

THE UNIVERSITY OF CHICAGO

PLAYING WITH CINEMA: THE DEVELOPMENT OF AUDIO-VISUAL STYLE IN
VIDEO GAMES

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVISION OF THE HUMANITIES
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF CINEMA AND MEDIA STUDIES

BY

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CHICAGO, ILLINOIS

AUGUST 2023

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Acknowledgments

In the early days of the Covid pandemic, I changed my dissertation topic from an overly-ambitious account of the development of audio-visual style in narrative cinema since 1960—which had become a staggeringly deep rabbit hole—to a historical and formal consideration of the influence and imbrication of film style seen in the younger medium of single-player narrative-inclusive video games. As I had done extensive work on this topic in graduate school, this seemed a wise way to narrow the scope of my research, and indeed it was.

Though I came to this decision on my own, it led to a change in my advisory committee within the University of Chicago’s Department of Cinema and Media Studies (CMS); upon hearing I was back to working on video games, Professor Patrick Jagoda—with whom I had frequently worked with as a student, teaching assistant, and writing intern—offered to join my committee as co-chair. Without Patrick’s mentorship, I am honestly unsure if my doctorate would be complete today. I came to the final stages of the dissertation process with some emotional and intellectual baggage, but having known me for years, Patrick deftly navigated the minefield of keeping me on track. As I regained my confidence, Patrick’s infinite patience combined with his clear, detailed, and actionable advice on my project was invaluable, to say the least. His brilliance in the field of game studies was certainly helpful too.

I also wish to thank my two other committee members—my co-chair, Professor D.N. (David) Rodowick, and Professor James (Jim) Lastra—for their years of support, encouragement, feedback, and intellectual guidance. David and Jim were more involved in the development of research for my previous dissertation project, but even when changing my

primary object to video games, I still found myself poring over old notes from my meetings with them. In other words, their excellent advice transcended my topic. While Patrick became my primary sounding-board—and academic-therapist, for lack of a better phrase—due to his wide-ranging video game expertise, David and Jim were both critical to the success of the current project, through their reliable support and deep knowledge of film and media theory and history.

Since the classroom has always been the most exciting part of academia for me, I wish to acknowledge the handful of courses that were most influential on the development of my research, intellectual life, and continued astonishment at the wonders of cinematic art. In my undergraduate years at Harvard College, these would be Rodowick’s “Digital Cultures,” Professor J.D. Connor’s “Contemporary Hollywood Cinema,” Professor Dominique Bluher’s “Contemporary French Cinema,” and anything Professor Despina Kakoudaki said about cinema in or out of her classroom (such as in our Independent Study, which led to my term paper analyzing David Cronenberg’s films *Videodrome* and *eXistenZ* via then-young video game theory, which got me in to graduate school). In graduate coursework at U. of Chicago, courses that had a huge impact on me were Lastra’s “Classical Film Theory” PhD seminar, the late Professor Miriam Hansen’s “American Cinema Since 1960,” Jagoda’s “Virtual Worlds” and “New Media Theory,” and Professor Tom Gunning’s “Methods and Issues of Cinema Studies.”

I would also like to thank Professor Dan Morgan for encouraging my recent work at U. of Chicago. My experiences teaching the advanced CMS undergraduate seminar “Post-Classical American Cinema” (twice, both times with extraordinary students) and “History of International Cinema III: 1960-Present” were critical fuel for completing my dissertation. I question whether I would have completed it without the stimulation absorbed from my students’ enthusiasm for

cinema and their more-than-occasional brilliance. Thanks also to Jane Bohnsack and Brianna Considine, CMS department administrators, for their tireless efforts supporting my academic activities in recent years.

This dissertation is dedicated to my mother Shannon Freeman, my brother Ryan Froehlich, my late father Dean Froehlich, and my partner Richard Whaling. As I have finished this dissertation, Richard's patience and affection have been saintly. As for my brother and mother, their support and love has been unwavering throughout this process, but they deserve this modest dedication—along with my father—chiefly for the innumerable hours of my childhood they spent enthusiastically experiencing the joy of cinema and games with me. I am not sure I would have survived without a family always down to go to the movies.

Abstract

This dissertation is about how video games incorporate cinematic style and use cinema's aesthetic toolkit. The ways that games affectively impact players are often determined by cinematic techniques; games thus demonstrate the influence and nesting of one medium within another. This dissertation occupies a theoretical space between that of "ludology" and "narratology," in that games' medium-specificity (interactivity) is what communicates with other media. This dissertation contends that games should be described as modeling cinematic, or "cine-real," mediations of reality via interactivity. That games are a creative use of (or play with) codified forms of cine-reality is this dissertation's instantiating claim.

Games are unique forms of "predestination machines," systems for processing external input into predetermined outcomes. They bear authorial signatures in ways similar to cinema. This dissertation offers the interpretation that what is unique about games is ontologically specific to their nature as interactive, cinematic machines. Games play themselves, progressing in predetermined fashions, ultimately demonstrating that what is authored in games parallels their cinematic attributes.

The idea of "playing with cinema" qualitatively elevates neither player agency nor authorial intention, even as it illuminates the latter as a corrective to decades of game scholarship dismissive of cinematic influence. The evolution of games across the last 30-plus years demonstrates that the influence of cinematic style has exploded rather than waned. How this has happened—through what formal means and cinematic-gamic correspondences—is this dissertation's primary concern.

It is inarguable that games today resemble cinema more than ever, but what often goes uninvestigated is that games were conceived as quasi-cinematic works from the medium's earliest days. Early fundamentals of the medium complexly utilized cinematic style, as shown in this dissertation's analysis of *Secret of Mana*, which wrestles with pervasive evidence of cinematic audio-visual techniques seamlessly integrated within interactive game segments. Interactivity is a polar node of the feedback loop with cinematic style in games, and this interplay is evident even in the 16-bit era, during which designers used music and text-based dialogue to condition emotional responses and evoke cine-realistic worlds. This audio-visual domain rarely functions without choreographed cinematic elements.

The development of cinematic style in games over time can be broadly characterized as the evolution of relationships between "cinematic flow" and "cinematic rupture." The oscillation between and intermingling of flow and rupture is where we locate games' simulations of cine-reality. This dissertation examines the evolution of cinematic storytelling in games from the mid-90s to the late-00s in particular, showing that the influence of cinematic style on games is no more prevalent today than in the 90s, but has simply become more discernible. It is also argued that the aforementioned period is historically crucial to the development of cinematic game style, and solidified many conventions of current video game design. We have always been playing with cinema, and as technology evolved the latitude of this play only increased in complexity, as demonstrated herein through analyses of games including *Tomb Raider*, *Resident Evil*, and *Uncharted 2*.

Introduction: **Games Playing Themselves**

“Video games and other types of interactive virtual reality are simulations of basic modes of real-life experiences.”
—Torben Grodal¹

“My girlfriend thinks it’s a movie.”
—TV ad for *Uncharted 2*

Near the end of the 2007 action-role-playing videogame *Mass Effect* (Bioware), the playable character Commander Shepard and her crew reach the conclusion of a critical mission on the planet Ilos, the site of an ancient, isolated Prothean scientific facility. The alien Prothean people are long extinct, having succumbed to the genocidal force of the invading Reapers, a race of immortal machines that serve as the *Mass Effect* series’ principal antagonists. On Ilos, Shepard is desperately searching for the “conduit,” an artifact left behind by the Protheans that both holds clues to battling the Reapers and is desired by Reaper agents for nefarious purposes. As Shepard, you drive a land vehicle through a massive, sickly green, Prothean-built canyon. Black tubes with glowing lights protrude from the vertical walls on either side of the vehicle, extending stories high and far into the distance. As you control the vehicle forward, conversation begins between Shepard and the crew members without player input, while the game’s memorable title-theme music, which plays over the game’s initial start-up menu screen but is never heard in the game until this point, begins quietly on the soundtrack, signaling to the player that this space is of momentous narrative importance. Shepard and crew discuss what they are seeing, ultimately assuming that the tubes are Prothean cryostasis pods, each holding a long-dead alien scientist.

After driving for about a minute, you reach a semi-translucent barrier and must stop. A crew

¹ Torben Grodal, “Stories for Eye, Ear, and Muscles: Video Games, Media, and Embodied Experiences,” in *The Video Game Theory Reader*, ed. Mark J.P. Wolf and Bernard Perron (New York: Routledge, 2003), 129.

member hypothesizes that your enemies erected it to slow your progress towards the conduit, but another says, “No, this is something else.”²

When exiting the car to continue on foot, the music dramatically increases in volume, a simple result of the cessation of the vehicle’s engine noise but one with sensorial significance nonetheless, as the electronics-heavy title theme, with its washes of atmospheric synthesizers, both signifies narrative import considering its rare appearance, and is affectively mysterious in itself, feeling simultaneously melancholy and celestially cosmic. With its heavy reverb, near-absence of rhythmic content, and general warmth, the composition is audibly evocative of Brian Eno’s *Apollo* music, and lends the imagery a dreamlike quality. As the music continues, you notice a doorway on a nearby wall. Through it is an elevator, which takes Shepard and crew down to a sub-level. While on the elevator, control of Shepard ceases but she and the crew remain onscreen without interruption (the game is also loading data for the next space), and during the descent, the theme’s primary synthesizer notes (comprising its limited melodic content) becomes perceptibly louder, but here the music is altered via the addition of a low-register, rhythmic heartbeat-like thumping not present in the main-title version, demonstrating a deliberate compositional modification for this particular scene. Here the simple melodic idea of the title composition is subjected to additional development and variation.

By using this attention-grabbing music cue, the game wants its player to *feel* the anticipation of this moment; what lies below? Is it a Prothean? The conduit? Also, what *is* the conduit? Is the mystery of the Reapers—unclassifiable giant killing machines from beyond charted space (and, possibly, beyond common understandings of *time*)—and their ultimate

² The exact wording of this mysterious line of dialogue depends on which crew members you (as Shepard) have brought along on the mission to Ilos. In this playthrough, the line was spoken by the character Garrus.

purpose about to be revealed? Despite concluding that the Protheans are (probably) all dead, the heartbeat-like sound that augments the theme music provides the impression of *life* all around, or at least an ineffable trace—the walls are covered in muted green vegetation signifying the potential of life, or its struggle to hang on, affectively suggesting that something ahead is *alive*. The theme music, the dialogue (“No, this is something else”), the creepy but beautiful space with its evocatively specific green hue (the mystery of the *mise-en-scène*, to use a film analysis term), the hours of narrative build-up to this moment—all these non-interactive elements and more conspire to summon a tingling anticipation in the viewer-player, one marked by a vague but sensorially pleasurable sense of cosmic, unknowable alien-ness, as if the secrets of the universe will soon be unlocked.

Does this sound kind of like a movie? It should. The aesthetically complex organization of diverse elements of sound and image here encapsulates the great possibilities of audiovisual synthesis in the video game medium. In demonstrating both those possibilities and the maturation of the art form, it should not be ignored that in generating its effects, the sequence is heavily imbricated with aspects of what is colloquially considered “cinematic;” it should be a foregone conclusion that film style has much to do with the sequence’s operations. Narrative form and (cinematic) audio-visual style interact seamlessly to engender an intended sensorial and emotional response pre-authored by the game’s designers (i.e., the artists who made it), and here we can also locate the video game medium’s evolution from Pac-Man racing around a maze to profound, aesthetically complex sequences that recall similar ones in movies, in which music deepens affect, the emotions of characters, and narrative via audio-visual spectacle.

The parallel precision in the use of important musical themes or motifs in a film score is particularly important here, demonstrating how the sequence in *Mass Effect* operates cinematically. For example, in *Titanic* (James Cameron, 1997), the rising vocal line not heard since the film's opening montage (which consists of documentary footage of the Titanic's departure) comes forth on the soundtrack over two hours into the film as Jack and Rose stare at each other with brokenhearted gazes as Rose is lowered in a women-and-children-only lifeboat, emergency flares exploding behind Jack symbolizing their passion. Here composer James Horner demonstrates his adept use of technique most associated with Richard Wagner—the development of a “library” of musical motifs intricately developed in a wide variety of combinations. In this scene of Jack and Rose experiencing the pain of separation, pieces of melodic movements in the film's opening montage are heard, but their orchestral development feels novel enough to create a sense of uncertainty in how the nostalgic melody will continue. The three-note rising choral line (from the film's opening) begins over a slow-motion shot of three young girls tearfully waving goodbye from the boat, continuing over a slow-motion shot of a White Star Line employee gesturing for his men to lower the boat, the choral line only slightly altered compared to that over the film's initial title card “TITANIC.” But it develops differently, as when the “fireworks” (the flares) burst across the frame behind Jack, a new motif is introduced with a horn line reminiscent of patriotic or funereal regalia—this is the film's first use of this motif, which is significant as it is used prominently only one more time, in the film's famously non-diegetic final shot, a tracking shot that travels through the ruined ship that digitally morphs into the splendor of its original design, as passengers and crew cheer on the two lovers.

Mass Effect's title-theme callback is a technique seen as well in *Blade Runner 2049* (Denis Villeneuve, 2017), as the most famous melody from its predecessor *Blade Runner* (Ridley Scott, 1982) is withheld until the film's final moments. As cyborg protagonist K lies down on a stairway to rest in a tranquil snowfall, mortally wounded but having completed his mission, the saturated, glockenspiel-like synthesized tones heard during villain Roy Batty's death in the first film begins on the soundtrack. From here, the music continues as a glacial crescendo, a slow vibrato giving way to rich spectral modulation. In a medium close-up, a tear emerges from K's eye and merges with a snowflake, as the music culminates in a blast of synthesized analog horn that swallows the crisp tones of the melody, and K—like Roy before him—presumably dies.

We *feel* these scenes—thus experiencing their emotional and narrational import—as much as we view and hear them. Their audio-visual techniques are painstakingly constructed to that end, and the scene from *Mass Effect* runs parallel to this system of audio-visual complexity.

Clearly, videogames are speaking the language of cinema.

