence, permeate, and alter one another. Dewey considered this process innate and natural, a part of the lived experience of human existence. We cannot help but look for rhythms in art objects, or narratives, because we encounter them in our environment—in fact, they *are* our environment—and we instinctively pursue equilibrium with them. The goal is to have what Dewey calls an

experience, a term which he uses in a specialized way to describe to a completed, fulfilled event that rises above a combination of mechanical, individual moments which are elevated through accumulated rhythm and intention. "In a work of art, different acts, episodes, occurrences melt and fuse into unity, and yet do not disappear and lose their own character as they do so," Dewey writes (38). The emphasis on melting and fusing, like the blue of the painted sky giving way to the white strokes that define the cloud, demonstrates Dewey's belief in contextual meaning. Open the script for an Ibsen play and choose ten lines at random, and while they may be brilliantly written, they will not be an experience because they have been stripped of contextual history and rhythm. The same is true of the brushstrokes of the painting; removed from their contextual meaning, they cease to be more than themselves. Transactionism holds that this is not only true of conversations and art objects, but of all lived experience. Humans are in the environment and the environment is within humans. We seek equilibrium with our environment. All experience arises contextually from the physical world, and is therefore a part of the physical world, which is itself a co-constituted phenomena made up of the sensing human and the environment. It follows, then, that the experience of videogames, and videogame narrative, is a physical phenomenon, and that the pursuit of equilibrium with it is a primary process through which that phenomenon is constituted. Helpfully, this concept is not foreign to game studies, but has been the subject of study for many years under a different name: flow

Mihaly Csikszentmihalyi coined the term flow to describe a psychological theory that mapped what he termed "optimal experience," (Csikszentmihalyi 2008) and although he did not initially intend for his work to apply directly to videogames, it is widely cited and discussed in the field precisely because it appeared to perfectly summarize the process of mastering a long and challenging game. Csikszentmihalyi proposed a model in which optimal experience does not

mean a person stays in a zone of perpetual comfort, but rather than they are occasionally challenged enough, in a manageable way, that the person finds it possible to overcome the challenge and master it. Then, just as that challenge transitions into rote repetition, a new, more difficult challenge arises, and so on (Figure 2). In essence, to achieve optimal experience, the person must be stimulated with ever increasing difficulties that remain manageable, pleasing the person as they observe themselves mastering one skill, and convincing them that when a new challenge arises, they will be able to master that one as well. (Csikszentmihalyi 1998)

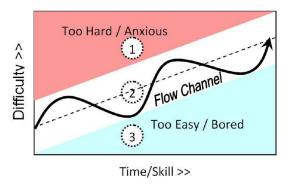


Figure 2: Csikszentmihalyi's Flow

Osikszentmihalyi's model is contextual. The experience he writes about cannot become optimal unless it is preceded by the previous points on the graph, degree by degree. The experience must become gradually more difficult, and then gradually less so, with each individual, mechanical moment flowing, one into the other. Flow has been widely adopted by game designers and even design scholars to depict the ideal model of videogame play, because it provides a roadmap towards "the zone," a supposed area of perfect equilibrium, where player and game move in tandem, respond expertly to one another, and all other environmental and sensory concerns fade into the background to be forgotten. To many designers this is the peak of interactivity, but from a transactional perspective, this is Dewey's contextual experience, albeit amplified into a particularly intense wavelength.

Flow, however, is not without problems. Recent work by Braxton Soderman has challenged what he calls the "uncritical" adoption of Csikszentmihalyi's model in both games and game studies, which he argues convincingly masks flow's underlying ideology of individualized actuation of happiness that rejects the collective alienation caused by the natural excesses of capitalism. By seeking flow in a person's daily activities, Csikszentmihalyi argues a person can find happiness and a cure for alienation within the system without discovering the need to affect change. I agree with Soderman, and do not wish to deploy flow uncritically, but rather to divorce it from Csikszentmihalyi's individualist interpretation. My argument is that Csikszentmihalyi's initial discovery of flow was descriptive rather than prescriptive, identifying the extreme sensations found during particularly intense attunement. Csikszentmihalyi often described his so-called "ideal experience" as one in which the flowing subject, as Soderman describes them, loses sense of self and engages fully with the activity, often forgetting to eat or to sleep because they are so embedded in the "zone." The description of such extreme unalignment with the body's lived rhythms and survival needs does not sound like ideal experience to me, but something gone wrong with our natural senses as a "live creature." Instead, Csikszentmihalyi's ideology has presented flow as an uncritical good when, in fact, we might think of the "zone" as an extreme attempt at attunement to a task that usurps and overwhelms the otherwise natural processes of transactionism and dynamic rhythm. When I speak of flow in this dissertation, the word will refer to the less intense, natural, and often invisible process of reaching across and experiencing the world through transactional rhythm, what I call "low-flow."

Returning to Dewey and context, we can see how his ideas may be applied to many kinds of experience beyond art, such as the transaction of a conversation. Individual points in a conversation are meaningless, it is the flow and the rhythm of the conversation that transforms it

into an experience, which forms from the chaos of potentialities, and must emerge from the environment through discovering rhythm, moment by moment, action by action. Game players often describe the steepest "learning curves" taking place in the early stages of a game, before the player has enough contextual information for the experience to arise from the various button presses, on-screen events, and game feedbacks. The same might be said of narrative texts, with users confronted with disorder and arrythmia and gradually understanding the order and patterns they see. Players reach across to the reaching game through initial soft framing, but begin in a state of narrative confusion, until enough context allows them to gradually piece together concepts such as characters, setting, and world before events disrupt those concepts, leading the user to question their standing in the narrative and whether they are still attuning, until events begin to crystallize in what direction the story is progressing, and so on.

Although rhythm (in the form of flow) is widely adopted in game studies, the missing piece from a transactionist position is the player's essential role in co-constituting the experience, not just in perceiving it, but in creating it and giving it existence in the physical plane *thorough* the act of perceiving it. What is fascinating is how often in Csikszentmihalyi's writing he veers close to a continuous and contingent edge of his model. For example, Csikszentmihalyi wrote at length about the body and its role in achieving flow. While listing an assortment of bodily activities like touching, throwing, and climbing, Csikszentmihalyi takes a surprising turn: "to this I might add imagination and imagining" (Csikszentmihalyi 1990 95). Csikszentmihalyi is quick to concede that body and mind function together and affect one another through perception and action, the beginnings of an essentially anti-dualist gesture that never fully arrives. In another passage, Csikszentmihalyi describes consciousness itself as constituted by things we "feel, think, and desire—our information that we can manipulate and use. Thus, we might think of

consciousness as intentionally ordered information" (Csikszentmihalyi 26). Csikszentmihalyi calls consciousness ordered information, but just prior to that defines that information as usable information. This appears to define consciousness itself as active function, by its use value, suggesting that the difference between my consciousness and another person's is not any fundamental difference in what it is, but in how it is used. This rhymes with Merleau-Ponty's phenomenological definition of consciousness as consciousness of something or, as Keogh puts it, an enmeshed consciousness in the world (2018 72-74). Transactionism only takes this a step further, eliminating the rigid boundary between the mind and the world altogether, locating the mind as a phenomenon of the world, in a shared plane where all experience occurs. Returning to Dewey, we find complementary ideas couched in aesthetic theory. For example, Dewey writes of aesthetic form, defining it as "the operation of forces that carry the experience of an event, object, scene, and situation to its own integral fulfillment." The form of the art object works to define itself and carries agency to self-actualization based on the intentionality of the design. For the observer whose perception brings the work to fruition, the contingency of the individual elements matters:

There can be no movement toward a consummating close unless there is a progressive massing of values, a cumulative effect. The result cannot exist without conservation of the import what has gone before.

Moreover, to secure the needed continuity, the accumulated experience must be such as to create suspense and anticipation of a resolution.

Accumulation is at the same time preparation, as with each phase of the growth of a living embryo (Dewey 142-143).

As we have seen, the essential event is the media user and the art object reaching across the physical plane to each other. The mutual reaching across must be sustained; retraction by the user or the art object can occur at any time, and the weakly emergent narrative phenomenon would collapse. If the reach is maintained, what happens next is the ongoing process of finding rhythm, of pulling narrative clarity from the primordial chaos, of discovering the contextual flow of events, the process that Dewey, in the passage above, calls accumulation.

Dewey's model of aesthetic accumulation is the less-aggressive version of Csikszentmihalyi's intense flow, although both processes gradually expand and retract as contextual meaning cascades and coalesces in a single direction. One area where they would appear to differ, however, is their belief in the value of the destination. For flow, the destination is less relevant than the journey, but for Dewey, the point of the experience is to *reach* an experience, which emerges from the combined contingency of the individual mechanical events. Without the sense that the flow is leading somewhere, or that progress is being made toward an overall goal, then the individual challenges or the perception of the individual brush strokes lose their meaning. The point of this rhythmic pursuit is that it is a flow *forward*, toward a destination. However, we mustn't overlook that Dewey's destination of equilibrium and aesthetic order from aesthetic chaos is not meant to be a joyless slog until, suddenly, the "aha" moment of truth. Transactionism suggests both the process of attuning and the satisfaction of achieving the experience produce pleasure.

Returning to *Undertale*, let's test this notion of narrative as a transaction of aesthetic rhythm by reframing the Toriel fight under the terms of reaching across, involvement, and accumulation. I reach across to *Undertale* when I pick up my Nintendo Switch and select the program. In my life outside the game, I have heard of the its reputation as an engrossing and

emotionally affecting story, and I'm hoping to have a similar experience. The Switch, responding to my button presses, accesses the game's code and begins to run the program. The game emerged from the design of Toby Fox, who intended players to be able to access multiple paths throughout the game, with very different consequences, challenges, enemies, and results for selecting those paths. When *Undertale* begins, all paths are equally valid and available. The game has no preference. Instead, the game presents its opening images and scenarios—the angry flower, the kindly Toriel. These are mechanical events, in Dewey's terms, meaningless and arbitrary individually, but they emerge in context, contingent on one another, and on me, the observer. My active perception—my eyes and ears, my fingers on the buttons, my hands sensing the weight and vibration of the Switch I'm holding—bring Toriel and Flowey into existence, just as they co-create my perception by *being* perceived. I am prepared for story content, and so I discern the characters, outlined in white, *as* characters, defined from the black backgrounds. The hateful rage of the flower in context to Toriel's kindness prompts me to have an opinion. I hope the story goes in Toriel's direction.

As the combats begin, the game and I look for the rhythm of one another's strokes. I am unsure what the game wants from me. To kill the Whimsun? The game, likewise, is unsure. It waits to feel the choice I make, for that will determine future choices. Slowly, encounter by encounter, moment by moment, I accumulate enough intentional information—the brushstrokes of the narrative—to begin to perceive the order of some things. Toriel really is kind, I see that she's not just fattening me up to eat me. The Froggit really was pathetic and worth saving; she wasn't just shooing it away so it wouldn't blow her cover. My understanding of the narrative I'm both receiving and creating is moving into focus like flow—just as I think I have a grasp on it, something happens that pulls the rug out from under me. Did I really kill Toriel? Is she really

dead? Am I on my own? Surely this is a dreaded low point, but thankfully another character named Sans arrives to provide guidance, bringing me back to a sense of mastery. With each narrative event I accumulate, the picture becomes clearer. From disorder and the unknown emerges order and stability.

Together, the game and I make choices that constitute the narrative phenomenon. Since we are not closed systems, the factors that might influence my narrative choices are numerous, anything from my personal values to my experiences in other games, or even my earlier experiences in this same game—many players replay games they've already played to create different narrative events. The game's influence on the narrative is no less varied. While it's true that the game code itself contains only so many potential narrative paths, anywhere from zero to a small handful, usually, with only a handful of robust games (for example, *Mass Effect*) containing many more, the code, like the player is not a closed system, and its narrative decisions can have arisen from any number of factors: the designer's politics, market conditions, limitations of the intellectual property, available memory. The game and I each attune to each other's rhythms through mechanical events, or soft frames—me from the happenings on screen, the game from my choices and button presses. Gradually, narrative phenomenon forms from the combined accumulation, from the textual flow of one intentional event into the other. This is not accidental or random, it is designed. The game wants to tell this version of its story, just as it wants to tell any version of its story. The game accepts my narrative input to guide its choices, and the game's choices guide my narrative input, but we are not interacting, but rather moving in tandem, mirroring one another. Take, for example, Toriel's hit box, seen in Figure 3. In *Undertale*, monsters attack by unleashing patterned blocks against a tiny heart that I control. I am allowed to defend my health by moving the heart to avoid the blocks. If the heart takes too

many hits, I will lose the game. The more difficult the fight, the more complicated the patterns get, until it becomes nearly impossible to avoid a hit. In the Toriel fight, the patterns are outrageously complicated, and far more difficult than anything the player sees up until that point.



Figure 3: Toriel's Complex Fight Pattern (Undertale)

The secret of the Toriel fight is that Toriel is not, in fact, trying to kill the player, meaning that although her patterns look complicated, the blocks intentionally dodge around the vulnerable heart. If the player doesn't move the heart, the patterns will veer *around* the heart and miss it entirely. But if I take the heart and move it around, the patterns try to adjust *simultaneously*, moving as I move. This is how transactional poetics function—perceiving and perceived, telling and being told, all simultaneously, and with no meaningful boundary or separation. The example of the blocks and the heart are a visual description of what I will call in this dissertation a "feeling-through" of the experience. I cannot see that the intention of the blocks, or the movement of the patterns unless I move the heart icon, feeling-through how the experience shifts under my extended touch. Likewise, the game is feeling-through the player with which its been dealt. It feels me shift and move under its own extended touch, and it moves with me. We are "speaking with one voice," foundationally learning and experiencing the

method through which we will create a larger and more complex narrative together, moment by moment.

Thinking of narrative in this way, we can at last account for the special properties of my *Undertale* experience that "some narrative," emergence, cognitive theory, and classical narratology all failed to explain. My guilt in killing Toriel was not an emotional reaction to the narrative; it *was* the narrative. It was not an outside force that affected me, and therefore affected my play; it was a planned and designed experience that prompted and then moved in tandem with my choice. The guilt I felt affected my interactions with the rest of the characters I met in the game, including a major antagonist, Undyne, whose primary motivation is to kill the player to protect the rest of the monsters in the underground. My accumulated experience with Undyne would have been different if I had been intentionally pursuing genocide, as the involvement of the game and the involvement of my own choices would have altered, shifted, and fluctuated, moment by moment, transforming the narrative one encounter at a time. In that way, Toriel, Undyne, the Whimsun, and all of the potential enemies of *Undertale* provide a powerful example of transactionally emergent, contingent narrative devices.

1.7 Enemies and Cooposition

As stated in the opening pages of this chapter, enemies are remarkably undertheorized in game studies when, especially from a transactional standpoint, they are perhaps one of the most valuable and essential elements of any videogame. Almost every videogame contains some kind of enemy opposition, even if those enemies are other players, as in the very first videogames like *Tennis for Two*, *Spacewar!*, or *Pong*, where programming limitations made it unfeasible to include enemy artificial intelligence. Punday argues that this choice to turn videogames into the site of frenetic combat arises from the academy interest in concepts of narratology, including

those of dramatic events and action. (Punday 9). The videogame emerged from its contexts to represent actions first and foremost, which led to Alexander Galloway's famous assertion that actions are the essential component through which videogames should be defined. "If photographs are images, and films are moving images, then video games are actions. Let this be word one for video game theory" (Galloway 1). As videogames moved into the arcade, the financial incentive to increase player churn led to waves and waves of enemies designed to quickly separate hapless players from their quarters. By the time gaming moved primarily to the home space, the logic of gaming as a lone player overcoming long odds against armies of lethal opposition was well-ingrained to such an extent that games with no enemies to speak of are considered by some players to fall short of their definition of a game.

The prominent role of videogame enemies grants them incredible value when attempting to analyze contingent and contextual narrative, and for several reasons. First, an enemy's design emerges from contexts that include thematic, ludic, and narratological considerations. Take, for example, an iconic enemy from *Super Mario Bros.*, the Goomba. This beginning monster presents little challenge for the player as she advances in the Mushroom Kingdom, moving slowly towards Mario and easily dispatched with a single stomp. The Goomba is a thematic fit for the world of *Super Mario Bros*. It has a mushroom shape, befitting its namesake kingdom. It's sinister, but not horrifying. It retains an essential cuteness that fits it within the rounded, pleasant atmosphere of the game meant for children. The Goomba also has a narratological role, as in the game's lore they are considered traitors to the Mushroom Kingdom who betrayed the Princess to Bowser and joined his troops. Finally, they emerged in a critical ludic role, as an easier replacement for the more difficult Koopa Troopa, to help ease the player into the opening worlds of the game. By creating a mushroom that the player learns to stomp, the game teaches

the player to be brave with mushrooms, a lesson that pays off seconds after the first Goomba encounter when the player encounters the first mushroom power-up. (Figure 4). All of these roles emerged in context with one another, and with other design contexts, such as the development of the player character, Mario: the Goomba can be jumped on because Mario's primary ability is to jump.

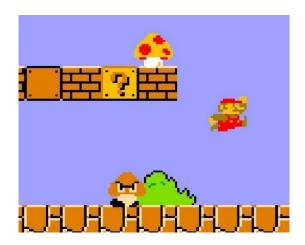


Figure 4: Goomba/Mushroom Designed Confusion

The player, meanwhile, while involved with the game and seeking aesthetic rhythm, coconstituting the experience, does so primarily by reaching across to the game's enemies,
touching and influencing, and being influenced by, those intertwined contexts. Much has been
written throughout the history of game studies on the player's relationship with the on-screen
avatar, the character through which the player controls the game, but as players reach the
experience, it is exceedingly common for players to describe becoming "one" with the controller
and the avatar. The player apprehends the rhythm of mechanical event after event, which in most
videogames means enemy after enemy—intertwined context after context. The player touches
the controller which sends electrical signals to the console that send similar signals to the
display; the player touches the game, touches the enemies in an unbroken, continuous plane, and
in so doing experiences, combat by combat, the game's design decisions, narrative choices, and

thematic meaning. Although they will most likely never meet, the player and the designer constitute the game's narrative together by reaching across, and they do so through active and cooperative opposition, the mechanism for the emergence of narrative phenomena.

This project is about the continuous, contingent, narrative nature of videogame enemies as they emerge rhythmically from the milieu in order to be perceived and thus elicit active response. This is an essential plank in the process of accumulating aesthetic narrative experience during videogame play. Enemies, of course, are not remotely the only kind of opposition found in video games. Beyond enemies, players may be menaced by anything the designer can imagine: chasms, platforms, puzzles, traps, mazes, timers, tricks, conversations, terrain, and the like. Some games have even forced the player to alter the settings within their console hardware before allowing them to advance. Each of these types deserves its own account, but my argument is that enemies have a unique and privileged position in the narrative platform because the player is as invested in the idea of the enemy almost as much as the designer. Buckles, writing on Propp and his work on folktales, recognized the importance of enemies to the narrative text, believing them to be "the symbolic representation of forces working to seemingly hinder, but actually promoting, the hero's or heroine's development" (cited in Montfort 112). The same is true of the videogame enemy, which marks a mechanical event, a single moment that, in context, constitutes the narrative experience, which, as we've seen with flow, means in a literal sense the player's physical skill development as much as it means the narrative development of the game's hero in the fiction. The videogame enemy opposes the player, wholeheartedly. The enemy is programmed to attempt to halt the player's progress, sometimes through extreme aggression. The player, meanwhile, does everything in her power to destroy, defeat, bypass, or otherwise neutralize the enemy threat. Both "sides" in this transaction are attempting to defeat the other,

but both are doing so to promote the development of the other—the game is attempting to provide challenge, fun, skill increase, and narrative, while the player is trying to advance game states and enact transformational action. Therefore, in a key term I will use and develop extensively in the chapters ahead, I will refer to this unique relationship as one of *cooposition*, an essential characteristic of most videogame narrative play.

However, it is easy to anticipate a critique here. No doubt there will be questions about the prominence of enemies in this study when there are so many other ways a game can mount a coopositional stance. When it comes to hazardous game objects, whether it looks like a spike, a bullet, a boulder, a chasm, a tank, or a Goomba, all that truly matters programmatically is the calculation happening in the game engine between the relative locations of the player character and the "hit box," or the threshold where damage is assigned by contact with the object. Therefore, from a pure computer science perspective, there is no real difference among the various threats I listed above, and it no doubt seems silly to some to pick out one for special attention—in fact, it's likely this reason has contributed to enemies being understudied in the first place. None of these objects are actually real, the thinking probably goes, and should therefore be equalized in importance. However, in transactional poetics, we must think of the player's role in co-constituting the narrative, and the fact is that players do perceive enemies differently than those other types of objects because the game phenomenon emerges from the lived experience of the physical world. In her study of videogames and emotion, Katherine Isbister notes a study that showed players were not only able to quickly identify friendly and aggressive responses in videogame NPCs, or non-player characters—a larger class to which many enemy types would belong—players tended to respond to NPCs based on those perceived attitudes just as they would another person giving them social cues. Isbister concludes that our

need to respond quickly in the videogame world leaves the player with no time to relearn social cues or acquire new environmental rules, and so the player applies their acquired environmental understanding of their world to the videogame (Isbister 20), a theory supported by transactional poetics which supposes that the mental phenomena of the experience emerge from the pre-existing environment, pre-reflection. The player has accumulated rhythms of social interactions and cues in the environment, and only readjusts to arrhythmia as the narrative phenomena emerges from that environment. Therefore, in transactional narrative, an enemy is an enemy and a bullet is a bullet, because they player sees them that way and will react to them as such until arrhythmia convinces them to readjust. Likewise, as the game reaches across, it depicts bullets and not, say, schoolhouses because the player is likewise softly framed through the assumed knowledge they bring with them from the world.

Since enemies have been an integral part of not just the videogame experience but also of videogame evolution, they are taxonomically diverse. Their design is limited only by the imagination of the designer and is reconceived from scratch for the needs of every title. There are, however, broad categories of enemy types that defined slowly, but firmly from the combined needs of gameplay and, as Punday noted, narrative. In the chapters that follow, I will explore four of these categories through a transactional lens, looking at how we might see enemies and opposition as a major process of narrative phenomena. Chapter 2 is about villains, the "final bosses" of many games, and a category that includes many of the most famous characters in videogame history. Villains often appear on game box art or in other key marketing texts, and can often be the central character of the game in which they appear. As a counterpoint to traditional arguments about the avatar as the organizing and orienting object of gameplay for the videogame user, I will show how villains act to situate the player into the narrative and orient the

emergence of the game's narrative, exploring how games use villains to create fertile conditions for particular behaviors and responses.

Moving down the videogame enemy hierarchy, Chapter 3 will examine bosses, also called level bosses or boss monsters. These enemies, which share thematic similarities to what Joseph Campbell called threshold guardians, typically exist at the end of game levels and gatekeep the player from advancing to the next stage of the adventure. I will explore the unique phenomenon of bosses who despite—or perhaps because of—their prominent roles are often both beloved and despised by player communities. Applying and complicating theories of rhythm and arrhythmia, well as the concept of artistic ugliness, I will show how bosses create a ludic ugliness that acts as an essential link between transactional experience and the flow of so-called optimal game design.

Chapter 4 is focused on the primary type of enemy that players experience in their narrative adventures, the enemies informally called mobs. These enemies, typically found in clusters or roaming units in most games, make up the bulk of most gameplay experiences, and provide the individual mechanical events that, in context, build the experience of the game. Less appreciated is the role of mobs in building and maintaining setting and space in games. Using theories of place and rhythm, I will demonstrate how individual mob encounters are non-discrete, creating landscapes, boundaries, and maps, not just of terrain, but of skill, accomplishment, emotion, and theme. Mobs allow players to feel-through space and actualize the experience beyond one of rote execution of felicitous play. I will introduce the concept of the rhizomatic maze, a transactional sense of space that connects all spaces to one another while still allowing for movement and antagonism to create the experience.

Finally, in Chapter 5, I will look at one of the least known and least recognized types of enemies, a subset of mobs that players have nicknamed trash. These enemies are defined much more by what they do than by what they are. Players recognize trash as a type of mob that is designed or placed intentionally into a level, raid, task, or other event for the express purpose of sapping the player's time, and therefore provides an opportunity to discuss enemies that irritate, annoy, complicate, and extend the playing experience. In this chapter, I will take a transactional look at the history of theorizing game time in game studies before demonstrating how trash, along with mobs, extend the temporal possibilities of the rhizomatic maze. Through this work, we can begin an understanding of why some narrative play brings pleasure, while other, nearly identical play, brings anger, frustration, or a termination of the play experience.

Throughout this project, the goal will be to look at enemies as present, active, and nontrivial to the accumulation of the coopositional experience of game narrative. If drama is conflict, then videogame narrative is, almost always, identified, embraced, and experienced through direct coopositional conflict. My goal is to reveal that player struggle and agency against this opposition is not a weakness in the pursuit of narrative, but rather the process through which narrative comes to exist at all.

2 VILLAINS: COOPOSITIONAL AVATARS OF NARRATIVE ORIENTATION

Bowser, Dr. Eggman, Sephiroth, Ganondorf, Joseph Seed, Asgore, Andrew Ryan,
GLaDOS, Handsome Jack, Lady Dimitrescu, Arthas the Lich King, Kefka, Mother Brain,
Wart, King Dedede, Dr. Wily, Big Boss, The Transcendent One, Wesker, Count Bleck

2.1 Introduction: Vaas

I knew Vaas Montenegro before I knew myself. My player character in *Far Cry 3*, Jason Brody, doesn't appear on the cover of the game box. Instead, a mohawked criminal wielding two handguns sits cross-legged on a beach, a scenic set of mountains behind him, just past two men in the near background hanging by their ankles from a tree. This is Vaas, and his victims are irrelevant to him. He's conquered them. Instead, he looks forward, directly at you, the person holding the box.

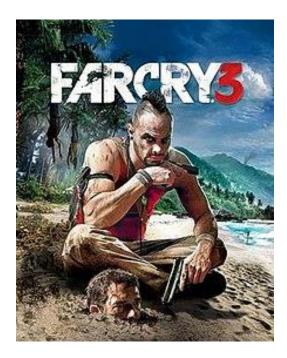


Figure 5: Far Cry 3 Front Cover

Vaas is a top man on a Pacific island harboring pirates, and when my friends and I accidentally trespass, Vaas kidnaps and terrorizes us. He plans to hold me and my brothers for

ransom, but I break free into the jungle and contact the locals who arm me, train me, and decorate me with ceremonial ink. Over time, as I fight back against Vaas's operation, I transform into a warrior and a killer—a killer like Vaas.

Vaas is the face of Far Cry 3 and one of the most popular videogame villains ever created, at least in terms of fan engagement. Played by the actor Michael Mando, Vaas first appeared in a promotional video for the game at the E3 conference in 2011, where Vaas rambles out a monologue about the definition of insanity, which Vaas he describes as doing the same thing repeatedly and expecting different results. The video ends with Vaas dropping the unseen player character off a cliff into the lagoon below. Far Cry series publisher Ubisoft recognized that Vaas had the potential to become a fan favorite character, and at the PAX East conference the next year paid workers to shave willing attendees' heads to match Vaas's mohawk (Crecente). The initial Vaas video went viral, racking up millions of views and driving anticipation for the title. It also gave the Far Cry series an identity; since Far Cry 3, the series has organized its narrative presentation almost entirely around its eccentric core villains. Far Cry 4 is all about Pagan Min, a psychotic Chinese autocrat and drug lord, while Far Cry 5 pits the player against American cult leader Joseph Seed. The most recent entry, 2021's Far Cry 6, boasts actor Giancarlo Esposito as Anton Castillo, a Caribbean dictator, but the closing moments of the game revealed the return of Vaas in future installments, despite his apparent death in Far Cry 3. The character returned as a playable figure in a Far Cry 6 downloadable content pack called, appropriately, "Vaas: Insanity."

The enthusiastic player reaction to Vaas is especially impressive when considering his limited appearances throughout *Far Cry 3*'s gameplay. A player may spend dozens of hours in *Far Cry 3*, but in all of that time Vaas appears on screen for less than fifteen minutes. Instead of

dealing with Vaas directly, the player is encouraged to explore the island, battle pirates, liberate supply stations, hunt wildlife, and collect items. Many franchise games developed by Ubisoft since 2007, from Far Cry to Assassin's Creed to Watch Dogs, are infamous for their signature style of open world map exploration, which forces players to unveil large sections of the map through a particular task (in Far Cry 3, this involves climbing a radio tower and looking around at the surrounding landscape). The map then populates dozens of points of interest within the revealed zone, giving the player hours upon hours of repetitive tasks that can be accomplished quickly and relatively easily at their own direction and leisure, ensuring that even a short play session results in the player feeling that some progress has been made. The player chooses tasks based on a preferred playstyle, as many tasks have only a tangential, at best, relationship with the story, leading to the kinds of dissonant play that open world games use as their basic draw. The player-character's voice performance and dialog suggest rescuing his friends from Vaas is his one single and driving goal. But once freed from the plot shackles and set loose in the open world, the player-as-Brody is encouraged to leave his friends at the mercy of pirates in order to embrace other activities, such as collecting ancient relics or hunting sharks in the ocean.

As with most *Far Cry* protagonists, Jason Brody is barely a character. He is young, male, and white, the middle of three brothers. His oldest brother, Grant, has military training and has seen combat but doesn't survive the opening cinematic. Jason, by contrast, fits the archetype of the unlikely hero, representative of the "wrong guy at the wrong time" action story trope. Despite this, the open-world design of the game and the fluid combat transforms Jason within minutes into an unstoppable killing machine, a hero and liberator to the island's native population, and a revered spiritual figure. Jason's implausible competence is not lost on the game's designers. In promotional videos, the *Far Cry* designers describe their goal to gamify repetitive tasks as a

strategy to push players into further extreme behaviors, plotting to seduce the player into further violence. This descent leads to scripted plot scenes late in the game; after Jason rescues his friends, he then quickly abandons them to continue his crusade. Vaas, a murdering psychotic who plans to butcher his own priestess sister Citra for obstructing his goals, intentionally mirrors that journey. Jeffrey Yohalem, the game's lead writer, explains that Vaas is meant to represent a possible future. "Vaas was a warning about what could happen to the player character" (Driver/Purslow). By letting the player observe how repetitive and guiltless violence drove Vaas into full insanity, the designers place Vaas as a moral guidepost, a symbol that can either draw or repel the player's performance of the generic protagonist. The final choice in the game is a binary one, in which Jason can either embrace his violent spirit and slaughter his friends or escape the island and reject his new destructive nature.