“Highly Cinematic Games” and This Dissertation’s Terminology

This dissertation is about how video games incorporate cinematic style and use the cinema's aesthetic toolkit. My primary concern is the way games draw from the audio-visual and narrative influences of cinema: where these media collide and produce something new, and where the medium-specificity of games often depends on knowledge of the language and history of cinema. The ways that this comparatively new medium can impact the player or viewer in emotional or affective ways are often determined by the cinematic techniques from which it frequently draws; as a result video games demonstrate the influence and nesting of one medium

within another. They exist in a soupy place where the medium specificity of games' interactivity meets the specificity of all other narrative forms (including literature), but most especially that of cinema and moving-image forms.

The specific game category that concerns this dissertation is the single-player narrative video game, which, as I will demonstrate, consistently deploys basic tenets of cinematic art. By 'cinematic art,' I mean the myriad forms of moving-image practice, from narrative film to television to short-form video. The games falling within this category number in the thousands, encompassing a wide variety of both ludic and narrative genres, from sci-fi to teen melodrama narratives to action-shooters to text-heavy narrative-choice-based games.³ While this category may seem overwhelmingly large, this focus still excludes a huge swath of game genres, including online arena-battle games, puzzlers, racers, fighters, simulation games, generally the entire corpus of games that rely on user-generated content, educational games, and even long-form role-playing games (RPGs) such as the *Final Fantasy* series (Square, 1987-present). While many of these 'excluded' genres have an abundance of cinematic and narrative elements in the broadest sense, including framing stories, settings within identifiable and highly codified narrative genres, and visual and aural details that set themselves within specific worlds—they do

³ Game-studies scholarship uses "ludology vs. narratology" to identify a tension between, in the case of the former, the notion that video games should be studied with their uniqueness as a medium foregrounded, and, in the latter, that scholarship should take the medium's uniqueness for granted in order to ask broader questions, including storytelling (and by extension, cinematic style). This dissertation takes a third route, namely, that video game medium-specificity itself is what is in communication with other media, and that this communication frames broad questions about quality, referentiality, and player-viewer agency. For a foundational example of this discourse, see Gonzalo Frasca, "Ludology Meets Narratology: Similitude and Differences Between (Video)Games and Narrative," Ludology.org, 1999, <<http://www.ludology.org/articles/ludology.htm>>

not fall into the category of being *highly cinematic*, those that depend on cinematic elements to the greatest degree within the entire medium of “video games.”⁴

As intimated above, video game genres are very diverse—perhaps even more so than those of cinema. All cinema requires you to sit, watch, and listen (as attentively as you feel like); in the case of video games, this form of spectatorship is only sometimes a requirement. In fact, games often bestow the option to skip non-interactive cinematic sequences, regardless of their narrative significance. Thus, playing the highly-cinematic *Uncharted 2: Among Thieves* (Naughty Dog, 2009) is less like playing *Minecraft* (Mojang, 2009: an open-world “sandbox” game) than watching Michael Bay’s *Transformers* (2007) is like watching Michelangelo Antonioni’s *L’Eclisse* (1962). Although *Minecraft* does contain “cinematic” elements by virtue of it being a representational moving-image work and taking place in a constructed fictional world, it offers the player little guidance other than to freely use the tools provided in the game, with the barest of narrative contexts—and thus falls outside the scope of “highly cinematic” games. *Uncharted 2*, on the other hand, involves moving an avatar forward through an entirely pre-determined, linear series of narrative events in order to experience and witness an unfolding pre-authored narrative story.

Highly cinematic is an intuitive definition, but one I hope will become increasingly clear to this text’s readers. In addition to encompassing a staggering number of individual games, this category also includes a substantial number of the most acclaimed, memorable, and influential video games of the medium’s history. The equation of “cinematic” with “high quality” has been

⁴ Not coincidentally, many games ‘excluded’ from this analysis still place players in cinematic narrative or symbolic contexts that deliberately evoke certain films. This has been the case at least since the early arcade shooter *Space Invaders* (Taito, 1978) offered players a crude approximation of the thrill of space battles from *Star Wars* (1977).

persistent in discourse on video games for decades, and continues unabated today. This loosely-defined horizon of highly cinematic games includes countless titles that are used as examples of games as an “art form,” both in a valuative and ontological sense. The debate as to whether games can be classified as “art” continues to raise important concerns, but the basic question is settled: games are representational and highly authored, thus they are art. We can move on.⁵

Nonetheless, when praising games as art, game critics tend to have in mind beloved and medium-defining games like *Braid* (Number None, 2008), *Bioshock* (2K, 2007), *Mass Effect 2* (BioWare, 2010), *The Last of Us* (Naughty Dog, 2013), or *What Remains of Edith Finch* (Annapurna, 2017): vastly different games that nonetheless share traits of strongly-authored narratives, surprising stories evoking literature, film, and television, and a sense of authorial purpose and intention. While a side-scrolling platformer with minimal editing like *Braid*, meant to evoke Nintendo’s *Super Mario Bros.* franchise, is far less visually indebted to cinema than the other examples, the fact remains that discussions of games as art will inevitably involve games that most resemble the carefully-authored audio-visual storytelling of cinema⁶. Discussions of quality, too, tend to divide games into those that consist mostly of mowing down opponents, and those that deploy cinematic elements for the purposes of affective impact or moralizing linearity.

As this dissertation demonstrates, cinematic style is so deeply and diversely nestled within the experience of these kind of video games that it is impossible to consider a full accounting of their form without an analysis of their cinematic inheritances and the way they utilize, modify,

⁵ For an overview of the “games-as-art” debate, see Ian Bogost, “Ch. 1: Art,” in *How to Do Things with Videogames* (Minneapolis, MN: University of Minnesota Press, 2012).

⁶ As an illustrative example from journalistic games criticism, note the prevalence of narrative-related, non-interactive “moments,” as well as the predominance of games from the category of single-player, story-heavy games in this article from the game-news outlet IGN: Various Authors, “Top 100 Unforgettable Video Game Moments,” *IGN*, September 15, 2017. <https://www.ign.com/lists/top-100-video-game-moments/1>

and even expand upon the possibilities of film form, from cinematography to editing to sound and of course narrative and genre style. Thus, from here on, unless otherwise contextualized, my use of the term “video game” (or simply “game”) limits itself to those games for which cinematic style is an appropriate avenue of analysis for what a game is attempting as a whole. My goals are not strictly comparative, qualitatively or otherwise. I am uninterested in judgments as to whether a game being more cinematic than others makes it ‘better,’ nor have I organized analysis around which elements of film style ‘work best’ within certain games. I instead aim to assess video games for what they are, and how creators draw inspiration from cinema for purposes on both macro- and micro-levels of game and experience design.

The Cinematic Toolkit: Playing with Cine-Reality

As laid out above, video games and cinema have become inextricable. Charting the evolution of games as cinematic experience reveals a direct link between the technology available to game designers and their ability to draw from the cinematic toolkit. As more of this toolkit has become available to game designers, rather than taking the medium in a more singular direction, they have embraced it expansively. I do not mean to imply a critical valuative judgment here, as if games failed through imitation, but rather, to make a claim about cinema. For a hardened cinephile and film scholar like myself, game designers’ use of film form shows that cinema, despite competition from a multitude of new 21st-century screen-based distractions, remains modern culture’s dominant art form, its greatest achievements in storytelling technology still an aspirational referent for virtually all kinds of moving-image work.

Games' slavishness to the affects of cinematic audio-visual style and the narrative forms of feature-length filmmaking (and, by extension, television) are thus not evidence of a lack of imagination in the medium, but instead show that the language of cinema, as codified in the 20th century, is now a permanent, if flexible, transmedial mode of storytelling. Commonalities of editing, cinematography, sound and sound mixing, the usage of music, narrative, and mise-en-scène seen across film genres are essentially now fixed as the most efficient methods for 'telling stories' via screens. Cinema, itself polyvalent and incorporating the specificities of countless artistic media preceding it, is at this point ubiquitous. Its tools for the presentation of spectacle, narrative, temporality, subjectivity, and performance will likely have a long lifespan within humanity's production of narrative art, regardless of how virtual its production becomes. This toolkit—with and through which games are designed and played—comprises what this dissertation will refer to as “cine-reality,” or “the cine-real:” the way that cinema visually and aurally captures, modifies, invents, and carves up elements of the “world” in order to create its own cine-worlds for telling stories and imparting sensations, where “physical reality” is a constitutive element filtered through recording devices and all manner of manipulating audio-visual technologies. Cinema utilizes established, now-conventional techniques in ways that are instantly (even subconsciously) recognized by practically anyone who has ever seen a moving image, and thus audio-visually coherent to viewers (and players).⁷ In other words, the way that

⁷ In the context of “post-classical” Hollywood (and dominant international film style), David Bordwell defines modern film style as “intensified continuity.” While I take issue with many of Bordwell’s claims about modern film style, chiefly because sound style is literally ignored, his taxonomic approach to describing post-1960s film form is broadly useful—also an excellent pedagogical tool for film history classrooms—and can be found in David Bordwell, *The Way Hollywood Tells It* (Berkeley, CA: U. of California Press, 2006).

cinema creates *its own world*, as cinema is never a passive recorder of “reality,” it is instead the “creative use of reality” as theorized by filmmaker Maya Deren in 1960.⁸

The term “cine-real” is taken from the book *Game Sound* by scholar Karen Collins, which principally concerns the role of audio in video games. She deftly describes how the aspiration toward “realism” in games “...is not a naturalistic realism in the sense of being a simulation of reality, but a *cinematic* realism that relies on established motion-picture convention. The “cine-real” is a sense of immersion and believability, or verisimilitude, within a fantasy world.”⁹ The cine-real is thus the perceptual result of the combinations of established, mainstream cinematographic techniques that define dominant international film style, and are accepted by audiences worldwide.¹⁰ While this intuitive, elegant term best defines my sense of the cinematic polyvalence seen in video games and will be used frequently in this text, it should be noted here that the term recalls film theorist Stephen Prince’s notion of “perceptual realism.” He writes, “A perceptually realistic image is one which structurally corresponds to the viewer’s audio-visual experience of three-dimensional space...Perceptual realism, therefore, designates a relationship between the image on film and the spectator, and it can encompass both unreal images and those

⁸ The “creative use of reality”—not to be confused with ‘realism’ as a genre or style of artistic discourse in any medium, which is one of film and media studies’ deepest rabbit holes—is how filmmaker (*Meshes of the Afternoon* (1943) et al.), essayist, choreographer, and dancer Maya Deren theorized “cinematography” in 1960. She was notably hostile to the notion of “realism” in art, writing, “The invasion of the motion-picture medium by modern playwrights and actors introduced the concept of realism, which is at the root of theatrical metaphor and which, in the a priori reality of photography, is an absurd redundancy which has served merely to deprive the motion-picture medium of its creative dimension.” This is found in Maya Deren, “Cinematography: The Creative Use of Reality,” *Daedulus* 89, no. 1 (Winter 1960): 157.

⁹ Karen Collins, *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design* (Cambridge, MA: MIT Press, 2008), 134.

¹⁰ Before turning to Bordwell’s account of “intensified continuity” in footnote 7 above, the standard account of film’s formal operations can be found in David Bordwell, Kristin Thompson, and Jeff Smith, *Film Art: An Introduction* 12th Edition (New York: McGraw-Hill, 2020). Though less useful in the context of video games’ adaptation of the cine-real, the tenets of dominant “classical” cinema are outlined extensively in David Bordwell, Janet Staiger, and Kristin Thompson, *The Classical Hollywood Cinema: Film Style and Mode of Production to 1960* (New York: Columbia U. Press, 1985).

which are referentially realistic. Because of this, unreal images may be referentially fictional but perceptually realistic.”¹¹ (An example would be computer-generated effects in cinema that — sometimes—appear “photorealistic.”) After quoting Prince above, film scholar Scott McQuire also notes that movies in the digital era often add “defects” (such as film grain, lens flares, or motion blur) to make images “look real” to viewers—thus contemporary cinema is mimicking “camera-reality,” an equivalence to established, pre-digital forms of cinematic imagery, which McQuire points out is now achieved through software tools.¹²

The notions of the “cine-real” and “perceptual realism” are instructive in conceptualizing how cinema creates *believable* narrative worlds, as neither cinema, and certainly not video games, capture “reality” per se. As Deren writes of photography, “If realism is the term for a graphic image which precisely simulates some real object, then a photograph must be differentiated from it as a *form of reality itself*.”¹³ A film or video game is thus *a reality*, and its verisimilitude is achieved through, as Deren calls them, “manipulations of the art instrument,” which in this context range from photochemical film technology to the (almost entirely) virtual tools of video games, and everything in between (for example, digitally-captured cinema). Perceptually, video games are an animated form,¹⁴ which raises similar issues vis-à-vis “reality” as digital cinema, particularly those films that simulate live-action photography entirely with computer-generated imagery such as *Avatar* (James Cameron, 2009). While the notion of

¹¹ Stephen Prince, “True Lies: Perceptual Realism, Digital Images, and Film Theory,” *Film Quarterly* 49, no. 3 (1996), 32.

¹² Scott McQuire, “Impact Aesthetics: Back to the Future in Digital Cinema?,” *Convergence* 6 (2000): 41-61.

¹³ Deren, “Cinematography: The Creative Use of Reality,” 154.

¹⁴ One caveat here is that video games do occasionally capture “physical reality” as part of their design, as games in the 21st century sometimes use motion-capture for human performers, as in countless films including the *Lord of the Rings* trilogy (Peter Jackson, 2001-2003). Games also sometimes contain live-action cut scenes.

“indexicality” in photography and moving-image representation—the idea that representational images bear a complex relationship to physical reality—is outside the scope of this dissertation, the concept of the “cine-real” in video games contains within it a nuanced valence regarding the medium’s relationship to “real-life experience:” a natural result of the rich history of scholarship in various disciplines of art and film theory on indexical relationships between representations—in any medium—and reality.¹⁵

So, what is it like to “play” with cinema—to interact with cine-reality? This motivating question is inspired by years of experience and rapt attention to the way games model interactivity within deliberately cinematic contexts. Video games are sometimes maddening and idiotic, in ways both totally unique and, comfortingly, just like the movies; but they can also be sublimely beautiful, thrilling, intellectually stimulating, and capable of surpassing some of cinema’s limitations through wondrous, pulse-quickening sequences of transcendent majesty. I am often consumed by this question: how do we square the undeniable banality of many aspects of gameplay with those that make video games a unique and exciting art form armed with powerfully affective tools? Though the use of these tools was preceded by earlier moving-image forms, within video games they become something very different as both a nominally and meaningfully interactive experience. In addressing formal concerns about video games in terms of their “remediation” of other forms,¹⁶ why is it so important to consider cinema alongside an analysis of video games?