Far Cry 3 is built around and entirely defined by Vaas, its villain, and not its protagonist, Jason Brody, despite the vast disparity between the size of their respective roles. This lopsided construction is quite common in videogames, which tend to reserve the villain for only the most climactic encounters at the end of narrative adventures, while simultaneously intending for villains to drive narrative play and ludic strategies. In this chapter, I will explore the characteristics of the videogame villain from the perspective of transactional narrative and cooposition, further elaborating on those terms and ideas throughout. The villain is an unusual figure in videogame stories, almost completely constituted through traditional narrative technique and largely disassociated from ludic concerns. In fact, as I will argue, the villain is identified by their actions; although most villains will, at the end of the narrative, serve as a final boss for the player to fight, the power of the villain is found in its core characteristic of unavailability, of not being subject to ludic combat. The villain exists to taunt and to motivate,

not to fight, and by doing so plays an essential role in facilitating narrative co-constitution on the part of the player. I will further argue that the game studies tradition of focusing attention on the player's relationship with the avatar/player character is, at best, over-emphasized and that the player's impetus to sense and locate narrative orientation and alignment *through opposition* to the villain makes the villain not only a critical phenomenon for narrative orientation, but defines the villain as a coopositional avatar for the videogame, its design, and its antagonistic elements.

2.2 The Role of the Videogame Villain

Vaas is an iconic example of the role of the videogame villain, a core antagonist typically presented as an ongoing, long-term target for the player and a key figure in many narrative games. It is important when defining the villain to clarify how the villain stands apart and beyond the other enemies of the game, at least phenomenologically, within the player's perception. Unlike the hordes of enemies and challenges a player may face in any game, the villain is typically singular, distant, and all-powerful, appearing as the game's central figure of opposition, seemingly unbeatable. Usually the other enemies in a game work for the villain, who stays off the main stage unless directly confronting, taunting, or attacking the player character. The villain usually fills a leadership role of some kind and, in contrast to the typical player character, is a figure of outsized personality. Videogame villains are known for being impossibly cool (Sephiroth, Final Fantasy VII), charismatic (Dutch, Red Dead Redemption 2) or entertaining (Handsome Jack, Borderlands 2). Sometimes, as in the Far Cry series, the villain appears on the cover of the game box and in much of the game's key promotional art. When Vaas stares out at the player from the cover of Far Cry 3, his scowl functions as an invitation. In front of him is a recent victim, buried in the sand. Vaas appears to be beckoning the player to try and do better.

However, unlike a common enemy in a level or a periodic boss monster, there is no expectation that the player will fight the villain regularly while playing a videogame (Bowser is an exception, showing up to fight Mario at the end of every World in the original *Super Mario Bros*. He evolves to a more standard villain role in future appearances). Instead, players have learned through decades of videogame storytelling not to expect to face the villain at all until the end of the game, if even then. In the rare games in which the player meets the villain in combat early, the villain will either easily defeat the player in a show of strength or find himself protected by designed narrative gates—for example, Darth Malak from the Star Wars roleplaying title *Knights of the Old Republic* (2003) is saved from losing in combat by sudden cutscenes which simply depict him winning instead.

runner named The Jackal, the villain of *Far Cry 2*. Clint Hocking, that game's creative director, is quick to identify the character in both narrative and gameplay contexts as a "macguffin," an object of pursuit. "He's really there to give the player a high-level target and a high-level goal that the player doesn't have any expectation of being able to get to until they've worked their way through the content. He's not really a gameplay function, he's just a motivation" (Driver/Purslow). This is how the videogame villain is usually perceived, more of a destination than an active threat. Many contemporary videogames present the player's character as a work in progress, using design elements of the role-playing game to allow the player to unlock and practice new skills and weapons throughout the course of play. Like Jason Brody in *Far Cry 3*, the hero is very often a different and more powerful figure at the conclusion of the story than at the start. In this scenario, as Hocking suggests, the villain functions as a kind of finish line for the completed experience, an endpoint for the player character's narrative journey and the

player's game experience, a destination that exists beyond the step-by-step encounters players experience on the path through the narrative, including standard enemies or even bosses. Villains extend beyond them all.

Some of the most memorable videogame villains assert their motivational role by taunting the player's incompetence. GLaDOS, the sinister AI that functions as the villain of the puzzle action game *Portal*, mocks the player throughout each puzzle, with quotes ranging from backhanded compliments ("You did so well, I'm going to note this on your file... 'Did... well... enough'") to emotional manipulation ("Despite your violent behavior, the only thing you've managed to break so far is my heart") to outright insults ("Here come the test results: 'You are a horrible person.' That's what is says. We weren't even testing for that"). After suffering her abuse for hours, many *Portal* players are delighted to finally have an opportunity to face her in combat, using skills they've sharpened in the earlier "tests" for a final fight that is as stuffed with one-liners as it is with danger for the player. (After the player destroys one of GLaDOS's many nodes, for example, the AI chastises her by claiming that particular part made "shoes for orphans"). GLaDOS is so famously skilled with her verbal assaults, that some writers have even suggested that *Portal* uses ridicule as a functional game mechanic. "Ultimately, the ridicule dares the player, motivating her or him to keep pressing onward" (Grewell, et. al).

The use of the villain as a motivating game mechanic evolved slowly across the history of the medium. The earliest arcade titles rarely featured villains, in large part because they rarely featured narratives. Since the goal of the arcade machine was to separate players from their quarters and clear the machine out for the next player, sessions were designed to be quite short and punishing. *Donkey Kong* is one exception, with the antagonist of the game receiving top line billing and his face on the side of the game cabinet, and the game's giant gorilla villain fills

much the same role as GLaDOS or Vaas, standing at each level's literal finish line and hurling threats at the hero. Unlike most villains, the player never gets to fully defeat Donkey Kong; although the player can drop Kong from a tall height every fourth level, the game simply repeats the cycle on the very next screen as Kong continues to capture and imprison Pauline, the player character's girlfriend, until the player's lives expire. Villains can be found scattered only sporadically throughout other early arcade games, such as filmmaker Don Bluth's laserdisc game *Dragon's Lair*, in which players memorize patterns to help the animated Dirk the Daring rescue a princess from the evil dragon Singe.

One of the most interesting examples of the arcade villain appears in the game *Sinistar*, in which players are tasked with defeating an evil, talking warship in space. Players pilot a small starship and navigate through a zone filled with enemy ships and small asteroids. By mining asteroids, the player earns special bombs used to defeat the Sinistar, the game's eponymous villain, which is built by enemy worker ships while the player mines for bombs. When the Sinistar is completed, it comes to life with stereo-supported dialogue, from disconcerting screams to taunts ("Beware! I live!"). Once in play, the Sinistar pursues the player's ship, destroying it with a touch while the player desperately launches the collected bombs to eliminate the threat. The villain in *Sinistar* therefore motivates through temporal pressure; the player knows the Sinistar is under construction but can't know when it will be completed, promoting rapid collection of bombs and, hopefully for the cabinet designers, pressuring the player into making mistakes. If GLaDOS weaponizes ridicule as a motivating game mechanic, the Sinistar weaponizes time in the same way. This same mechanic appears in another 1983 title, the Atari 2600 cartridge Frankenstein's Monster, in which the player must collect stones and build a barricade around Mary Shelley's creature before a lightning storm wakes it. Unlike in *Sinistar*,

the monster is constantly visible throughout play but gradually changes color to indicate how much time the player has to complete their task before failure.



Figure 6: The villain on the cover and in-game in Frankenstein's Monster

As games moved out of the arcade and to home consoles and personal computers, the longer and more comfortable play sessions (removed from the need to cycle quarters) soon led to more complex narratives, and therefore more villains. Legendary text adventure *Zork* famously contains a wicked Thief who appears throughout the game at random to steal items and must be killed and looted by the player to finish the game. The Thief is memorable but arguably falls short of true videogame villainy because he is not the motivation of the player's quest but simply a personified obstacle the player meets along the way. It isn't until *Zork II* in 1981 that true villainy appeared in the series. Frobozz, a sinister wizard, appears on the game box and periodically appears to attack the player with harmful spells. The player can only stop Frobozz by gaining enough power to finally confront the wizard. Nick Monfort, in his writing on game narrative, cites the *Zork* games as aligning with Propp's theories of literary villainy. "Propp believed villainy to be the most important function in the folktales he examined," Montfort writes, while elaborating ideas first proposed by Buckles writing about the text game *Adventure*. "[villains are] 'the symbolic representation of forces working to seemingly hinder, but actually

promoting, the hero or heroine's development" (Montfort 112). Following that thought, Frobozz appears in *Zork II* not just to provide an obstacle for the player, but to encourage the development of the player's skills in *overcoming* obstacles.



Figure 7: Frobozz on the cover of Zork II

This connection from Propp to *Zork II* and *Adventure* is justified because the template for videogame villainy was established in legacy media, from classical folktales to fairy tales, adventure stories, and popular fiction. After adopting narrative and villainous foils, videogame studios soon worked to establish the most popular as transmedia figures—for example, 1980s Nintendo games generated such a robust rogue's gallery of memorable baddies that the company spun them off into film and television, including the Saturday morning advertainment cartoon *Captain N*, in which a 1980s teen is zapped into Nintendo's shared universe to fight an assortment of Nintendo heavies. It didn't matter that videogame villains couldn't yet compete with their analog predecessors for depth or complexity; the villain's role was to stand permanently opposed to the goals of the videogame heroes and, by proxy, the player,

establishing early the popular assumption that videogames, by their nature, perform as heroic wish fulfillment simulations in which the player grabs his controller to engage in battle against implacable foes.

In this way, the adoption of fiction tropes related to heroic quests and villainous opposition opens study of videogame narrative to classical narratological theories of the role of the villain, such as those of Propp, who believed the villain held a central and critical role in the folktale. The villain is the figure who creates the "actual movement" of the story (Propp 29), and early incidents in the plot, including the basic setting and any tragic backstory that exists in the life of the character such as the absence of a parent, serve primarily to set the stage for the villainy that occurs. The villain, then, is the engine of the adventure that will change and develop the hero into a more powerful version of him or herself. The literary villain is the reflection of the hero; it is by comparing the evil of the villain and the goodness of the hero that the reader comes to understand the hero's nature and identity. The juxtaposition of evil with good creates a mutual reflection, and the qualities of each shine brighter due to the comparison. In fact, this observation of Propp's, which has ascended into common understanding of fictional villains over time, is one of the possible reasons why the videogame villain, and character-driven opposition as a whole, has remained undertheorized in game studies. Literary and narrative scholars have centuries of villains available to study and catalogue, and, as Arenas has noted, the assumption appears to be that the question of the villain has been thoroughly picked over and little new awaits our inquiry. Arenas writes that the academic consensus is that "fictional characters should not keep us too busy, since they are mere patterns of recurrence within a text, or mere functions within a plot," (Arenas 3) functions that include collecting and personifying those textual

patterns (we might consider them *rhythms*) that position the character as a recognizable agent of Aristotelian *agon*.

While this seems evidently true, that does not mean that villainy is a settled question, especially for videogames. In fact, Arenas's work was on the possibility of opening villains up to advanced scrutiny through a blended approach of psychoanalysis and cognitive psychology. Arenas explores how and why people embedded in particular cultures might identify character traits as villainous by way of cognitive analysis and intuition. For example, suggesting that readers are constantly processing and analyzing presented characters for the presence or lack of character traits such as trust, straightforwardness, altruism, compliance, modesty, and tendermindedness (20). In Arenas's account, the villain should not be psychoanalyzed to discover the hidden desires of the author but rather studied through psychology to determine why persons, groups, or cultures respond to villains as negative reflections of their own values.

While Arenas and others work to find new life in the villain, the same interest has not yet emerged in game studies, where the consensus appears to be that villains aren't of particular interest, as little research has addressed the topic. The villain is such a staple of literary studies that its analysis has been abandoned to the application of literary tools, if at all. (Once again, the suspicion of game studies for theories that emerge from outside disciplines has an overbearing effect.) As we have seen, however, allowing narratological concepts to cross freely into game studies can create intractable problems. The dualist rift returns when trying to mirror the villain off the videogame's hero because the nature of the hero itself—especially in relationship with the player—remains such a hotly debated topic. It seems to me that to assess the videogame villain, one must ask a series of foundational questions about the relationship of the videogame villain to the literary villain, to the videogame hero, and of the hero to the player, applying our

transactional lens to look at these relationships in terms of aesthetic rhythm, flow, and continuous experience.

2.3 More Than Just a Mountain

The first question we must ask is whether or not the villain of the game carries any special relationship at all with the player or player character. This is not a simple question, because the videogame villain is a significant figure of narrative opposition and motivation but, as any player can attest, videogames are filled with all manner of oppositional forces, not the least of which is the hardware and underlying code itself. Players are acutely aware that the game is programmed to work against them, and active perception of the game requires a multi-layered, continuous, and malleable appreciation of the game's coopositional rhythms (more on this term later) in order to achieve a state of rhythmic equilibrium, what Csikszentmihalyi thinks of as flow, or what Jayemanne might consider felicitous engagement with the game's framing. In that way, villains are just one of the narrative game's many oppositional targets. For example, returning to Hocking's description of The Jackal in Far Cry 2 as a high-level goal for the player, we might point to the 2012 game *Journey*, which includes no villain or enemies in its premise. Instead, at almost all points during the game, players may observe a gigantic, glowing mountain spire on the horizon. Without any prompting, instruction, or dialog, players inevitably move toward the mountain, because it is the most dominant feature in the landscape and, therefore, a goal.



Figure 8: The mountain guides the player in Journey

Like defeating Vaas, approaching the mountain is an impossibility without undergoing some improvement in skill and ability. The player must take time along the path to collect extensions to the player character's whirling scarf, which in turn allows the player to catch the wind and fly for longer periods, aiding in the solving of environmental challenges or puzzles. The mountain awaits, and the player must rise to meet that challenge—just like the player must do with the villains we have discussed.

If ascending the mountain is the ultimate challenge of *Journey*, and if the pursuit of the mountain drives players to increase the player character's skills and abilities, then is the mountain a villain? As many designers and game scholars have noted (Anthropy and Clark, for example), there is little difference *programmatically* between the mountain and Vaas, GLaDOS, or any other videogame villain. Underneath the graphical expression of mountains, villains, chasms, monsters, sandstorms, and dragons, these entities are each just expressions of computer code given visual, aural, spatial, and temporal characteristics meant to distinguish them from other coded phenomena within the text—what designers call "fiction," or the textual patterns meant to disguise the object's or obstacle's true nature as code and mathematical calculation. A ruthless reading of the *Journey* mountain might then suggest that it *is* the villain of the game,

because any sufficiently motivating obstacle—especially an obstacle that drives the overall arc of gameplay and progression expected from contemporary videogames—qualifies, since all code is the same as any other. This is the ludological reading of game narrative, in which the presentation of coded items is ultimately irrelevant, since in the end, like say in *Tetris*, it's all "really" just blocks and shapes, no matter what we call the pieces. (Gee 15-17)

However, as Katherine Isbister has noted, the crucial element missing from that account is the *player's* active perception of the videogame mountain and the videogame character as elements of her world. Isbister notes that players can engage in intense emotional relationships with videogame characters through parasocial interaction (Isbister 7). Shira Chess, for example, has noted how casual games will deploy cute characters, such as a polar bear mother with her cubs, to manipulate players emotionally, even in games with stripped down, casino-like mechanics. And Yee has argued that humans have a difficult time treating digital persons differently than flesh and blood people (Chess 156-157). For this reason, the social game studio Zynga often included romantic interests in their games to great success, even though the love interests were little more than static NPCs with no game function, such as the lovers Lisa Latte and Joe Espresso found in Café World. Simply put, players see mountains and characters differently, even if they're much the same "under the hood." Gee is half-right when he claims that no amount of fiction will make *Tetris* more than blocks and shapes in the code; what he misses is how players will adjust relationships to those blocks if they are encouraged to perceive them as characters instead. One of the most famous examples of this in videogames is a *literal* block: the Weighted Companion Cube, one of GLaDOS's insidious pranks from *Portal*. One level in the game requires players to manipulate the position of a cube in order to solve a puzzle. GLaDOS, however, identifies the cube as your companion and alters its basic design with hearts

(otherwise the cube is standard in every way). Once the player has completed the challenge, GLaDOS orders the player to drop the companion cube in an incinerator, and many players expressed shock and dismay over having to "kill" the block.

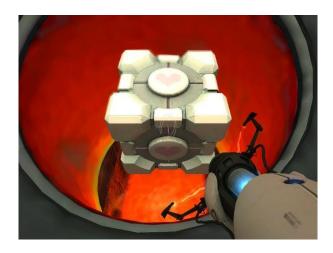


Figure 9: The Companion Cube in Portal

Imagine, then, if the block had been replaced with the 3D model of a baby polar bear, and it becomes easy to see Isbister's argument. "Avatars and NPCs [non-player characters] allow players to identify and engage in new ways, awakening different kinds of emotions... a feeling of responsibility and of the complexity of relating to other beings" (Isbister 41). To return to a concept from Chapter 1, players perceive villains *experientially* as distinct from other kinds of digital objects, no matter what the underlying code suggests. *Journey* does no work to encourage players to see the mountain as having agency or as a companion. It is just a mountain. On the other hand, it is the perceived agency of the villain—from Sinistar to Vaas—that allows it to emerge from the milieu as a recognizable and coopositional figure. And as its agency appears to the player as an extension of the game's design and desires, these figures emerge as avatars *for the game*.

To expand on this point: when the player of the narrative videogame reaches across through perception and movement using her senses and controllers, she attempts to achieve a

felicitous rhythm with the narrative material of the game, aligning her own biological and cultural rhythms with that offered in the narrative game not as a distant, separated text but in a way, as Anable puts it, that sees the game as "part of the historically and technologically grounded, yet emergent and evasive, shifts in the everyday conditions of the computer-mediated world" (Anable xiii). The player reaches across as an entity of biological and cultural rhythms what Apperley and others call a "polyrhythm" (Apperley 38)--embedded continuously in a world with its own massive polyrhythm. Through perception and play the player attempts to align with the polyrhythm of the game, which is perceived as a physical extension of the computermediated world in which the player is enmeshed. A game that offers narrative rhythms in addition to gameplay rhythms—both of which emerged through combined rhythms of design, technology, and culture—provides just one more wave with which the player may attempt to align, in the same way Dewey's spectator aligns with a set of organized brushstrokes to perceive the image offered by the painter. In this way, the villain is quite different from the mountain because the player does not perceive them both as coded obstacles but as expressions of physical rhythms in the world. Rather than rely on Arenas's cognitive approach to analyzing literary villains, we can instead think transactionally, as the player reaches across to align with a game's narrative rhythm, then perceives as the "brushstrokes" of character emerge from the milieu, first by way of appearance, then by way of action and dialog and conflict and perceived agency, all of which rely on the player's cultural and environmental milieu to inform how they are perceived. It's for this reason that we can think of villains as more than their ludological ontology but as the weakly emergent phenomena between player and game—less a node of textual information than a emergent rhythm that sits on the extreme outside of the player's aspirational aesthetic—like

Vaas on the cover of Far Cry 3, a character that demands defeat before all the polyrhythm can align.

2.4 The Problem of the Avatar

I have just argued that the villain maintains a special, privileged position in the eyes of the player. The villain is not just like every other obstacle, no matter its "true" nature as code. But the second question that must be asked—whether the videogame villain fills the role of the literary villain, as a foil who gives identity to the hero through juxtaposition—runs into a very serious problem, one that has consumed game studies far more than questions of opposition and antagonism. That problem, put simply, is who or what we should identify as the hero. At the heart of this problem is the dualist rift that I have argued has stymied game and narrative studies for many years. At issue is the special, privileged relationship the player has to the game avatar or player character, which I will approach as separate but related concepts.

To explain this problem, let's return to the character of Jason Brody in *Far Cry 3*. As explained earlier, Brody is a mess as a character. If the average player's actions in *Far Cry 3* were written out as a novel, the character would become a hopeless tangle of contradictions. Brody is not a trained soldier, although he is said to have shown aptitude with a gun when shooting with his older brother. But within minutes in *Far Cry 3*, Brody is an unstoppable killing machine. The emotional conflict in the story is about Brody being torn between his new nature as a killer and his stated goal to rescue his friends and escape the island. But in actuality, players will likely spend hours guiding Brody on busy work and side quests. This disconnect is by no means restricted to the *Far Cry* series. Many games with open-world design struggle with the same problem. For example, in *Grand Theft Auto V* (2013), the character of Michael De Santa is depicted as living a quiet life in the suburbs, laying low after having left his criminal past behind

him. Eventually, the world of crime and chaos finds Michael in the plot, but long before that happens the player can take Michael on a killing spree and joy ride through the city, causing enough mayhem to bring the National Guard down upon them, but the next cutscene in Michael's life ignores that and returns to the idea that Michael just wants to hide his destructive past. These examples point to an alleged disparity between the player, the player-character, and the manifestation of that character controlled by the player, the avatar. So, if the videogame villain is acting as a reflection, drawing out the identity of the hero, the troubling question is how to identify the hero from that milieu.

The videogame avatar has long been seen and studied as a critical element of videogame play. Researchers have proposed that the avatar acts as an extended self that allows for construction of player identity (Turkle 177), as orientating figures in a virtual environment (Vella), as cybernetic arrangements (Keogh 22), inhabitable protagonists (Isbister 11), as doubleconsciousness (Salen & Zimmerman, by Vella); and as a second skin (Consalvo/Begy 108-109). Each of these metaphors and approaches tries to make sense of what, in a ludological sense, is the ultimate distinction between videogames and legacy media, the link between the player and the actions of the character the player controls. Most game studies approaches to the avatar follow along these lines, suggesting that the player and the avatar merge in some significant way that allows the player to experiment with being a different person or trying on another set of perspectives and cultural values. One of my students once described his experience playing a Batman videogame in those terms, feeling like he was Batman saving Gotham from a wave of crime. His description lends credence to these ideas, which appear at first to be evident. But my student said something curious next. When he was not successful as Batman, such as when he fell from height or lost a combat to a random thug, he blamed the character, not himself, taking

credit for all of Batman's skill and yelling at the superhero for being bad at his job when it was the student himself who made a mistake. The instant and sudden dismissal my student described is not unusual for videogame play and seems incompatible with true "second skin" constructions. Keogh has written that players exist both in the game world and the real world simultaneously, shifting perception as needed based on environment. For Keogh, this is a phenomenological transition between perceptive states (Keogh 51). My transactional argument is that this is possible because there is no boundary between any of the individual states to begin with, precluding the idea of the avatar as a second skin or a costume to be worn to enter a digital space. Plenty of research, such as Consalvo and Begy's study of the rise and fall of the browser game *Faunasphere* (2015), have shown that players do not need an avatar to find themselves or to form identities in games. In fact, I believe that game studies has misunderstood and overemphasized the role of the avatar and player-character as a driver of player identity in almost all narrative games.

Walt Williams, the writer of the lauded narrative shooter *Spec Ops: The Line*, once described the enormous gap between fictional characters and avatars. "A character can be flawed, hypocritical, or just plain evil. An avatar has to be a blank slate, so that its personality doesn't conflict with that of the player." (Williams 169) The videogame avatar is falsely looked upon as a character when in fact they are closer to, as Newman suggests (2002), collections of affordances. Aarseth correctly noted this distinction early, calling out the dissonant play when a player using an avatar cannot perform basic actions or techniques that the character would be able to perform if not trapped within a videogame (Aarseth 121). However, Aarseth saw this as a flaw of thinking of videogames as narratives, when it is really a flaw of dualist narratological theory to account for all ways in which stories and storytelling have transformed through digital

media and videogames. Avatars, as Walt Williams suggests, do not contain anything more than superficial character traits—from visual design to audio dialog to animations--to leave the character as empty as possible to be filled with player action. Klevjer is among the scholars who have attempted to reconceptualize the inflated understanding of the avatar, instead arguing for what he calls "prosthetic telepresence," (Klevjer 17) with the player relationship to the avatar-in-the-game more akin to driving a car on a city street. Apperley's analogy is perhaps preferable, considering his interest in gaming rhythms. Apperley extends outward from the avatar to the player, and from the player outward into the polyrhythm of the player's situated body in the world, what he calls a "situated ecology." Noting how videogame players often dream of the game when they aren't playing, or believe they see the game's targeting reticles when moving throughout the real world, Apperley believes videogame play, and videogame avatar manipulation, is more akin to dressage, or preparation for tasks required to complete the game (Apperley 34-35).

Considering these ideas, while it is true that avatars are often given names, histories, personalities, and faces, one natural experience for players is to looks *past* the avatar or beyond it. The avatar, in most cases, carries very little emotional or narrative weight. Translating and adapting these ideas into transactionism, we can return to Reynolds and his account of *The Unfinished Swan*. As he describes the player's manipulation of the avatar Reynolds describes the critical importance of moving the avatar, designated as a character named Monroe, through the world. Monroe's movement is an act of perception through which the player makes sense of the game's invisible architecture as the player hurls paint and understands the revealed three-dimensional space based on the relationship between the avatar's presence and the splotches on the wall. The avatar is not a character in those moments but a collection of perceptual

affordances that allow the player-as-Monroe to "aestheticize the world by perceiving it," and vice versa (Reynolds 19-22).

If the avatar and the player-character are not synonymous as Apperley and others suggest, and if the avatar is a mere expression of player affordances to which the videogame villain is providing identity through reflection, then should we consider the player-character as the protagonist in the videogame story? Is the protagonist the character or the player who drives it? Which is the more important phenomenon, the player-as-avatar, or the player-as-character? Fortunately, this is a false binary that reflects the larger difficulties with theorizing narrative under player control, as outlined in Chapter 1. When we return to thinking of narrative transactionally, we can see there is no separation between these weakly emergent constructions. Remember, the player *constitutes* the narrative through active perception, just as the game situates and constitutes the player's body, attention, and perception through the course of play. The player-character as a narrative element is continuous with the player-as-avatar, allowing a character-narrative-player eurhythm, to use a term coined by Lefebvre (1992) to describe the culmination of many dissonant polyrhythms into a single experience. The villain is not separate from this rhythm; it invites *coopositional* alignment. Put simply, the player seeking narrative experience will identify and then align in opposition to the villain, meaning that the villain reflects the identity of both the player-character and the player herself.

2.5 Villains as Coopositional Avatars

It is necessary now to expand on my previous descriptions of transactional cooposition. In chapter 1, I described cooposition as "cooperative antagonism." To that description, I want to add that cooposition is not only cooperative, it is also *productive* antagonism, and a foundational element in active perception of any narrative, although it is most prominently displayed in

videogame narrative. To explain cooposition, I want to return to Walt Williams and his military shooter, Spec Ops: The Line. Released in 2012 to little attention, the game (the tenth entry in a lesser-known military shooter franchise) quickly gained a positive reputation for its strong and twisty narrative. The player controls Walker, an American soldier sent into Dubai which, in this world, has been swept off the map by a sandstorm of unbelievable scale. Walker leads a small team on a reconnaissance mission but gradually grows obsessed with a man named Konrad (the game contains overt references to Joseph Conrad's *Heart of Darkness*) who has gone rogue from the military and begun committing atrocities against the survivors of the sandstorm. As Walker pushes his team deeper into the ruins of the city, each grisly discovery only makes him more determined to find and eliminate his enemy. After endless firefights and explosions, the player controlling Walker commits his own atrocity—believing he is facing a large squad of Konrad's troops, Walker drops lethal white phosphorous on a population, only later realizing that the group contained only innocent civilians. As the player-character Walker spirals into madness, the player controlling the avatar of Walker must confront his own complicity in war crimes. There is no choice to avoid Walker's orders if the game is to continue, save for refusing to play.

In the final stages of the game, the player discovers that Konrad is not Walker's enemy. In fact, Konrad was dead before the game's story even began. All of the atrocities that Walker has been attributing to Konrad are, in fact, Walker's own atrocities, reworked in his mind to attribute them to Konrad after Walker's own guilt over the white phosphorus attack sent him into a mental breakdown. The events since the civilian attack are then recontextualized and represented to the player, who sees how at each stage the villain was, in fact, the player-character Walker, and that the dialog from the men under his command were actually concerned pleas for Walker to come to his senses even as they followed his orders. Faced with this moment of mental

clarity, the player's final choices are to surrender to a squad of troops or to embrace the Konrad inside himself and open fire... or to commit suicide and truly defeat the villain.

The events of *Spec Ops: The Line* illustrate how cooposition develops player and character identity through conflict. Since he is deceased, Konrad is a purely narrative construction, a narrative Walker tells himself, one created by Walker's perception of the world. Walker defines himself as opposed to the Konrad figure he's created. Even when Walker commits his war crime, he justifies the action by positioning it next to Konrad's worse actions, and even by blaming Konrad, who "forced" him to drop the white phosphorus. Like the videogame villain he is, Konrad sits at the end of the journey, unstoppable, backed by hundreds of minions, and Walker's goal becomes single-minded as he's driven to find and confront the villain on the (metaphorical) horizon.

But like the player, Walker is changed by his journey. The closer he gets to Konrad, the more like Konrad he becomes. Meanwhile Konrad is becoming less of a threat—by the time Walker gets to him, he's no longer a boogeyman but a corpse who died weeks ago on a balcony. Coopositionally, Walker and Konrad advance one another's' journey through active antagonism. Their conflict is a *productive* conflict. Although Konrad and Walker appear to be engaging in a fight to death, in reality there is no actual separation or gap between them. They exist within each other, and the pursuit of Konrad makes Walker more than he was at the start while simultaneously advancing Konrad toward his own actualization as a full character, one that can only be properly assessed and understood when his fate is revealed.