¹⁵ For one of the most lively—and mercifully readable—discussions of this thorny issue in film theory, see D.N. Rodowick, *The Virtual Life of Film* (Cambridge, MA: Harvard U. Press, 2007).

¹⁶ Remediation, or the rendering of elements from one medium into another, is the topic of Jay David Bolter and Richard Grusin, *Redmediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999).

The answer to this question is that the raw materials of cinema—its commonalities and ubiquitous tools noted above—are image, sound, space, and time, which are then arranged and transposed to a fixed audio-visual representation that seems to reference a reality completely its own, or as Deren would call it, “a plastic image which is a reality in its own right.”¹⁷ Video games are composed of the same raw materials, but to this mixture add interactivity and thus user-generated flexibility to audio-visual representation, which depending on the example, or one’s perspective, has a productively additive effect or a frustrating and limiting one. Regardless, because video games include those same basic elements of cinema—chiefly time, as moving images can only move in *time*, and sound, which unlike imagery is completely inextricable from time since it cannot be frozen or fixed¹⁸—games model cine-reality (or, “possible” cine-realities) and thus are creative uses, or remediations, of cine-reality, rather than “simulations of modes of real-life experience” as claimed by Torben Grodal in this chapter’s first epigraph. Games include cinema as part of their specificity, and if cinema is the artful arrangement of image, sound, and time to stimulate the mind and focus the attention of an imagined spectator, then games, which embody this same definition as part of their fundamental identity, are more accurately described as modelling cinematic, or cine-real, mediations of reality via interactivity.

That video games are a creative use of (or play *with*) codified, conventional forms of cine-reality is the instantiating claim of this dissertation, with the acknowledgement that some games are explicitly anti-cinematic, such as “puzzlers” or some “simulation” games. When gamers and

¹⁷ Deren, “Cinematography: The Creative Use of Reality,” 153.

¹⁸ Deren argues that cinema is a “time form,” writing that, “Whether the images are related in terms of common or contrasting qualities, in the causal logic of events which is narrative, or in the logic of ideas and emotions which is the poetic mode, the structure of a film is sequential. The creative action in film, then, takes place in its time dimension; and for this reason the motion picture, though composed of spatial images, is primarily a *time form*.” In *Ibid.*, 160.

critics adopt the view that games are an evolution of cinema and contain the formal means to surpass the potential effects of non-interactive cinema, their opinions may be meant to value games as a more powerful art form, but to me, it is simply a brute fact that has little if anything to do with how we should value art forms historically, subjectively, or in socio-political contexts.

Predestination Machines and User Input

I opened this dissertation with a description of an impactful play experience from *Mass Effect* to ultimately assist my claim that video games, as I am defining the term for this text, are a unique kind of predestination machine, or a system for processing external input into a predetermined outcome. Video games are strongly authored in a manner closely related to cinema, with narrative outcomes and sensorial affects that are pre-determined—or at least *attempted* or *deliberate*, for as with cinema (or any art form), a desired affect cannot be guaranteed for every individual subjective viewer. But what is new and unique about video games is ontologically specific to their nature as interactive machines. In contrast to the temporal linearity of cinema, video games output stored, pre-determined audio-visual data that is released in response to controller input, rewarding ‘correct’ input with predestined narrative events and resolutions. These include spectacle-laden sequences of audio-visual synchronicity that within the context of the animated game constantly rework cinematic tools, including everything from the “attractions” of early cinema (seen in the presentational aesthetic of *Puppeteer* [Japan Studio, 2013]) to the set pieces of modern action cinema (seen in the *Uncharted* series [Naughty Dog, 2007-present]) to the more abstract audio-visual means of narrative and affect delivery in experimental genre films like *Under the Skin* (Jonathan Glazer, 2013) or those of David Lynch

(seen in *Here They Lie* [Santa Monica Studio, 2016]¹⁹). Games play themselves, progressing in a predetermined fashion as long as the correct input is received via the controller, an input that has been determined by a game's designers as proper and acceptable for the continuation of the gameworld experience and narrative. That these gameworlds are modeled less on "real-life experience" than on the playful and creative tools of cine-reality is strongly suggested by the fact that Lynch is one of the most-cited filmmakers in interviews with prominent game directors, leading to the conclusion that the cine-reality toolkit is heavily utilized in game design and contributes to the medium's ontological heterogeneity.²⁰

All gamers play differently, and with different skill sets, making two different playthroughs of the same game nominally 'different': this medium-specific ontology has led to the assumption on the part of gamers, critics, and many scholars, that individual playthroughs significantly differ as narrative and audio-visual experiences. Through interrogating gamers' differentiated strategies and pace of play, scholars and students have been invigorated by complex theoretical concerns of the stakes of individualized play.²¹ But the broad assumption that games provide unique experiences for each player can make us forget the fact that video games operate as machinic output devices. The input states provided by players, which resolve gamic scenarios and advance narrative, are not unique from player to player. Specific enemies must be 'beaten,' and avatars

¹⁹ Other games that are notably "Lynchian" include *Deadly Premonition* (Access Games, 2010), *Lone Survivor* (Jason Byrne, 2012), *Virginia* (Variable State, 2016), and *HitchHiker - A Mystery Game* (Mad About Pandas, 2021).

²⁰ For an example of Lynch's influence on game designers, see the following interview with *Silent Hill* creator Keiichiro Toyama: Mike Wilson, "'Silent Hill' Creator Talks 'Slitterhead', 'P.T.' And David Lynch in New Interview," *Bloody Disgusting*, December 14, 2021. <<https://bloody-disgusting.com/video-games/3695793/silent-hill-creator-talks-slitterhead-p-t-david-lynch-new-interview/>>

²¹ For a foundational example of discourse on individualized play, see Will Wright and Celia Pearce, "Sims, BattleBots, Cellular Automata, God, and Go," *Game Studies* 2, no. 1 (July 2002): <<https://www.gamestudies.org/0102/pearce/>>

must be moved through virtual space in a predetermined way leading to an outcome (or a few potential outcomes) that the machine is capable of outputting to the screen and speakers.

Branching narratives and alternate endings are no longer rare, but they are as tightly circumscribed and authored as other predetermined elements. The extent of player choice in single-player narrative games has generally been greatly overstated. While players are crucial as the input machines in this digital symbiosis, controller input can only trigger predestined audio-visual and narrative output. We can choose whether or not to play a video game, but we cannot choose what controller input will advance the game, or even determine what counts as an advance.

Video games are thus active computing machines that process different paths towards fated scenarios. They are not cinema, certainly, no matter how cinematic the experience becomes, but they're not purely "games" either. Video games are more like a series of puzzles that provide narrative and sensorial information upon completion, as opposed to, for example, multi-player tabletop board games, which tend to have a wider variety of outcomes. When we "win" a single-player narrative video game, we have provided the proper input for the game machine to unspool itself towards its preordained conclusion. The potential outcomes of board games with narrative elements can feel practically infinite by comparison, while the outcome of video game *Uncharted 4: A Thief's End* (Naughty Dog, 2015), is as preordained as any film narrative. Some players' experience with *Uncharted 4*, what could be called their 'style of play,' can vary dramatically, especially in duration (simply, some players are far more efficient than others in inputting the proper data). But ultimately, all players must put the puzzle pieces in the right place using controller input, and in response, the machine of the game system outputs advancement. I

want to stress again that this is not a valuative criticism of what video games offer. As a medium, there is nothing else like them. Frankensteined together from fragments of a multiplicity of creative media, along with predestined, but user-inputted, data—most often represented as combat and/or spatial navigation—video games are possibly the most bizarre and confounding storytelling medium that the human species has yet created.

My chief point is not that player agency is meaningless in video games, but simply that it is overstated and too often goes uninvestigated—it is nonetheless an important aspect of video game experience. Rather, my point is that what is singular about video games is not the player *controlling* the experience, but the feedback loop between the input-output poles of the medium within a fundamentally cinematic context of audio-visual creativity and narrative development.²² In their moving-image, aural, and narrative contexts, video games are commonly more cinematic than what is often called ‘gamic.’ While the charge could easily be made that this analysis is prioritizing certain aspects of gameplay at the expense of others, the intent is to demonstrate that cinematic style and predestination is indivisible from the totality of the video game experience—what is *pre-determined* or *authored* in video games directly parallels what about them is *cinematic*. It is a tangled, even confused relationship—this link between the cinematically determined machine and its users—but one that may be the most fruitful way to understand why video games are so unique and impactful.

²² For a discussion of how certain games disrupt the medium’s input-output feedback loop, see Alexander R. Galloway, “Ch. 5: Countergaming,” in *Gaming: Essays on Algorithmic Culture* (Minneapolis, MN: University of Minnesota Press, 2006).

User Agency in the Cinematic Machine

The aforementioned feedback loop is where the great specificity of the medium lies, and video games can expand upon the limits of cinematic affect with that feedback because even if player agency is an overtheorized phenomenon, when we play we are still playing *with* cinema rather than “passively” experiencing it, even if outcomes are preordained. Games have always been deeply indebted to film genres and their associated audio-visual styles, and modern games are so breathlessly cinematic and so obviously reminiscent of certain film genres (mainly action, sci-fi, and horror), that they must be read through the toolkit of cinematic style if we are to effectively describe their appeal, uniqueness, and of course the affects they can achieve that arguably go beyond the capability of cinema. As for playing with cinema, what else can we call 360-degree camera control in a meticulously crafted fictional space? The toolkit of cinema is the jumping-off point for the magic of video games as a medium.

In his essay “Beyond Play: A New Approach to Games,” Thomas M. Malaby cites anthropologist Phillips Stevens to make the point that “play” is not an activity in itself, but rather a “mode” of engagement. Malaby writes, “[Stevens] makes a key point that game researchers (and social scientists generally) are prone to forget: If by “play,” we are trying to signal a state or *mode of human experience*—a way of engaging the world whatever one is doing—then we cannot simultaneously use it reliably as a label for a *kind* or *form* of distinct human activity (something that allows us to differentiate between activities that “are play” and those that “are not”).”²³ The ways modern games have developed into increasingly cinematic narrative experiences show how this approach to “play” is sensible when seeing the copious evidence of

²³ Thomas M. Malaby, “Beyond Play: A New Approach to Games,” *Games and Culture* 2, no. 2 (April 2007): 100.

games actively remediating—and sometimes expanding upon—the detailed world-building, pacing, and audio-visual synchronicity of cinema. “Play” is thus the mode of experience that defines video gaming, while the “*kind or form*” of activity that founds the video game experience is that of cinema viewership. Thus we are playing with cinema; the input we must provide to advance the experience toward its gamic and narrative conclusions are an authored part of the cinematic experience of games. Interactivity, and thus the authors’ predictions about player responses to stimuli within game space, become an addition to the cinematic toolkit, not necessarily more or less important than *mise-en-scene*, cinematography, narrative, or sound.

The idea of playing *with* cinema qualitatively elevates neither player agency nor authorial intention, even as it seeks to illuminate the latter’s great import in game design. Video game scholars have often overstated player agency and “emergent” experience (whereby the individual styles of play and micro-decisions within game space have a pronounced effect on the baseline text of the game world, sometimes including its narrative dimension), typically as a recourse to medium specificity. Media theorist Ian Bogost’s conception of “procedural rhetoric” as “a technique for making arguments with computational systems and for unpacking computational arguments others have created,”²⁴ has been influential in this regard. He describes video games and other interactive digital texts as being fundamentally defined by processes, those inscribed by game designers as well as those performed by users, but Bogost’s emphasis is on the *persuasive* power of designers—their power to use computational systems to create persuasive processes (like rhetorical arguments). In this view, game designers became authors of processes that can lead to a multiplicity of rhetorically individualized outcomes and experiences, more so

²⁴ Ian Bogost, *Persuasive Games* (Cambridge, MA: MIT Press, 2007), 3.

than they are authors of an experience with the predetermined pacing, sequence-building, rhythmic flow, and narrative beats of, say, a film or fictional television program.

The above argument necessitates thorny debate, with justifiably unresolved questions about authorship. In the case of video games, the defensive desire to argue for their medium specificity (in other words, to argue for their legitimacy within the gatekeeping structures of academia and the art world), implicitly rejects games' remediated aspects from cinema being central to their identity. In the chapter "Art" in his book *How To Do Things With Videogames*, Bogost writes,

Still, we must not mistake authorship for intention. The intentional fallacy, which rejects the idea that a work's meaning or value is related to the creator's intention, is still at work in games. Player agency in games of all kinds leads to unique interpretations of play experiences; in proceduralist works, such meaning generation is spurred by the knowledge that a specific being set the work's processes into motion.²⁵

Intentional fallacies will continue to be a problematic aspect of art criticism, likely as long as art exists. The desire on the part of some critics and scholars, and certainly the public, to view the content of creative works as personal artistic expression of intentionality is deeply ingrained in the valuative way that art is commonly approached, rooted in our lionization of the lives of celebrity artists. However, Bogost's use of the intentional fallacy to make a point about procedural works (again, work that hinges upon procedural relationships between both designer and text, and player and text) overcomplicates the subjective experience of many video games in its attempt to characterize "proceduralist" work as a wholly singular new genre of art practice, one that magically whisks away authorial intentionality because the user is given agency at playing with authored processes that make games markedly different for individual players.

²⁵ Bogost, "Ch. 1: Art," 17.