This is how cooposition works in videogame narrative: as productive opposition. The player approaches the game and its narrative, but because of the nature of the experience they must be opposed. The game must work to challenge the player and to prevent the quick and easy

accomplishment of the player's goal. The two forces appear to be at odds, pushing against one another in a conflict that, typically, the player will ultimately win. But this antagonism is an illusion. As the player pushes back against the game, the player is in fact progressing through conflict. The game advances when defeated. Likewise, as the game pushes back on the player, the player learns the techniques and skills required to win the next round, meaning that the game's opposition helps to constitute the player's experience and skill. Even when the player suffers a setback in time or effort through the loss of a life or some other defeat, the player's experience with the game is not reset, rebooted, or erased. It is brought forward. In other words, cooposition is active opposition that productively advances the emergent game in every instance. It is opposition as net positive. This model evokes Csikszentmihalyi's description of flow, Dewey's model of aesthetic perception, and Lefebvre's thoughts on rhythm, all of which rely on (to various degrees) an understanding that attuning to and aligning with the positive emergence of phenomena, or what Dewey calls an experience, means engaging in a struggle with rhythms until a balance is found. Productive experience and sensation can be thought of as the organism and the environment struggling together, forward. Lefebvre argues that to discover and attune to surrounding rhythms requires the analyst to be grasped by it. "One must let oneself go, give oneself over, abandon oneself to its duration" (27). Transactionally, however, we can think of the rhythms around us, of our environment, of our media, of other people and minds, as doing the same for our rhythms—all the rhythms of the world, attempting to grasp and be grasped by all others they encounter. The perception of artistic rhythms, including that of narrative, are therefore active and oppositional. We attempt to grasp the narrative activity while the narrative activity attempts to grasp us. Perceiving is an active task, and the perceived environment resists its own constitution through struggle to constitute us. We sense the struggle—even if only lightly and through "low-flow"—and when we make sense of the art before us we feel satisfaction in overcoming its challenge and equalizing its rhythms with our own.

Returning to the question of whose character and identity is illuminated by the wicked actions of the villain, I believe the clear answer in a transactional sense is that the narrative videogame villain acts as a central engine of identity construction for the merged player, avatar, and player-character and not just for the player-character itself. Put another way, the player is not merely making the story happen through play but is included in the weakly emergent narrative phenomenon. The player's own identity, both as a player and as an agent in the narrative, is illuminated and defined by the villain, just as clearly, or even more so, than the player-character itself. The avatar is a special tool of narrative production with no clear boundaries between itself and the player, or between itself and the player-character, but the avatar has no particular identity of its own to discover through cooposition with the villain.

How, then, does aesthetic rhythm alignment produce identity? At issue is the construction of the player-character/player/avatar, which I have called a weakly emergent phenomenon of play. Is it important to reiterate that this is *weak* emergence and not a cybernetic or prosthetic construct favored by some phenomenologists. The cybernetic approach to the player/avatar is tempting because the player and the avatar superficially appear to merge during the course of play. Take, for example, the oft-observed way players tend to move their bodies along with the avatar they control, as if trying to assist Mario in making his leap across the chasm with a little extra oomph. This is the basis for Klevjer's suggestion of "prosthetic telepresense," extrapolating from Merleau-Ponty's famous example of the blind man and his walking stick, as if the player dons the avatar like a suit, allowing for an exploratory, perceiving presence within the digital game world. If we follow that line of reasoning, we might conclude that the player-avatar

construction is an *individual* construction, in the sense Gilbert Simondon describes individuation, as a gradual, iterating presence that elevates a machine (in this case, the player-avatar prosthetic assembly) from its embedded environmental milieu as it becomes more efficient and less reliant on external support through a process he calls concretization (1980). In this account, the play session and the play experience would be seen as the process of individuation, and the alignment with the game's rhythms—the aesthetic flow—would represent the moment that the player-avatar emerges from the chaotic milieu into a fully concrete cybernetic individual. This is strong emergence as found explicitly and implicitly throughout phenomenological readings of games, such as those of Keogh or Crick, whose work extends from Sobchack and seeks to identify the "game body" in play, such as the manipulation of the game camera as separate from the avatar, seeking what Crick calls "a better understanding of how the player is theoretically able to exist within differing spatial domains during a first-person gaming experience, operating both on and in the game's space from their own physical space" (259).

Cybernetic and strongly emergent models, however, become untenable from a transactionist and naturalist perspective when trying to determine where exactly the emergent construction ends. Simondon in particular argues that an individual only emerges—only becomes concretized as more than a collection of components—when the entity no longer requires maintenance, resources, or other material from its associated milieu. Naturalism tells us that this never occurs. The moment never arrives where the associated milieu becomes irrelevant or otherwise loses its influence over the machine. There would be no such thing as an individual. Circumventing this problem is the appeal of transactionism, which asserts that the essential element of existence is not what something is but how it acts. If the avatar and its permeable boundaries between the narrative player-character and the actively perceiving player can be

thought of as a set of affordances—Apperley's dressage analogy—then we may reconfigure the relationship between the three nodes of the player/avatar/character as one of action, with each reaching across to constitute the other, and then disengaging when the play session ends. The player, having been partially constituted by the cooposition of the game, takes with her the experience, the memory, the muscle coordination between her eye and thumb, and she will bring that with her the next time she reaches across to the game. But she never becomes a full cybernetic construction; she is always influenced and affected by her contexts, her social world, her culture, her environment. The player-character is likewise not a closed entity, affected as it is by the perception of the player, the design choices made during development, and the technology that gives it existence. Neither is the avatar a closed system, bound as it is by the game engine, which itself branches outward towards the engine's design and designers, and so on. The contexts branch out *ad infinitum* with no fixed boundary, ever, and the videogame villain becomes a critical and essential context for the player/avatar/character construct as it engages with the narrative.

Therefore, in rhythm alignment with this model of the player, I propose to reconsider the villain as the game's avatar, specifically as an avatar of cooposition, representing the coopositional force that produces the narrative and co-constitutes the player and her active aesthetic perception. Players are always aware during a videogame play session that the game itself and the code represent the design and contexts of the designers to provide opposition. In fact, as Juul asserts, players typically become deeply frustrated when a game does not oppose them *enough* (2013). Game designer Richard Rouse III persuasively argues that particular types of game genres, namely horror, have thrived in videogame cultures because generic needs and affordances align with the nature of the videogame itself—in both horror and in gaming, the

spectator/player knows the threat is real, somewhere off where it cannot be seen (15). Narrative videogames that present a strong villain are essentially offering up an avatar of the game's antagonism. The villain controls the environment and the enemies within it, in the same way that designers have built the challenges, puzzles, chasms, and threats of the world for the player to traverse. The villain's usual placement as the final threat to overcome in the game world is in rhythm with the game itself. Just as Walker and Konrad inch closer to each other via each conflict, only learning at the end that they were never separate in the first place, the player-avatar-character emergence inches closer to the game-designer-character emergence of the villain with each step, adding skills and experience, constituting and being constituted by the phenomenon. Every obstacle the player overcomes is another element in that journey, but the villain wishes to be perceived as above it all, controlling it all, claiming to wish destruction on the player, while actually working to lift up, improve, and facilitate play-- the permeable avatar of productive antagonism itself.

2.6 Identity and Inverse Orientation

Sara Ahmed wrote that "it matters how we arrive at the places we do" (2). She was speaking in part of the way that objects and emotions orient us in our lives, determine how we exist in spaces, and in which directions we orient towards and why. The *Far Cry* writers cited above spoke of Vaas and The Jackal—iconic villains—as orienting forces that direct and move players toward the designers' goals. Vaas in particular was meant to orient the player by demonstrating what the player's violent actions, such as what repeating the same violent tasks over and over again, as per the game's design, might do to his mind. The player orients toward Vaas as the villain, the apparent end goal of the game, but the contours and rhythms of gameplay create the illusion of an inverse orientation, the desire to turn one's self, or the character of Jason

Brody, or the avatar, away from Vaas. At least that is one possibility. The player may also choose to orient herself toward Vaas positively, as a model for the kind of personality and ethics that guarantees survival on Vaas's lost island, happily choosing the late-game options to murder Brody's friends and accept his role as a spiritual vessel of vengeance from the island's priestess. There are many other kinds of orientations as well. The player may ignore the narrative elements and orient toward the task list or mindless carnage, or perhaps the player orients towards the space itself to seek secrets and easter eggs via exploration.

That plurality in videogame play and the vast disparities between play styles are key reasons why dualist theories are often insufficient to account for videogames. The villain, as the central avatar of the game's cooposition, invites a particular kind of spatial orientation within the game world. For Ahmed, orientation relies on bodily and emotional inhabitance in a space. "We might fear an object that approaches us. The approach is not simply about the arrival of an object: it is also how we turn toward that object. The feeling of fear is directed toward that object, while it also apprehends the object in a certain way, as being fearsome... emotions shape what bodies do in the present, or how they are moved by the objects they approach" (2). Ahmed's phenomenological approach to orientation can give us insight into a transactional way of approaching the orientation "line" between the player and the videogame villain. We of course would not see the emotion as separate from the physicality of the body, nor would we see it as isolated and trapped within the confines of the body itself. Emotion, like cognition, extends beyond the body by way of how we are oriented towards our environmental milieu. The highlevel Tetris players discussed in Chapter 1 demonstrate this extension. Reynolds describes how cognition itself moves beyond the body of the player and into the game space through rapid object manipulation, where movements are too fast to be accounted for through cognition alone.

Orientation through a coopositional villain is the same phenomenon, expressed through a different processional rhythm.

If we were to describe the process through which identity and orientation within the game world is formed, we start with the villain. The villain, rich with its presented character traits but also an avatar for cooposition and displaying the designed antagonism meant to create productive play, exists within the game space. The player begins the game and enters into the complex emergence of player-character-avatar. Character traits, game states, and interpretations assert themselves from the continuous milieu in the same way that the painting of a boat on the ocean becomes clear when perceiving the white strokes juxtaposed with the blue. The player, in continuous and extended relationship with her environment and culture, aligns and turns toward objects, determining orientation. Perhaps she will choose the narrative orientation. If so, then her consciousness and player-avatar-character emergence will begin to push against the game world in pursuit of the narrative tasks she perceives and understands. As the villain emerges from the milieu, she rapidly perceives and assesses it, her interpretations and emotions the result of infinite contexts that constitute her and extend beyond her in every direction. The villain is constituted of its own contexts and rhythms. There is no separation; the villain exists only for her perception and to invite her orientation. The villain exists to be pursued. It exists because it is pursued. The player's impressions are not located solely within her but reach beyond into her actions, which snap back and inform her impressions like the feedback of a bat's sonar sounding off against an obstacle. With each micro-action and micro-reaction, perhaps dozens per second in a frantic moment, the player and the game world—recall, under the direction of the villain/game—enter into a new rhythm. The effect is not unlike two sets of wave pattens or swells in the ocean crossing to create an unusual, perpendicular collision at sea; at first the swells

run in opposition, but given enough energy and time, they will align with one another to create a new swell pattern unlike either of the two that began the phenomenon. (Crucially in that analogy, it's all still one continuous ocean, with different waves patterns created from their own milieus before meeting at the intersection point.) The videogame player in this description arrives in play with her own rhythms, aligns her rhythms with that of the character and avatar to form a weakly emergent pattern, then through active engagement with the villain aligns a new pattern—forming an identity unique to the aligned player and character. Perhaps the player will admire Vaas and want to be more like him. Perhaps the player will want to destroy Vaas and follow the prescribed path the designers laid out to kill him and reject his ways. In any case, the narrative choice is valid and relies on player identity that is developed and honed through productive opposition to the elusive videogame villain, an inverse orientation in which orienting toward the object--in this case, the villain--feeds back into the constitution of the player herself, helping to form a stable, if permeable, identity-in-relation that becomes an inseparable phenomenon of the experience of play. As Ahmed writes: "When we follow specific lines, some things become reachable and others remain or even become out of reach... we do not have to consciously exclude those things that not 'on line.' The direction we take excludes things for us, before we even get there." (15). It only remains to be made clear that this applies not only to the forward direction of productive cooposition but also to the inverse feedback of the construction of identity. As the player and the game work together to constitute identity, the narrative belongs at once to the designer, the player, and all points between. The unique experience is dispersed across the weakly emergent platform as a narrative phenomenon.

2.7 The Point on the Diagonal

When Far Cry 3 was in the design phase, Vaas was not the original choice to act as the game's villain. Instead, according to producer Dan Hay, the original design called for a huge, bald hulk named Bull to be the face of the game's cooposition. "We absolutely didn't get it right on the first go," Hay admits (Dyer). It wasn't until the actor Michael Mando auditioned for the part that the villain morphed into the character players came to know, with his different mixture of intensity and lithe physicality cited as the reason for the change. By the time Vaas was revealed to fans, he had been completely rethought as the charismatic killer who would taunt the player throughout the game experience. His "definition of insanity" speech was influential enough to inspire fan art and memes. The speech signals the narrative's intent to challenge the player's rote repetition of easily-accomplished tasks:

Did I ever tell you what the definition of insanity is? Insanity is doing the exact same fucking thing over and over again expecting shit to change. That. Is. Crazy. The first time somebody told me that, I dunno, I thought they were bullshitting me, so, I shot him. The thing is, he was right. And then I started seeing, everywhere I looked, everywhere I looked all these fucking pricks, everywhere I looked, doing the exact same fucking thing over and over and over and over again thinking 'this time is gonna be different' no, no, no please... This time is gonna be different ("Far Cry 3").

Vaas continues to rant along these lines, until finally, just before he drops Jason Brody into a lagoon with a weight tied around his ankles, he pauses, seemingly confused, and turns back to the player: "Did I ever tell you the definition of insanity?" The speech does its work to

present Vaas as a non-aspirational figure whom the developers hoped would prompt the player to think about and explore the tasks in front of them. But the speech, effective as it is, has a very clear and strategic gameplay role. Another quote from Vaas later in the game, however, is more telling about his role, not just in the narrative in confrontation with Jason Brody but in his relationship with the player beyond. While Jason hunts Vaas, the villain tries to justify his actions with a piece of pop philosophy: "The world is on a diagonal. I am the balancing point." Unlike Vaas's (incorrect) definition of insanity, this hits closer to the truth. Of course, many videogames contain no narrative at all, and of those that do, not every videogame organizes its narrative around a central villain. Of those that do, the villain holds a special, privileged position as an orientation point within the game world, inviting productive antagonism and narrative development while facilitating the player's emergent identity within the game world. Throughout videogame narratives, there are thousands of villains just like Vaas, and millions of heroes who align their identity with, around, or against them. Where Vaas errs in his statement is on the structure of the "world." Videogame narratives and videogame worlds do not rest on a diagonal, with only binary sides at stake—up or down, left or right, good or evil. The villain crosses many different possibilities, as many as there are play sessions and players to co-create them with the game. But the villain is a key orientation point within the aesthetic milieu that reaches out to the player and asks to be formed, just as Vaas on the cover of Far Cry 3 invites the player to take him on. Players come and go within the environment of the game, but the villain remains, organizing cooposition and aiding in the construction of its own impending defeat—a balancing point across the horizon of narrative possibilities.

3 BOSSES: UGLY EXPERIENCE THROUGH LUDIC ARRHYTHMIA

Dancer of the Boreal Valley, Culex, Omega Weapon, Psycho Mantis, Malus, Kai Leng,
Ornstein & Smough, The End, Old King Allant, Baldur, Vortex Queen, Mothrakk, Kraid,
Seth, Manus, Yuki-Onna, Hard Man, Dark Link, Skolas, Ludwig von Koopa

3.1 Introduction: The Pigs

I startle from a drunken stupor to find myself in a destroyed hotel room. My tie is hanging from the ceiling fan and my gun is missing. I rescue my tie successfully, but the gun is gone. My hangover is so cataclysmic that it takes serious effort to even remember my name: Harry Du Bois, lieutenant double-yefreitor of the Revachol Citizens Militia (RCM), a police force only barely recognized and not even a little bit respected in the district of Martinaise. I was there to solve the murder of a mercenary sent to break up a local dockworkers' strike. Most of Martinaise could muster motive for killing any outsider, and especially an outsider interfering with union politics, so I set aside that issue in order to listen to the competing voices in my head, remembering—or deciding—what kind of man I was. In that context, the fate of my gun seems important; re-arming symbolizes my journey back to the competent officer of the law I hoped I was, while losing it forever locks me in as a screw-up.

Eventually, I get a tip. Someone calling themselves "The Pigs" has been waving a gun around, and chances are it belongs to me. To follow the lead, I visit a boardwalk at night.

Gloomy shadows and limited visibility set my nerves on edge, but what's really off-putting is the sound of a siren that grows louder as I approach. I finally spot The Pigs, a hunched and crazed woman with flashing police lights strapped to her back, cranking a rudimentary siren and brandishing my gun. She whips the barrel in a flurry of directions and barks police jargon into a

megaphone. "This is the Pigs. Show me your hands. *RIGHT NOW*!" She swings the gun in my direction.

I've been playing *Disco Elysium* (2019) for many hours before reaching this encounter, and nothing I've experienced yet has prepared me. There is almost no physical combat or struggle in the game, which is mostly a detective procedural about questions, interviews, puzzles, and transcendental self-reflection. In that environment, the standoff with The Pigs is disorienting. It's not that I haven't been in danger before; even the precarious act of recovering my tie from the ceiling fan in my hotel room had the potential to end my life and initiate a Game Over. But rarely have I been threatened so directly as The Pigs is doing now. I wonder whether she'll shoot if I make the wrong move, and if I have the physical skills necessary to dodge a bullet. I worry that even if I can avoid getting killed, my police partner, Kim Kitsuragi, won't be so lucky. Engaging with The Pigs requires navigating a complex set of dialogue options to, hopefully, say the right thing at the right time. This isn't new. Dialogue is the primary means through which I experience the world and characters of *Disco Elysium*. But the sirens, the gun, and the aggressive orders serve to convince me that this would be tougher than usual. I have to be thoughtful if I want to save everybody's life, but that siren *keeps wailing*, setting my nerves on edge.



Figure 10: The Pigs

I start with de-escalation. I try to convince The Pigs that I'm not armed, which is of course true. But her answer rattles me: "Failure to comply. Suspect is displaying aggression! OFFICER UNDER DURESS! OFFICER UNDER DURESS!" My own heartbeat is elevated. I'm nervous. I don't want to screw this up. I want to save everybody's life. I want the narrative to proceed in my preferred direction, and I try to think about successful strategies I've used in previous conversations that accomplished that goal. Nothing works. While searching for new options, a thought comes to mind, offered by my Empathy skill: "So this is what the weather's like on the other side of a cop's gun?"

I've chosen to begin this chapter on videogame bosses with an example fraught with potential controversy—the encounter with The Pigs conforms to very few of the traditional definitions of the "boss fight," one of the most famous and fundamental videogame experiences shared across all generations and platforms of play. But The Pigs fulfills what I define as one major functional role of the Boss, that of a singular, memorable experience that gates and influences moments of transition and transformation in videogame play. There is no encounter in *Disco Elysium* quite like The Pigs. Most of the conversations that drive the game are with

characters who are hostile or confrontational to Harry Du Bois and his investigation, but exceedingly few are *this* hostile. Worse, the perceived threat from The Pigs is of a kind Du Bois hasn't seen yet in this story: the encounter is driven by terror. In *Disco Elysium*, Du Bois sifts through fractured memories and nascent thoughts to discover who he is as a person and the encounter with The Pigs constructs a scenario that allows Harry and the player to experience "the weather" of disproportionate police response. The Pigs shows us one kind of police expression. She demands compliance and her own control while terrorizing Harry and the player with the trappings of authority: sirens, megaphones, lights, and a gun. The experience is dissonant. I am powerless, unarmed, and want desperately to calm the situation and survive. But The Pigs is driven by her own fear, oblivious to the ways in which her powerful stance is intensifying the emotions of every actor in the scene. No matter how the situation resolves, I have now seen police power from the perspective of those against which it is applied, and to find harmony with myself and my job I will have to incorporate that new knowledge. I will have to decide what side of the weather I'll be on.

This scene from *Disco Elysium* is a moment of conflicting rhythm, both in its sociocultural situation and the ludic construction of the scene. As the player, I entered the encounter with The Pigs in harmony with a particular gameplay rhythm of investigation and conversation: search, interrogate, track, recover, arrest. I was following up on a lead and searching for a perpetrator, a gun thief. I played to fill a role in the narrative and the world of Martinaise, but The Pigs confronted me with an entirely different and dissonant rhythm of authority, an arrhythmic emergence of the police constructed from the same iconography and paraphernalia, one that clashed experientially with the rhythm I thought I understood. In a game containing little combat, the sudden and loud intrusion of an armed threat disturbed my

understanding of the world I was experiencing, forced me to consider new or novel approaches to resolve the encounter, and illuminated the advantages and deficiencies of my approach and perception of the game. And, critically, the encounter served as a gate between two major game states. Navigating arrhythmia in the ludic and narrative experience served to propel me into the later stages of the game. The Pigs may not resemble a videogame boss, but she is a significant example.

In this chapter, I attempt a transactional look at the boss monster and its primary expression in the "boss fight" as phenomena of ludic arrhythmia, arguing that mainstream contemporary design practice and player expectations trend towards an experience of ludic harmony and "beautiful" design, while videogame bosses intentionally disrupt, distort, and distend that rhythm through a variety of gameplay and narrative strategies. In essence, bosses pursue a rhythm of *ludic ugliness* that forces players to confront arrhythmia as a strategy of producing challenge, memorable experiences, frustration, accomplishment, and narrative struggle. The player relationship with a boss is one of the most complex and ludically driven of any form of videogame coopositional phenomena, and one that is absolutely essential to understanding how cooposition produces strong narrative experience.

3.2 The Boss Monster

The boss monster is a fundamental feature of videogame design history, so ingrained in the form of both narrative and non-narrative games that the actual origin of the term is obscured. Some critics have linked the boss as a game term to popular culture depictions of the mafia boss, or to the Bruce Lee film *The Big Boss* (1971), although the plot structure of Lee's posthumous *Game of Death* (1978) more closely resembles the level-based construction of most boss battles (Grayson, et al. 2021). In games, most critics point to 1975's *dnd* on the PLATO computing

system as the first to design a boss encounter, the "Golden Dragon," which guarded a magical orb needed for completion of the game (Pellett; Lee), tying the boss monster closely to the earliest days of popular, commercial videogames.

Due to player familiarity and near-ubiquity, there are nearly as many permutations and variations on the boss encounter as there are bosses themselves, but generally speaking a boss is a significant encounter in the course of videogame play that functions as a gate or skill challenge for the player before she can progress to the next phase of a game or earn some kind of reward. Bosses can appear almost anywhere or anytime during gameplay but are most often associated with discrete videogame levels or locations, and the player's defeat of a boss typically serves as the final capstone or achievement in that level. Through various techniques—large open spaces suddenly appearing, or the location of save points and powerups—players are usually aware of an impending boss fight, and players expect to face at least one boss before an area or a level can be considered complete. Often, bosses are thematically designed alongside the level's environment, suggesting that the environment was constructed or created specifically to house that boss. The many robotic bosses in the Mega Man series of games are famous examples of this phenomenon. For example, the stage for Fire Man in the original Mega Man (1987) is dominated by the color orange and features flame columns, lava pits, and floating fireball enemies, while in Dark Souls (2011) the player might navigate through crystallized architecture and battle halfcrystal minions in the Duke's Archives level in order to reach the crystal dragon Seath the Scaleless.

The boss monster is positioned as the strongest threat in their area, but narratively the boss monster is almost always subservient to the game's villain, if one exists. It's important to remind here that there are no fixed or impermeable boundary between a boss and other enemy

types within a game. In some games a villain might appear as a boss in the early stages but survive the encounter and return to their role as an orienting destination. Conversely, it's common for a defeated boss monster to appear again in later levels as a standard enemy type that exists in the game world. In transactional narrative it is the *function* of the phenomenon and not its intrinsic properties that define its role, and so in these edge cases outlined above we must consider the function of the enemy in that moment in order to know how to approach it. A villain who appears as a boss—such as Kefka in *Final Fantasy VI* (1994), who begins as a clownish misfit in an early battle and an all-powerful force in a later fight—must be considered by how it functions in each appearance. When Kefka serves as a gatekeeping battle in the narrative, Kefka is a boss, but when Kefka serves as an orienting, motivating force the players must pursue, he is a villain. Villains often, but not exclusively, appear as "final" bosses, but this is an area of permeable experience, and one of the characteristics that separate villains from other kinds of enemies, including the boss monster. The player's active perception of the enemy's role in the narrative is enmeshed in how the player co-constitutes the narrative activity, and therefore has influence on affect, comprehension, decision-making, and other aspects of the transactional phenomenon. In the case of the boss, videogame players typically understand that the boss is a significant challenge that must be overcome but that doing so will not mean the completion of the game. The boss is merely a major milestone in the journey. As such, player relationships to bosses are complex and emotional. Player culture is filled with stories of how players approached or experienced particular bosses, and bosses routinely rank among the most memorable and popular figures in any game.



Figure 11: Kefka as an early boss in Final Fantasy VI



Figure 12: Kefka as a final boss in Final Fantasy VI

Narratively, the above description bears similarities to what Campbell called the "threshold guardian," a spatial and antagonistic figure in myth that Campbell argued must be overcome by the hero but also *assimilated* in some way as part of Campbell's structuralist outline of the hero's journey. The incorporation or assimilation of the threshold guardian is as important for the hero as the defeat, with countless examples throughout media. For one example, in the film *Labyrinth* (1986) teenage Sarah, played by Jennifer Connelly, must defeat

the comical fox knight Sir Didymus in order to progress to the goblin city, and once bested the fox agrees to join her on the journey and becomes a friend. In another, a deleted scene from *The Batman* (2022) depicts an imprisoned Joker (Barry Keoghan) offering Batman clues as to the identity and methods of the Riddler (Paul Dano) from behind a pane of glass.

Campbell's belief in the "monomyth," of which the threshold guardian is an essential element, has met with widespread criticism from folklore and religion scholars, psychologists, and more (Northup; Beggan), but Campbell's easy-to-follow blueprint was adopted by authors and consumers of popular culture in the years since it appeared in publication and on public television documentaries, giving the threshold guardian concept an entry point into mainstream literature and media. This may serve in part to explain how threshold guardians/bosses found such a prominent role in videogame ludic and narrative structure. Early game designers were largely influenced by fantasy stories and roleplaying scenarios, both of which are full of examples of threshold guardians and overlords backed by armies of minions, with one of the most popular early forms of the latter being the "dungeon crawl" in which players work through progressively tougher challenges that culminates in the dungeon's "boss" giving up his hoard of treasure in defeat. Subsequent sessions of a roleplaying campaign might pit the players against progressively harder bosses, acknowledging the increase in skill and power that defeating previous bosses made possible. It was an easy and natural transition for early game designers to move the concept of the boss monster and its specially-crafted dungeon into the world of video games, which had already had the concept of individual levels introduced in programmatically structured "boards" or "stages" in the arcade. *Donkey Kong* (1981), to name one example, puts players in pursuit of the ape, only for Kong to escape with the damsel just as the player reaches him on the first, second, and third boards. But every fourth board of Donkey Kong puts the

player into a direct boss confrontation with the ape, as the hero must remove pegs from steel girders to bring a superstructure crashing down and Kong with it. The cycle then repeats for the next series of four boards.

The fourth board of *Donkey Kong* provides us a window into how bosses distort ludic rhythms. In the first three boards I described, the player is presented with scenario built around progression. The player may attack or avoid enemies, make perilous jumps, and climb ladders, all in pursuit of forward momentum towards the goal at the top. These boards function like an obstacle course with completion of the course the player's only task.

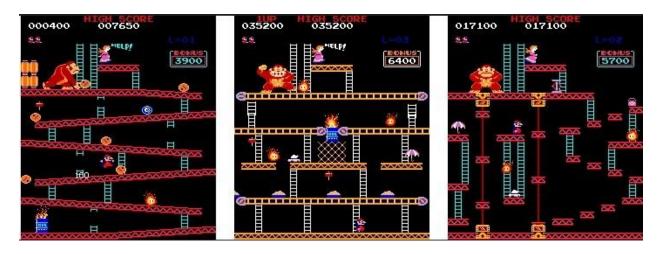


Figure 13: The first three boards of the Donkey Kong cycle

The fourth board, however, is not designed for forward momentum. Gameplay on this fourth level follows a different ludic structure. Instead of advancing through an obstacle course, The player must work his way backwards and forwards to touch a series of nodes, presented as pegs that must be knocked out of the superstructure in order to collapse it. As the player removes pegs from the girders, he adds new obstacles for himself—holes that have to be jumped in order to avoid a sudden death. Enemies track the player as he works to remove pegs by running over them. Often, the player must treat the pegs as attacks of opportunity, targeting the closest peg that isn't also swarming with danger. Haphazard approach to pathing through the pegs usually

results in the player having to backtrack, sometimes descending ladders he's already climbed, and retracing his steps.

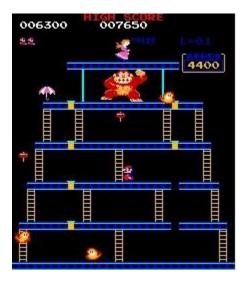


Figure 14: The "final boss" board of Donkey Kong

Importantly, the player character's *verbs* (Anthropy) do not change in this level. The hero still navigates the stage using his basic skills of jumping, climbing, running, and hammering. The use of those verbs must be applied in new directions—backtracking instead of progressing, collecting nodes instead of reaching a finish line. These changes mean that the 4th board of *Donkey Kong* is the only avenue through which the player can confront the gorilla *directly*, in something resembling a boss encounter. The player is not simply trying to reach Kong, she is trying to bring him crashing down. The change in architecture and ludic strategy transforms the board into a boss arena, a specialized place where the boss may be confronted and defeated.