Not acknowledging the complex remediation of other moving-image forms that define video games, by defining them narrowly as “proceduralist,” becomes tepid when looking at prominent game examples. Consider *Braid*, one of the most discussed “art games” since the term began to be used, and whose creator, Jonathan Blow, is now treated as an ‘auteur’ of the medium. *Braid*’s defining play feature, the ability to rewind the two-dimensional, side-scrolling spatial puzzles to ‘correct’ one’s moves as the puzzles become increasingly clear to the engaged player, is where procedural rhetoric shines as an organizing theory. This process, written into the game by Blow and his collaborators, and the player’s usage of it, has a direct relationship to the game’s organizing themes: regret, desire to correct past mistakes, and as a commentary on video games themselves the tedious tasks asked of gamers to both understand and enact correct procedures to progress in games. These themes come to light during play because of the interactive process of the rewind mechanic, making *Braid* a transparently instructive example of procedural rhetoric. But the authorship of such processes is lost in Bogost’s push for medium specificity. While the game has a variable duration that depends upon play style and skill, a player of *Braid* who reaches the game’s end is as subject to Blow’s authorship as that of any film narrative. Procedural rhetoric is a tool added to the cinematic basis of all interactive moving-image art. *Braid* ends with a twist: the player-avatar protagonist is revealed to be a creep, essentially, pursuing the unwilling Princess for nefarious reasons. Before this point, players assumed *Braid*’s narrative world was adjacent to the naive innocence of the “kidnapped princess” fairytale of the *Super Mario Bros.* franchise. Blow successfully rips away the curtain obscuring the misogyny and sexual-consent issues that bubble beneath the surface of fairytale romances (and hence the *Mario* franchise). The fact that Blow tells this story—or at least aids in its thematization—

partially through a *process* of user input does not change the constitutional fact that there is only one way *Braid* can end; the processes in question were deliberately authored to have prescribed input required to progress the game along a set path. The experience has a defined beginning, middle, and end, it unfolds in a moving-image context with narrative, editing, and sound, and the player's 'decisions' or 'play style' have no effect on the identities of the characters, the story being told, or the way that story is told through audio-visual means.

When Blow was interviewed about the game, he sounds far more like a filmmaker than a 'designer of procedural rhetoric.' He says,

Nothing in the game is there by accident and that includes all the story pieces... So I feel like when someone takes one of them and decides to say, 'This is what the game is all about', they're sort of neglecting a lot of the other ones, which I would not recommend... the reason I make video games, or one of the many reasons, is that I want to do some art things—I'll say art, right—and what I want to do is communicate certain feelings, situations... Those things for me are very hard to verbalise. The sort of things that I guide myself into thinking about, doesn't succumb itself into linear language, or at least I don't know how to do it. Even though there are text bits in the game, I think about the game as the whole thing, that it's some kind of envelope that I'm trying to express, or points at it in different places and in different directions.²⁶

Deleting any references to games, this quote could easily be a smart filmmaker talking about their authorial process.

Bogost is not wrong about process and procedurality being an important aspect of game experience, but these aspects are nestled within an expanded cinematic toolkit utilized for the same purposes as those making traditional cinematic art—using “story pieces” to “communicate certain feelings [and] situations” (Blow, above). Reading video games as a continuation of existing moving-image practice is thus more sensible than overcomplicating authored game

²⁶ Unknown Author, “*Braid* Ending Explained by Jonathan Blow,” *Digital Spy*, October 27, 2010. <<https://www.digitalspy.com/videogames/a284605/braid-ending-explained-by-jonathan-blow/>>

experiences as “procedural” when we consider how much games resemble cinematic narrative discourse despite the player being engaged in one half of an input-output feedback loop.

Crucially, this feedback loop can help us formulate ideas about how video games have themselves altered the horizons of cinematic experience. Even within established genres, video games are extremely variegated, from visual style, the function of sound, types of gameplay, and the manner in which the narrative is presented and how it is ultimately uncovered through player interaction. As many video games have become more and more cinematic, many games have moved away from a passive-narrative mode (in which most narrative information is provided in “cut scenes,” short non-interactive narrative sequences edited like a film) in favor of liveness in narrative denouement, where “in-game events”—a term I will be using frequently—become a dominant method used to advance both games’ overarching narratives and the presentation of micro-events in game worlds that create new obstacles and episodes. An “in-game event” is, broadly speaking, a piece of narrational or contextual information (from dialogue to audio-visual cues) that occurs *during* interactive portions of gameplay rather within a cut scene. In some ways, this liveness has distanced video games experientially from their cinematic forebears, with story elements often intertwined with some level of interactivity, but crucially, it has also brought them closer together. Since games are an authored audio-visual screen experiences that include interactivity, the idea of play within a remediated cinematic space becomes the most fruitful way to approach their formal and narrative operations.

“Still a Film”

Akira Kurosawa wrote in his autobiography, “For me, filmmaking combines everything. That’s the reason I’ve made cinema my life’s work. In films, painting and literature and theatre and music come together. But a film is still a film.”²⁷ For games, process and more broadly interactivity is added to this list of media nestled within video games, but a game is still a game. No one confuses a video game for a film, animated or otherwise, except in marketing contexts or in the occasional game with hourslong cut scenes (such as the games of Hideo Kojima).²⁸ We intrinsically understand the borders of the two media, but if the evolution of popular video games across the last 30-plus years shows us anything, it is that the influence of cinematic style has exploded rather than waned. How this has happened—through what formal means and through what cinematic-gamic correspondences—and how games’ relationship with cinema has morphed over time toward what they have become today is my primary concern in this dissertation. I believe that the answer to *why* this has happened—and it is inarguable that video games today resemble cinema more than they ever have—is very simple: video games are a moving-image technology that were influenced by, and conceived as, at least quasi-cinematic works from the early days of video game technology, and once they started telling even semi-complex stories (or, intentionally expressing moods, feelings, emotions, and aiming for emotional affect generally), the guiding toolkit became that of cinema.

I came across the previous quote from Kurosawa in an article on the Kurosawa-inspired

²⁷ Akira Kurosawa, *Something Like An Autobiography*, trans. Audie E. Bock (New York: Vintage, 1983), 155.

²⁸ In the 1990s and the first decade of the 2000s especially, it was common for game trailers to be comprised entirely of imagery from games’ unplayable “cut scenes,” as opposed to gameplay footage. Historically, this was to conceal the relative lack of visual detail in a game’s playable portions, as games before the mid-2000s often utilized different graphics/animation engines for cut scenes and gameplay. Cut scenes from 1990s games looked more like animated cinema or cartoons than gameplay footage, and were thus deemed superior as marketing material.

2020 game *Ghosts of Tsushima* (Sony) entitled, appropriately, “*Ghosts of Tsushima* Director Nate Fox on the Challenges of Making a Playable Akira Kurosawa Movie.” Addressing Kurosawa’s words above, writer David Ehrlich adds, “Reading those words today, at a time when movies are starting to feel more like video games and video games are starting to feel more like movies, it’s tempting to imagine how Kurosawa might have felt about a digital medium that’s developed the capacity to ingest all of his favorite art forms, and combine the “everything” of filmmaking into something even more.”²⁹ The “medium” here could also be described as *computers* generally, which have the simulative capacity to imitate any art media. Regardless, comparing the poetics of cinema and video games illuminates what is “more” about video games, but also the ways in which the media complement each other in performing narrative and affect; video games do some things better than cinema, such as subjective bodily affect and what can provisionally be called “immersion,” while cinema can tell stories and express certain emotions and themes in ways that video games have difficulty emulating in *interactive* portions (not cut scenes)—such as cinema’s precise duration, and what results from the effects of montage linking wildly disparate situations and ideas in near-instantaneous fashion. This is due to the ways that interactivity can awkwardly collide with cinematic style, and narrative generally—a phenomenon known as “ludonarrative dissonance.”³⁰

²⁹ David Ehrlich, “*Ghosts of Tsushima* Director Nate Fox on the Challenges of Making a Playable Akira Kurosawa Movie,” *Indiewire*, July 17, 2020. <<https://www.indiewire.com/features/commentary/ghost-of-tsushima-interview-nate-fox-akira-kurosawa-samurai-movie-1234574709/>>

³⁰ The term “ludonarrative dissonance” was coined by game designer Clint Hocking. See Clint Hocking, “Ludonarrative Dissonance in *Bioshock*,” *Click Nothing*, October 7, 2007. <https://clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html>

The Techno-Teleology of Video Games: Increasing Cinematic Complexity in Game History

But before this dissertation moves to the level of individual genres and cases that clarify and complicate the cinema-games relationship, an overview of games' techno-teleology—demonstrating a clear evolution towards increasingly cinematic representation—is necessary to set the stage for the more granular concerns of this dissertation's chapters.

From a historiographic perspective, since roughly the early 1990s, the development of style in video games shows a strong narrative of progress towards increasingly complex emulations of cinematic form, and this narrative is inextricably tied to the forward march of technological advancement. This is fascinating, and important, because in many ways the development of video games in their relation to film style mirrors the decades-earlier evolution of cinema through technological progression. As graphics became more detailed, virtual worlds more expansive and realistic, and advancements in data storage and processing speed allowed for complex algorithms that dictate incredible precision in the sequencing and timing of gamic events, more and more of what makes up the formal ontology of cinema has been revealed through video games.

If so inclined, one could reverse-engineer an “Introduction to Film” course using primarily video games as examples. Early games noted for their “cinematic” qualities—*Alien Trilogy* (Probe/Acclaim, 1995), *Myst* (Cyan Worlds, 1993), *Resident Evil* (Capcom, 1996), *Tomb Raider* (Eidos/Core, 1996), *Final Fantasy VII* (Square, 1997), *GoldenEye 007* (Rareware, 1997), *Chrono Cross* (Square, 1999), *Silent Hill* (Konami, 1999)—show deeply cinematic self-consciousness in their approaches to the unfolding of narrative and the soliciting of adrenergic affect. However, viewed out of historical context and in cinematic terms, these games all have a

rudimentary style in comparison to those created less than a decade later, such as *Dead Space* (EA, 2008) and *Uncharted 2* (2009), that not only reveal a deeper investment in the history of genre cinema and its greatest achievements (cinematic influence and pervasive quotation have become far more apparent) but, more radically, an increasingly profound and meaningful emulation of cinematic style and form. In historical context, the previously cited late-90s games were designed for consoles such as the (original) Playstation and Nintendo 64, whereas *Dead Space* and *Uncharted 2* were designed for Playstation 3 and Xbox 360. These latter consoles sported processing power orders of magnitude greater than earlier examples, comfortably paralleling advances in personal computing over this period (compare the memory, speed, and power of a mid-90s desktop PC to one from the mid-2000s—an almost science-fictional leap in capability). The fact that advancements in game technology allowed for the increasingly precise simulation of cinematic elements is, admittedly, self-evident. But it is nonetheless an important area of inquiry because it helps to elucidate what is behind cinema's unique powers of representation and affect in the first place, and is a crucial discussion within the expanding medium of digital games, which cannot be understood completely without recourse to the array of art media and narrative traditions which are all part of video games' polymorphous identity.

Long before we had games like *Detroit: Become Human* (Quantic Dream, 2018) or *The Last of Us Part II* (Naughty Dog, 2020) competing with the verisimilitude and audio-visual sophistication of big-budget genre films—all while moving smoothly, sometimes imperceptibly, between interactive navigation and cut scenes—the influences of cinema and motifs from literary sources was seen in the earliest video games. The text-based game *Adventure* (Will Crowther, 1975), often a launching point for histories of storytelling in the medium, recalled the narrative

tropes of Tolkien novels and the fantasy genre in general, with the majority of the ‘environments’ being caves, mountains, and magical forests populated with trolls and strange woodland creatures. The legendary shooter *Space Invaders* (Taito, 1978) recalled *Star Wars* (George Lucas, 1977) for its players. *Star Wars* itself inspired one of the earliest film-to-game adaptations in 1983, followed by an Atari version of *Indiana Jones and the Temple of Doom* (1985). An infamous adaptation of *E.T.* practically destroyed the company.³¹ But beyond the franchising of Hollywood properties by game companies (which has its own fascinating history), it is easy to locate strongly proto-cinematic elements in early console games such as the *The Legend of Zelda* (Nintendo, 1986-present) and *Final Fantasy* titles for the Nintendo Entertainment System/Famicom and Super Nintendo/Super Famicom with their audio-visual presentations of long, detailed fantasy narratives, surprisingly rich characterizations, and narrative-based reward systems. However, technological limitations precluded 8- and 16-bit console games from utilizing consistent correspondence to cinematic conventions of audio-visual narrativization. The view on the action was usually from a top-down or side-scrolling perspective, which has virtually no equivalent in films beyond those that parodically wink at video game aesthetics,³² and the unfolding of narrative happens almost entirely through on-screen text in dialogue boxes that progress with user input. Thus when it comes to the qualities of transmedial citation, these

³¹ For an enjoyable and informative history of the Atari console, an essential piece of game history, see Nick Montfort and Ian Bogost, *Racing the Beam: The Atari Video Computer System* (Cambridge, MA: MIT Press, 2009).

³² For example, a bloody gun battle in the film *John Wick: Chapter 4* (Chad Stahelski, 2023) is shot from a top-down perspective, following the protagonist through different rooms of an apartment as if the space is roofless, recalling the shot of Norman Bates’ “mother” stabbing Det. Arbogast at the top of a staircase in *Psycho* (Alfred Hitchcock, 1960), but much more reminiscent of games that use this perspective throughout, such as the first title in the omnibus game *Die Hard Trilogy* (Fox Interactive, 1996) or *Hotline Miami* (Dennaton Games, 2012). As a sidenote, the latter game is yet another for which its designers cite David Lynch as an inspiration—while they are of course referring to its (minimal) narrative elements, it is still a curious inspiration for a video game in which extremely graphic murder is essentially the only activity.

games arguably had as much in common with comic books as they did films, despite being made of moving images with audio. But even games of the 1980s and 90s demonstrated complex and effective usages of cinematic audio-visual style (as I will investigate in Chapter 1 primarily through discussion of 1993's Square title *Secret of Mana*).