The periodic chance to defeat Donkey Kong comes at the cost of comfort with the rhythms of jumping and running that the player has practiced in the previous three boards. In order to bring Donkey Kong to the ground, the player must reconfigure the skills he's honed through the previous three boards, altering his rhythms and adapting to the new stage's rhythms while under threat from ancillary enemies and a timer. Defeating Donkey Kong and restarting

the four-board cycle demands a demonstration of expertise with game systems beyond the needs of the journey required to arrive in the arena.

Bosses, then, are manifestations of *ludic arrhythmia*, constructing and presenting a novel and unfamiliar rhythm for the player with the goal of gating progress in the game until the player demonstrates enough mastery with ludic systems to adapt, incorporate, and harmonize their previously understood rhythms with the new. The word "harmonize" is key here. What I am proposing is that we look at bosses through a lens of ludic distortion *and* of narrative distortion in story-based games. Both are distortions that players are encouraged to confront, challenge, and resonate with in order to drive the narrative and the gameplay forward. The transactional nature of the boss encounter makes literal the assimilation role ascribed to Campbell's threshold guardian. Critically we may also rethink that role as an assimilation into the complete milieu of the game in order to constitute coherent and contingent narrative phenomena.

3.3 Ludic Rhythm and Arrhythmia

By discussing ludic arrhythmia, I am asserting that ludic rhythm likewise exists and is identifiable but not discrete. We have approached ludic rhythm before in this study in discussion with flow and with Dewey's claim that perceptual attunement with the natural rhythms of the environment are the key to aesthetic approaches to art, but many game scholars have observed that games appear to offer rhythms and that pursuit of pleasant engagement with those rhythms might be among the sources of pleasure in digital play. Keogh claims that "videogames are all about finding a rhythm. The rhythm of a kill streak, of an active reload, of 8 goombas being knocked out with a kicked shell. We find a rhythm and then we lose ourselves to it." (Keogh 2012, 18-19). Keogh later writes of "input-microrhythms" that produce pleasure by oscillating between the player and the game a rhythm of interaction—"the fluctuating feedback loop of

input and output, input and output... the pleasure of acting and the pleasure of being acted upon" (Keogh 2018, 120). Anable notes, however, that games can motivate players through displeasure, through a state she refers to as "radical arrhythmia." In her analysis of how social and casual games, especially games in the Invest/Express genre, produce disorder and chaos to encourage rhythms of work and productivity, Anable suggests that games contain "the capacities... to wrest us from our everyday rhythms, to make our bodies move in ways that confound efficiency and productivity" (73). For Anable, arrhythmia encourages play and affective engagement, the path towards meaningful appreciation and pleasure. Even Sudnow, writing in the early days of the arcades and Atari's first home console, saw in games the potential to absorb the player so completely in its rhythms that he joked pop psychologists might consider game play as a pathway to finally unlocking the psyche.

...therapists in California always looking for a new gimmick can talk about "neurolinguistic programming"... Watch your moods realized in the pure mathematics of an algorhythm [emphasis mine], start dreaming about Breakout angles instead of your mother, and it's bye-bye Freudian, hello Nerdian psychology (Sudnow 131-132).

Sudnow's near-transactional analysis of the gameplay in the Atari hit *Breakout* identifies the rhythms in play but also observes, right at the kickoff of game studies, that there appears to be no meaningful separation between the player's rhythms and the game's, comparing it to the flow-like experience of losing himself in the playing of a piano (128) before concluding that he "couldn't find a locus for the skill" (130), suggesting that mastery of the game resided somewhere elusive. Sudnow suggests that the skill could be located "deep inside," but a

transactional reading of rhythm suggests that the skill cannot be located because it doesn't belong solely to the player or the body. Instead, it's extended beyond and into the rhythms of the game experience. A player cannot develop skill or rhythm without the environmental milieu required for its existence.

Apperley has perhaps has gone the furthest in his work investigating rhythms of play. Specifically, Apperley is interested in the bilateral movement of rhythms found both in the situation of play and in the "real" world of the player, arguing that since gameplay must be situated in the world, it is subject to the biological and cultural rhythms of those who experience gameplay and the biological and cultural rhythms relevant to the game's production. (Apperley 8) Among Apperley's goals is the attempt to map digital game ecologies as inseparable parts of the player's sociocultural milieu, investigating "the abstract circuits of technology, culture, and marketing in the lived experience of players through material accounts of play." (Apperley 16). Critically, Apperley believes that the rhythms of the player and the game become a polyrhythm, an "intertwined" phenomenon in which the game teaches the player to align with the game's rhythms in order to achieve success and pleasure, a process Apperley calls "dressage."

The body produces its own rhythm, while the game's rhythm varies, together the rhythms enact a 'duration,' a moment of congruence where the game's rhythm and the rhythm of the everyday take on a common refrain, which can be interrupted with any variance or difference in either rhythm... The everyday is not a hermeneutically defined sphere (Apperley 20).

Suggesting that the game interferes with the player's bodily rhythm, and not the other way around, is a critical move that Apperley makes to situate videogames into a position of

power in the model of media consumption, a key claim to permit further exploration in how videogames affect the rhythms of culture, identity, and politics (Apperley 25). Of course, a transactional way of looking at videogame rhythm fundamentally rejects the parsing of multidirectional rhythms of play, which departs from Apperley's ideas. For example, Apperley suggests that players approach videogames through two cognitive processes. The first process is concerned with the core facilitation of play, what Apperley calls the "rhythmic, kinesthetic, ergodic" process needed to push buttons, manipulate control sticks, focus the eyes on key portions of the screen, and so on. The second mental process Apperley describes is the imagination and interpretation needed to make meaning from the game text. "The movement between these two imbricated processes provides a space for exploring and negotiating the residences between the digital game ecology and the everyday life of the player that is flexible enough for creative improvised spontaneous and stylistic adaptations of rhythms." (24-25). But why must these processes be separated at all? Instead of a space between these perceptual processes to allow for improvisation, transactionism and cooposition, suppose that there is no boundary between them—meaning can be made from button presses and the composition of UI elements; the interpretation of narrative can be kinesthetic and ergodic. Importantly, all of these processes are happening simultaneously and inseparably. In the case of the boss fight, the difficulty of the required button presses and the dissonant rhythms encountered contribute to and affect the boss monster's narrative role as a being in the game world with a function to fulfill.

Apperley's work is heavily influenced by Lefebvre and his book *Rhythmanalysis*, which proposes no less than an entire field dedicated to the study of rhythms in culture and society. For Lefebvre, all rhythms from the cosmic to the micro are defined by *repetition* (both cyclical and linear) and *measure* (roughly synonymous with form or character), which are identifiable in all

situations, environments, and things. In fact, Lefebvre dismisses the importance of *things* at all, as all fixed forms of matter are temporary and an expression of the underlying rhythms from which the object emerged (6-8). Studying the thing is a distraction from studying the actual phenomenon of its rhythm. Of course the observer and scholar contains his or her own rhythm that complicates analysis, and so Lefebvre asserts that those who study rhythm—rhythmanalysts—must first develop an affinity and understanding of their own body and place in the world before attempting to understand the rhythms around them, as those rhythms work on the analyst as much as they do any other object under their influence (19). To study rhythm under Lefebvre's model is phenomenological, starting from one's self and gradually expanding outward in all directions, describing and critiquing what is found.

Lefebvre establishes key analytical terms to aid the rhythmanalyst, including *dressage* (later adapted by Apperley), *polyrhythmia*, *eurhythmia*, and *arrhythmia*. (16). The first, polyrhythmia, describes those moments where multiple distinct rhythms are moving together in a single phenomenon. The weak emergence of videogame narrative and play experience appears polyrhythmic, with various rhythms coming together and permeating one into another to create the experience from which the gameplay experience emerges. When those rhythms synchronize and harmonize with one another to the complete or near-complete elimination of dissonant notes in the rhythm, that creates eurhythmia, with the failure of polyrhythms to harmonize creating an unsatisfactory and potentially damaging arrhythmia. Lefebvre notes, for example, that the body is a polyrhythm that in most cases exists in a state of eurhythmia, but that can be disrupted by states of arrhythmia, either obvious or invisible under more dominant repetitions. But Lefebvre's key example of rhythmanalysis in action is the roiling polyrhythms of a city street outside his Paris window, which he likens to the polyrhythm of a symphony in action (27). For this reason,

studies of locations and environments find Lefebvre appealing for discovering complexities in the polyrhythm of people, culture, technology, and environment pursuing eurhythmia in a public space (Simpson).

But videogames are not environments that players visit through a drivable protagonist. The player constitutes the videogame world through perception, and that world likewise positions and constitutes the player in the space of the play experience. The environment of the game, then, is not in a fixed location inside the code or the computer monitor but a weakly emergent phenomenon that exists in no fixed place and belongs to neither the player nor the game exclusively. Lefebvre and Apperley's work thinks of rhythm as parallel tracks of two or more distinct, isolated rhythms that work on each other but maintain their individual distinctness even in eurhythmia, an idea influenced by cybernetics and the concept of closed systems of components that find eurhythmia by achieving a balanced harmony by working on one another. But as we've seen transactionism dismisses the myth of the closed system, acknowledging that every system extends outward in every direction, expanding to move beyond the player and the game—or even the sociocultural contexts of the play session and game development—outward directly into the cosmic rhythms from which all contexts emerge. As we have seen in Dewey, it is the nature of the human being to pursue equilibrium (read: eurhythmia) with environmental milieus, which have been developed within the rhythms of the tides, seasons, circadian rhythms, and so on, outward, forever. As sensing, perceiving beings--Dewey's "live creature"—we developed within these environmental contexts and, in fact, the ability to perceive and harmonize with environmental rhythms is a fundamental survival strategy necessary for the success and prosperity of the organism. Human perception is always "on:" we feel fluctuations in temperature and the air on our skin, we listen to our surroundings even when we sleep.

According to Dewey, it is for this reason that aesthetic appreciation of art is even possible, because of our innate survival instinct to achieve eurhythmia when otherwise out of rhythm with our environment. We see the disorder in the art object—the brushstrokes of a painting, the elliptical cuts of a film edit, the pixel rush of a boss battle—and take pleasure in achieving eurhythmia.

What Apperley and Lefebvre call dressage is an acknowledgement of the player's pursuit of eurhythmia, suggesting that players willingly concede the power in the play experience to the game that must train them to achieve on the game's terms, but such a one-way model obscures that the player's rhythms likewise affect the game. Eurhythmia, in this transactional sense, is not numerous rhythms finding harmony with each other, but multiple rhythms becoming inseparably involved in the weak and temporary emergence of a new single rhythm, made possible through the single physical plane of experience. Rather than think of a symphony or a polyrhythmic city, this model may be properly explained by thinking of ocean waves. Despite the classification of various seas, eddies, currents, and streams, all oceans are continuously connected into a single water mass, and yet these individual elements within the ocean maintain their own rhythms and directions and momentum. When waves moving at different rhythms and character ("repetition and movement") intersect, they may find eurhythmia and form a larger, more powerful single wave system with its own rhythm and existence, or they may find arrhythmia, at which point the conflict may neutralize them both. (Salmon 20). Eurhythmia, in this case, would not allow either of the original waves to maintain their character. And yet, no matter the result, the waves remain continuous phenomena across the single plane of the ocean. The same is true of the player and the videogame: rhythms along the same plane moving at different repetitions, and in different directions, and encountering each other in the play session, at which point all rhythms form into

a single eurhythmic or arrhythmic experience. Typically, the experience is initially arrhythmic as the player and the game adjust to the new rhythms, before settling into the eurhythmia the player, the "live creature," naturally pursues and typically desires for aesthetic enjoyment.

Note that some players intentionally pursue and enjoy aesthetic arrhythmia with the videogame. Games such as Bennett Foddy's *Getting Over It* are designed to frustrate and irritate players who often react with amusement and astonishment when confronted with a game that so actively hostile to their play experience. But games such as this—and the players who pursue them—are not representative of mainstream play. In most cases, arrhythmia is considered a failure in terms of play, either a failure of the game (perhaps due to shoddy design) or a failure on the part of the player to create eurhythmia through mastery of the game's ludic elements.

Apperley describes a kind of arrhythmia through a well-known episode of the television series *South Park*. The episode "Make Love, Not Warcraft" first aired in 2006 and depicted the four main children adventuring in the massively multiplayer online game *World of Warcraft*. When an anonymous player with incredible skill defeats the kids, they commit themselves completely to the game in an effort to avenge their losses. Their skills grow and they acquire powerful new abilities and items, but their physical bodies change to reflect the perceived downsides of never leaving their computers—they gain weight, grow acne, and fall into ill health. In one moment (among many) of scatological humor, the character of Cartman demands his mother ring him a bucket so that he can purge explosive diarrhea without leaving the game. Apperley argues that the boys' push to create a perfect eurhythmia comes at a price of grossly distorting the rhythms of their body, but that Cartman's mother and the bucket work to neutralize that arrhythmia and maintain the pursuit of eurhythmia by extending the game's rhythm out into the physical world (Apperley 20).

A transactional approach to rhythm disagrees with this conclusion. The *South Park* version of the game is a fiction, one that demands total loss of attunement with one's own body in order to succeed. In truth, the game turns its rhythms toward the player just as the player turns toward the game. After all, when the player takes much needed "bio breaks" (presumably not in a bucket) or steps away from the game for any other reason, then the game loses its actualization through perceptual constitution—the game relies on the player as much as the player relies on the game to form the experience. But video game history and culture contain notorious, actual stories of bodily abandonment during incidents of extreme attempts to attune to the rhythms of the game. Many are sensationalized, some are all-too-real and very tragic (Parkin). I argue that it is a mistake to consider these stories, like the *South Park* episode suggests, as the tragic result of achieving a perfect videogame eurhythmia, but rather as results of extreme *failures* to achieve eurhythmia.

Humans live through direct experience with the environment. We do not simply exist in the environment; the environment also exists within us, from gut biome activity to beneficial bacteria and parasites on our skin. Our well-being depends on equilibrium in and within the environment, which is why our active senses are always on, always testing and pushing us to achieve that equilibrium, because our continued existence relies on it. As Dewey writes, "the career and destiny of a living being are bound up with its interchanges with its environment."

(12). Therefore, when confronting a new environmental rhythm, our biology compels us to adjust and adapt. And since, as we saw in Chapter 2, our initial instinct is to treat NPCs and fictional characters we encounter as we would a flesh-and-blood person in the real world, it is logical to assume our senses drive us to perceive and encounter videogame environments and worlds as rhythms we must attune with in order to survive, just as we strive to equalize with our physical

environment. But what happens when a person tries, but fails, to achieve eurhythmia? Perhaps the player abandons the game, retreating from the world instinctively rather than remain in a state of arrhythmia. On the other hand, the player may continue to pursue eurhythmia and fail for whatever reason (likely incompatibility of rhythms, leading to frustrating "neutralization" in the play experience, like incompatible ocean waves). In extreme cases, the player may pursue equilibrium so intensely that eurhythmia becomes impossible because their own biological rhythm becomes distorted. Perhaps the player forgets to eat, disrupts their circadian rhythms and loses sleep, or some other damaging side effect. All the relevant rhythms are continuous across the physical plane, which causes friction and frustration when they cannot easily be reconciled into a unified rhythm through natural processes of perception. This is the failure of eurhythmia transitioning into extreme arrhythmia, a stymied attempt to equalize with an encountered rhythm that promotes a strategy of disengagement from the known rhythm to better intensify the focus on the new.

This arrhythmia could explain some of the more troubling aspects of Csikszentmihalyi's concept of flow, which his positive-psychology approach frames as a pleasurable and fruitful interaction with the external task. Reynolds notes that decades before Csikszentmihalyi proposed the concept, John Dewey had already identified the phenomenon, describing it as "smooth running functions" that extended from existing perceptual processes (Reynolds 66-68). Flow is not a state one enters; it is an extreme expression of a state one never leaves. Our continuous and borderless adjustments to our environment and our active perceptual activity—our *transactions* with the world around us—are dynamic and inescapable. Perhaps we should call this *low-flow*, to describe a flow process that is invisible to us, that is "smooth running," precisely because it is inseparable from the continuous task of survival, of aligning rhythmically with the world. What

Csikszentmihalyi identifies as his heightened state of flow is the process intensifying and rising to the level of awareness, characterized ironically by the supposed unawareness of the environment to focus on the task at hand. That flow can be enjoyable and productive is not at question. Rather, my argument is that the pleasure is an essential feature of a natural state that promotes the continued survival of the organism through eurhythmia so intensely that it arrhythmically decentralizes basic bodily awareness and needs. Dewey recognized this: "The rhythm of loss of integration with environment and recovery of union not only persists in man but becomes conscious with him; its conditions are material out of which he forms purpose" (15). Dewey argued that the live being is always pursuing that integration, usually unconsciously, and that the pursuit of what he called integration could only stop in one of two conditions—either total order, or total chaos. Neither is remotely possible in our environment. When the player and the game reach across to each other, the game presents as a condition of the player's environment, and the player's senses and actions pursue eurhythmia as a condition of survival in the environment. Why should the organism's drive for integration consider its task any less urgent because the rhythms it perceives emerge from a videogame? When experiencing extreme arrhythmia, the pursuit is made conscious and the body's inherent rhythms are deprioritized. In this model, we might reconsider game designers' attempts to keep players in a state of flow as a deliberate manipulation of arrhythmia.

3.4 Ugly Bosses, Ugly Rhythms

It follows, then, that novel rhythms encountered are favored when they match or conform to rhythms experienced in the natural environment, the "cosmic" rhythms Lefebvre and Apperley describe, the pursuit of which Dewey proposes allows for the appreciation of aesthetics.

Transactionism, in one respect, is the pursuit of a model in which aesthetics, rhythm, and the

natural world are desegregated, their assumed boundaries dispelled. Once allowed to exist on the same plane, continuous with one another, we can begin to consider some rhythms as pleasing and attractive in the same way that the viewer of art may find pleasure in its beauty. If the ludic properties of videogames are pursued for eurhythmia, then is it possible to think of gameplay rhythms themselves as attractive, even beautiful?

On April 21, 2022, game developer David Szymanski wrote a tweet saying "Elden Ring is a rhythm game" and, copying a meme format for bold opinions, asked readers to change his mind (Szymanski). However, describing Elden Ring (2022), a fantasy action title, as a rhythm game should not be as controversial a claim as Szymanski believes. Game developers long ago discovered that regular, sustained rhythms are a benefit to combat games. The classic Batman: Arkham Asylum (2009), in fact, was initially developed with an explicit rhythm mechanic, asking players to smash colored circles in precise timing in order for Batman to land his strikes (Sterling). The final title removed the colored circles, but retained much of the timing mechanic—the player must push buttons at precise moments to effectively strike and counter waves of opponents, with rewards piling up the longer the player can maintain their combat rhythm without taking a pause or an enemy's hit.



Figure 15: David Szymanski's Elden Ring rhythm tweet

Elden Ring also encourages precise timing as a play strategy, especially with weapon-based melee combat. A player in Elden Ring is in continuous danger of catastrophic damage; even a lowly, lone enemy can be deadly if the player fails to defend. Players are motivated to learn an enemy's attack timing so that they may defend by dodging, shielding, or parrying as the enemy's weapon strikes. Successful timing opens the enemy up for a devastating counterattack from the player which in turn shortens the encounter by depleting an enemy's health bar faster than any normal strike, reducing the number of attacks the player must face from the enemy, and so on. Many Elden Ring enemies attack in rhythms familiar to players, with strikes coming at regular intervals interrupted by a sizeable gap before the attacks begin again. The gap is the player's chance to stop defending and go on offense. These rhythms are repeated by every instance of that enemy found wherever the enemy is placed throughout the game. Other enemies might have different rhythms, but as players continue to experience the game they will attune to those as well. To play an expansive game such as Elden Ring is to integrate, to use Dewey's term, with a host of continuous, connected rhythms, adjusting contextually as play continues.

But *Elden Ring* bosses escalate the challenge and promote new rhythms and experiences through a strategy of radical arrhythmia. Below is a sketch posted on the subreddit r/Eldenring by Reddit user WeeziMonkey. It depicts a slightly exaggerated model of how *Elden Ring* bosses disrupt the player's eurhythmia through intentional confusion and rhythmic disintegration. The drawing mocks a common characteristic of almost all *Elden Ring* bosses: the extension of an entirely new rhythmic pattern unique to the boss that disrupts the player from any area of comfort, increasing the odds of successful strikes from the boss and of mistakes on the part of the player. (The depiction is quite accurate; my only critique of the sketch is that it attributes to 'Normal bosses' a standard rhythmic attack pattern, but just because *Elden Ring* bosses are

designed to promote extreme forms of arrhythmia, the arrhythmia of 'normal' bosses in context with their surrounding levels and gameplay milieus should not be dismissed.)

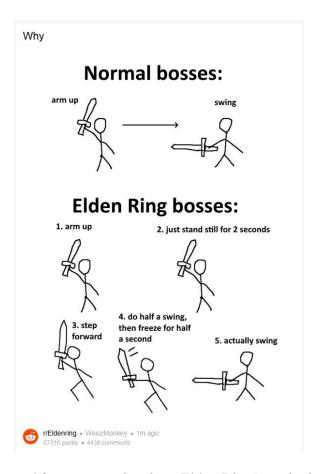


Figure 16: Internet joke about Elden Ring's arrhythmia

The style of arrhythmic combat depicted in the drawing is only one strategy *Elden Ring* uses to create rhythmic confusion for players; another is spatial arrhythmia. One of the first bosses encountered in *Elden Ring* is a Tree Sentinel, a powerful knight on horseback visible from the hill on which player initially spawn after completing the tutorial area. The Tree Sentinel stands out as unique and in motion against the still landscape, and many players are drawn to challenge him in their first few minutes in his area, Limgrave. But the Tree Sentinel is much more powerful than any starting character and the encounter is extremely likely to end in quick defeat. The Tree Sentinel communicates to the player that the traditional rhythm of videogame

progression, in which players usually face enemies of equivalent threat as they gain experience and move across the game world, does not apply in *Elden Ring*, and that dangerous bosses could lurk anywhere, even within sight of the starting position. Another boss, the Fallingstar Beast, uses both arrhythmic combat and spatial arrhythmia (this time, appearing suddenly and without warning at the peak of a long mountain climb) to disrupt players but adds a complication with its "hit boxes," the zones on its body that are vulnerable to player strikes at any given time. As you can see in the below images, the Fallingstar Beast is almost fully vulnerable during some of its attacks (the yellow mesh over its body in Figure 17) but strangely invulnerable during others, (seen by its lack of hit boxes in Figure 18). Even if the player aligns with the Fallingstar Beast's rhythm and attacks during a perceived opening in its attack pattern, the attack could still be entirely ineffective, further destabilizing the player in the game's rhythmic regime.

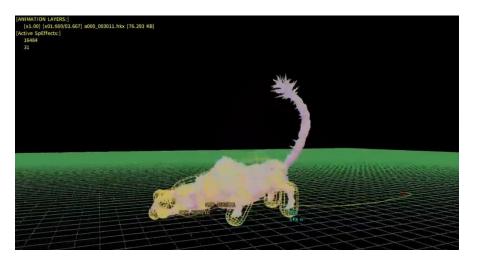


Figure 17: Fallingstar Beast. Yellow boxes indicate vulnerable areas.



Figure 18: Fallingstar Beast. The boxes have vanished with no explanation.

If, as Anable suggests, radical arrhythmia is a strategy of affective engagement, then that could help to explain why, despite their apparent difficulty and intentional disruptions, *Elden* Ring bosses generate endless discussions, art, memes, and media from players—much of it dedicated to their outsized difficulty. Perhaps bosses promote this affective engagement because their difficulty represents such a dramatic distortion of the comfortable, regular rhythms of play that their ludic rhythms have become aesthetically grotesque, even ugly. Dewey argued in his analysis of aesthetics that it is reductive and incorrect to think of the ugly in art as an aberration or corruption of the aesthetic. Instead, the ugly contributes to the whole of the aesthetic object precisely because it appears to be individuated, and the seemingly individuated arrests the attention of the viewer (212). Dewey's idea sounds paradoxical, but it's quite practical when you consider that the ugly aesthetic cannot be removed or separated from the art without disrupting the whole, but the ugly aesthetic suggests an individuation that draws the eye and the attention. In our transactionist account, that attention is fixated on the ugly as the viewer attempts to master the rhythms it offers, which differ from the whole and its aesthetics of beauty. Boss monsters in particular are notable for their tendency towards ugliness. The Pigs in *Disco Elysium* is physically distinguished by characteristics of poverty and disease. Other characters that arguably

rise to the level of boss in *Disco Elysium* by virtue of their complex, arrhythmic dialogue and aggression include Cuno, a trollish little boy who harasses the player as he tries to deal with the hanging corpse at the center of the game's mystery, and Measurehead, a towering, heavilytattooed racial supremacist who blocks the player's path through the docks. Within the context of Disco Elysium—a game filled to bursting with exaggerated and distorted characters—The Pigs, Cuno, and Measurehead are particularly striking in their physical distortion. Elden Ring, and the entire franchise of Fromsoft action games from which it derives, is likewise famous for its grotesque collection of bosses. One of the earliest bosses in *Elden Ring*, Godrick the Grafted, is a monstrosity gathered from dozens of "grafted" limbs, somewhere under which lies the region's mad king. A later boss, the Fire Giant, is distinguished from other giants by the fire-vomiting face inside the giant's torso that erupts and escalates the conflict at its midpoint. Godrick likewise resists player attunement to his rhythms by amplifying his arrhythmic distortions midway through the fight—after suffering enough damage, Godrick severs a useless arm and replaces it with the somehow-interchangeable head of a dead dragon, which can now spew fire in a concentrated stream at the player. If ludic rhythms can be ugly, then the ugliness of those rhythms match the typical ugliness of the boss monster itself.

But is it fair to think of ludic rhythms as beautiful or ugly? To answer this question, we have to consider definitions of aesthetic beauty that have shifted and changed throughout history, and are often considered too subjective to codify, or that they confuse the issue of art appreciation. Kant, for example, wrote in his aesthetics that the beauty of an art object allows for aesthetic appreciation of the object as distinct from cognitive appreciation, a phenomenon that allows for both subjectivity (i.e., taste) and rigid formal aesthetic rules to coexist. But this boundary has long frustrated scholars of Kant because it seems to suggest that *any* item that can

be aesthetically appreciated—virtually everything—must therefore be beautiful (Kieran). Ugliness, therefore, either doesn't exist or would deny aesthetic appreciation and be relegated purely to the realm of disgust or dismissal on formal terms. In his attempt to resolve Kant's aesthetic crisis, Kieran argues that beauty, in fact, derives from harmony, and that it is possible for ugliness to contain its own internal harmony that diverges from the beautiful harmony that surrounds it—in other words, ugliness is consistent, continuous, and contextual. However, Kieran goes on to state that a viewer is able to aesthetically appreciate the work of, say, Francis Bacon because the internal harmony of the work develops "our cognitive understanding of what certain human possibilities would or could be like" (387). In this solution, experience of the ugly remains cognitive, not aesthetic, a move that satisfies Kant but remains frustrating for those who have experienced being struck by art in a pre-reflective moment.

Kuplen attempts a different cognitive solution. She argues that schema of beauty and rhythm effectively form laws in our appreciation of new experiences, and that our free play of imagination (the initial aesthetic evaluation that arrives before cognitive understanding) is struck by aesthetics that appear to violate those laws. "Only when the imagination in the given object plays freely and spontaneously (that is, the sensible manifold is not constrained by determinate rules), then such an object 'is always new for us, and we are never tired of looking at it'" (Kuplen). By why limit this experience to the cognitive? As we have seen, our active and sensing bodies are always "on" and pursuing eurhythmia, which I claim is not parallel rhythms moving together or a third rhythm emerging when two collide but many rhythms on a continuous plane shifting to temporarily move as one, together. If, as Dewey says, the only end to aesthetics is either a world in total disarray or a world totally without rhythms, then the live being is physically struck by both outsized beauty and outsized ugliness, both of which exist as

disruptions from the low-flow rhythms in the surrounding milieu. Subjectivity and formal "rules" can coexist in this model, the model of Lefebvre and rhythmanalysis. The "rules"—which are in actuality not rules at all, since as Eco masterfully details in his work, even the so-called formal rules morph and collapse over time (391-408)—are the aesthetics that achieve eurhythmia with the rhythms of the culture and society from which they emerge, while the individual is continuous with that society but also with a specialized and personal milieu of existence, and therefore may experience deviations of taste based on his or her own rhythmic sensations.

Ugliness, therefore, is not a binary of beauty. As Henderson writes, if there is an opposing force to aesthetic appreciation, it is "neutral comfort," (Henderson 12), since both beauty and ugliness are distortions of the low-flow rhythms within which we are all inherently immersed. As Henderson goes on to write: the physical engagement of the viewer and the ugly art "suggest that we, as perceiving subjects, might be matters out of place" (128).

Videogames, by definition, deny neutral comfort, or as Reynolds writes they "stage an encounter that facilitates a new mode of presence and new conditions for expression" (Reynolds 49). Some games like *Getting Over It* (2017) or *QWOP* (2008) or *Octodad: Dadliest Catch* (2014) use comically extreme rhythmic distortions to satirize the antagonistic design of ludic rhythms that resist eurhythmia, making the player's every move fraught with disastrous, unintended chaos (for example, in *QWOP*, players try to run a dash with each of the title keys on the keyboard controlling a different individual muscle on a runner's leg. The result is almost always instant wipeout). With occasional exceptions, games like these do not contain bosses since the challenge of the regular ludic distortion is challenging enough. Other games, like *Shadow of the Colossus* (2005), work to transform ludic distortions by attempting eurhythmia with player expectations (the discourse surrounding the game is how the "boss fights" in the

game were actually akin to "levels" in other games—effectively supplanting one kind of rhythm with another). But *Elden Ring*'s strategy is typical of most mainstream games. The boss is a distortion of a regular rhythm, a ludically ugly aberration *contextually* against the beautiful rhythms of regular play, rhythms that are perceived as beauty because they emerge from the social and cultural rhythms of not only the player's personal milieu, but also the cultural ecology of the videogame medium itself. This can explain why over the decades of mainstream videogames, certain control schemes and button layouts have found near-unanimous adoption across consoles, developers, genres, and game franchises. As Eco described of art, some rhythms find favor as the standard of aesthetic beauty in a medium based on the culture and contexts that perceive them. Therefore, intentional distortions of those rhythms are, by definition, ugly—but ugly *for a purpose*. Ugly rhythms shock, draw attention, and provide challenge for the perceiving organism who wishes to attune to them. The boss monster, often an example of visual ugliness, is ludically ugly to the same degree.

3.5 The Pigs, Overcome

Let's reexamine the encounter with The Pigs through narrative and ludic rhythm. In *Disco Elysium*, the rhythms include active conversation, the narrative obfuscation of the detective story, and the ludic milieu of the point-and-click adventure. As Harry, it's my job to investigate a murder. The various suspects, antagonists, bystanders, and pains-in-the-neck stand in assigned positions throughout the city. They wait for me to discover them and initiate a conversation, the results of which might reveal a clue or send me to another location. Some exist merely to elaborate on the game's many political themes and social climates. Some of the characters disappear or move to different locations after I chat with them. In the early hours of the game, I have the option of asking most of the characters around town about the whereabouts

of my missing gun, but I only find out about The Pigs after I've accomplished a few milestone tasks, after I've grown comfortable with the rhythms of the game. My own rhythms constituted from my cultural milieu and from previously encountered media (from detective stories to adventure games) facilitate my eurhythmia with the experience and the mode of presence the game stages. But the encounter with The Pigs is ludically distorted, rhythmically ugly. The flashing lights and siren disrupt my comfortable eurhythmic low-flow. My attempts to calm her enough to lower the weapon only agitate her. To this point in the game, I've never been under direct attack, but she levels my own gun at me. My unflappable partner pulls his gun and puts me in the middle of a standoff. The game offers me a chance to rush her and take the gun for myself, but the chance is low, a result of my character's poor physical skills. I'm nervous. I suddenly feel like I don't know how to play this game and that I could make a wrong choice and ruin this playthrough. At this narrative moment in *Disco Elysium*, both Harry Du Bois and I face an uncertain future in which we are possibly undone by the choices we've made. Ludic ugliness stages a world out of control, that moves against the player from an unknown direction. This is also the narrative role of the boss monster, to disrupt the world as the player knows it and to signal a new world beyond. To enter that world, Harry Du Bois has to find eurhythmia with The Pigs and her radically distorted encounter. I don't know how to help him at first; we are in a shared arrhythmia. But through active attention and perception I gradually facilitate the encounter. I guide Harry as he uses logic and rhetoric to unnerve The Pigs, to make her question the weapon in her hand and the man who sold it to her. The encounter ends and I retrieve my weapon. I return to the beautiful rhythm of the game, and Du Bois approaches closer to the rhythm of the cop he wants to be (at least as I play him). The world of the game state is changed. I have the gun now, and my encounter with The Pigs will inform my decision on how, or

whether, to use it. The narrative of *Disco Elysium* and my experience playing it permeate through each other inseparably. The Pigs changes the game world for me and Harry simultaneously, moving together. Like all the best narrative boss encounters, I may return to the feeling of low-flow rhythms, but they are not quite the same. The achieved eurhythmia of the boss encounter has joined them.

Players consider boss monsters and boss fights as constructs that stage difficult encounters to promote player training and skill. In the process of mastering a boss encounter, failure is not just to be expected but often the point of the encounter itself. But as Anable writes, encounters that emphasize difficulty "are asking us not to celebrate failure but to flail with it for a while and learn its contours. Maybe flailing with failure through games that jerk our bodies out of the smooth rhythms of frictionless labor, or deny our participation at all, will shift our attention away from the perceived personal failings and back to the failures of a larger ideological formation—say, a user interface, a digital platform, or even an economic system" (Anable 129). To that I might add the failures of a struggling policeman or a warrior struggling to become the Elden Lord. Narratives thrive on rhythms; stories are inert when they approach "neutral comfort." The boss monster is a construction in narrative games that distorts rhythms to deny comfort to the player, the character, the game world, and the player's milieu. The game confronts us with visual and ludic ugliness to provide us an opportunity to resolve it and neutralize its nonconforming rhythms, to bring the game world and the story back into eurhythmia with the environment—imperative to our survival in this unknown world. To confront a boss is to experience the disruption required to engage with new narrative and ludic expressions because a boss expresses differently. We learn to express with it, then take it with us into the conditions of the changed world.

4 MOBS: THE FEELING-THROUGH OF NARRATIVE SPACE

Rhinotaurs, Prairie Chickens, Vegetoids, Koopa Troopers, Slimes, Murlocs, Darkspawn,

Creepers, Zombies, Head Crabs, Pidgeys, Infected, Elites, Octoroks, Lickers,

Necromorphs, Locust Grenadiers, Iron Virgins, Goombas, Zebbos, Bats, Icecaps,

Bandits, Gargoyles, SOLDIERs, Molded, Bloatflies, Shpiders

4.1 Introduction: The Night Folk

I'm trudging through the bayou near Lakay at night—already a desperate decision but one intended to keep me safe from the searching eyes of Pinkerton agents. It's 1899, and my partners in the Van der Linde Gang have similarly gone underground after a series of disastrous and spectacular failures. We botched a bank robbery in Saint Denis and barely escaped with our lives. Every hideout we've tried to make a home has been blown. Afraid of moving west, we've retreated to the southeastern swamps, but even that was a misstep. The Pinkertons found us almost immediately and put us back on the run.

I'm searching the swamp for secrets, valuables, and pelts. I'm hoping to raise enough cash to pay off a debt I owe to the town of Strawberry, a quaint and archetypal old west town filled with deputies primed to shoot me on sight. It's been a long time since I've been able to enjoy the hospitality of a town. My beard is overgrown; I have dark circles under my eyes and a persistent cough that squeezes my lungs at random. I'm dying of tuberculosis, but I've decided that's nobody's business but mine. I'm trying to see my gang through to safety before the end.

Somewhere nearby in the trees I catch the sounds of a woman crying. It's not uncommon to run into strangers out in the wilderness in need of assistance or willing to offer me some kind of task, potentially for a nice reward. It's also not uncommon to be

lured into a trap, and so I approach the woman carefully when I spot her. She's hunched over in the moonlight, sobbing. I inch towards her and announce myself, but she doesn't respond. My attention is on the surrounding area, but she appears to be alone—no horse, no provisions, and no nearby town. How did she get out here? Was she kidnapped, perhaps, carried off in her sleep? Finally, I'm just inches from her. I'm still trying to calm her down when she suddenly whips around and slashes at me with a knife. She doesn't say a word, she just sprints deeper into the swamp. That's when I notice her companions. They're pale, painted white across the face and arms. Their clothes are tattered and damp, and they carry only knives. They say nothing. Did they come up from the water? From behind the trees? I missed their entrance because I was looking at the woman, but no matter. I draw my pistol and fire off some shots to neutralize the first two, but the third slices me across my rib cage before I can level the pistol at him and fire. With the three painted men dead, my last decision is whether or not I'll fire at the fleeing woman who lured me into this trap. I let her go and dig the pockets of her accomplices. There's not much of value, just some tobacco and bits of food. Times must be lean in the swamp.



Figure 19: The Night Folk

My dangerous encounter in the swamps of Lakay pitted me against the Night Folk, a bizarre group of enemies in Red Dead Redemption 2 (2018). The Night Folk are unusual even for the game they appear in, a game already full to bursting with murderous cretins and thieves looking to rob me of my valuables or my life. Unlike the usual collection of bandits, gunslingers, and officers of the law, the Night Folk are completely silent and are only encountered in the southeastern bayous at night where they emerge from the swamp to attempt to murder the player's character or, in a gruesome twist, the player's horse. Even when not physically present, the Night Folk cast a shadow over the swamp. Curious players can discover corpses strung up against trees, wagons filled with dismembered horse parts, and strange cultish etchings and markings scattered about the area. The Night Folk appear to infect and infest their swamp, and they rarely, if ever, venture beyond into the rest of the territory. They are dependent on their bayou in just the same way as the Murfree Brood is to the area around Beaver Hollow or the O'Driscoll boys to the plains of Hanging Dog Ranch, but what's especially fascinating about the Night Folk is just how little the player can learn about them and how irrelevant they ultimately are to the game's linear plot. They just are, an already existing phenomenon of the game world that marks the player's crossing of a threshold from the world outside the swamp to the world inside. No major story elements and exceedingly few quests or tasks force the player to cross paths with the Night Folk. In that way they violate Roger Ebert's Law of Conservation of Characters (Reilly), in which characters who seem unimportant rarely are. In *Red Dead Redemption 2*, the Night Folk have unique character models, designed and ideated encounters, specialized clothing, environmental presence, specialty animations, and connections to a few voice-acted quests. And yet despite all of that

investment and development time, they are in fact quite unimportant. They provide flavor for the world and a puzzle for curious players to debate and theorize, but otherwise could be swapped out for any number of hostile bad guys with no change to the game's story.

Such a change would, however, leave a dramatic impact on the game's construction of *narrative space*. In this chapter, I will analyze and explore methods through which cooposition and hostile ludic rhythms co-create a potent space for both the game's narrative structure and its emotional themes, particularly through the use of "mobs" like the Night Folk, who work to constitute the desperation and bleak psychology of the *Red Dead Redemption 2* narrative section through which they appear while also shaping, defining, and acting as permeable and passable boundaries for the territory they rule. Narrative games have used mobs in similar roles for decades, often relying on variable degrees of opposition, threat, and difficulty to frame their stories, build their worlds, guide narrative through virtual environments, and reward player agency.

Before advancing, a caution: while mobs will be discussed in this chapter almost exclusively in terms of constructing narrative space, I acknowledge the impossibility of untangling space from the concept of narrative time. The two concepts are essential and inseparable, as Bakhtin rightly proposed in *The Dialogic Imagination* (84). For now, I will bracket off the concept of time and revisit in the next chapter when investigating a particular sub-type of mob, the "trash" mob. In that way, we might think of this chapter and the next as approaching the overall question of videogame narrative time and space from two variations of the same taxonomical category of coopositional enemy.

4.2 Mobs in Spatial Regimes

Confusingly, a "mob" is a singular enemy in a videogame. A group is referred to as "mobs." The term did not originate from the English word for a large crowd or from the informal term for an organized crime gang, instead emerging as the abbreviation for "mobile object," a term pioneered by game design legend Richard Bartle in his work on the early virtual world MUD1 (Bartle 102). Although the etymology is obscure, the word appears to have filtered into the common language of game players via the enemies in EverQuest, a massively popular online game in the 1990s that liberally borrowed ideas and design concepts from MUD1 and its descendants. Somewhere along the way, players privy to insider lingo crossed the word over into common parlance, where it became the standard term for roving enemies in videogames, first in the massively multiplayer online roleplaying game (MMORPG) genre, and then eventually to videogames at large. Mobs are the primary combat encounter of nearly every videogame that features players in cooposition with the computer AI. While videogame villains are mostly unseen, offscreen threats, and boss monsters are figures of specialized encounters in isolated arenas, mobs are everywhere in videogames. An encounter with an individual mob is rarely meant to be memorable as an isolated event; instead, mobs distinguish themselves by representing particular kinds of challenges that recur throughout play. Take, for example, the common mobs in Super Mario Bros. The Goomba is the first mob encountered on the very first map and is easily dispatched by stomping. However, another mob, the Koopa Troopa, isn't eliminated via stomping. Instead, when Mario leaps onto these turtles, they retreat inside of their shells. If left alone, they reemerge, but in the meantime Mario has the opportunity to kick the shell, laying waste to every enemy in the shell's path. Each of

these mobs requires a unique strategy to defeat, and so savvy placement of the mobs in a level promotes particular kinds of actions in the player as they navigate each encounter in turn. Perhaps a Goomba is sandwiched in between two Koopa Troopas, making it tricky to deal with it directly. Or perhaps a Troopa will appear at the vanguard of a column of Goombas, providing an opportunity to wipe out the entire line of Goombas with one stomp and a kick.

In this way, mobs are the construction material of most action-based videogames. If a player enters a level with a task to defeat the area boss, the player can be sure that a small army of hostile mobs lies between the player and her goal. Learning the peculiarities and strategies of every mob—finding a felicitous rhythm—is the actual work of the game and the path to progression. But although mobs are the primary essential task of many videogames, the game texts rarely frame them in such a way. In comparison to dominant villains or rhythmically challenging bosses, mobs are typically weak and easily dispatched by a player using the basic skill affordances or verbs granted to their player character. To provide challenge, mobs are usually scripted to arrive in large numbers in an attempt to overwhelm the player. Some games, like *Undertale* or *Dark Souls II*, allow players to clear mobs out of a level, effectively ending agential opposition in that part of the game world if the player wanders through in the future. Many other games—for instance, the *Metroid* series—allow mobs to "respawn" after death or when a player walks through a certain point on the map again so that the challenge remains evergreen. There are many different strategies to how game designers deploy mobs, but the overall goal for designers, especially those designers influenced by theories of flow, is to create a constant challenge for the player that is never too overwhelming or too easy, since, as

Juul notes, players find games that are too easy just as frustrating, if not more so, than games that are deemed too hard (2013). In the hierarchy of videogame enemies, a mob is nearly always subservient to a boss or to another higher form of enemy like a villain. A standard mob almost never functions as an area boss, but the reverse can happen—some games introduce a tough mob as a boss first, and then convert that boss to a standard mob that may appear anywhere in future levels. That players often find this reversal alarming is deeply instructional; there appears to be a certain expectation with mobs that they are to provide just enough challenge to give the level some grit and friction on the way to the final boss, and so the sudden appearance of a monster once thought of as a unique boss encounter, even a boss that, by definition, the player has already dispatched, can feel like an unfair move on the part of the game, as if the game is violating some unspoken understanding.

But mobs embody a myriad of functions far beyond maintaining a consistent coopositional rhythm. For example, many mobs perform dressage roles as they prepare the player for larger tasks. The mobs in the classic fire stage from *Mega Man* (1987) are vulnerable to the player's Ice Slasher weapon, affording the player opportunities to practice that weapon before using it against the stage boss, Fire Man. Likewise, the basic ghosts found in the hallways of *Luigi's Mansion* give the player a chance to practice with their ghost-capturing vacuum before the stakes are raised in combat with one of the game's more robust and combative portrait ghost bosses. But beyond combat, mobs also serve a vital role as an identifying *path of advancement* for the player. In an elegant coopositional move, mobs identify the path forward for players by signaling an increased but inviting level of challenge. Players navigating through videogame worlds understand

that they are likely progressing in the "correct" (intended) direction in the videogame level if they encounter resistance and, counterintuitively, if the player moves too far in a direction with little to no resistance the player soon feels *unwelcome* or *incorrect* in their orientation within the game space. In essence, players are searching for a sensation of resistance, feeling resistance as a sign to *advance*, not to retreat. This is one expression of what I will refer to this chapter as *feeling-through* the play experience. Players and games reach across to one another and feel for resistance. In fact, it is this resistance that provides the central means through which the player and the game co-constitute the experience for one another.

We can see this function of mobs in action by examining their placement within what Arsenault and Cote call different "graphical regimes." In summary, a graphical regime is a standard of design in videogames driven by the technological innovations and graphical fidelity available during a particular period of design. Regimes emerge from the shared cultural and technological milieu of the design environment, as those milieus produce a particular aesthetic phenomenon that most appeals to contemporary designers and players, at what Arsenault and Cote called a "junction point between gameplay and graphics" (2013) but that we might also think of as phenomena of eurhythmic transaction. In the below images we can see two different graphical regimes in the martial arts beat-em-up genre. The first, from the 1989 classic *Final Fight*, depicts the sidescrolling regime that dominated the arcade and 1980s home console technology. The second image is from *Sifu*, a 2022 release for personal computers and the advanced PlayStation 5.



Figure 20: Final Fight's 2D regime



Figure 21: Sifu and the 3D regime

In *Final Fight* and other typical sidescrolling action games, the player begins on the left side of the screen and progresses by moving to the right. As the player moves forward, new mobs appear in a line in front of them, sometimes standing on different planes within a limited range to create the illusion of depth. The player fights the current set of enemies and, if victorious, moves forward in the level where more enemies await. Progressing in the game means facing further resistance. If the player moves in the "wrong" direction, i.e., backwards from right to left, they will find the way impassable. This is not coopositional resistance but a direct block. Mobs in the typical arcade graphical regime function quite similar to a public door that opens when pushed. If I reach for the door handle and pull, the door will form an impassable

barrier and I cannot progress. But if I push, the door will *resist* through its own weight and the pressure of the air on the other side, but with a low level of effort, I will succeed in opening the door and will move to the next part of my day.

In 2022, however, the graphical regime has changed considerably with high-budget games increasingly invested in large, open environments that afford players the opportunity to explore in any direction they like. In Sifu, the player is still matched against a legion of enemy fighters but is afforded more freedom to move throughout the play field. The game camera has shifted accordingly behind the player character and follows as the player navigates around mobs, through doors, and over obstacles. In this contemporary graphical regime, players decide which direction the scene moves. Instead of a "push" door gating progression, the player in a contemporary open level game has no clear and preferred pathway to follow through a level and looks to cues such as the locations of mobs to guide them. Players of these games are reaching across to the game and feeling-through for renewed resistance. If the player in Sifu has cleared their hallway or nightclub scene of visible enemies, but the game does not progress, then the player may explore the space. If no enemies are encountered in a certain direction, the player can safely assume that this is not the direction forward and may continue to look in a variety of directions until, at last, a new set of enemies is discovered. The player and the game are reaching out, one to the other, through an active phenomenon of cooposition that shapes and conjures the "door" that *Final Fight* makes very explicit, but instead of *Final Fight*'s impassable resistance as the block, it is Sifu's failure to resist that turns the player away from certain directions and towards others. In the 3D open world graphical regime, I push the game and only find promise of progression when the game pushes back.

4.3 Videogame Space Through Cooposition

The nature, function, and construction of virtual space in the video game is a topic of great interest in the field of games studies. Aarseth argued that games "celebrate and explore spatial representation as their central motif and raison d'etre" (2001) because the construction of space appears to be of fundamental concern to designers—before gameplay may begin, there must be a field within which the game rules function. Murray agrees, naming spatiality as a core feature of digital texts and simulations, which include video games (1997). This belief has history far beyond videogames and into concepts of play itself. In fact, it could be considered foundational to the field, as one of the earliest and most widely cited and discussed theories of games and play is Huizinga's spatial concept of the so-called "magic circle," which frames the space of play within a zone where the strictures and culture found in the "real world" are temporarily suspended to allow for safe and free experimentation through play (1971). Of course, as discussed in Chapter 1, theorizing play as taking place in a zone surrounded by hard boundaries is problematic for transactionism, and thankfully has been the topic of thorough critique from scholars arguing from a variety of theoretical approaches, notably Mia Consalvo (2009) and Lisa Nakamura (2013), both of whose arguments reveal that attempts to imagine hard boundaries separating the physical world from the virtual fail to account for what the player brings with them into the virtual space and what the player takes with them from the virtual world into the physical, imagining a permeable boundary passable by not only players but also cultures, ideologies, and hegemonic regimes. Games create spaces for exploration and experience, as Jenkins claims (2006), but those spaces are not magic, separate, or ephemeral, but continuous with the physical world and constituted by players in active sensory involvement

with that space, senses that are extended outward through the means of control, the gamepad, the character's actions, and the game's sensory feedback.

In Media in Mind, Reynolds describes at length the experience of sensing space in the videogame The Unfinished Swan, which begins as a white void on the screen that only reveals its depth and pathways as the player hurls balloons of black paint into that void (18-31). Yes, the splotches of paint splattering against walls gives the player visual cues and feedback to better understand the contours of the otherwise-invisible environment, but an underlying claim in Reynold's account of *The Unfinished Swan* is that the player's *action*—the hurling of the paint is itself a sensory action. The action does not simply create new conditions to facilitate perception. Instead, the actions themselves are transactions of information. The player moves the character on screen, and by extension the game's camera documenting the visual field, and hurls more balloons, feeling-through the space through action, activity, and agency. The void of *The* Unfinished Swan resists sensory examination but through coopositional perception gradually emerges into being. "Perception... is a material transaction among organisms," Reynolds writes, making a claim to the transactional role of the perceived as much as the perceiver. Space, in this construction, constitutes the player by making itself available as a field of perceptual action and, in The Unfinished Swan explicitly, the perception of its visual rhythms and shapes require a transactional resistance, a dynamic coopositional stance in which the setting resists perception to beckon towards being perceived.

We might consider that this explicit transaction only makes clear the implicit transaction facilitating all videogame spatial perception. As with Dewey and his aesthetic rhythms, through which perception of the art object utilizes the same bodily perception that attunes the observer to the rhythms of their environmental milieu, the videogame space does not reveal itself without

resistance. When entering a new video game, I may see a towering mountain in the distance, but is it an actual location I can reach, scale, and explore? Or is it background only, a construction used to establish the narrative setting of the game? In other words, is the mountain in the field of play or beyond it? As a player, I can decide the answer to this question by pushing towards the mountain with the verbs available to me—extending my perception through action, as in *The Unfinished Swan*—and feeling-through for coopositional resistance. Perhaps I'll hit a hard boundary that obstructs me from getting any closer to the mountain, a hard resistance barrier that I will recognize as a sign that the mountain is off limits. But perhaps I'll meet increasing challenges along the path, or perhaps a string of mobs leading up to the chasm. Through cooposition, I continue toward the mountain and perceive it via action and resistance.

That action and resistance are inherent features of videogame spaces is not a controversial claim, as such a claim contains obvious similarities to Aarseth's use of the term *ergodic* to describe videogame texts, tying the medium of videogames to the effort they require of the player to be read. As Nitsche writes in his study of what he calls semiotic and representational videogame space through player experience:

3D game spaces allow players to crawl, jump, run, fly, and teleport into new worlds of unheard-of form and function. The game space we can experience, discover, and manipulate has become endless and at the same time more accessible than ever. Video game spaces stage our dreams and nightmares and they seem to get better at it every year (Nitsche 2).

Nitsche's list of actions belies the difficulty of thinking of videogame space as constructed worlds meant to *contain* the player and the action of the game. Nitsche describes

actions conceivably offered to the player (crawling, running, jumping, flying) as means of entering and exploring a virtual world. The player *runs* through a world, at which point the world becomes available to the player's senses. But as we have discussed, the player's senses are expanded through videogame play into the space of action. Running is itself a sensory phenomenon. The potential parameters of the space bound in the videogame's code reveals itself through the player pushing against and feeling through the space via action. Just like hurling black balloons of paint, the player extends into and perceives the possibilities of the space through the game's permeable and cooperative resistance. The player moves control sticks with her thumbs, and the character or camera on screen runs through the environment. The physics of running emerge from the game's code and is designed in tandem with the space of the gameworld. To refashion Carl Sagan's famous quote, videogame action is a way for the code to know itself, but the game requires the player to put those systems into cooposition and to fully constitute the gamespace of the virtual world.

When we consider actions as perception, Nitsche's list of verbs allowing access to the game world can be expanded to include "fight." In games containing enemies, combat is a character action bound by coded parameters that afford exploration of the world through resistance, just as any movement or exploration action available to the player in the game's design. Many 3D open-world games, defined as games that allow the player free access to the world map instead of a linear, dictated progression structure, take the affordances of the fight action for granted when designing to the player experience. For example, in *Fallout 3* (2008) the player begins in a linear tutorial story that takes place throughout the player's childhood in an expansive underground bunker called a "vault." The player makes choices about her character's physical appearance, skills, and personality while involved in conversations with non-player

characters and occasional combat with critters in the tunnels and the vault's local gang, the Tunnel Snakes. The tutorial ends when the player emerges from the vault out into the world of Fallout, an irradiated wasteland forged by global nuclear war. The player isn't provided with clear directions on what to do next. A nearby shantytown called Megaton is likely to be her first destination due to its proximity and visual appeal, but there is nothing that explicitly compels the player to visit Megaton. Instead, the player can wander off in the opposite direction, or any direction she likes, walking deeper into the game world. However, the player's journey is heavily influenced by the level of resistance she meets along the way. In Fallout 3, the player gains skills and talents by "leveling up," gradually becoming more formidable as she puts the wasteland's challenges behind her. But some mobs that populate the wasteland are built tougher than others, and the player may find that the enemies in one particular direction are far beyond the reach of her initial skills, while mobs in another direction are more easily dispatched. Officially, there is no boundary or limit to the player's exploration in the open world. There is no hard barrier demanding that the player follow a prescribed path. But the player soon realizes that some paths are more difficult than others—or even near-impossible at her current skill level. In this way, through combat, the player feels-through a set of permeable boundaries in the space. Fighting a mob that far outpaces the player's abilities in an early section of a game sends as clear a perceptual signal as hurling a balloon filled with black paint against an invisible wall. By moving against the world, I perceive it. By fighting against the world, I also perceive it.

Through combat, the player and the game feel-through one another. Each pushes back on the other. For the player, the resistance to her push will be felt somewhere in the coming together of the coded parameters of the actions and offered extensions afforded to the player and the player's skill utilizing those extensions. If the game's cooposition folds too easily under the skill,

it's a sign that the area these mobs populate was intended to be experienced earlier. If the mobs are barely dented by the player's actions and overwhelm the player with a quick death, it's a sign that the player is not yet ready for this space but may be at a later time. Again, nothing forces a particular player response; the space called to the player, and the player makes the narrative and gameplay decision whether to double down on that pursuit, but is under no obligation. The game will feel-through her choice either way.

To provide another example: In *Dark Souls*, new players find themselves at a central hub called Firelink Shrine. Just off from the shrine is a tall stone staircase ascending the side of a hill, leading to a bridge across a chasm. The staircase is guarded by Hollows, among the weakest of all *Dark Souls* mobs. In the opposite direction is a graveyard containing hordes of skeletal warriors, much more powerful than Hollows and capable of resurrecting after defeat unless the player commits a special attack to the creature's corpse. The graveyard is much more daunting for a new player, and most will opt for the staircase. But savvy *Dark Souls* players know that a superior weapon awaits them in the deadly crypt just beyond the graveyard, and so push against the more difficult path in the hopes of a quick evening of the odds. The world of *Dark Souls*, *Fallout 3*, and many other open 3D worlds suggests a path forward but doesn't deny the player the choice of where to lead the action. It can only push back, coopositionally, and move with the player as the player and the game feel-through each other.

4.4 Feeling-Through Narrative

The previous discussion has been concerned with how enemies, cooposition, and conflict transactionally create videogame space by dynamically reaching across to meet the player's own probing and actively sensed opposition. This next section, however, shifts the parameters and definition of videogame space to discuss the space of the narrative, the story space within games

that create coherent fictional worlds. I argue that the play field of possible action in videogames, the space within which the game takes place and beyond which movement and exploration is restricted, is continuous with narrative space, which I define here as the boundaries of the game's designed narrative activity. The narrative space includes action and incident and, through the player's experience and active sensory constitution of the narrative, expands to include seemingly ephemeral concepts like emotion and theme, struggle and confusion into the realm of the spatial. Cooposition with mobs is the engine of this expansion.

The literary means of constructing narrative space has been so widely researched and discussed in literary narratology that it would be impractical to attempt a full recounting in this project. The general tendency, however, is to rely on cognitive theory to explain how readers imagine, maintain, and make stable the narrative space of the novel or story. Both Bal (2009) and Cobley (2014) point to cognitive engagement with semiotics as the prevailing understanding of literary space construction, with Bal in particular noting that space is often constructed in stories by use of language appealing to the work of the five senses (133-143). Cobley is careful to note, citing Barthes's hermeneutic code found in S/Z (1975), that narrative is also about movement from one point to another. Movement can be defined in either the physical sense or the temporal; all narrative implies a movement from a beginning to an end point through time. In the physical sense, however, movement through a story space that promotes the reader's understanding of space is still largely accomplished through appeals to sensory cognition, the description of floorplans, the sounds of footsteps against stone, the smell of dinner beckoning to the kitchen. As I claimed in chapter 1, the difficulties that come with applying literary narratology to videogame narrative are numerous, in no small part because of the apparent differences between the media and the need for readers to imagine sensory stimuli interpreted from text on a page while the

videogame player senses firsthand the videogame world. Visual media are likewise bound up with cognitive narratological models of space construction. Bordwell has written considerable volumes on the applications of cognitive narratology models to cinema, arguing that schema in the mind and memory of the viewer allow the viewer to experience and make sense of film space as it is presented to them, and that filmmakers can use intentional spatial confusion as a powerful tool in particular kinds of narrative situations (1985). Again, however, these models fail when applied to the creation of videogame narrative space. A wall in a videogame does not represent a wall that a player can relate to through schema; the player, through active movement and sensation, can feel the resistance of the wall and make her own determination about is impassability. The wall in a videogame *is* a wall, an actual barrier and border that has to be reckoned with. Likewise, a mob in a videogame is an enemy, albeit a coopositional one. It follows, then, that to fully account for a transactional understanding of narrative space, the player's sensory experience of that space must come through action, through movement, and through coopositional resistance.