In the 1990s, when advances in processing power and data capacity aided the contemporary video game's movement towards more detailed virtual environments—from the generic exile of 2-D platformers, puzzle games, top-down shooters, and redundant strategy games, to fully 3-D adventures with navigable worlds—the emulation of cinematic experience quickly became an implicit goal of single-player game design.³³ Though the absorption of cinematic style into game design began in earnest in the early-to-mid-1990s with the introduction of CD-based game consoles (e.g. Sega CD, Panasonic 3DO, Sony Playstation, and Sega Saturn) and the booming popularity of PC-based CD-ROM gaming, the medium of the video game in the early 2020s is in a remarkably similar state vis-à-vis its relationship to cinema, at least from an industrial standpoint. The deep immersion, thrilling adrenergic affect, and narrative cohesion of canonical Hollywood genre cinema remain a critical point of reference for designers of the most perennially popular game genres—particularly action-adventure and horror. The cinematic quality of certain games is trumpeted as loudly today as it was in 1997 when the breathtaking cut-scenes of seminal PlayStation title *Final Fantasy VII* led to premature proclamations about video games matching—even exceeding—the aesthetic and narrative possibilities of cinema. In fact, it is difficult to find written material on *Bioshock* (2K Games, 2007), the *Resident Evil*

³³ For a richly detailed history and analysis of the technological and aesthetic movement toward 3-D worlds in 1990s games, see Christopher Todd Carloy, "'True 3D': The Form, Concept, and Experience of Three-Dimensionality in 1990s Videogames." (PhD Dissertation, Chicago, IL, University of Chicago, 2018).

series (1996–present), the *Uncharted* series, *Gears of War* (Epic Games, 2006), *Heavy Rain* (Quantic Dream, 2010), *Dead Space*, *Half-Life 2* (Valve, 2004), or *007: Everything or Nothing* (EA, 2004) without at least cursory mention of how they are “like a movie” or “film-quality.”³⁴ In the case of licensed multi-media franchise games, like the *007* series, constant comparison is made to source material in other media, and critics find it natural to move between discussions of examples across them.

The increasing pollination of games with cinematic elements engendered a strong response from scholars at the dawn of “game studies” as a humanities sub-field, which—perhaps not coincidentally—occurred in the late 1990s and early 2000s³⁵ alongside the rapid technological advancements of CD and DVD-based consoles and their software.³⁶ Games like *Metal Gear Solid* (Konami, 1998), *Final Fantasy VII*, *Resident Evil*, and *Silent Hill* began previously-unimaginable conversations about games as an art form and one particularly comparable to cinema. The responses to the ever-increasing overlaps between cinema and video games were wide-ranging, occasionally messy, and prone to deterministic adjustments of analytical models drawn from literary theory and cinema studies. But overall, these responses produced groundbreaking work from scholars such as Ian Bogost, Henry Jenkins, Jesper Juul,

³⁴ For examples, see this review of *Death Stranding*: <https://www.rogerebert.com/features/death-stranding-offer-surreal-cinematic-experience-with-controller-in-your-hands> and this review of *Uncharted 3*: https://www.brainygamer.com/the_brainy_gamer/2011/11/take-3-uncharted-the-director.html

³⁵ To avoid confusion, note that “2000s” in this text refers to the first decade of the century, i.e. roughly 2000–2009.

³⁶ For examples of influential early video game scholarship, see Janet H. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (New York, NY: Free Press, 1997), Espen Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore, MD: Johns Hopkins University Press, 1997), and Markku Eskelinen, “Towards Computer Game Studies,” in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2004).

Tanya Krzywinska, Lev Manovich, Janet Murray, Mark J.P. Wolf, and others performing the difficult intellectual labor of laying out the stakes for a new sub-field of media criticism.

These early years of video game studies were among the richest for considerations of games in relation to various facets of cinema, from audio-visual style to narrative and genre. While it could be argued that scholarly interest in the comparative media poetics of cinema and video games has waned, discussion is in fact still vibrant, though scholars have moved toward more narrow concerns in keeping with the academic humanities' turn towards increased specialization.³⁷ The early debate over how much games *should* emulate cinema is far less relevant now, since the games industry essentially ended the debate by continuing to refine and complexify the relationship between the two media, allowing cinematic influence to deepen. Meanwhile, much game scholarship today is pre-occupied with theorizing video games in terms emphasizing their inclusion of significant literary themes, as part of the field's defense of its existence, which requires that academic gatekeepers consider it a "significant" art form.

Twenty-odd years ago, scholars were engaging with the comparison actively and without disciplinary reservation, responding to the simple, obvious fact that video games were beginning to depend upon players' foreknowledge of popular cinema from the cinematic genres of action, adventure, science-fiction, and horror, in ways that are still vital today.³⁸ One could identify a strong preoccupation on the part of game designers (and writers) with medial self-consciousness,

³⁷ In the Japanese animated film *Ghost in the Shell* (Mamoru Oshii, 1995), cyborg protagonist Motoko bemoans that her technologically advanced society increasingly produces individuals narrowly fit for certain tasks only, due to the hyper-specialization of cybernetic implants for specific labor. She says, "If we all reacted the same way, we'd be predictable, and there's always more than one way to view a situation...It's simple: overspecialize, and you breed in weakness. It's slow death." Another possible translation is: "Organizations or humans, what lies beyond specialization is only a slow death." The Humanities in the 21st century should take note.

³⁸ For example, see Geoff King and Tanya Krzywinska, eds., *ScreenPlay: Cinema/Videogames/Interfaces* (London: Wallflower Press, 2002).

creative citation, and citational replication. With the massive success of games like *Resident Evil*, which self-consciously riffed on George Romero's zombie films and relied heavily on the formal conventions of cinematic horror for its effects (a major concern in Chapter 3), it should come as no surprise that ten years later, players of *Dead Space* were assumed to have at least a casual familiarity with films in the *Alien* franchise (1979 – present). The game's creators certainly wanted the player keyed in to this influence—if you let the game rest at the opening title screen, a 'trailer' for the game begins playing that contrasts gruesome images of alien dismemberment and haunted spaceship corridors with a melancholy rendition of the children's song "Twinkle, Twinkle Little Star," nodding to the eerie irony of Ripley mumbling the song "You Are My Lucky Star" at the end of *Alien* (Ridley Scott, 1979) while she prepares to dispatch the murderous xenomorph.

In its aesthetic relationship to contemporary video games, cinema became and remains a point of contact and contest, a constant frame of reference, and a category loaded with valuative rhetoric. For both the general gaming community and game/new media critics, what it means for a game to be "cinematic" has been contested and debated with vigor. It can be a question of narrative genre, of style, of a game's dependence on 'out-of-game' events (cut scenes), or something more elusive and difficult to theorize—the way a game can simply *feel* cinematic, resulting from a complex combination of formal, structural, narrative, generic, and gamic or ludic elements that for analytical purposes require close readings of relevant game examples.

Critical Counterarguments to Games as Cinematic

The question of cinema in games is, or at least was, a site of scholarly contest: on the one hand are the relatively small but influential constellation of both gamers and critics who once saw (and some still see) cinema and its associated classical narrative formulas as an unwelcome encroachment upon a new, singular medium that should be defined and theorized purely through interactive dimensions, construction of playable space, and other characteristics specific to the ludic aspects of games. Markku Eskelinen's attention-grabbing polemic on the subject, "The Gaming Situation" (2001), is a striking example. In Eskelinen's view, game studies must "annihilate for good the discussion of games as stories, narratives or cinema....stories are just uninteresting ornaments or gift-wrapping to games, and laying any emphasis on studying these kinds of marketing tools is just a waste of time and energy."³⁹ This medium-specific approach, which rejects the useful border territory between gamic and cinematic elements, begs the question of what happens when the "gift-wrapping" is removed, when a game has no narrative "ornaments" to provide a context to its progression, or when games present lengthy narrative cut scenes as the primary reward for progression, as in *Metal Gear Solid*. This view is implicitly wrapped in the celebration of gamic characteristics like *paida* (freedom or free play, as opposed to rule-based *ludus*), re-defined by Jesper Juul and others as "emergent gameplay."⁴⁰

A productive counter-argument to the view cited above is that in emergent gameplay, narrative context still provides an important framework for gameplay despite the option to deviate from the cinematic frame narrative and range in *paida*, as seen in games with detailed

³⁹ Markku Eskelinen, "The Gaming Situation" in *Game Studies* 1, no. 1 (July 2001). <<http://www.gamestudies.org/0101/eskelinen/>>

⁴⁰ See Roger Caillois, *Man, Play and Games*, trans. Meyer Barash (Champaign, IL: U. of Illinois Press, 2001) and Jesper Juul, *Half-Real: Videogames between Real Rules and Fictional Worlds* (Cambridge: MIT Press, 2005).

audio-visual narrative frameworks like the *Grand Theft Auto* series (Rockstar, 1997-present), or in RPGs. Geoff King and Tanya Krzywinska take this view, framed in the binary between emergent games and “progression” games:

[In games of progression] moment-by-moment developments gain narrative resonance through their position in a wider frame that is largely pre-established. ‘Emergent’ narratives, constructed in the mode of play itself, particularly the interactions of players in multiplayer games, are more likely in RPGs and ‘God’ games. But even here certain narrative developments and plot nodes are likely to be built into the parameters of gameplay.⁴¹

The key issue here is the player-avatar being defined as a *character* even in games where emergent gameplay is dominant (or at least in cases in which the game procedurally encourages it, like the RPG). The gamer has an investment in the character as a virtual extension of the self or by virtue of the gamer choosing to control the character—to play the game—and thus the attributes of that character and its position in the game world have meaning and value.⁴² This is one way among many to account for the way different players will behave in a graphically violent or destructive emergent game space like those of *Grand Theft Auto*, *Infamous* (Sony, 2009), or *Prototype* (Radical, 2009). Emergent gameplay can be morally loaded in many games, such as in the *Mass Effect* series when binary moral-or-immoral behavior choices lead to predictable positive-or-negative consequences (hallmarks of the gameplay style of notable developers Bioware and Bethesda), and gamers are aware of their avatar as a character in a game world with strong narrative dimensions, which has an effect on the shape of emergent gameplay.

It could be argued that a game like *Grand Theft Auto* would not work without its dynamic

⁴¹ Geoff King and Tanya Krzywinska, “Introduction” in *Screenplay: Cinema/Videogames/Interfaces*, ed. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002), 24.

⁴² For a fascinating, counter-intuitive study of how gamers “identify” with their avatars in games, see Adrienne Shaw, “Does Anyone Really Identify with Lara Croft?,” in *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture* (Minneapolis, MN: U. of Minnesota Press, 2014).

narrative context, that even gamers who ignore narrative information—and it is fascinating to witness how subjective the extent to which players absorb and attend to narrative is in videogames, both reinforcing and challenging Eskelinen’s views—may require basic narrative components as a foundation in order to invest in emergent gameplay. Narrative elements affect, for example, players’ moral behavior within emergent situations in different narrative contexts. Our perception of protagonist John Marston’s quiet heroism and loyalty to his family in *Red Dead Redemption* (Rockstar, 2010) affects how we behave towards in-game civilians, just as it does in *Grand Theft Auto V* (Rockstar, 2013) when we play as a cynical, nihilistic Italian-American gangster who clearly loathes his entitled wife and children. Whether we play these characters according to the defining traits provided by the designers, which are often directly comparable to character types propagated in genre films, or push against them, it would seem absurd to deny that the context provided by the game’s authors influences our play—though the open-world free play of *Grand Theft Auto V Online* is a notable deviation, where matches, missions, and races advance no central narrative. Yet even in the *Online* version, recognizably cinematic elements remain in each discrete mission. Even in emergence-focused play, narrative context within a game’s cinematic mediation of reality is never far away.

On the other side of influential polemics from academia are those who argue that the expansion of narrative—or more complex, multi-faceted, character-based narratives—is the future of video games. These calls for greater complexity to game narratives, either within interactive constituents of the games themselves or in narratives presented through cut scenes, come not only from a position of high-cultural valuation (games needing to have more ‘meaning’), but more importantly from a fervent and honest desire for games to become more

richly immersive and variegated, as when Janet Murray in her seminal *Hamlet on the Holodeck* longs for games to “embrace more complex dimensions of experience.”⁴³ Both Murray and Henry Jenkins insisted on ‘improvement’ in games’ mediation of storytelling forms. In “The Game as Object of Study,” Jenkins strikes an oft-cited analogy between early cinema (1896-1910), when it was “locked into the chase film,”⁴⁴ and the state of the video game industry around the year 2000, which he argued was not exploring complex themes. Naturally, Jenkins’ notion of video games at the time of his writing as being emblems of an ‘immature’ period for the medium was criticized by some for its valuative dimension—that games had not yet fulfilled their true potential. King and Krzywinska criticize this argument’s “...inbuilt teleological assumptions: that games should ‘develop,’ to fulfill some more culturally acceptable/respectable destiny, rather than being taken for what they are, at present, and are likely to remain to a large extent in the immediate future.”⁴⁵ As cinema has been a firmly established medium for over 100 years and has long, illustrious traditions as both high-art form and staple of popular culture, Jenkins’ and Murray’s narratological positions imply a relationship to cinema due to its status as the dominant frame of reference for moving-image media’s respectability, and the path it must take to achieve it. Both may argue for complex interactive dimensions, but cinematic tradition is the primary point of contact—these positions are invested in a longing for video games to raise themselves to the level of an ‘authorship-based’ medium, which narrative feature cinema had to fight for in its first half-century of existence.

⁴³ Janet Murray, *Hamlet on the Holodeck* (New York: Free Press, 1997), 21.

⁴⁴ Henry Jenkins, “The Game as Object of Study,” Game Cultures Conference (Bristol: June 2001).

⁴⁵ King and Krzywinska, “Introduction,” 21.

King and Krzywinska also bring us to an important juncture in historically assessing the rapid evolution of games since the first period of popularity for home console systems in the 1980s and early 1990s. They are right to decry the condescension inherent in arguing that video games, or any art form, must “develop” towards and thus actively strive towards a “culturally respectable” position. But considered nearly 20 years later, it is hard to not see games’ rapid development as a complicating factor. The extent to which games have evolved in the intervening time is far beyond what scholars foresaw in the early days of video game studies: that they have ‘developed’ is a foregone conclusion. In fact, it is arguable that no other major representational medium in history has changed with such blazing rapidity, particularly between the years of roughly 1995-2007.