Marie-Laure Ryan, Kenneth Foote, and Maoz Azaryahu have proposed a geographical approach to narratology when considering the videogame. In *Narrating Space*, they propose a model that maintains the critical importance of cognitive schema while simultaneously expanding the conditions of schema to include more avenues of human experience, thereby expanding narratology itself into a fully interdisciplinary field since, under their proposal, functions of life, media, and social systems may all be considered relevant to schematic geography, and thus capable of being experienced as narrative through the exploration of videogame spaces (Ryan, et al. 2016). Transactionism downplays the importance of schema and mental representations (which Reynolds convincingly argues against in his work [71]) in favor of

the lived experience of telling and being told the narrative in a contingent, weakly emergent phenomenon in which the actual experience of the story bleeds inextricably with the telling. Ryan, Foote, and Azaryahu's account, although reliant on problematic cognitive assumptions that have plagued studies of videogame narrative, is at least in one respect a welcome move in the direction of a more total and expansive approach to both environments and storytelling. Their take is substantively distinct from the proposal of environmental or embedded storytelling championed by Jenkins (2007 57) and Pearce (201) during the transition to explorable 3D environments, often likened to the Imagineering teams at Disney who thread narrative suggestions and tip-offs into the designed environments of their theme park rides, an exhibition approach to narrative that Bogost has critiqued as being too removed from told narrative elements to be studied as narrative at all. Instead of environmental storytelling, Bogost suggested such sets were "just environments" (2017). Instead, the approach championed by Ryan, Foote, and Azaryahu is reaching across towards a more actively engaged conception of narrative space, towards experiencing the creation of narrative as Dewey's "live creature," who does not only exist in an environment but also constitutes that environment by perceiving it, changing it, and transacting through it.

The emergence of hypertext fiction and new conceptions of the freedoms of digital narrative encouraged the generation of new kinds of spatial metaphors for narrative, beyond the geographic, "point A to point B" models mentioned above. One popular metaphor was that videogames and other digital narratives could be considered like labyrinths or mazes (Ryan 2006 141), in which the player chooses her own path from a selection of twisted and obscure options to lead to a felicitous end point. Fernandez-Vara argues that the maze is a better fit for videogames than labyrinths, due to the classical labyrinth design supporting only one felicitous

solution, while mazes are multicursal and make available many different pathways to success (2007). But the metaphor of the maze, while potent and appealing for describing the apparent process of a player entering a challenge, finding their own way, and arriving at the destination, remains unsatisfying for videogame narrative due to its rigid, pre-constituted, and undynamic feedback. The wanderer in the maze, standing in here for the videogame player, may feel-through the maze, pushing against the walls and feeling their resistance, but each response is binary—either the wall allows passage or does not. The walls of the maze in this way resemble the hard and fixed walls of the 2D sidescrolling regime, not the dynamic guidance, pushing, and probing of the environmental and coopositional mobs in the open 3D world. Environments like these are responsive and involved. Games adjust and move with the player coopositionally, while a maze is inert. The narrative space of the videogame must be thought of as in motion and fluid, pushing and pulling the player in equal measures, at all times. The maze metaphor, therefore, fails to describe that type of space unless it is expanded to include another classical element. What the maze needs is a minotaur.

A minotaur resembles a boss monster, but it is not. Although the minotaur is a singular creature, a daunting threat, and often described as a threshold guardian of the maze, popular depictions of the minotaur reveal the creature as a dynamic, active entity. The minotaur does not wait and taunt the player from the maze exit like a villain. Nor does the minotaur act as a passage guardian, a secondary challenge to overcome on the player's way out of the maze. The minotaur, instead, moves through the maze, hunting the invader in its territory, dynamically altering the path forward with every step. As the minotaur moves, it alters the maze itself. The safest path forward collapses as the minotaur moves into it, and a new path grows more attractive. But the player is not forced into confrontation with the minotaur. Players may *choose* to confront the

minotaur if they are up to the challenge, accepting the results as they come. The minotaur, then, resembles a single, powerful wandering mob, a dangerous enemy that patrols the space of the maze and, in so doing, creates new and dynamic parameters for the creation of the narrative of escape.

The early videogame 3D Monster Maze (1981) for the Sinclair ZX81 understood the power of the minotaur to shape narrative experience and bring a dynamic element to the maze. In the game, the player is invited by a carnival barker to witness a sideshow spectacle: a Tyrannosaurus Rex "preserved in silicon since prehistoric times." Once the player enters the attraction, the real situation reveals itself. The exhibit is a maze and the T-Rex is alive and hungry. The player then navigates the low-resolution maze looking for an exit, with a twist. With each new screen of the maze that the player reveals, she also receives a warning about the location of the T-Rex including phrases such as "Rex Lies in Wait," "Footsteps Approaching," "He Has Seen You," "Run, he is beside you," and so on. Each turn in the maze, therefore, is accompanied by new information about the dynamic, pursuing, unseen enemy. This maze is more than the impassable walls of the structure; it is an ever-shifting and unfixed set of narrative possibilities in a story of escape, danger, or death. The player moves through the maze and the monster moves in tandem, and as this happens the story shifts and moves along with them.

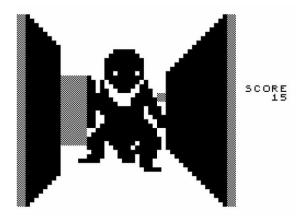


Figure 22: 3D Monster Maze (1981)

3D Monster Maze is simple but effective in its design, and the limited information the game provides amplifies the suspense of each encounter, making the game an ancestor of the survival horror genre of games (Rouse III). Alien: Isolation (2014) a popular, more-recent entry in that genre, escalates and smooths out the design of 3D Monster Maze to offer an intense and horrific narrative experience that emphasizes and enlivens the dynamic narrative space of Sevastopol, a dying space station in the backwater nowhere of deep space. Again, although the signature alien carries many superficial similarities with villains or bosses, its actual function in the game is as a wandering mob, moving and hunting the player through corridors as she pursues a means of escape from the station and the beast. Like the T-Rex in 3D Monster Maze, the alien is unkillable; although it can be fended off in combat using specialized weapons, the effect is always temporary. Late in the game, in fact, players learn that "the alien" is just one of a horde of the creatures that have infested the station—an entire class of unkillable, hostile mobs.



Figure 23: Alien: Isolation (2014) updates the maze

Alien: Isolation is a stealth game. Contact with the alien results in a gruesome and instant "game over," and so the player must learn to navigate the ship while hiding from the creature as it hunts her. Again, like in 3D Monster Maze, the space of the narrative shifts and alters dynamically as the beast and the player move together and feel-through each other's presence. Instead of on-screen text, the player relies on a tracking device to keep tabs on the alien's location but may also rely on a host of aural or visual cues. The creature moves through vents above and around the player, drips saliva from ambush points, and responds dynamically to environmental stimuli, meaning that while the player listens out for the creature, it also listens for her. A gunshot or even heavy footsteps will be enough to draw the alien to her location and end the game. The wandering mob in this maze therefore contributes not only to the visible and invisible elements of the narrative setting of the station but also to the narrative and emotional fields of action. The player experiences the claustrophobia and fear of pursuit that the player character describes and comes to regard the station as doomed, decrepit, and unsafe—all key features of the narrative, which involves the decommissioning and abandonment of the company's workers in pursuit of corporate profit and survival. The narrative space of the game extends beyond the literal and physical space and into the rhizomatic, a concept Fernandez-Valla draws from Delueze and Guattari, to describe a digital narrative structure "in which every point is interconnected with every other point" (Fernandez-Vala 75), a structure that extends outward in every direction, experienced as a total phenomenon through transaction and active perception, i.e., perception through activity.

An analogy of a maze-like, rhizomatic model of narrative occurs in Victor Pelevin's 2006 experimental novel, *The Helmet of Horror*. The novel is experienced as a long series of text message exchanges between a collection of people who have each awakened in strange rooms adjacent to a massive and unknowable labyrinth. The prisoners, each bound to a fictional handle and many of whom resemble figures from the Perseus myth of the minotaur, talk and argue with one another about the particulars of the labyrinth, their lives before their kidnapping, and their various internal and external struggles. Attempts to explore the labyrinth and reveal a means of escape prove fruitless, in part because the individual sections of the maze they explore seem irrational and disconnected from each other, suggesting that the characters are not imprisoned in proximity, and in part because of the horrifying figure of the minotaur who roams the maze, described as a powerful male figure wearing a massive helmet—the Helmet of Horror. In a dream one character, "Ariadne," fittingly receives a vision in which she sees the minotaur and his peculiar helmet.

On his head he had a bronze helmet, like a gladiator's mask—a headpiece with a wide brim and a plate with holes in it where the face would be. There were two horns on the helmet... they didn't stick out to the sides, they ran backwards, merging into the helmet to form a block (Pelevin 25).

These unusual horns that bend inward towards the helmet are revealed in the dream to be called the "horns of plenty," and in a later dream she learns that the helmet is not a helmet at all but a *mind*, with each part of the helmet receiving an appropriate name and function related to mental activity such as "the frontal net," "the separator labyrinth," and "Tarkovsky's mirror." (76-77). The prisoners are puzzled by this description. The helmet is a mind, but it is also an object in the world, an object that supplants all other objects, including itself, because all objects originate in the mind. This logical paradox appears to some of the prisoners to hold a solution to their predicament, and they spend significant time trying to puzzle through the helmet's nature, hoping it will lead to escape. As they reason it, the helmet's "horns of plenty" bend backwards into the helmet to provide a permanent feedback loop, in which the helmet appears as a closed system, but from within which everything and anything the mind can experience must emerge (78-94). One of the prisoners using the name "Nutscracker" takes a particular interest in this description of the helmet due to its similarity to devices he's encountered as part of his work as a designer of games, simulations, and interactive virtual worlds. Nutscrackers refers to the user of a virtual helmet as a "Helmholtz," who believes that the virtual world is a space of limitless possibility when, in fact, the game must push and coerce the player to move in directions the designers see fit that will provide the best, unbroken experience. Complete freedom of choice, for Nutscracker, is the death of the experience. The helmet, then, is the point from which "reality" springs, containing everything the player's mind encounters.

The helmet of horror is a confusing artifact—intentionally so—and it is significant that Pelevin chose to place it as the head of the minotaur (not *on*; it's made clear that there's no space inside the helmet large enough for a head to fit). Where the characters in the novel, who appear to each fill particular functions of the mind in Pelevin's philosophical exploration of the concept,

fail to understand the paradox of the helmet, from a transactional perspective the artifact comes into clarity. As Reynolds explains, the mind is not isolated or contained within the brain or even the body. When we consider how mental activity and cognition emerge from shared transactions with our environment, the location of the mind extends and disperses into that surrounding environment. The contents of the mind are everything in our environment, everything our dynamic sensory experience can perceive, everything the environment perceives about us—and it does extend like a rhizomatic maze into surrounding directions, touching point-to-point as we experience as live beings. Nutscracker confuses the helmet and the mind as isolated, requiring stimuli to force players into preferred directions, what the character calls "coercive orientation" (96), but he fails to see that the designed world functions as part of the mind of the Helmholtz, with the player and game acting and perceiving together. Pelevin may have seen this construction more clearly, since he chose to associate the helmet—the contents of the mind, and therefore the sum of experience—with the pursuing *threat* of the minotaur. "Everyone has his own Minotaur... but in reality, it's not he who pursues us, we pursue him. And the labyrinth in which we seek him is the dopamine chains of the pleasure linking up into the rings of the human brain" (208).

Setting aside Nutscracker's gesture to the mind's corporeality, this statement reveals that the minotaur, the pursuit, and the threat are elements of the mind, perceived by the mind, and which promote the advancement of the mind which again is boundaryless and extended as far as the active perception of Dewey's live creature extends. The minotaur is coopositional and transactional, a creature that moves us as we move it, all to advance the experience of being perceived and challenged and to continue our development—it is a creature of the rhizomatic maze. Like in the television series *Westworld*, a series heavily preoccupied with the ethics and

practices of AI, game, and world design, the maze is presented as a pathway towards actualization. It is not a metaphor but a literalization of the working of the mind in a pursuit of sentience. If a robot denizen of the Westworld park travels the length of the "maze," which is not literal but rather a pathway of mental causation and cognitive discovery, she will find herself as a live creature. But, true to game design, the maze is not inert. There must be challenge and a pursuing, driving force that harries the entity in various directions, towards the "center" of the maze. Rote execution of a maze-solving script does not lead to actualization, but dynamic and active transaction by way of pursuit and obstacle will.



Figure 24: Westworld's maze of actualization

The rhizomatic maze of a 3D open world narrative does not often contain such a clear, rigid minotaur labyrinth, and yet through opposition, pursuit, and conflict of mobs can lead to narrative actualization through the process of feeling-through. And, importantly, noting that the maze is a rhizome that connects in every direction, much like the contents of the helmet in Pelevin's novel, means that narrative in videogames is not strictly focused on the destination or the result. Nitsche writes that narrative "is best understood as a form of comprehension that can be triggered and affected by the game world" (42) and that the individual incidents and events along the way—which, as we have stated, in many games can largely be made up of encounters

with mobs—is "not to tell a linear story, but to provide evocative means for the interactor to comprehend the virtual space and the events within it, and generate context and significance in order to make the space and the experience of it more meaningful" (45). The sounds of the alien hunting the player through the Sevastopol vents evoke paranoia and fear to provide that context and significance for *Alien: Isolation*, and as the alien moves dynamically by sensing the player, the evocative space of that story element shifts, moves, and pulsates under the player's touch.

The same can be said of games in which the walls are removed and the mobs multiplied. In Fallout 3 I am free to explore as I wish, but I have to weigh that ability against the dangers of the wasteland. How can discovering mobs that provide too much of a challenge for my skills reflect the narrative space of the rhizomatic maze? Wee Liang Tong and Marcus Cheng Chye Tan have argued that the shift to 3D visuals in videogames promoted the adoption of cinematic storytelling techniques by developers. Soon, those techniques became shared between the player and the game as a means of directing the narrative events. The authors argue that just as the cinematic camera developed to follow the action of the cinematic image, selected and framed by the director, the videogame offers players the opportunity to share in the direction of the experience. Players have access to turning the camera, focusing on objects and characters, pausing the action, and many other cinematic tricks to guide and frame the action on screen in a way that appeals to their individual tastes (Tong, Tan 2002). The game offers the action to be tracked in these free-camera situations but rarely dictates the player's moves. It's a cooperation, one that facilitates, in a sense, a shared "credit" on the narrative experience. I argue that this shared phenomenon extends beyond the use of presentation materials such as camera angles and focus, and directly into the co-constitution of the rhizomatic narrative itself. If we consider encounters with mobs as the central site of action in a narrative videogame then, following

Nitsche, the mob encounters become the stuff of the game's narrative. Through the rhizomatic maze, these encounters and our experiences of them reach across to co-constitute the full accounting of narrative activity, including emotional responses, impressions, foreshadowing, and so on. In this accounting, if I encounter a collection of overpowered mobs in Fallout 3, my actions and choices direct the story as much as my choice of camera angle may direct the presentation of that story. The game offers an action encounter. The game and I reach across to one another and feel-through the resistance we meet. I decide to continue the encounter or abandon it, essentially choosing the direction of the story as we, the game and myself as a coopositional phenomenon, prefer. The game does not require walls to facilitate a coercive orientation because the game is prepared to walk with me in any direction. The game offers permeable spatial organization through conflict with mobs, and I, as the player, confirm and mold and morph that space through my coopositional strikes. Like the minotaur in *The Helmet of* Horror, the mobs and the narrative appear to be pursuing me, but I am in fact pursuing them at the same time. We are reaching across simultaneously, and the result is the gradual progression through a narrative maze that extends outward in all directions, connecting with all other points.

4.5 The Night Folk and the End of Day

Returning to the Night Folk in the swamps of *Red Dead Redemption 2*, we can see through this lens of the maze that they both inhabit and create the actual space of the swamps and the narrative space of the overall *Red Dead Redemption 2* story, which presents the gradual sunset of a proud outlaw and his longtime friends. A prequel to the original *Red Dead Redemption* (2010), part 2 depicts the trials of the Van der Linde gang, presented in the game as a community of men, women, and children who lives on the fringes of the law across five fictionalized US states in 1899, a territory that contains within it every major archetype of the

western setting, from deserts to plains to frigid mountains to major cities like Saint Denis, a stand-in for late-19th century New Orleans. The player takes control of outlaw Arthur Morgan, a gruff and level-headed gunman who co-founded the gang years earlier with its unquestioned leader and charismatic guidestar, Dutch van der Linde. As the game begins, the gang has just suffered a major setback after a botched ferry robbery and has had to flee their home base near the city of Blackwater, first finding shelter in the mountains before finally selecting an idyllic meadow to set up shop, earn money through criminal enterprise, rest, and rebuild. Unfortunately for the gang, Pinkerton agents are in dogged pursuit, and as the player completes tasks and advances the story, the authorities close in and drive the gang from their tranquil camp and into another hiding spot. In a plot structure that gestures to the known western trope of the time of the outlaws coming to a close as coastal capitalism and statehood take root in the region, the player's gang finds that no matter where they travel, the Pinkertons are close behind. Each new hideout the player sets up is in worse disrepair than the previous, is situated in more desperate conditions, or is just inadequate to the gang's needs. In one scene, the gang has barely arrived and set up in their new home before the authorities make their attack and put them on the run again.

As the player and the gang are harried and harassed further into the wilderness, the personal stakes grow darker and more dangerous. Arthur and Dutch grow apart as the cheery leader becomes increasingly desperate to hold the gang together despite the obvious impossibility of their situation. Worse, Arthur learns he is dying of tuberculosis. As the player advances the game, Arthur grows visibly weaker and becomes prone to violent coughing spasms. In the game's finale, most of the gang has been killed by various means and Dutch, in his madness, blames young outlaw John Marston. Determined to kill John, Dutch loses Arthur's trust at last and the player spends Arthur's last moments of life attempting to help Marston and

his family escape to the west. (All of this serves as a set up to the events of the first game in which the player inhabits Marston on a quest to find the last remaining members of the gang.)

The space of *Red Dead Redemption 2* plays a critical role in communicating the story. As each hideout is worse and less stable, so the surrounding environment grows darker and more dangerous. There are six camp locations that the Van der Linde gang set up during the story, and while each has its own environmental features and quirks as narrative setting, the change in camp is also accompanied by an overhaul in the game's mobs. Mobs in Red Dead Redemption 2 serve an important role in keeping the player occupied with plenty of options for incident and activity as they travel the terrain. This is critical because RDR2's framing as a construction meant to resemble the old west means that the game, for the most part, prefers to create believable cities and towns, providing opportunities for the player to either integrate into society (visiting shops, collecting and selling pelts, playing poker) or terrorize it (robberies, shootouts, train heists). The verisimilitude of the game's setting would dissolve if the player was under constant attack from waves of hostile mobs. Instead, the world of RDR2 is populated by many dozens of encounters. As the player travels from one location to another, bandits might rush out of the woods at her, or may set a trap to block the road, or may simply be found looting a stagecoach on the side of the road. These incidents are meant to be believable within the context of the game world and reflect the state of the narrative setting in which the player is currently located. This means, as the player's gang picks up and moves locations to a new camp in a new area, the game's mobs and encounters change accordingly. In the early phases of the game, the Van der Linde gang finds itself at constant odds with a rival gang known as the O'Driscolls. The rivalry between the two gangs is intense enough that the groups will shoot at each other on sight, and the constant irritation of the O'Driscolls leads to several memorable scenes and missions in which the player

can neutralize the gang. While the O'Driscolls are a threat to Arthur's safety while he travels the territory, they are a threat recognizable to fans of the western genre. The blood feud with the rival gang has a long history in western literature, owning largely to historical feuds between families like the Hatfields and McCoys or the Clantons and the Earps. The rivalry with the O'Driscolls, then, reifies the narrative pleasures of the western that the game will soon disassemble. As the Van der Linde gang moves on, the O'Driscolls drop out as a going concern and their role in open-world incidents is assumed by other gangs like the Lemoyne Raiders. These mobs emerge from a specific narrative setting within the game's five-state territory, reflecting the physical space and the narrative space of the game, and as the game's narrative grows darker, discomforting, and hopeless, the mobs change to match. As the west grows even more hostile and the player's camp becomes less stable, the mobs seem to emerge from the woods in a similar state of desperation. The Skinner Brothers and the Murfree Brood are smeared facsimiles of organized gangs, more indiscriminate murderers and savage, half-feral clans than outlaws. The landscape in which these groups reside is littered with evidence of carnage and blood. And then, at last, come the Night Folk.

By the time the player encounters the Night Folk as regular mobs after taking up residence near their swamps, the situation in the Van der Linde gang is in full disintegration. Arthur is dying, and the genial bonds of outlaw friendship that buoyed the plot earlier in the game are gone now. When I played *Red Dead Redemption 2*, I by this point dreaded going back to camp to check in with the gang because I felt discomfort with what the relationships had become. My world had grown unpleasant, and the sinister nature of the swamp rose to match. The Night Folk made me feel the narrative space of the game, beyond a simple matter of setting. The narrative had entered an unstable, fractured, and hopeless stage far removed from the jaunty

western tropes that formed its premise, and the enemies closing in on me from the swamp had likewise abandoned any pretense at offering me encounters I could recognize from a Saturday afternoon western matinee. The Night Folk emerged from the dark. They killed without passion, like bad fortune. They made attempts to slaughter my horse, stealing away an item arguably more valuable than my character's life. If Arthur dies, the game respawns him. A dead horse is dead. The Night Folk occupy a tangible, stable space in the game world, and reflect through the rhizomatic maze the narrative space of the player's journey through the narrative. Like the rot in Arthur's lungs, the Night Folk are silent as death and creep from the moist darkness to pull Arthur down into the drink. There is no explanation for them, no solution. They are inextricable with the space; no amount of killing would eliminate them, as the game would always spawn more. The Night Folk would outlive Arthur Morgan, and there was nothing to be done.

Mobs in video games are often framed as disposable enemies who take up room in a game world and offers the player simple tasks to accomplish, but mobs like the Night Folk demonstrate how inextricably tied the enemies are with the story space, geography, and world navigation. When exploring the world of a narrative videogame, a player feels-through the space and the narrative of the game, and it is against mobs that they will encounter the most active resistance and dynamic response. While thinking of game stories and worlds in transactionist terms, we see the emergence of narrative phenomena as inextricably connected to contexts beyond the player and the game—the rhizomatic maze that the player explores, a dynamic construction in which conflict and pursuit, not just from the enemy but at the enemy, promotes cooposition and advancement through the story space, a space that reaches beyond setting and location and into the thematic and emotional space of the story. To play a narrative game is to

actively sort it and perceive it, to discern its rhythms and see it clearly. Mobs provide the conflict and resistance that shape that process, suggesting the space of action one fight at a time.

5 TRASH: THE PERIPATETIC TASK OF KILLING TIME

Taken Hobgoblins, Infernos, Peepers, Gajalaka, Spiders, Mobile Alert Systems, Core
Hounds, Boaboa, Skeletons, Gordian Sniper, Vectagoyles, Whelps, Restless Orcs,
Amputators, Scarlet Diviner, Goblinoids, Crullers, Wendigo, Brontaurs

5.1 Introduction: Kefka's Tower

The world is ruined. Kefka, the emperor's mad jester, has killed his ruler and broken the truce of the Warring Triad, three magical statues high above the clouds that stood in balance to maintain the structure of the planet. By toppling the statues in his lust to acquire more power, Kefka has doomed the landscape below. I've traveled the world for weeks with a troupe of heroes trying to preserve the world's order, and although we once battled enemies across green fields, warm deserts, and pristine valleys, we now stand on the deck of our airship and see nothing but cracked and broken desolation. No place has been spared. Every peaceful village where we've found harbor is in a state of desperation. Kefka wanted so badly to hold the world in his hand that he crushed it to powder.

But my troupe and I aren't broken. We've faced many trials and battled our way to Kefka's tower. We know that Kefka now holds the power of a god, but we're no pushovers either. We've maximized our training. We shine with magical armor, weapons, and spells. We have faced every threat the World of Ruin has to offer, and we're still standing. We break into teams and enter Kefka's twisted tower. All that matters now is getting our hands on the villain. Hopefully we can put the world right. At the least, we can avenge it.

Unfortunately for us, Kefka isn't alone. Although we arrive at his tower sanctuary fully loaded with potions for healing and Phoenix Down for resurrections, we find a small army of hideous enemies lurking in the tower's halls, ready to test us and delay our path to their boss. As we trek through the branching path on the way to our final fight with Kefka, we're stopped and harassed repeatedly by critters like Retainers, Strikers, and Guardians. Sometimes it seems like we can't get more than a few steps before a crowd of EvilOscars pick a fight. We're not here for these creatures, but they're here for us. Gradually it dawns on me that getting to Kefka is going to be as much of a challenge as fighting the mad clown god himself. When we do finally reach our target, we can only hope there will be enough of our resources left to save the world.

The above description summarizes the final stages of the epic RPG Final Fantasy VI (1994), originally released in North America as Final Fantasy III for the Super Nintendo home console, and widely considered one of the most significant narrative videogames in history. Players navigate the environment through two kinds of top-down maps. The first overworld map depicts the entire landscape of the world at a reduced scale, affording rapid travel from place to place. Players initially have to walk across the landscape, but as the game progresses it allows more and faster means of travel, including the speedy airship. Players may stop at sites of interest on the map, such as towns or caves, and when they do the map switches to a tighter-scaled (but still unrealistic) "close-up" of the area for players to navigate. As players explore these areas, no enemies are visible. Instead, the game processes a random check in the backend; each step the player takes on the screen has a small potential to trigger an encounter with a local enemy type. After the game signals an enemy has been found, the game swaps over to a semi-abstract

battle screen depicting the two "sides" of the battle and a collection of menu options for the player to consider. A victory in battle puts the player back on the overworld map to repeat the process. Therefore, if a player is looking to engage with enemies to gain experience points, gear, or just for fun, she might choose to stay in one general area and simply walk back and forth or in a search pattern of her choosing, trying to continuously jump into battles.



Figure 25: The World Map in Final Fantasy VI

On the other hand, sometimes the player simply wants to navigate through a space or towards some objective and does not want to fight enemies along the way.

Unfortunately, the player's options are limited. In most situations, there is no way to reduce the number of encounters. *Final Fantasy VI* offers an item that prevents random battles, but it's difficult to acquire and must be held in the party by a specific one of the fourteen playable characters, often a burden for players who typically settle on a favorite team lineup. The battles that form the core of the game's fun and enjoyment for much of the game become, in this scenario, irritations. Nothing else about the fights themselves has changed, only the fights' context in relation to the player's attempt to feel-through

other narrative events. And while mob fights benefit players by providing needed experience and items, that isn't so in my account of the assault on Kefka's tower. I entered the tower ready for my final encounter with the game's villain. My characters were strong and well-equipped for the boss fight. However, instead of taking the fight directly to Kefka, I had to maneuver through terrain, solve puzzles, and defeat minor bosses to unlock the path. The task was difficult even before accounting for the chance of random battles at every step along the way. Most of the enemies I fought were familiar to me. The experience and items they offered in defeat were unhelpful because my party was so far advanced. Frankly, these enemies were just in the way, and fighting them became a chore rather than a thrill. The enemies look and perform like standard mobs, but players contextually perceive them in a different classification. They become a distinct *kind* of mob, a kind that many players refer to as *trash*.

In this chapter, I will examine the phenomenon of trash mobs in videogames through the context of how they are designed and deployed in games to alter, dilate, and manipulate the transactional experience of narrative time. While the previous chapter was concerned with mobs and the construction of narrative, emotional, and thematic space, trash mobs are designated as such by players who are made aware through context of the direct relationship trash has with the experience of videogame time. Trash, from one perspective, *wastes* the player's time. From a transactional perspective, however, I will argue that trash mobs should be considered as temporal phenomena in themselves and that the player, by engaging with trash, advances and experiences the narrative by directly "killing time." Through this discussion, I hope to arrive at a preliminary

understanding of the space and time milieu of fighting mobs in videogames, on the way to a transactional and rhizomatic chronotope of videogame narrative.

5.2 Trash, the Time Between Here and There

I first encountered the term "trash" in the mid-2000s while playing in a regular raid group for the massively popular game *World of Warcraft* (2004). Raids in *WOW* are major tasks designed for large groups, often split into several major events or bosses that have to be overcome. They can be serious business for players who sacrifice a significant part of a day to complete the challenge in the hopes of being rewarded with a unique weapon or special badge. Raids are considered the "endgame" of *WOW*, the only part of the game that still offers story, challenge, and entertainment after the player has finished the major questlines and reached the game's high "level cap" after which the player cannot gain more experience for that character. Snatching a new piece of high-level "raid gear" is perceived by many players as the path to continuing their character's growth beyond that cap. Raids, therefore, can feel a bit like a military exercise, with players encouraged to fill specific roles, to follow commands from a "raid leader," and to avoid at all costs making a mistake that might result in death, as any weakness in the raid group's formation might result in the entire group being overwhelmed and defeated.

It was in this context that I first heard a raid leader expressing irritation with trash mobs. By far the most popular and dangerous parts of any raid are the major bosses the groups encounter along the way. In between each boss are paths to navigate, and each of those paths is populated by groups of enemy mobs. Raid groups contain high numbers of top-level characters and players—standard mobs (even the buffed "elite" mobs that patrol a raid dungeon) do not present any actual threat unless they swarm in high numbers.

Therefore, the raid leader characterized them as "trash," mobs to be discarded and tolerated as little more than irritating litter on the way to the actual threat of the boss.

Like the term "mob" as it refers to enemies, the term "trash" likely originated in the game EverQuest, the first widely popular massively online roleplaying game (MORPG). This should be no surprise, considering that with a widespread adoption of an online videogame came the need to form communities and culture within player populations, including a shared language to describe the types of challenges found in the world. One theory is that trash is a shortened version of "yard trash," as one of EverQuest's raids, named "Unrest," featured a house with low-level mobs wandering its front and back yards. According to World of Warcraft wiki Wowpedia, "Lower level players shouted for groups to kill yard trash for experience," ("Trash Mob" Wowpedia) leveling up their characters while allowing the higher-level players to avoid the trash and focus on the major task of the raid. Over time, the taxonomy of the trash mob has extended into the wider ecology of video game enemies, most prominently in recent years to the videogame Destiny 2 (2017), which likewise features massive raids and pickup multiplayer. Players on online forums commonly discuss trash mobs and their roles in games, and the term has spread to other forms of media consumed by players, including podcasts (Player1).

What's especially interesting about trash mobs is the way that players openly disparage, reject, or fully despise their encounters with them. A typical example appears in the definition of the term found on the fan site *Giant Bomb*.

Trash mobs (often just abbreviated as 'trash') are dungeon bosses' lackeys. When players enter a dungeon, it is often for the sole

reason of killing bosses and getting loot. However, the evil game designers [emphasis mine] have chosen not to make this task too easy, so they've filled the space in between bosses with countless of lesser, easier mobs. These mobs rarely provide any profit, hence the name 'trash mob,' and they're essentially just road blocks for the players ("Trash Mobs", Giant Bomb).

The editorial aside within what is mostly a straight definition of the vernacular labels game designers as "evil" for placing trash mobs into dungeons, which raises questions. Does the author believe the game designer is seeking to cause pain and suffering through "road blocks," perhaps believing the designer a sadist abusing privileged access to the game's code to inflict harm on players? If so, what is it about trash mobs that does harm? By the author's own admission, trash mobs are typically easy and are defeated using the same tactics that, in other situations outside the dungeon, players identify as part of the game's usual design. In other words, placed into a different context, trash mobs are just mobs. Even the designation as "trash" reveals a deep disdain for the experience of this type of combat, in this scenario. As I suggested above in my description of the trash mobs in Kefka's tower, dislocating mobs and enemy encounters from the rhythms of progression—that is, progression in the sense of experience, items, or the completion of levels—shifts these encounters towards sensations of labor. When fighting trash, the player goes through the same motions, uses the same combat verbs, presses the same buttons, and feels-through the same zone of rhizomatic narrative space and contextual rhythm as in any combat with mobs, and yet the experience is qualitatively different. Trash often appear using the same models and skins, the same

abilities, and the same programming as mobs found elsewhere, but they are another kind of enemy experientially. The encounters that emerge when players fight trash are fundamentally altered by the contingent emergence of the battle. Therefore, trash are *relational* expressions of cooposition that neatly demonstrate how the promotion of narrative phenomena is co-constitutive. Understanding how and why many players feel frustration with the relational experience of trash, separate from other expressions of encounters with mobs, allows us to analyze the functioning of that coopositional phenomenon, specifically the ways in which mobs—all mobs, not only trash—construct and guide videogame narrative time.

5.3 Peripatetic Event Time

Trash mobs *are* time, literally. As we've seen in previous chapters, successful players seek eurhythmia with individual enemies found in videogame levels. When a player first encounters a mob, the combat might prove difficult because the player is attempting to attune with an unknown rhythm. After many encounters with the same enemy, however, eurhythmia may emerge and players may settle into an expected pattern for the fight. In *Final Fantasy VI*, my characters have been battle-tested through their journey to Kefka's tower. I have settled on a collection of characters whose individual skills and talents best align with my personal rhythms of play and with the combat rhythms encountered in the game. I feel-through the game using my combat actions, and the game feels-through my resistance using its own actions. For example, when encountering a group of Veterans (oddly named floating orbs with cyclopean eyes and tiny bat wings), I know from my coopositional encounters that it is best to allow Cyan, my noble swordsman, to charge up his SwdTech ability, for my clown Gogo to drop an

Ultima spell that affects all Veterans at once, for main hero Terra to use her own destructive magic to do another sweeping attack on the group, and for my wizard, Strago, to use healing magic to keep my party upright. I will do all of these in my first set of actions. I know that the Veterans will attempt to cast Death spells on my characters, after which I can return to my rotation of abilities. Given the standard variables involved—the hit points of the Veterans, the amount of damage my spells and weapons inflict on the creatures, the speed at which my actions become available, the typical selection of attacks the Veterans will try—every encounter with a group of Veterans or any group of similarly designed enemies will go much like any other. Give or take a surprising attack from the enemies or a tactical error on my part, the combat will end with my party victorious and will take roughly two minutes of real-world time. If my party is trying to cross a room, I know that each combat that's triggered randomly by my steps will delay my crossing by that approximate two minutes.

In games like *Destiny 2*, trash enemies are clearly visible along the path one has to travel to complete the larger raid, and players know that each group of enemies will cost a fairly standard amount of effort and time to eliminate. This is why I say that trash mobs *are* time. They stand openly as temporal objects that can be read by a player as easily as any clock. One of the worst offenses a player in a *World of Warcraft* raid group can commit is a mistake (perhaps missing a heal on the "tank," the player drawing the attention of the enemies in the area to protect more vulnerable players) that results in a complete team "wipe," or the death of every player character. This is a disastrous, upsetting turn of events for serious players, but in *World of Warcraft* the only item of

value that is lost in a team wipe is time—time taken by players to run their ghosts back to their bodies, time for the team to reassemble, regroup, and recast spells and buffs.

Many game scholars have noted the relationship between character death and a player's lost time (for starters, Juul 2006; Abraham 2009; Keogh 2018; Engelstein 2020). While a common design trope in some older games was to penalize players for death by taking away perks, items, or experience points (the online game City of Heroes [2004] infamously put defeated players into experience point "debt" that had to be worked off before they could again gain progress at the standard rate), contemporary design trends largely treat the loss of the player's time as enough of a penalty. Over decades of industry practice, designers appear to have decided that nothing is more precious to a player than his or her time. Games are expected to move, and to avoid backtracking or obvious timewasting tactics; even explicit narrative elements that found early popularity and adoption by designers, such as pre-rendered cutscenes that interrupt gameplay, have largely been pushed out of mainstream videogames, or are routinely skippable. Other games, especially predatory social and mobile games that advertise themselves as "free to play," place time barriers into the core game design and charge small amounts of money for players to skip ahead to the reward. Even a moderately successful "free to play" game can collect massive profits in what designers sometimes call an "impatience tax." The webcomic *Penny-Arcade* summarized the feelings of many players recently with a comic inspired by the popular speedrunning indie game Neon White (2022). In the comic, a character representing the game's narrative designer is told that the studio will make his narrative work as skippable as possible, because in a game focused on fast-paced action, narrative activity is perceived as a liability and counter to the game's goals.



Figure 26: Penny-Arcade for June 22, 2022

But these are common complaints in the history of videogame narrative play.

What distinguishes trash mobs from player frustration with interruptive narrative elements is that trash are not interruptions from the game loop; they in fact *are* the loop for most combat games, or at least an essential phenomenon within the loop. In games focused on hero narratives, allowing the player to set out on a task-focused quest, trash is peripatetic, constituting the journey through the raid dungeon, tower, or other narrative edifice of the event. Raids in *Destiny 2* or other massive multiplayer games are typically designed as spaces to be traversed from one point to another with trash mobs constituting the space of the path between. If the raid is an undertaking with a commitment of time and effort on behalf of the player and the game, then trash is a visible and tangible extension of time—the more trash, the more time the raid consumes. Trash, therefore, are calibrated, designed phenomena that alter and distort—through rote repetition—the experience of time within the play experience, an arrhythmic interference in the player's peripatetic time. Drew Davidson once described the experience for his wife as she watched him play *Uncharted 2*. "She enjoyed it best when I played on the Easy setting.

Anything harder caused me to take too long with the various combat sections [where I'd tend to die the most often] and she would lose a sense of the thread of the story" (Davidson). Davidson's wife was spectating rather than playing, but in both her experience and the player's experience with trash, the disruption in the rhythmic flow of the event that, critically, players perceive as unnecessary is enough to alter the game loop relationally from a sensation of progression to one of pettiness or irritation, sensations that arise from the relational exposure of how trash function as interruptive units of digressive time. To examine this point further, we must explore videogame time as a transactional phenomenon of the play experience, an idea that departs from traditional game studies accounts of game time, which tend towards the cognitive and the structural. Through this analysis, I will demonstrate how my account of trash differs from these accounts and turns the discussion towards the transactional and continuous, as rhizomatic as the previous chapter's discussion of inseparable videogame space.

5.4 Videogame Time, in Brief

Videogame scholars have long been interested in the unique qualities of videogame time, and far more has been written on the subject than I could effectively summarize in this chapter. Instead, I will focus on a few major approaches that exemplify particular lines of thought before addressing the difficulties with reconciling those approaches with transactionism and contingent, continuous experience.

Videogame scholars have paid close attention to the nature of videogames as temporal objects, finding fascination with the various kinds of temporal experiences players and games facilitate and perceive. As with questions of narrative and space, opinions on the nature of videogame time have trended towards the cognitive. Igarzabal,

in what he describes as a cognitive-formalist approach to videogame time, begins from the position that time is a mental construction (13) "dependent on mental states and the ways these are altered by the environmental and bodily signals" (17). In this approach, the player engages with the game as a discrete, technical and constructed artifact and perceives and analyzes cues in the videogame to process and perceive time and, by limited extension, space. This approach of cognitive construction of time is familiar in game studies writing, which often attempts categorization or taxonomical designation of various kinds of videogame time that allow for cognitive engagement. Zagal and Mateas, for example, propose four distinct, parallel categories of videogame time that they refer to as "temporal frames"—Real-World, Gameworld, Coordination, and Fictive (2010). In their account, the player lives their physical life in real-world time while simultaneously experiencing the gameworld time as a separate track. Elden Ring, for example, progresses from day to night and back again in a full cycle that takes roughly one real-world hour, meaning that a player who spends six hours on their couch playing the game will experience six full days of *Elden Ring*'s gameworld time. Other games, for example Animal Crossing: New Horizons (2020), use a day/night cycle that mostly fits to the player's own real-world time, meaning that if the player plays in the late evening, she will find that the sun has set in her gameworld as well. There is, however, a loose and often illusory relation between gameworld time and the game's "fictive" time. My playthrough of *Elden Ring* was around 50 hours in length, meaning I progressed through 50 day/night cycles. And yet my character never slept or ate and could cross the game's entire massive continent in less than an hour of running. Since it's implausible to accomplish such a feat in the physical world, it seems reasonable to say that the

gameworld time cycle is not analogous to the fictive time within which the story unfolds. The same is true of *Animal Crossing*. Despite its tighter connection to the player's real-world time, buildings and bridges may still be built within just a few hours, or even instantly, depending on the task. In *Red Dead Redemption 2*, my character is diagnosed with tuberculosis and then dies from the disease all within roughly a dozen or so hours, during which an incredible number of fictional events, spanning seemingly months, take place. Again, the fiction time and the gameworld time appear to be running on separate tracks. Zagal and Mateas suggest a fourth category, coordination time, that accounts for the time taken to facilitate the game in menus, loading screens, matchmaking lobbies, and other such spaces (Zagal and Mateas).

Although the names and characteristics of the categories differ, Zagal and Mateas's project shares similarities with proposals from other prominent game scholars. Elverdam and Aarseth offer two broader metacategories of External Time (real-world) and Internal Time (gameworld), further breaking those categories down into Teleology and Representation time in the external or Haste, Synchronicity, or Interval Control time in the internal (2007). Juul prefers to separate game time into a duality of play time (real-world) and event time (gameworld) (2006), while Lindley proposes four "levels of temporal structure"—Discourse (player experience), Performance (gameplay events), Simulation (fictive time), and Generative Substrate, similar to Igarzabal'a coordination time (Lindley). At the risk of overwhelming the subject with taxonomy, all of these various categories are, in different but similar ways, attempting to make sense of how the player can seemingly exist in several different temporalities at once while experiencing a videogame. Many of these approaches are productive for descriptions and forensic

exploration of videogame play, but they remain inadequate for enveloping the loose and flowing temporality that players experience phenomenologically. In order to apply any of these taxonomies to narrative experience, it becomes necessary for scholars to lean on terms from cognitive narratology, with many lists asserting that one category or another amounts to a game's story, while others act as discourse (for example, Zagal and Mateas's fictive time/story versus gameworld time/discourse). As always, however, this approach produces problems accounting for player activity and perception, again distancing the player permanently from the temporal activity of the narrative even as she participates in its creation. Since the player does not control, or has exceedingly limited control, over fictive time and gameworld time, then how can the player be *co-constituting* the narrative with the game? Time as a purely cognitive construction denies its nature as carnal and felt, a sensed and experienced rhythm of the world.

Zagal and Mateas note that accounts of game temporality must "be able to describe a broad range of phenomena," (Zagal and Mateas) and for that reason choose to dismiss a fixed and rigid Platonic understanding of time in favor of what they call a relational understanding, which they characterize as the difference between believing time is objective, even while in pure stasis, versus time existing as a measurement of change. They describe the relational approach this way: "discourse about time and temporal relations can be reduced to talking about events and the relationships between them. Without change (events) there can be no time" (ibid.). Videogames are media of change and thus temporal artifacts, even in otherwise still moments where the player has chosen not to act. The game continues to reach across for the player, continues to process

and adjust. The "ambient actions" in the game *Shenmue* are only one visible example of this fact (Galloway 8-12).

But how do players experience that relational, change-driven understanding of time? The general consensus of the cognitive approach is that games run on a series of temporal tracks which are processed by the player simultaneously through oscillations from one track to another dynamically, as needed. In Final Fantasy VI, I may cognitively process and acknowledge the gameplay time before considering that time relationally against my cognitive understanding of the fictive time. Perhaps I lose myself so completely in the game that by the time I oscillate back to my real-world time, maybe by checking the clock on my phone, I might be surprised at how much time has passed in the real-world. In his phenomenology, Keogh has noted that videogames are multi-modal, but are experienced in a fashion similar to what Harraway calls "in the splice" of film, or in the simultaneity of the experience. "Videogames exist in all of their processes at once" (2018 17). I agree with Keogh that the experience of videogames is holistic, but where I depart from Keogh and from Zagal and Mateas's definition of relational time is in my consideration of that phrase, "all of their processes." While it is often useful to think on specific videogame processes as individual phenomena (and certainly it becomes useful when thinking of various natural rhythms or the total rhythm of a complex superstructure such as a city [Simpson]) transactionally there is no firm or fixed separation between processes. Two processes change each other and become inseparable. A hundred processes (or more) in a contemporary big-budget videogame change a hundred more and are perceived and felt by the player as a single process—the game. The experience that emerges from the game and the player feeling-through with one another is a phenomenon

that could only result from the processes of the game and the processes of the *player* growing inseparable. If videogame time runs on different tracks, those tracks are not separate and cannot be oscillated between. They are one, uniform. All processes of videogame time are continuous with each other from the real-world to the fictive time, creating a unique temporal phenomenon that is read by the player as a fully contingent experience. In Chapter 4 I introduced the concept of the rhizomatic maze to describe how many kinds of space become inseparable in videogame play through cooposition. The seemingly antagonistic coopositional relationship with trash helps us to see that videogames perform on a rhizomatic clock.

Imagining a rhizomatic clock is more difficult than imagining the maze in which all ends connect to all others, but if it were possible to see temporal activity in videogames as a physical readout, it might approach the experience of videogame temporality. A true rhizomatic clock would have an unlimited face on which are countless measurements of various kinds of time, the time tracks that Juul and others argue we oscillate amongst. And yet there would be an ever-shifting time at the center—a result of the temporal accounting of our experience in all the other times at once. Since our lived experience of time is registered on the clock, just looking at the clock would change the central reading in some small way. The central reading is the temporal result of my lived experience, and so any arrhythmic disruption in one of the temporal tracks disrupts the entire clock.

For a more practical example of how the rhizomatic clock functions, consider the much-derided final sequence of the otherwise beloved shooter *Bioshock* (2007). In the game, you play an unnamed man shooting his way through Rapture, an objectivist

paradise built under the sea that has descended into madness and ruin. After uncovering the history of Rapture's fall and slaying its founder (while also discovering your own identity as an assassin driven by mental conditioning and subliminal orders) the game continues for a long stretch as you pursue a bigger villain in the hopes of freeing yourself. To that end, you must collect the pieces of a massive suit that will transform you into a "Big Daddy," a hulking monster tasked with protecting "Little Sisters," small children who scavenge the station for a powerful substance called ADAM. The sequence culminates in a level where the player must stand guard and wait while a Little Sister does her work, guarding her against waves of hideous enemies who want to steal the ADAM in her possession. The sequence is generally despised by players, in part because it changes the core gameplay style from a fast-paced action to stationary defense. Players want to be moving, but Bioshock now requires them to pause, wait, and then repeat the cycle. It's clear that the change in playstyle alters the temporal rhythm of *Bioshock* late in the game experience, but it's less clear on which "track" the change takes place? Certainly not in the fictive time, or the coordination time of the game's internal workings. Gameworld time seems like the most likely candidate, but that temporal track alone cannot account for the way in which the player experiences the delay. The gameworld time in *Bioshock* has only barely changed; the same is true of the player's real-world time. In fact, what has changed is the coopositional time of enemy encounters. The game is now presenting events that require a slower feeling-through, which is a drag on the transactional track of the gameworld time and the real-world time as they affect and feelthrough each other. The game reaches across to the player's real world time and elongates it and distorts the experience of it as the player suddenly *feels* the time it takes

to accomplish the task, while the player reaches across to the game and discovers new resistance to her temporal expectations. The enemies in this sequence, while functionally identical to enemies found in the rest of the game, emerge with new temporal qualities that are met by the player's coopositional reach to dynamically change the experience of play time. The player feels this temporal shift, i.e. "reads the rhizomatic clock," and grows frustrated with new arrangement. The mobs in this *Bioshock* sequence are transformed dynamically into trash.

5.5 Killing Time

Players reject or dismiss trash mob encounters because trash disrupt and distort the rhizomatic clock. Through transactional play, by assessing rhythms and actively perceiving the experience of the gameplay and narrative, the player and the game feelthrough each other and generate the play phenomenon. But the contextual emergence of trash is a taken as coopositional betrayal. As all videogame time is perceived at once, inseparably, the player is aware that the temporal shift that accompanies trash encounters alters the player's perception of real-world time. Players may express this feeling as a complaint that the game is "wasting" their time, despite the encounters with trash offering peripatetic productivity, moving the journey of the experience forward, which is the same implicit goal of play outside of the context that creates the experience of trash. This seeming contradiction might be explained by the relative triviality of trash encounters, as Juul has suggested trivial videogame tasks belong to a separate category of "dead time." Although Juul considers dead time the domain of such trivial tasks as idle animations, inventory sorting, and the like, he does acknowledge later in the same essay that killing mobs can be trivial (2006). Yee points out that some players feel the same

way, recording an interview with a *City of Heroes* player who describes the task of "grinding"—repeatedly killing mobs for no other purpose than to acquire incremental rewards—to provide "a certain feeling of Zen [...] hours on end in the same area, doing the same thing over and over, watching the XP bar creep slowly upwards. Just soloing, just me and the Monsters" (Yee 80). But fighting trash is not relaxing, nor is the time spent fighting trash "dead time." As noted above, trash are common in raid dungeons, which are highly structured and approached very seriously by advanced players. And, of course, the peripatetic function of trash shares remarkable similarities with the function of standard mobs, which is to constitute the time and space between larger encounters (Bryant and Giglio 106-107).

Perhaps we should be thinking differently about that time between. Its specific context—the condition that allows for the emergence of trash as peripatetic time—distinguishes the time between as an arrhythmic temporal phenomenon, or at least as a part of the larger game phenomenon in which arrhythmic temporality can emerge.

Perhaps, then, the contextual milieu of the time between alters it into a different kind of play. Ethan Tussey writes about "day parts," discrete blocks of time media companies use to artificially segment the day and target different groups with different kinds of media.

For example, prime time viewing is a day part discrete from late night and carries media with distinct content standards and audience expectations. He goes on to suggest that digital media has allowed for a more malleable and permeable mobile day part filled with media designed solely for the purpose of killing time between larger events—commuting on a train, in a waiting room, and so on (Tussey 2018). Applying that same permeable yet identifiable definition to the space between major events in gameplay would allow us to

perceive a "play part." Irrevocably connected to the major events on either side, the play part is the span of space and time across which the major events on either side reach across to one another, and through which the player transitions away from the one and towards the next. In Tussey's mobile day part, a person might mediate the moment by accessing trivial tasks like simple games, social media, or quick news bites on their digital device to "kill time." In the play part, the player does the same. If a unit of trash is a unit of measurable time, then the player in the transitional play part accomplishes peripatetic progression by literally "killing time."

Here we arrive at a crucial distinction, however. In Tussey's account of the mobile day part, digital media users occupy a subject position created by companies that mediates "the tension between productivity and entertainment [...] for those who are waiting, procrastinating, and/or killing time" (29). Tussey's point is that procrastination media in the mobile day part justify their capitalistic colonization of our otherwise "dead" time by providing content that normalizes the time not spent working as time for recreation; in other words, justifying the existence of the mobile day part (and its invasion of our time) by providing the glittering content to fill it. "Each time people complete a level or advance in a mobile game, they are reminded that the time they spend waiting has value [...] 'killing time' in the procrastination economy is about making a mark and asserting the value of a person's time" (Tussey 110-111). But in the transitional play part, where the player is literally killing time, one trash mob after another, the player has an opposite reaction. Killing time still reinforces the value of that time, but the player does so only unwillingly. That's because the game and the player has an inverse relationship in the videogame trash encounters. The *player* isn't procrastinating. The

game is. And because the player and the game are inseparable in the phenomenon, the player feels the disruption in the rhizomatic clock, and is forced into attuning to the game's procrastination—into making it happen, in fact—to stay aligned and attuned with the game's rhythms.

Videogame designers rely on trash to achieve desirable market conditions related to time. Take, for example, the *Destiny 2* raid titled the "The Last Wish." An experienced team can complete the raid in about three real-world hours, although times of four and five hours are not uncommon. The most important elements of the raid are the boss monsters found within, but there are only a handful of them. Without trash mobs, the experience of The Last Wish would be significantly shorter as players moved from boss to boss throughout the raid.

Despite player irritation with trash mob encounters, however, The Last Wish has not been and will not be reduced to its boss fights. That's because there is a strong market incentive for Bungie, the parent company that owns *Destiny 2*, to maintain—and even maximize—the time cost for the raid. For many major video games, time is explicitly the product sold in marketing materials. *Destiny 2* is not unique in the space when it promises players will need "hours upon hours" to complete major tasks ("Destiny"). As game prices have risen in recent years, publishers and studios increasingly rely on promising players a massive return on their investment in the form of play time. The length of raids is a selling point, despite the shared understanding that the easiest and most effective way to increase time is to increase trash. As we have seen, every encounter with trash adds a quantifiable number to the rhizomatic clock. From this perspective, then, we can see that although the player is literally "killing time" by fighting through waves of trash, it is the game that is drawing out the time between major tasks,

protracting play time with methods that lay bare for players the distortion to the rhizomatic clock.

5.6 Peripatetic Temporal Presence

Lefebvre writes that time and rhythm—and therefore the lived, natural rhythms that constitute an individual's experience—are inseparable, as shown by the repetition of rhythms, which are found "in the workings of our towns and cities, in urban life, and movement through space" (viii). To move, then, is to experience time, and thus peripatetic action is temporal action. This is significant when considering the journey between spaces and its relationship with the sensory experience of the videogame because it confirms that videogame experiences happen in the present moment; the journey is a rhythmic, temporal act that progresses *now* as opposed to cinema or photography, which Barthes correctly noted are media that never fully arrive in the present moment (Barthes 1980) because the image was captured in the past and the viewer perceives it as a document of such. "There is no *now* in film. The arrival of the cinematic image imbued the sphere of representation with the potential overcoming of the desire for presence" (Tucker 23).

Videogames resist any move away from *now*, however, because although they are images videogames privilege the present. Even videogames utilizing full-motion video over digital graphics (*The Complex* [2020], for example) are transformed in the transactional play phenomenon into presence. The player and the game each together apprehend the present by feeling-through each other. The player does not experience the game as a document of the past but an activity of the now. Even if the image on the screen is still or evokes a history (such as a note or a diary entry offering itself for reading, like the item shown in Figure 4 for the game *DreadOut* [2014]), the player feels the experience of discovering the image as part of *her*

present, not another character's moment in the past during which the narrative occurred. The videogame image is always both *being* and *becoming*, reaching across the present to a future present always about to arrive. The experience of mutual feeling-through of experience means that the player and the videogame, together, constitute the temporal horizon of experience at all times.



Figure 27: A note in the present about the past in DreadOut

Returning to Jenkins and others who see videogames as *places*, actual spaces bursting with potential action and narrative activity, it is the very nature of the peripatetic drive—largely constituted of encounters with mobs—that works to stabilize the image by encouraging the experience of progressive rhythms. "Places are always in a process of becoming, seething with emergent properties, but usually stabilized by regular patterns of flow that possess particular rhythmic qualities whether steady, intermittent, volatile, or surging" (Simpson). Fighting mobs creates peripatetic rhythm. The encounters shape the phenomenon of videogame space and time, giving shape to the chaos of digital polygons on screen, and in narrative games, forming the permeable boundaries of narrative activity. Trash, however, once again disrupt this experience in a way that frustrates the rhizomatic clock. In a medium about presence, the experience of trash

and the needless, valueless repetition required to overcome it complicates and confuses the sense of peripatetic progression and places the player awkwardly into the past, present, and the future of the event simultaneously. While the player struggles through the present event, the sudden disruption of the coopositional rhythm draws attention to the designers behind the code (in much the same way a bad strike call suddenly calls attention to the otherwise-invisible umpire in a baseball game). The player is forced into experiencing now as a connection to then, the moment the designer chose to load the level with trash. Worse, the player in the present may look ahead to trash lying in wait on the path up ahead (or, as in Final Fantasy VI, the invisible trash that could potentially pounce on each step of the journey) and can see, in a literal sense, the becoming time yet to be killed. I have argued that players already exist in these times all at once because there is no true separation between them in a transactional sense. But trash lays bare the *nature* of the rhizomatic clock. Instead of seeking eurhythmia with the central reading of the clock—the total experience of time during play—the player is shunted into awareness of the many faces of the clock, a disruption that feels like punishment. Cooposition has turned sour. The player sees manipulation where once there existed partnership. I have argued that trash are a phenomenon of the game procrastinating, but what that is true it is the *player* who must kill the time being wasted by the game. This is an uncomfortable, arrhythmic position. Cooposition still occurs, but the tone is hostile and frustrating.

5.7 Narrative Dilation and Dead Time

And yet trash mobs remain a familiar, standard element of narrative videogames, even well-received and popular games. Like standard mobs, trash are usually themed and designed for the larger narrative structures they support. While the trash in *Final Fantasy VI* don't appear to have any direct link to Kefka and, in fact, seem quite arbitrary in their selection, trash in *World*

of Warcraft are often chosen for raid dungeons specifically because they make narrative and thematic sense for the event. In Chapter 4, I argued for mobs as a coopositional phenomenon for establishing and constituting narrative space through what I called a rhizomatic maze, or a space that can move in many, twisty directions, connecting in on itself and other expressions of space from narrative to thematic to emotional. In the same way that Bakhtin proposed the chronotope as a measurement of space and time in narrative, and that Lefebvre argued that space and time cannot be thought of as separate entities because space emerges from temporal rhythm, I am arguing that the narrative rhizomatic maze and the rhizomatic clock are inseparable phenomena. They are rhizomatic together, with all spatial and temporal phenomena connecting across to all other spatial and temporal phenomena. And just as the minotaur/mob functions to direct the player through the rhizomatic maze, so mobs—and trash—function as peripatetic temporal phenomena. To be clear, I do not only mean that trash functions in this way in the spaces between, where narrative events reach across to one another, but to all temporal phenomena in the play experience. As Taylor writes, the "player must perform at multiple levels while playing a video game. In this regard, the player in play is present in more than one spatial domain" (Taylor). Of course, I would add "temporal" to Taylor's domains and argue that the multiple levels cease to remain as separate levels during play, but it is true that the player feels-through the experience of the game in all directions at once, both through the maze and through the temporal, just as the game feels-through the player's involvement dynamically to determine the processes and experiences that must emerge in the next moment, and the next, and so on. As I have argued, while trash remains functional coopositionally, it is a feature of trash that it has the potential to disrupt coopositional rhythms and force the player to become aware of the various

faces of the rhizomatic clock, a discomforting and irritating experience because it conflicts with the lived sensation of unified game time.

However, that does not mean that designers and narrative writers have found no narrative use for trash. In fact, many games, including those we have discussed in this chapter, take advantage of trash to accomplish something that is otherwise difficult in a medium that privileges presence—the dilation of time through narrative technique.

Writers and authors of narrative texts have an astonishing number of literary tools at their disposal for manipulating the reader's understanding and experience of narrative time. Through the use of varying rhythms in the text, focusing on minute details or moving the perspective outward to broader events, descriptive language, and many more, writers can take an otherwise innocuous narrative event (say, falling down a staircase) and dilate the time around the event until it takes pages, or even a chapter, to fully manifest in the text. The reader can be made to feel the event as it is unfolding precisely as the author intends, either as a quick and brutal happening that shocks the reader or as the culmination of pages of setup or any number of permutations in between. The same can be said for narrative film; Sergei Eisenstein famously dilated the time it takes to descend the Odessa Steps into one of the landmark sequences in cinema. Videogames, however, have long had difficulty developing the same kinds of narrative techniques precisely because of the videogame's irrevocable existence in the present, as a medium of now. Zagal and Mateas argued that a player's experience of time could be manipulated via "tasks that trigger specific forms of metaphoric temporal cognition," (Zagal and Mateas) but I remain unconvinced that metaphor alone can overcome the working of the rhizomatic clock. When I play Five Nights at Freddys (2014), I am bombarded with metaphoric tasks meant to represent the passing of a single night as a watchperson at a haunted pizza

restaurant. Creatures change positions on security camera feeds faster than would be plausible; I have to keep an eye on the slow emergence of a hostile animatronic from its curtain; I have to keep my office secure until the end of my shift, represented by the appearance of a clock.