This particular historical moment returns us to the aforementioned techno-teleology of evolution in the medium, which has been a surprisingly unidirectional, uninterrupted march towards seamless integration of cinematic style and filmic (or televisual) narratives within the ludic context of many of the most popular game genres. Which now brings us to the question of what “seamless” integration means.

Integrating Cinematic Flow: The March Toward Seamlessness

Ultimately, while games have evolved and changed in myriad ways independent of their simulation and remediation of cinematic experiences, it is in their relationship to cinema that we see perhaps the most profound developments. These developments can be broadly categorized as the continuing evolution of the relationship between cinematic *flow* and cinematic *rupture* within games’ overall experience designs. I will be using these two terms often in the following

chapters. The two terms together form a simple modeling of cinematic form in games; the oscillation between and intermingling of flow and rupture is where we locate their simulations of cine-reality, and within the umbrella of this flow-rupture relationship rests a game's narrative and characters, its audio-visual style, its genre identity, and its thematic concerns. This intermingling is not only crucial to the overall experience of the wide purview of games relevant to this study, but the rapid development and innovation of flow-rupture interactions is also the most visible result of games' techno-teleological development as described above (except, of course, for the immediately apparent increases in graphical 'quality' since the mid-1990s).

Flow and rupture are only seemingly opposed, as they work together to deliver the kinds of game experiences that both gamers and critics describe as "cinematic." Cinematic rupture occurs when 'out-of-game' or non-interactive events interrupt playable gamespace: those large portions or even brief moments where the player loses all forms of control, and is placed into the 'passive' viewing mode of cinema spectatorship.⁴⁶ A rupture begets the aforementioned cut scenes—pre-rendered passages (today, typically using the same engine as the gameplay) providing narrative context and progression. Cinematic flow thusly describes the delivery of narrative information and audio-visual affect within interactive portions of gameplay itself, or

⁴⁶ As video game scholars frequently refer to the viewing of cut scenes as a "passive" mode, they seem stuck in the "apparatus theory" days of cinema studies, exemplified by Jean-Louis Baudry's essay "Ideological Effects of the Basic Cinematic Apparatus" (1970), a theory that postulates the film viewer as a passive receiver of ideological content, essentially placed into a dreamlike trance by moving images. Apparatus theory was also furthered by Laura Mulvey's still-influential essay "Visual Pleasure and Narrative Cinema" (which coined the term "the male gaze"). Cinematic spectatorship as an *active* process was later theorized under the rubric of "cognitive film theory" by David Bordwell and Noël Carroll, among others (see Bordwell, *Narration in the Fiction Film*, and Stephen Prince, "Psychoanalytic Film Theory and the Problem of the Missing Spectator," in *Post-Theory: Reconstructing Film Studies*, ed. David Bordwell and Noël Carroll (Madison, WI: U. of Wisconsin Press, 1996). Apparatus theory was also challenged by the "new historicist" movement—see Judith Mayne, "Paradoxes of Spectatorship," in *Viewing Positions: Ways of Seeing Film*, ed. Linda Williams (New Brunswick, NJ: Rutgers University Press, 1995). In game studies, it is rhetorically useful to use a passive-active binary for cut scenes versus gameplay, but this places problematic restrictions on what "active spectatorship" can mean, a topic with significant extant coverage in film studies. Beyond the broader cultural lexicon's adoption of terms like "the male gaze," the purely passive spectator of apparatus theory has not been widely considered to be theoretically sound for decades.

what can be called ‘in-game-events.’ The influential first-person sci-fi shooter *Half-Life* (Valve, 1998) was a notable early innovator of in-game, non-text-based narrative, due to its absence of cut scenes and thus the player’s ability to control the avatar during portions of the game principally devoted to revealing narrative information.⁴⁷

As others have indirectly argued, cinematic video games since the mid-1990s, in their storytelling efforts and the way they deliver spectacle inextricably linked to cinematic modes, are predominantly characterized by the aforementioned oscillation—one providing a literal experience of cinematic spectatorship (*rupture*) in either long passages (*Metal Gear Solid*) or brief cut scenes in which the player loses control during gameplay only to have it quickly restored (*Uncharted*), and one that is a more complex remediation of cinematic style (*flow*), in that interactivity is still present even as cinematic audio-visual elements are foregrounded in the game’s operations at a particular moment. These cinematic audio-visual elements are multi-faceted, even dizzyingly polyvalent, and locating them is a revealing critical process that comes pre-loaded with controversy—what constitutes a “cinematic” in-game-event? Does cinematic flow, in notable cases, eradicate the border between the cinematic and gamic? Between passive and active? Games that are heavily invested in the operations of cinematic flow, such as *Dead Space*, *Bioshock*, et al., show complex operations in which the player—through her spatial orientation, progression through the gamespace, or interaction with virtual objects—unknowingly activates pre-authored audio-visual elements that are intuitively cinematic.

Modeling flow-rupture relationships can be used to test the borders of cinematic and gamic operations. They become a binary categorization in limited cases, particularly with

⁴⁷ For an excellent discussion of *Half-Life* in the context of phenomenology, see Ian Bryce Jones, “Enough of a World: A Phenomenology of Videogame *Weltlichkeit*” (PhD Thesis, Chicago, IL, The University of Chicago, 2015).

modern games that rarely if ever rupture interactivity but frequently rely on cinematic style, generic tropes strongly tied to cinema, and games with fast-paced narratives lifted or inspired by influential films that can thus be called games of cinematic flow. These include *Dead Space*, *Bioshock* (and a bevy of other modern first-person shooter, aka FPS, games), the *Half-Life* series, *Portal 2* (Valve, 2011), and *Shadow of the Colossus* (Team Ico, 2005). These examples rely almost exclusively on cinematic flow, and represent the historical evolution of games as moving towards more immediate cinematic experience during gameplay, rather than rupture-heavy earlier examples, when cut scenes were the norm for narrative exposition.

This flow is the crux of games' evolution in cinematic terms. While narrative cut scenes are still very common in practically all game genres, cinematic flow has become just as common today after three decades of steadily-improving technology allowing designers to experiment with how and when cinematic affect is delivered beyond cut scenes. Among titles in the 3D/CD era of the mid-to-late 90s, games like *Oddworld: Abe's Oddysee* (EA, 1997) and *Apocalypse* (Activision, 1998) used cut scenes to contextualize their worlds and deepen player engagement, but had game engines and graphics too rudimentary relative to live-action or animated referents to utilize strongly cinematic elements. Thus these games' cut scenes were pre-rendered essentially as digital animated shorts, with graphics far more detailed than what is seen in-game. But as technology progressed, particularly in the predictable technical leaps occurring when new game consoles are made available to developers, more and more of playable gamespace became cinematically porous.

Presently, the most common flow-rupture relationship is an oscillation between modes, where cut scenes remain crucial to narrative progression, and are crafted using the same engines

and graphics as playable gamespace, but more of cinematic form, and thus in-game events and cinematic flow, can be ensconced within gameplay. This can also be viewed as an aesthetic unification of cut scenes and gameplay that typifies games since the mid-2000s. Examples are of course in abundance, and include the *Mass Effect* series, *Alan Wake* (Remedy, 2010), *The Walking Dead: The Game* (Telltale, 2012), *Heavy Rain*, *The Evil Within* (Bethesda, 2014), most RPG variants, and games discussed at length in upcoming chapters, such as *Uncharted 2*. Some games heavily stylize cut scenes to deliberately demarcate playable and non-playable space, like the comic-book-inspired, multi-window, text-heavy cut scenes of the *Max Payne* series (Remedy/Rockstar, 2001-present), and many Japanese games with cut scenes in an anime style not utilized in playable space. However, the norm in most narrative-heavy games is still a unified style.

Writing in 2002 in the essay “Vision and Virtuality: The Construction of Narrative Space in Film and Computer Games,” Wee Liang Tong and Marcus Cheng Chye Tan strike a diametric opposition between flow and rupture, but without using those terms. From the vantage of two additional decades, they inadvertently demonstrate how technology and the aesthetic innovations it has allowed have blurred the flow-rupture binary in ways that were surely difficult to imagine at the time. Here they strike a hard border between in-game events and cut scenes:

The difference between a cinematically presented conversation and a verbal exchange that takes place as an event in the game environment is an important one for they signify dissimilar modes of visualizing and alternate ways of narrativising game spaces. The immersion of a gamer in an interactive simulated 3D environment, in real-time, precludes the employment of cinematic framing and editing techniques, the stylistic *modus operandi* in the construction of filmic narrative. Although games can, and often do, consist of both immersive interactivity and cinematic cut-scenes, these are two distinct modes of visualizing the game-environment that cannot be synthesized. When the gamer loses control

of the camera/character, thus ceding control to pre-set camera positions that direct the field of vision autonomously, in accordance with a predetermined script, the game effectively enters into something closer to a cinematic mode.⁴⁸

Nothing in the above statement is rendered entirely inaccurate by examples from more recent games, but it is unlikely that they would have struck such a strong binary between flow and rupture after games like *Uncharted 2*, which employ cinematic rupture at a micro-level that reveals the distinctiveness of the two modes but also, and more importantly, shows how the boundaries between them can blur and become formally unified on the audio-visual level, such as when audio dialogue between on-screen characters occurs during interactive sequences. In such examples, non-interactive elements (crudely, the “cinematic” or “literary”) are layered or nestled into interactive space.

The notions of cinematic flow and rupture were addressed and debated frequently if not extensively in the initial flowering of video game studies. Cut scenes in particular were a reliably dominant issue in scholarly accounts of game operations. Cinematic rupture became increasingly common in the first two generations of the 3D-era of home console gaming, and more and more games began to use cut-scenes, the perennial example being *Metal Gear Solid*, which is watched nearly as much as it is played. Many gamers became frustrated by their ubiquity, and debates about the utility of cut scenes raged among scholars, game critics, and especially players. King and Krzywinska write that “Narrative reliance on cut-scenes and other ‘out-of-game’ devices, as they are termed by the designer Richard Rouse, is one of the main reasons why the narrative

⁴⁸ Wee Liang Tong and Marcus Cheng Chye Tan, “Vision and Virtuality: The Construction of Narrative Space in Film and Computer Games,” in *Screenplay: Cinema/Videogames/Interfaces*, eds. Geoff King and Tanya Krzywinska (New York: Wallflower Press, 2002), 104.

dimension is often seen as essentially opposed to that of gameplay.”⁴⁹ These “devices” serve to contextualize gameplay through a narrative structure and were generally opposed by ‘hardcore gamers’ as an unwelcome distraction from gameplay serving to attract new, less serious gamers. Writers like Eskelinen argued that narrative is an “imperialist” encroachment into game space,⁵⁰ while Steven Poole, despite writing about the convergence between cinema and games, dismissed cut scenes as “merely tinsel around the real gameplay.”⁵¹

Cut-scenes have always had cheerleaders, and Rune Klevjer’s approach in the 2002 essay “In Defense of Cutscenes” is especially insightful. He sees the cut-scene as exemplary of a “narrative of *pre-telling*, paving way for the mimetic event, making it part of a narrative act, which does not take place after, but *before* the event. The cut-scene casts its meanings forward, strengthening the diegetic, rhetorical dimension of the event to come.”⁵² This is one of the more elegant descriptions of the way cut-scenes can enhance interactive experiences that I have encountered, with Klevjer reinforcing other formulations that argue for narrative context as an element that enhances or intensifies player investment in game space.⁵³ But unlike cut scenes, the use of in-game devices as a general strategy is almost universally viewed as a positive (or, more accurately, not negative) application of narrative or cinematic style to game space. Narrative

⁴⁹ Geoff King and Tanya Krzywinska, *Tomb Raiders and Space Invaders: Videogame Forms and Contexts* (New York: I.B. Tauris, 2006), 44-5.

⁵⁰ Eskelinen, “The Gaming Situation.”

⁵¹ Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade Publishing, 2000), 78.

⁵² Rune Klevjer, “In Defense of Cutscenes,” in *Computer Games and Digital Cultures Conference Proceedings*, ed. Frans Mayra (Tampere: Tampere University Press, 2002), 200.

⁵³ It should be noted that Klevjer’s notion of “*pre-telling*” is also an apt description for the incorporation of short-form video at amusement parks such as Disneyland, as noted in Henry Jenkins, “Game Design as Narrative Architecture,” in *First Person: New Media as Story, Performance, and Game*, eds. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2004).

material is seamlessly integrated—examples include signs or notes that are scattered throughout game space (*Half-Life*, *Resident Evil* et al.), events such as non-player characters interacting with each other or the player’s avatar, and major events in game space occurring on-screen without rupture.

But while gamers, critics, and designers continue to argue about cut scenes, the (increasingly seamless) integration of cinema seems to have won the debate. As cinema arguably spent decades casting off the strong influence of theatrical style brought by practitioners of the stage who moved to cinema in the 1910s, as well as overcoming technological limitations on editing, sound, and visual effects that kept mainstream cinema from fulfilling its hyper-kinetic, rhythmic, temporally fluid destinies, one might have predicted in the early 2000s that cut scenes would become a thing of the past in favor of the immediacy of the interactive virtual world. But instead, while cinema both more deeply absorbed and experimented with its theatrical inheritances in the 1960s, video games in the last 10-15 years have embraced the nestling of cinema into the fabric of many important game genres. Cut scenes are treated more as a stylistic choice today, one that may frustrate certain gamers and critics but is nonetheless an accepted part of the stylistic toolkit. The flow-rupture oscillation of modern games, including the incorporation of cut scenes, is no longer widely controversial, perhaps for the simple reason that designers never stopped crafting cut scenes despite the increased sophistication of in-game events allowed by advancing technology. When *Metal Gear Solid* creator Hideo Kojima's latest opus *Death Stranding* was released in 2019, debate on its countless hours of cut scenes was not ontological, but rather qualitative: are the game’s cut scenes, which include performances from name actors Norman Reedus and Lea Seydoux, “good?” Cut scenes are massively significant in Kojima’s

games, and are now treated as simply part of his style. As one of the most famous ‘auteurs’ of the entire medium, Kojima has been significant in making video games a safe place for cinema.