Figure 28: The space of temporal labor in FNAF

And yet, during all of my playthroughs of the game, I never lost myself or felt affected by those metaphors. The rhizomatic clock also accounts for my own lived time, and I knew while playing that a full night at Freddy's took precisely six minutes of real-world time. That time was both a work shift *and* six minutes at once. No metaphor could alter my experience with the singular time of the game. Instead, I argue that space and time in videogames shape each other at all times, and any technique of time dilation for narrative events would have to account for both, at once, in a contingent way because of the medium's presence. Players must be made to feel the dilation of time directly, not metaphorically. Trigg has argued that time and space shape one another, and that space in particular has the power to seize time and hold it still. Trigg considers this essential to the establishment and creation of memories, which he argues are embedded in spatial presence (2013 8). If we consider mobs and trash as spatial and temporal phenomena—literally connecting at all points through rhizomatic processes—than it follows that those enemy types can and do function as technique for stopping, dilating, elongating, and otherwise manipulating both space and time. By careful design that acknowledges and expects the mutual

feeling-through of the experience, "killing time," literally eliminating time (trash) placed before the player by a procrastinating game, the player and the game may mutually dilate a moment or a series of moments to create narrative impact that might otherwise fall flat in a milieu of presence. Critically, this narrative technique of time dilation does not belong solely to the designers or to the game because the player is the one who must kill the time. The time dilation technique is dispersed across the coopositional activity—the narrative dilation occurs through the continuous and co-constitutive field of play.

Take, for example, the story that began this chapter, of my fight up Kefka's tower and the irritating trash that haunted my steps, whittling down my health potions and hit points on my way to Kefka. As I've established, the trash had only the flimsiest of narrative connection to Kefka himself. There was, to put it mildly, no clear reason for them to be there. Kefka had, in past narrative moments, revealed himself as in control of certain kinds of minions, but these are not the trash mobs that appear in his tower. They are arbitrary, annoying, and frustrating. And yet, consider Kefka's tower without trash. Final Fantasy VI was released during a trend in videogames towards more cinematic presentation via cutscenes, and a substantial cutscene precedes the descent to the tower for the final fight. Cutscenes could be considered time dilation events (and, like trash, they promote frustration and irritation in many players). But walking straight into Kefka and triggering the final battle just seconds after that last cutscene would hardly feel satisfying in a narrative sense, even if, in the structure of the narrative, that is the only event on the tower that "matters." The fight with Kefka comes at the end of a long journey, almost 40 hours of my real-world life, and much longer for the characters in the game world. We have witnessed death, ruin, and the destruction of our world. The final moment with Kefka is a narrative moment improved by time dilation and attrition. Instead of landing directly on the mad

clown's boss arena, my heroes arrive for the final battle bedraggled, harried, and less than sure of their chances. The fight with Kefka is more dramatic and elating because of the contingent experience of the trash that maneuvered me here. When I defeat him, I feel an overwhelming sense of relief and associate it with myself, with the characters, and with my accomplishment.

To be clear, I'm not arguing that all game designers are acutely aware that trash in videogames could be used as a form of narrative temporal technique. Business and marketing concerns are still the most likely reason for the protracted time costs for some of the most difficult raids and dungeons in games. But, as a former designer, I can personally affirm that I often designed via what just "felt right," and the addition of trash to a significant encounter is a tool at the disposal of designers looking to dilate a temporal event until it "feels" right. While trash will likely remain a controversial and unpopular expression of cooposition with many players, what I am arguing here is that the phenomenon of trash points towards the possibilities of developing narrative techniques of presence, of active cooposition, and of continuous and contingent perception. While trash disrupts the rhythm through which we "read" the rhizomatic clock, that disruption has been turned into productive and meaningful game design that promotes narrative experience in the present tense, as it's happening, and as the player makes it so. The nature of trash, then, suggests a possibility of better and more refined tools for designing—and therefore experiencing—coopositional narrative through a rhizomatic chronotope.

6 CONCLUSION

The circumstances that forced me from my village were less than ideal. My foster father confronted me on the streets of Candlekeep and pushed me and my traveling companions from the safety of the town walls and out into the wilderness. He promised to explain his reasons, but shortly after that he was killed by a demonic figure who was clearly looking to turn his murderous weapon towards me. Now, hours later, I have fought my way through the wilderness and into the iron mines at Nashkel to root out an evil half-orc poisoning the ore. I had to do this just to keep my pockets lined with coin, as any adventurer on the Sword Coast must do. In between adventures and temporarily without a target, I find myself and my companions standing in an empty plain and I take a moment to reflect. Surely new threats and adventures await me just beyond my line of sight. I know this, but for this one quiet moment I decide to consider where I've been, and where I might choose to go next.

This interlude from 1998's *Baldur's Gate* is a moment without enemies. The game and I are feeling-through one another and agreeing to temporary détente. The game awaits my move. I know it will move with me. But this moment is about stillness and possibility, and a story that's still being told. It's a story that both the game and myself will choose to make together.

Throughout this project, I have attempted to examine videogame enemies from original and, no doubt for some readers, unusual perspectives. Relying as it does on a controversial theory of a mind as continuous with its environment, transactionism remains a subject of debate. However, through the pages of this project I hope to have demonstrated many of the productive possibilities that emerge when thinking of videogames from this relatively fresh point of view. I have suggested that we reconsider the perceived interactivity of the rigid computer answering player choice through the illusion of the interface, or of videogames as strong platforms or

prosthetic devices. Instead, I have offered a perspective on games as bodies and as phenomena engaging at all times in a dynamic movement and co-constitution with the environment within which they are involved. John Dewey once wrote about dance—between people, yes, but we might consider the dance between the player and the game—as bringing pleasure to the participants because through their movements and partnership they bring order from chaos (Dewey 16). Dewey asserts that the same is true for art and aesthetics, and my argument supposes that the same is true of narrative.

But if we derive pleasure from bringing order, what is the chaos that we are ordering? The chaos is our natural milieu, the cosmic rhythms of the world, the environment that never stops shifting and churning around us. Art, aesthetics, and narrative all seek to exist within the chaos of the natural world, harnessing chaotic rhythms and bringing order to them in service of technique, communication, and emotion. What transactionism reminds us is that we are not only within the chaos, but that the chaos is within us. We are made up of the chaos of the natural world, and we always shift and move dynamically with the environment as it does the same around and within us. Videogames are a specialized phenomenon within the natural world, but they are still inseparable from it. They are dynamic and our experience with them is the same as any natural phenomenon. This includes our experiences with videogame narrative, which emerge from our attempts to bring order to the chaos, to make sense of what we are experiencing as we feel-through the game and it feels-through us.

Players who experience narrative videogames bring rich and varied stories to order from that chaos, and yet narrative videogame studies continue to struggle to account for precisely what mechanism allows those stories to emerge because our existing traditions were not designed to examine those rhythms. Rather than "colonize" game studies through cognitive narratology, my

approach has been to examine the narrative phenomena that emerge from what has been one of the central verbs of videogames from *Spacewar!* to *Elden Ring*: combat with enemies.

But as I conclude this initial proposal to see through transactionism and naturalist philosophy, I am that traveler in the woods in Baldur's Gate. I know that my adventure could take so many different paths forward, all of which will lead to new and dynamic challenges, even challenges that go far beyond the nature of enemies and antagonism. If, as I suggest, we adopt a transactionist perspective on games and media, it becomes possible to explore the rich and complex industrial and cultural issues surrounding games in entirely new ways. In one direction, deemphasizing the avatar as a literary construction and elevating the player herself into the weakly emergent platform of the game has potentially huge ramifications on common critiques of representation and culture, including the possibility of radical change within gaming culture brought forth by the differently-oriented bodies and minds of individual players and their eurythmic relations with the larger gaming culture and industry. In another direction, we can envision a new model of game and narrative design that takes transactionism and player involvement as its baseline assumption and promotes developers to push the limits of the means by which games reach across and feel-through their coopositional foil. In still another direction, we can explore the implications of multiplayer games and the nature of the rhizomatic transactions from which multiplayer cooposition emerges.

I chose enemies as the subject of this dissertation project to reexamine a fundamental plank of videogame play from an entirely new perspective but, as I indicated in the introduction, there are so many more transactions and phenomena that surround the player in the milieu of the gameplay experience—as with *all* media experiences. Having journeyed this far, more directions are possible, and the best way to reveal them is to feel-through and see what pushes back.

REFERENCES

- Aarseth, Espen. Cybertext: Perspectives on Ergodic Literature. UK ed., JHUP, 1997.
- ——. "Allegories of Space: The Question of Spatiality in Computer Games." *Cybertext Yearbook 2000*, edited by Markuu Eskelinen and Raine Koskimaa, Research Center for Contemporary Culture, Jyvaskyla, 2001, pp. 152-171.
- ——. "Game Studies: How to Play -- Ten Play-Tips for the Aspiring Game-Studies Scholar." *Game Studies*, vol. 19, no. 2, 2019, http://gamestudies.org/1902/articles/howtoplay
- Abraham, Ben. "Permanent Death The Complete Saga." *SLRC Subterranean Loner Rendered Comatose*, Blogspot, 4 Dec. 2009, drgamelove.blogspot.com/2009/12/permanent-death-complete-saga.html.
- Ahmed, Sara. *Queer Phenomenology*. Amsterdam, Netherlands, Amsterdam University Press, 2006.
- Altman, Rick. A Theory of Narrative. Illustrated, Columbia University Press, 2008.
- Anable, Aubrey. *Playing with Feelings: Video Games and Affect*. 1st ed., Univ Of Minnesota Press, 2018.
- Anthropy, Anna, and Naomi Clark. A Game Design Vocabulary. Pearson Education, 2014.
- Apperley, Tom. Gaming Rhythms. First Edition, Institute of Network Cultures, 2011.
- Arenas, Enrique Camara. "Villains in Our Mind: A Psychological Approach to Literary and Filmic Villainy." *Villains and Villainy: Embodiments of Evil in Literature, Popular Culture and Media*, edited by Anna Fahraeus and Dikmen Yakali Comoglu, Editions Rodopi, 2011, pp. 3–27.
- Arsenault, Dominic, and Pierre-Marc Cote. "Reverse-Engineering Graphical Innovation: an Introduction to Graphical Regimes." *GAME: The Italian Journal of Game Studies*, Feb.

- 2013, https://doi.org/https://www.gamejournal.it/reverse-engineering-graphical-innovation-an-introduction-to-graphical-regimes/.
- Bakhtin, Mikhail M. *The Dialogic Imagination: Four Essays*. Edited by Michael Holquist, University of Texas Press, 1981.
- Bal, Mieke. *Narratology: Introduction to the Theory of Narrative*. 3rd ed., University of Toronto Press, Scholarly Publishing Division, 2009.
- Barthes, Roland. S/Z: An Essay. Hill and Wang, 1975.
- ———. Camera Lucida: Reflections on Photography. Translated by Richard Howard, Reprint, Hill and Wang, 1980.
- Bartle, Richard. *Designing Virtual Worlds*. 1st ed., New Riders, 2003.
- Beggan, J. K. "Monomyth or monogamyth? Polyamory's Conceptual Challenges to the Hero's Journey." *Heroism Science*, *5*(2), Article 3.
- Bogost, Ian. "Video Games Are Better Without Stories." *The Atlantic*, 26 Apr. 2017, www.theatlantic.com/technology/archive/2017/04/video-games-stories/524148.
- Bordwell, David. Narration in the Fiction Film. University of Wisconsin Press, 1985.
- Bryant, Robert Denton, and Keith Giglio. *Slay the Dragon: Writing Great Video Games*.

 Michael Wiese Productions, 2015.
- Calleja, Gordon. "Digital Game Involvement: A Conceptual Model." *Games and Culture*, vol. 2, no. 3, 2007, doi:10.1177/1555412007306206.
- Campbell, Joseph. *The Hero with a Thousand Faces*. Pantheon Books, 1968.
- Chess, Shira. Ready Player Two: Women Gamers and Designed Identity. Univ Of Minnesota Press, 2017.
- Cobley, Paul. Narrative. 2nd ed., London, Routledge, 2014.

- Consalvo, Mia. *Cheating: Gaining Advantage in Videogames*. Annotated edition, The MIT Press, 2007.
- ——. "There Is No Magic Circle." *Games and Culture*, vol. 4, no. 4, 2009, doi:10.1177/1555412009343575.
- Crecente, Brian. "These People Shaved Their Heads for Far Cry 3." *Polygon*, 8 Apr. 2012, www.polygon.com/gaming/2012/4/8/2933911/these-people-shaved-their-heads-for-far-cry-3.
- Crick, Timothy. "The Game Body: Toward a Phenomenology of Contemporary Video Gaming." Games and Culture 6.3 (2011): 259-69. Web.
- Csikszentmihalyi, Mihaly. Finding Flow: The Psychology of Engagement with Everyday Life. 1st ed., Basic Books, 1998.
- ———. Flow: The Psychology of Optimal Experience. 1st ed., Harper Perennial Modern Classics, 1990.
- Davidson, Drew. "The Performance of Gameplay: Developing a Ludoliteracy." *Eludamos: Journal for Computer Game Culture*, vol. 5, no. 1, 2011, pp. 1–3. *Crossref*,

 https://doi.org/10.7557/23.6123.
- "Destiny Angry Interview E3 2014." *YouTube*, uploaded by AngryJoeShow, 17 June 2014, www.youtube.com/watch?v=SQKp0VcA1Vw.
- Dewey, By John. Art as Experience (Paperback) Common. Perigee Books, 1934.
- Driver, Dale, and Matt Purslow. "How Far Cry's Iconic Villains Were Created." *IGN*, uploaded by IGN, 3 Oct. 2021, www.ign.com/articles/how-far-cry-villains-were-created.
- Dyer, Mitch. "Far Cry 3: The Vaas That Never Was." *IGN*, 5 Feb. 2018, www.ign.com/articles/2013/01/10/far-cry-3-the-vaas-that-never-was.

- Ebert, Roger. "Video Games Can Never Be Art." *Rogerebert.Com*, 16 Apr. 2010, www.rogerebert.com/roger-ebert/video-games-can-never-be-art.
- Eco, Umberto. On Ugliness. Rizzoli, 2011.
- Elverdam, Christian, and Espen Aarseth. "Game Classification and Game Design." *Games and Culture*, vol. 2, no. 1, 2007, pp. 3–22. *Crossref*, https://doi.org/10.1177/1555412006286892.
- Engelstein, Geoffrey. Achievement Relocked: Loss Aversion and Game Design. The MIT Press, 2020.
- Eskelinen, Markku. "The Gaming Situation." *Game Studies*, vol. 1, no. 1, 2001, www.gamestudies.org/0101/eskelinen.
- "Far Cry 3 Definition of Insanity Cutscene Gameplay (Xbox 360)." *YouTube*, uploaded by GameSpot, 1 Dec. 2012, www.youtube.com/watch?v=rKMMCPeiQoc.
- Fernandez-Vara, Clara (2007). "Labyrinth and Maze: Video Game Navigation Challenges." In F. von Borries, S. P. Walz, & M. Bottger (Eds.), *Space Time Play* (pp. 74-87). Birkhauser.
- Farrow, Robert, and Ioanna Iacovides. "Gaming and the Limits of Digital Embodiment." *Philosophy & Technology*, vol. 27, no. 2, 2013, pp. 221–33. *Crossref*, https://doi.org/10.1007/s13347-013-0111-1.
- Frasca, Gonzalo. "Ludologists Love Stories, Too: Notes from a Debate That Never Took Place."

 Ludology.Org,

 svn.sable.mcgill.ca/sable/courses/COMP763/oldpapers/Frasca_LevelUp2003.pdf.

 Accessed 23 Jan. 2021.
- Galloway, Alexander. *Gaming: Essays On Algorithmic Culture*. First edition, Univ Of Minnesota Press, 2006.

- "Gear Check." Wowpedia, https://wowpedia.fandom.com/wiki/Gear_check.
- Gee, James Paul. Why Video Games Are Good for Your Soul. Common Ground, 2005.
- Grayson, Nathan, Ash Parrish and Mike Fahey, hosts. "Gaming's Best and Worst Bosses" Splitscreen, Kotaku, 9 February 2021, https://kotaku.com/why-do-we-call-the-hardest-video-game-enemies-bosses-a-1846301973
- Grewell, Greg; McAllister, Ken S.; Ruggill, Judd Ethan. "You Really Do Have Brain-Damage, Don't You?": Ridicule as Game Mechanic in the PORTAL-Series." In:

 Thomas Hensel, Britta Neitzel, Rolf F. Nohr (Hg.): "The cake is a lie!"

 Polyperspektivische Betrachtungen des Computerspiels am Beispiel von PORTAL.

 Münster: LIT 2015, S. 323348. DOI: https://doi.org/10.25969/mediarep/15011.

Henderson, Gretchen. *Ugliness: A Cultural History*. Reaktion Books, 2015.

Huizinga, Johan. Homo Ludens. Amsterdam University Press, 1971.

Igarzábal, Federico Alvarez. *Time and Space in Video Games: A Cognitive-Formalist Approach*.

Berlin, De Gruyter, 2020.

Isbister, Katherine. How Games Move Us: Emotion by Design. Reprint, The MIT Press, 2017.

- Jenkins, Henry. "Game Design as Narrative Architecture." *First Person: New Media as Story, Performance, and Game.* Edited by Noah Wardrip-Fruin and Pat Harrigan, The MIT

 Press, 2006, pp. 118-130.
- ———— (2007). "Narrative Spaces." In F. von Borries, S. P. Walz, & M. Bottger (Eds.), *Space Time Play* (pp. 56-60). Birkhauser.
- Juul, Jesper. "Introduction to Game Time." First Person: New Media as Story, Performance, and Game. Edited by Noah Wardrip-Fruin and Pat Harrigan, The MIT Press, 2006, pp. 131-142.

- -. Half-Real: Video Games between Real Rules and Fictional Worlds. The MIT Press, 2011. . The Art of Failure: An Essay on the Pain of Playing Video Games (Playful Thinking). Reprint, The MIT Press, 2013. Kieran, Matthew. "Aesthetic Value: Beauty, Ugliness and Incoherence." *Philosophy*, vol. 72, no. 281, 1997, pp. 383–99. Crossref, https://doi.org/10.1017/s0031819100057077. Keogh, Brendan. Killing Is Harmless: A Critical Reading of Spec Ops: The Line. Stolen Projects, 2012. —. A Play of Bodies: How We Perceive Videogames. Illustrated, The MIT Press, 2018. Klevjer, Rune. "Enter the Avatar: The Phenomenology of Prosthetic Telepresence in Computer Games." The Philosophy of Computer Games, edited by Hallvard Fossheim et al., London & New York, Springer, 2012, pp. 17–38. Kuplen, Mojca. "The Aesthetic of Ugliness -- A Kantian Perspective." Eurosa. Org., Proceedings for the European Society for Aesthetics, 2013, www.eurosa.org/volumes/5/KuplenESA2013.pdf.
- Lee, Tyler. "An Annotated History of Video Game Boss Battles", *Polygon*,

 https://www.polygon.com/features/2015/9/28/9333685/annotated-history-boss-battles.

 Accessed 4 March 2022.
- Lefebvre, Henri, et al. *Rhythmanalysis: Space, Time and Everyday Life*. Bloomsbury Academic, 1992.
- Lindley, Craig A. 2005. "The Semiotics of Time Structure in Ludic Space As a Foundation for Analysis and Design" [online]. *Game Studies* 5 (1) [cited 25 October 2005]. http://www.gamestudies.org/0501/lindley/.

- McKinney, Luke. "5 Reasons Bowser Is The Most Successful Video Game Character."

 *Cracked.Com, 6 Nov. 2010, www.cracked.com/article_18863_5-reasons-bowser-most-successful-video-game-character.html.
- Montfort, Nick. *Twisty Little Passages: An Approach to Interactive Fiction*. The MIT Press, 2005.
- Murray, Janet. Hamlet on the Holodeck. Cambridge, Netherlands, The MIT Press, 1997.
- ------. "Are Games Bad for Stories?: Seeing Interactive Narrative as its own Genre." Lecture Presentation, March 29, 2019, Emory University, GA.
- Nakamura, Lisa. Cybertypes. Taylor and Francis, 2013.
- Newman, James. 2002. The Myth of the Ergodic Videogame. Some thoughts on player-character relationships in videogames [online]. *Game Studies* 2 (1) [cited 25 July 2005]. http://www.gamestudies.org/0102/newman/.
- Nitsche, Michael. Video Game Spaces: Image, Play, and Structure in 3D Worlds. Illustrated, The MIT Press, 2008.
- Northup, Lesley A. "Myth-Placed Priorities: Religion and the Study of Myth." *Religious Studies Review*, vol. 32, no. 1, 2006, pp. 5–10., https://doi.org/10.1111/j.1748-0922.2006.00018.x.
- Parkin, Simon. Death by Video Game: Danger, Pleasure, and Obsession on the Virtual Frontline. Melville House, 2016.
- Pearce, Celia (2007). "Narrative Environments: From Disneyland to World of Warcraft." In F. von Borries, S. P. Walz, & M. Bottger (Eds.), *Space Time Play* (pp. 200–205).

 Birkhauser.

- Pelevin, Victor. *The Helmet of Horror*. Translated by Andrew Bromfield, New York, Canongate Books, 2006.
- Pellett, Dirk. "Gary Whisenhunt, Ray Wood, Dirk Pellett, and Flint Pellett's DND", http://www.armory.com/~dlp/dnd1.html. Accessed 3 March 2022.
- Player1, Eddie, et al. "The Trash Mob Show." *Spotify*, 20 Nov. 2020, open.spotify.com/show/6JYJLqIiNpqLX7GMkodJlg.
- Propp, Vladimir. *Morphology of the Folktale*. Martino Fine Books, 2015.
- Punday, Daniel. *Playing at Narratology*. Netherlands, Ohio State Press, 2019.
- Reilly, George V. "The Law of Economy of Characters." *Atom*, 2 Mar. 2009, https://www.georgevreilly.com/blog/2009/03/02/TheLawOfEconomyOfCharacters.html.
- Rouse III, Richard. "Games of Fear: A Multi-Faceted Historical Account of the Horror Genre in Video Games." *Horror Video Games: Essays on the Fusion of Fear and Play*, edited by Bernard Perron, Illustrated, McFarland & Company, 2009, pp. 15–25.
- Ryan, Marie-Laure. Avatars Of Story. First edition, Univ Of Minnesota Press, 2006.
- ———, et al. Narrating Space / Spatializing Narrative: Where Narrative Theory and Geography

 Meet. 1st ed., Ohio State University Press, 2016.
- Salmon, Rick. "Introduction to Ocean Waves." *Introduction to Ocean Waves*, www-pord.ucsd.edu/rsalmon/111.textbook.pdf. Accessed 1 Mar. 2022.
- Szymanski, David [@DUSKdev]. "Elden Ring is a rhythm game. Change my mind." *Twitter*, 21 April 2022, twitter.com/DUSKdev/status/1517235731210637313
- Simondon, Gilbert, et al. *On the Mode of Existence of Technical Objects*. Amsterdam, Netherlands, Amsterdam University Press, 1980.

- Simpson, Paul. "Apprehending Everyday Rhythms: Rhythmanalysis, Time-Lapse Photography, and the Space-Times of Street Performance." *Cultural Geographies*, vol. 19, no. 4, 2012, pp. 423–45. *Crossref*, https://doi.org/10.1177/1474474012443201.
- Sterling, Jim. "Batman: Arkham Asylum Could've Been a Rhythm Game." *Destructoid*, 6 Oct. 2009, www.destructoid.com/batman-arkham-asylum-couldve-been-a-rhythm-game.
- Stewart, Jared. "Some Elden Ring Players Aren't Happy About How Bosses Attack in the Game." *GameRant*, gamerant.com, 16 Mar. 2022, gamerant.com/elden-ring-players-unhappy-how-bosses-attack.
- Sudnow, David. Pilgrim in the Microworld. Warner Books, 1983.
- Taylor, Laurie. "When Seams Fall Apart: Video Game Space and the Player" *Game Studies*, vol. 3, no. 2, 2003, http://www.gamestudies.org/0302/taylor/
- Teague, Mason. "How Vaas Survived Far Cry 3 Revealed." *Screen Rant*, 19 Nov. 2021, screenrant.com/far-cry-6-vaas-survived-3-insanity-dlc-ending.
- Tong, Wee Liang, and Marcus Cheng Chye Tan. "Vision and Virtuality: The Construction of Narrative Space in Film and Computer Games." *Screenplay:**Cinema/Videogames/Interfaces*, edited by Geoff King and Tanya Krzywinska,

 Amsterdam University Press, 2002, pp. 98–109.
- "Trash Mobs." *Giant Bomb*, www.giantbomb.com/trash-mobs/3015-5383. Accessed 20 June 2022.
- "Trash Mob." *Wowpedia*, Fandom, wowpedia.fandom.com/wiki/Trash_mob. Accessed 20 June 2022.
- Trigg, Dylan. *The Memory of Place: A Phenomenology of the Uncanny*. 1st ed., Ohio University Press, 2013.

- ——. Topophobia: A Phenomenology of Anxiety. Reprint, Bloomsbury Academic, 2016.
- Tucker, Thomas Deane. *The Peripatetic Frame: Images of Walking in Film*. 1st ed., Edinburgh University Press, 2021.
- Turkle, Sherry. Life on the Screen: Identity in the Age of the Internet. Simon & Schuster, 1997.
- Tussey, Ethan. The Procrastination Economy: The Big Business of Downtime. NYU Press, 2018.
- Vaugha Dahart "Erangia Connolo's 'Tryint' to De Chuffled to I

Upton, Brian. The Aesthetic of Play. The MIT Press, 2015.

- Vaughn, Robert. "Francis Coppola's 'Twixt' to Be Shuffled to Home Video." *Diabolique Magazine*, 5 June 2013, diaboliquemagazine.com/francis-coppolas-twixt-to-be-shuffled-to-home-video.
- Vella, Daniel. "'It's A-Me/Mario!': Playing as a Ludic Character." *Foundations of Digital Conference Proceedings*, vol. 8, no. 5, 2013, pp. 31–38. *Semantic Scholar*, www.semanticscholar.org/paper/It%27s-a-me-%2F-Mario%3A-Playing-as-a-ludic-character-Vella/7c7494b1f05b21332c31cfa64de4328b47dd8386.
- Wardrip-Fruin, Noah. How Pac-Man Eats. Cambridge, Netherlands, The MIT Press, 2020.
- Yee, Nick. *The Proteus Paradox: How Online Games and Virtual Worlds Change Us—And How They Don't.* 1st ed., Yale University Press, 2014.
- Zagal, José P., and Michael Mateas. "Time in Video Games: A Survey and Analysis." Simulation & Gaming, vol. 41, no. 6, 2010, pp. 844–68. Crossref, https://doi.org/10.1177/1046878110375594.

APPENDIX: LUDOGRAPHY

3D Monster Maze. PC, 1981.

Adventure. Windows port, 1977.

Alien: Isolation. Xbox One, 2014.

Animal Crossing: New Horizons. Nintendo Switch, 2020.

Assassin's Creed. Xbox 360, 2007.

Baldur's Gate: Enhanced Edition. PC, 2013.

Bioshock. Xbox 360, 2007.

Borderlands 2. PC on Steam, 2012.

Breakout. Atari 2600, 1978.

Café World. Facebook, 2009.

Call of Duty: Warzone. PlayStation 4, 2020.

City of Heroes. Windows, 2004.

Control. Xbox One, 2019.

Dark Souls. PlayStation 3, 2009.

Dear Esther. PC on Steam, 2012.

Death Stranding. PlayStation 4, 2019.

Destiny 2. Xbox One, 2017.

Disco Elysium. PC on Steam, 2019.

dnd. Windows port, 1977.

Donkey Kong. Arcade, 1981

Dragon's Lair. Arcade, 1983.

DreadOut. PC on Steam, 2014.

Elden Ring. PlayStation 4, 2022.

Everybody's Gone to the Rapture. PC on Steam, 2016.

EverQuest. Windows, 1999.

Fallout 3. Xbox 360, 2008.

Far Cry. PC for Windows, 2004.

Far Cry 2. Xbox 360, 2008.

Far Cry 3. Xbox 360, 2012.

Far Cry 4. Xbox One, 2014.

Far Cry 5. Xbox One, 2018.

Far Cry 6. Xbox Series X, 2021.

Faunasphere. Windows browsers, 2011.

Final Fantasy VI. Super Nintendo Entertainment System, 1994.

Final Fantasy VII. PlayStation, 1997.

Final Fight. Arcade, 1989.

Five Nights at Freddy's. PC on Steam, 2014.

Frankenstein's Monster. Atari 2600, 1983.

Getting Over It. Windows, 2017.

Gone Home. PC On Steam, 2013.

Grand Theft Auto V. Xbox 360, 2013.

Gungrave. PlayStation 2, 2002.

It Takes Two. PlayStation 4, 2021.

Journey. PlayStation 3, 2012.

Knights of the Old Republic. PC on Steam, 2003.

Luigi's Mansion. Nintendo GameCube, 2001.

Mario Paint. Super Nintendo Entertainment System, 1992.

Mega Man. Nintendo Entertainment System, 1987.

Ms. Pac-Man. Arcade, 1982.

MUD1. Windows port, 1978.

Neon White. PC on Steam, 2022.

Octodad: Dadliest Catch. PC on Steam, 2010.

Planescape: Torment. PC on Steam, 1999.

Pong. Arcade, 1972.

Portal. PC on Steam, 2007.

QWOP. Flash for Browsers, 2008.

Red Dead Redemption. Xbox 360, 2010.

Red Dead Redemption 2. Xbox One, 2018.

Shadow of the Colossus. PlayStation 2, 2005.

Shenmue. Sega Dreamcast, 1999.

Sifu. PlayStation 4, 2022.

Sinistar. Arcade, 1983.

Spacewar! Windows port, 1962.

Spec Ops: The Line. Xbox 360, 2012.

Super Mario Bros. Nintendo Entertainment System, 1985.

Tennis for Two. Analog Computer, 1958.

Tetris. Nintendo Entertainment System, 1988.

The Complex. PC on Steam, 2020.

The Last of Us. PlayStation 3, 2013.

The Last of Us Part II. PlayStation 4, 2020.

The Unfinished Swan. PlayStation 3, 2012.

Uncharted 2. PlayStation 3, 2009.

Undertale. Nintendo Switch, 2015.

Watch Dogs. Xbox 360, 2014.

World of Warcraft. Windows, 2004.

Zork. Windows port, 1980.

Zork II. Windows port, 1981.