The seamless integration of cinema is also seen in *genre*’s powerful effect on flow-rupture interactions, demonstrating how cinematic style in games is not only a matter of when the player is or is not in control, but also of how a game aesthetically navigates that border. Indeed, the codified aesthetics of cinematic genres is one example where cinema seamlessly saturates an entire video game. A particularly instructive example is *Red Dead Redemption*. This popular gamic concoction of narrative tropes from movie westerns feels markedly more cinematic than other Rockstar titles (like the *Grand Theft Auto* titles) due to the overpowering generic characteristics of western iconography. As genre theorists including Rick Altman, Steve Neale, and Thomas Schatz note, the western (along with the musical) is a rare example of a “stable” genre, one in which the visual iconography of place and setting are so powerful as to be instantaneously recognizable.⁵⁴ The right hats, some horses, and a particular type of American desert landscape immediately activates recognition and thus expectations of the genre. *Grand Theft Auto*, by contrast, is more generically promiscuous, and without a generic framework as strong as *Red Dead Redemption*’s near-constant audio-visual and narrative signifiers of the western genre, we feel less of the influence of cinema in *Grand Theft Auto*’s gameplay. But armed with the iconographic, transhistorical stability of the genre, and, critically, the unbreakable tie between the western genre and cinema, despite the genre’s presence in other media, *Red Dead Redemption* feels like a pure example of cinematic flow of a different sort, one in which cinematic influence is so omnipresent that even the banal hours of “fetch-questing” throughout

⁵⁴ See Rick Altman, *Film/Genre* (London: British Film Institute, 1999).

the game feel loaded with potential cinematic energy. This is despite the fact that *Red Dead Redemption*'s oscillation between rupture and gameplay is structured almost identically to that of the *Grand Theft Auto* games: frequent, often lengthy cut scenes, in addition to in-game exposition provided via conversations with non-player characters while the player travels via horse or car through the two games' open worlds. The example of *Red Dead Redemption*, while not a major case study in this text, points to why this dissertation is invested in genre throughout: the operations and extent of cinematic flow in games is heavily influenced by narrative genre and audio-visual signifiers that denote cinematic influence, just as in narrative film we see genre operating as an aesthetic infrastructure, creating important commonalities across different individual films (or games).

“Interactive Movies”

When discussing the feedback loop of cinematic style and the predetermination machine that is the video game, the following truism from Bernard Perron's essay “From Gamers to Players and Gameplayers: The Example of Interactive Movies” should be kept in the foreground; “Like the interactive narrative in general, the interactive movie is seen as an oxymoron. It is not possible to tell a story by putting the storytelling in the hands of the spectator.”⁵⁵ Nonetheless, a game like *Uncharted 2*, with its many sequences of dramatic exposition that mimic the cinematographic conventions of Hollywood genre movies, represents the field of canonical examples of games that *could* be casually described as “interactive movies.” But by definition, that description makes *Uncharted 2* a ‘movie with interactive elements,’ despite the fact that the

⁵⁵ Bernard Perron, “Stories for Eye, Ear, and Muscles: Video Games, Media, and Embodied Experiences,” in *The Video Game Theory Reader*, ed. Mark J.P. Wolf and Bernard Perron (New York: Routledge, 2003), 239.

vast majority of the game experience is user-enacted gameplay—the cut scenes, or predetermined narrative sequences, are still presented as ‘rewards’ for proper play. The designation “interactive movie” carries too many problematic connotations of user-controlled narrative. Branching-narrative games like *Heavy Rain* and *Life is Strange* (Square, 2015) are strongly authored and their player-enacted narrative divergences have far more in common with *Choose Your Own Adventure* stories than a utopian notion of user-created narrative. The sense of agency imparted by these games can be very powerful, however, and therein lies a significant element of what makes those games and others so singular as hybridized media experiences in their intermingling of cinema and play. (Nonetheless, it should be noted that this dissertation occasionally uses the term “interactive movie” in denoting a specific sub-genre: cut scene-heavy, branching-narrative titles like those listed above, which are often colloquially described as “interactive movie games.”)

The idea of games as interactive movies is principally a marketing concept, as major game companies deploy a bevy of related euphemisms in hawking “immersive” titles like *Uncharted 2*. However, Netflix’s experiments with interactive, branching-narrative programs such as *Black Mirror: Bandersnatch* (2018) and *The Unbreakable Kimmy Schmidt: Kimmy Vs. The Reverend!* (2020), and new iterations of 1990s-style FMV (full-motion-video, meaning live-action) *literal* interactive movies (such as Sony Interactive’s 2019 title *Erica*), are potentially predictive of the future popularity of live-action content with branching, user-choice-based narratives, but without avatar control that would make them “games” in the popular imagination.

Although this dissertation concludes with analysis of games from the late 2010s, the main chapters of this dissertation focus on earlier games, including some with far less obviously-

cinematic elements compared to the self-conscious movie-game hybrids I have just described. In Chapter 1, I use *Secret of Mana*—a game not traditionally thought of as “cinematic”—as a case study in how narrative information and emotional impact are delivered through historically cinematic tools, particularly the audio-visual interactions resulting from musical scoring. Then, Chapter 2 examines a more traditionally “cinematic” game—*Tomb Raider*—to demonstrate problems with a “medium specificity” approach to game experience, to further chart how moments in games are critically organized for sensorial impact using cine-real tools, and to demonstrate the evolutions in cinematic and gamic hybridization that blossomed in the 1990s. Chapter 3 then analyzes the evolution of “cinematic dynamism” from the late 1990s to the late 2000s, using games from the *Resident Evil*, *007*, and *Uncharted* franchises. The chapter argues that this was the period in which the medium most dramatically experimented with and eventually solidified the cine-real operations that still define today’s most celebrated mainstream, single-player, narrative-inclusive games. Ultimately, we see how the intersections of games and cinema increased in complexity, volume, and depth over time, even as certain avenues of hybridization were closed off if not entirely abandoned.

If the future sees an explosion in the popularity of live-action branching-narrative content, or another related “game form” that moves the medium toward an even more literal incarnation of “interactive movie” than ones available today, perhaps such transformation will engender radical change to the arguably solidified, if still wondrously productive cinema-games hybridization we see today, which has reached a plateau of innovation in the current era. For now, however, let me be clear that this “plateau” is a rich place of possibilities, and continues to produce beautiful, deeply rewarding, richly-narrated games. But by the mid-2000s, it became

clear how and in what ways single-player narrative video games would progress toward a more immersive and unified intermingling of cinematic flow and rupture. Today, the future is less certain, making today an exciting time.

Chapter 1

Music, Narration, Time: Organized Complexity in *Secret of Mana* and *Castle of Illusion*

16-Bit Cinema?

Video games have always told stories or have at least come wrapped with narrative context in the most capacious sense, such as the relationship between *Star Wars* and *Space Invaders* mentioned in the introduction. The narrative trappings that come with genre forms such as “space adventure” are definable as a form of storytelling, providing context that results in simple equations of narrative stakes; in *Space Invaders*, I (the player) am the hero who must save the galaxy, while the marauding hordes of pixels are the enemies that must be defeated to save said galaxy from a vague, evil threat.

In arguing that cinematic style is paramount to understanding the experience of playing a wide variety of popular video games—and particularly those that this dissertation calls *highly cinematic games*—one can turn immediately to recent, and obvious, examples such as *Detroit: Become Human* (Quantic Dream, 2018), *Until Dawn* (Supermassive, 2015), or other “interactive movie” games (as they are sometimes called) that have frequent sequences of character movement and exploration, while regularly incorporating cut scenes of widely varying lengths, in addition to semi-fixed camera positions in exploratory sequences that precisely restrict the visual information available to the player. Many cut scenes in such games are also interactive, in the form of what are known as quick-time events (QTE), during which icons for controller buttons or specific analog-stick movements appear and must be performed quickly for the scene

to advance in the manner most advantageous to the survival of the character.¹ QTE can also be deliberately ignored if players wish to see “bad” branching-narrative outcomes, or used to make deliberately villainous decisions, such as the common trope of time-limited on-screen prompts for violent actions that the player should ignore if endeavoring to play ‘morally.’²

QTE-based interactive movie games have actually been around since *Dragon’s Lair* (Cinematronics, 1983), a crudely interactive, laserdisc-based animated short film that uses a standard television or disc-player remote controller for simple QTE, which must be performed to advance the simple story of a heroic knight battling a dragon (**Fig 1.1**). But contemporary QTE-based games are more complex, fluidly moving between multiple playable characters, telling stories with branching narratives that divide and redirect due to the player’s dialogue choices, whether or not specific items or clues were discovered in exploratory sequences, and how ‘well’ the game is played during interactive QTE cut scenes.³ But in their extreme self-consciousness as cinematic mediations, these games show the viability of the “interactive movie” as a sub-genre in modern gaming, but demonstrate little about earlier, established fundamentals of the medium and how they utilized cinematic style in complex ways.

¹ As discussed in this dissertation’s introduction, these games are often colloquially referred to as “interactive movie” games because of their reliance on cut scenes and QTE. However, they are not “literal” interactive movies as in the case of *Erica*, *Dragon’s Lair*, or Netflix interactive programs, which are notably different in that character movement is *only* performed through QTE.

² This is typical of the aforementioned Quantic Dream games, as well as in the action-RPG *Mass Effect* trilogy (EA/Bioware, 2007-2012), which occasionally offers “renegade” QTE options that can be ignored. Activating renegade options invariably leads to the protagonist using violently persuasive methods in conversations.

³ As these modern iterations of QTE-based interactive-movie games move fluidly between different playable characters, so do the multi-protagonist network narrative films they sometimes resemble, such as *Nashville* (Robert Altman, 1975), the Altman-inspired *Magnolia* (Paul Thomas Anderson, 1999), *The Flowers of Shanghai* (Hou Hsiao-hsien, 1998), and *Amores Perros* (Alejandro G. Iñárritu, 2000). Focalizing around different characters in disconnected scenes, both game and film examples usually converge in a climax intertwining character fates. *The Flowers of Shanghai*, however, is unusual for a multi-protagonist film, in that instead of climaxing in a sequence both revealing and rupturing the network of characters, its ending emphasizes the depressingly cyclical nature of the network itself, through the preservation of transactional relationships between the film’s courtesans and their wealthy patrons, even as some of the female characters are relieved of their servitude.



Fig. 1.1: *Dragon's Lair* — The arrow on the right indicates that the “player” should press the right directional button on their laserdisc remote control (or arcade controller) to move the knight in that direction away from the falling debris.

This chapter argues that investigating these early, fundamental elements of the medium is necessary to understand the relationship between games and cinema. In video game studies, comparisons to cinema have been debated since the field's earliest notable work, often as a negative. But this debate has been, and largely remains, an argument about the utility of cut-scenes as they have been conventionally understood since the mid-1990s. In many essays, the notion of cinematic style in a game context has been either confined to the discussion of non-interactive sequences or openly hostile to cinematic influence, as demonstrated in this dissertation's introduction.⁴ What is missing from much of this debate, focused often on clearly-demarcated cut scenes 'interrupting' gameplay, is an analysis that wrestles with the strong, pervasive evidence of cinematic style seamlessly integrated within interactive portions of gameplay in games not usually labelled “cinematic.” Additionally, as a direct result of scholars'

⁴ For a brief historical overview of pre-2000s cut scenes, see Sacha A. Howells, “Watching a Game, Playing a Movie: When Movies Collide,” in *ScreenPlay: Cinema/Videogames/Interfaces* (London: Wallflower Press, 2002).

focus on cut scenes as the linchpin of what is cinematic in games, examples before the mid-1990s are virtually never discussed in this context, beyond the obvious early interactive-movie experiments such as *Dragon's Lair*.

The scholarly focus on cut scenes is due at least in part to the technological developments of the mid-1990s, when CD and DVD-based media for video games became dominant, and when data limits rose in orders of magnitude, enabling game creators to add lengthy animated cut scenes with high-fidelity sound. These lengthy cut scenes became common and, to some vocal players and scholars, intrusive and unwelcome, implying that prior to this technological shift, games were not as cinematic. I argue that this implication, while technically accurate, is misleading as a judgment of game history, since cinematic style is not only identifiable but crucial to the aesthetic success of many games preceding the CD era and, relatedly, is still crucial to games without cut scenes, including genres that are rarely analyzed via cinematic elements, such as the platformer. This argument depends on a different definition of what constitutes 'cinematic' than what is conventionally assumed in game studies, where the term is typically equated with passivity and thus used as a rhetorical stand-in for the qualitative cine-realism of cut scenes. I will instead demonstrate how "cinematic style" is best defined as a multi-faceted combination of audio-visual elements, and that sound design and music are essential to this mixture. It is a complex combination of elements activating cinematic style, and this transcends the passive-(inter)active binary that dominates comparative scholarly discussion of games and movies.

To showcase the analytical strength of this definition of cinematic style, this chapter will analyze a crucial early sequence in the Super Nintendo (SNES) game *Secret of Mana* (Square,

1993). This example will show how games of its era combined moving pixels, deceptively simple sound design and music, and text-heavy narrative context to engender emotional response in a way pointing towards games' future storytelling innovations, while also being complexly cinematic on their own terms despite what may now appear to be severe technological and thus aesthetic limitations. I argue that the "organized complexity"⁵ of cinematic style in *Secret of Mana* both delivers narrative and emotionally impacts players, thus providing motivation to continue play, and my particular focus is on the way musical scores deliver complex, pre-determined emotional affect meant to be legible to any player or viewer of a moving-image work. I conclude with a consideration of the much later *Castle of Illusion Starring Mickey Mouse* (Sega, 2013) to demonstrate both the evolution of the medium's cinematic toolkit, and how it has allowed games to playfully complexify their temporality in a cinematic fashion, ultimately showing that even games' interactive operations need not be organized strictly in the present tense. At stake is understanding that regardless of interactivity, video games have always been a time-based, audiovisual narrative artform. Before diving into the sonic analysis of *Secret of Mana*, I next address the bigger question of interactivity and its relation to cinematic style.

Interactivity: Flow and Rupture

As discussed in this dissertation's introduction under the rubric of a "flow" and "rupture" model of cinematic style in games, the active-passive divide in gameplay experience is often a more porous boundary than commonly believed. Game scholar Tanine Allison's essay "Losing Control: *Until Dawn* As Interactive Movie," effectively challenges this division via a subtle,

⁵ "Organized complexity," a physics concept, will be explained later as it is used in John D. Barrow, *Between Inner Space and Outer Space* (New York: Oxford U. Press, 1999).

engaging analysis of *Until Dawn*, demonstrating how the game’s oscillation between cut scenes and gameplay, and especially its branching-narrative, choice-based mechanic, “...self-reflexively creates a pleasurable tension between passivity and activity, thereby decentering action, and even interaction, from what is thought to make video games unique as a medium.”⁶ But as a recent example circulating within the field, Allison’s article reveals how scholars remain hung up on the apparent passive-active division in game experience, where the apparent passive aspect is still lazily equated with ‘cinema.’ Allison’s essay is a convincing corrective to this notion, and this chapter aims to expand upon it by arguing that the “decentering” of interaction as the defining trait of the medium’s specificity is in fact a phenomenon visible in games released far earlier, before cut scenes were either common or debated.

It is my position that what makes games frequently cinematic are organized combinations of audio-visual elements that are, of course, identifiable in cut scenes, but more importantly are powerfully and seamlessly present within interactive portions of games. This chapter’s two principal game studies—*Secret of Mana* and *Castle of Illusion*—do not “look” cinematic in the conventional sense that game scholars understand it, as the first is a top-down perspective 16-bit action-RPG (role-playing game) while the second is a side-scrolling, two-dimensional children’s platformer, and both contain an insignificantly small number of cut scenes. But both games, through the organized complexity of audio-visual elements, are brimming with cinematic style and hugely dependent upon those elements for their appeal as gameplay experiences. This chapter is heavily concerned with non-diegetic music as one of cinematic complexity’s most delicate and impactful elements, in both games and movies, the latter modeled by an analysis of

⁶ Tanine Allison, “Losing control: *Until Dawn* as interactive movie,” *New Review of Film and Television Studies* 18, no. 3 (2020): 276.

notable musical cues in the film *Nightcrawler* (Dan Gilroy, 2014). Mirroring the problem that scholars of film sound have complained about for decades—that cinema studies does not pay enough attention to sound—the effects and tools of sound design and music are de-emphasized in debates about what constitutes the “cinematic” in games. Broadly, my most ambitious goal is that this chapter effectively, if indirectly, argues my conviction that music and sound design in games *and* films are so significant to an audio-visual moving-image artwork’s aesthetic functions that small sonic changes are at least as important as the visual track, often more so, for a work to achieve peak aesthetic complexity.

Game scholarship often states, or implies, that “cinematic” is an inappropriate adjective for game experience, unable to shake off the notion that it is synonymous with passivity. Allison, in the aforementioned article—despite explicitly rejecting the passive-active divide defining foundational scholarship and even contemporary discourse on the game-cinema relationship, and even including the word “movie” in the article’s title—seems eager to distance her analysis of *Until Dawn* from the term “cinematic.” Discussing the game’s frequent cut scenes, she writes,

...the player’s loss of control is not necessarily ‘cinematic’; video games contain both ends of the spectrum between action and reaction, playing and watching. In this, one can read a broader argument that video games are not *solely* played for their interactivity and the freedom of choice given to players. Instead, there are fundamental, and often pleasurable, elements of video games that require waiting, watching, listening, anticipating, reacting, thinking, feeling, or interpreting that are as essential and as definitive to the medium of video games as those elements that are more directly interactive.⁷

As to her list of the requirements of many “fundamental” and “pleasurable” elements of game experience, my position is that Allison is describing elements that *are* “necessarily cinematic”; this list could also be the itemized mental operations performed by a TV or movie viewer. The

⁷ Allison, “Losing Control,” 280.

joy of the game medium lies in the “spectrum” she describes above, which is the beginning of an argument that video games have the potential to exceed certain aspects of cinematic experience. But ultimately, as I demonstrate in this chapter and the dissertation overall, this spectrum between playing and watching—the flow and rupture resulting from oscillation and deliberate play with one’s ‘control’ over a game’s unfolding—is an expansive, interactive audio-visual domain that rarely, if ever, functions without choreographed cinematic elements within the corpus of games that concern this dissertation.

Complexity Within Mimetic Limitations: *Secret of Mana*

The concept of cine-realism evokes all the diverse tools that films use to generate affect and invest viewers in narrative, and these tools can be found in common game genres as early as the 1970s and 80s. With the graphical improvements in the 1985 version of the largely text-based *The Oregon Trail* (MECC), we can already see these cinematic tools at work. With motion graphics sometimes in place of text (whereas earlier versions of the game were text-only), certain events became more impactful—having to *see* your oxen die of dysentery in a crude animation creates a more powerful emotional response akin to moving-image storytelling. Only a few years later, the era of 16-bit console gaming (e.g. the SNES and Sega Genesis TV-connected consoles) produced works that include precise moments of organic form: audio-visual synchronicity engendering emotional response while efficiently providing relevant story information, including sophisticated cut scenes such as the famously chilling opening sequence of *Super Metroid* (Nintendo, 1994). RPG players were accustomed to heavy doses of mostly text-based story information in the 8-bit progenitors to classics like *The Legend of Zelda: A Link to the Past*

(Nintendo, 1991) and *Final Fantasy IV* (Square, 1991), but it was in these later 16-bit games that sequences of choreographed cinematic form became common, where audio-visual elements work together to produce specific emotional and sensorial responses that are reproduced, or predestined, in *every* playthrough of the game (if the game is played with the intention of moving the plot forward).

The opening sequences of the action-RPG *Secret of Mana* are a stunning example of how cinematic audio-visual style could be crucial to the impact of games with text-based dialogue, simple sprite-based graphics, top-down perspectives, sound design severely limited by technological constraints, and few, if any, pre-rendered cut scenes with edited shots. The game opens with a minute-long, isometric-perspective cut scene set to darkly melodious electronic music based in what sounds like a synthetic bass guitar sample, with panning shots depicting a mechanical aerial warship (the Mana Fortress), a decimated forest (where a blue tint to the image signifies an apocalyptic war), a vertical pan from a blue sky to mountains speckled with green, and finally a dizzying, traveling aerial shot across a flat green world with streaks of blue representing rivers, ponds, and waterfalls.⁸ This shot is accompanied by a new sonic motif—a descending synthetic choral note that matches the vertiginous virtual camera. Between shots in the cut scene, text explains the *Lord of the Rings*-esque backstory: an ancient technological civilization harnessed the power of Mana (a mystical energy source) to create the “ultimate weapon,” the flying Mana Fortress. Its creation “angered the gods,” who sent beasts to destroy

⁸ It is notable that *Secret of Mana*'s opening cut scene unfolds using largely the same isometric perspective and graphics as throughout the game. It was seen as impressive in the 2000s when games began using the same graphical engines for cut scenes and gameplay, unlike in the mid-to-late 1990s when cut scenes were typically pre-rendered with higher resolution and detail, resembling animated short films visually disconnected from gameplay. In-game graphics utilized for cut scenes was actually common before the CD era. The period when *most* cut scenes were pre-rendered, or even live-action as in *Resident Evil* (Capcom, 1996), was a relatively brief phenomenon during the first generation of disc-based console systems, including the first Sony Playstation.

the fortress. A fierce war ensued, during which the power of Mana, which presumably keeps the world in a harmonious balance, nearly disappears. An unnamed hero, possessing the powerful Mana Sword, destroys the fortress, bringing peace to the ruined, now-pastoral world. Before the traveling landscape shot, the scene's final text reads: "But time flows like a river...and history repeats..." A familiar but intriguing narrative world is thus efficiently established; much like the prologue in the film *The Lord of the Rings: The Fellowship of the Ring* (Peter Jackson, 2001), released ten years later, the opening sequence implies that the power of Mana will re-surface and an epic adventure will result.

The game's main playable character, canonically known as Randi (the game allows you to enter your own character names) is quickly introduced. After the cut scene, three boys are shown beside a waterfall, talking of a secret treasure nearby and their need to avoid the village Elder, who has forbidden trespassing in the area. Randi slips and falls into the lake, and while navigating the area to find your way home, the screen flashes with light and the text "Randi... Randi" appears on-screen (all dialogue in the game is presented via text). Control of the character ceases at this moment, timed precisely by reaching a certain point in the game space. You soon reach a sword stuck in a stone, a convenient development since you need something to cut through vegetation blocking your exit from the area. When you are a certain distance from the sword, you lose control and again the screen flashes white, with the text "Randi...remove the sword..." appearing on screen. Randi removes it, the screen briefly flashes white once again, and afterwards the gray ghost of a knight sits atop the stone. Cryptically, the knight says, "Randi...it is I who asked...the sword..." before disappearing in another blaze of white light. Randi lifts the sword, and an ovular beam of energy with blue shooting sparks emanates from it and fills the

screen, which again goes white. The energy beam then reverts back towards Randi, resolving again into an ovular shape until it disappears. You now possess the Mana Sword.

Only minutes into the game, *Secret of Mana* is choreographing narrative elements at precise points when control of avatar movement is taken from the player. The only required player input during these segments are button-presses advancing on-screen dialogue text, which also provides an illusory sense of control. In effect, these are early examples of cut scenes retaining a cinematic flow within gameplay experience, using micro-ruptures in player control that are seamlessly integrated into playable space.

This oscillation continues after Randi retrieves the sword. You return to the village, fighting monsters along the path (here, the “monsters” are adorable bouncing yellow blobs with big, wet eyes, known as “rabites”) which Randi points out were not present until now. In the village, you encounter Randi’s friend Elliott, one of the boys from earlier. Panicked, he says monsters have returned to the land and quickly blames Randi upon seeing that he possesses the Mana Sword. Elliott attacks you, with the screen flashing white with each strike, until an earthquake shakes the screen and a giant hole appears in the ground. Both boys fall into a cave beneath the hole, where you must battle a giant crab-like monster to save Elliott. After vanquishing the monster, Randi returns to the village and speaks to the Knight Jema, who requests that you meet him at the nearby palace to learn more about the Mana sword. From Elliott’s attacks through the cave sequence, control of Randi is occasionally withheld for expository moments and dialogue text, again denoting prototypical instances of the cinematic rupture and in-game events characterizing much later games.

Randi is then called to the home of the village Elder, where the townsfolk conclude that Randi's removal of the Mana Sword has caused the arrival of the dangerous monstrosities, and that Randi must be banished. In this scene, the relationship between games and cinematic style is demonstrated in the sequence's precise, interlocking timing of musical cues, character blocking, and text dialogue. We see a remarkably effective usage of choreographed audio-visual synchronicity to communicate the heightened emotion of the situation. The scene's dialogue and character movement, with notes for important musical transitions, breaks down as follows. (Note again that Randi's movements described below are pre-programmed, in other words not controlled by the player.)

Randi begins at the bottom of the screen by the entrance, and above him are five other figures—the Elder and his wife, and three high-ranking villagers. The music at the beginning of the scene is carried over from the conversations with Jema, a cheerfully militaristic percussion-led march, appropriate here as a musical celebration of your defeat of the crab-monster. This piece, titled “Calm Before the Storm” on the game's soundtrack, is in a major key with six audible synthesized orchestral lines, including glockenspiel, strings, and an arpeggiated flute line, and thus the tune is close to reaching the maximum eight sampled channels of the SNES sound chip, a point I will return to soon. The scene's dialogue begins with:

Villager: Elder! We can't go on like this! **(Fig. 1.2)**

Villager: Yeah! There's no relief in sight.

Elder: ...Oh, Randi!

[Randi moves to the middle of the screen, closer to the speaking Elder.] **(Fig. 1.3)**

Elder: You've really done it to me this time! The reason why monsters have appeared is because you removed the sword.

Villager: It's settled. We can't let Randi stay in the village anymore! **(Fig. 1.4)**

[During the line above, the music fades out quickly, and there is silence over the following lines.]

Villager: If we do, more monsters will come after him!

Villagers: Go! [Randi takes a step back, away from the other figures.] (**Fig. 1.5**) Get out of here! [Randi takes another step back.] (**Fig 1.6**) Yeah, on your way now! [Randi takes a final step back.] (**Fig 1.7**)

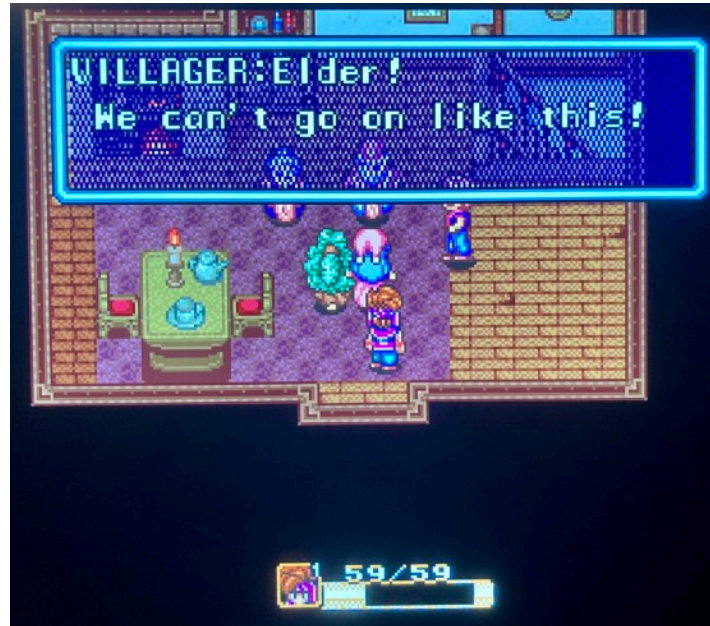


Fig. 1.2: *Secret of Mana*

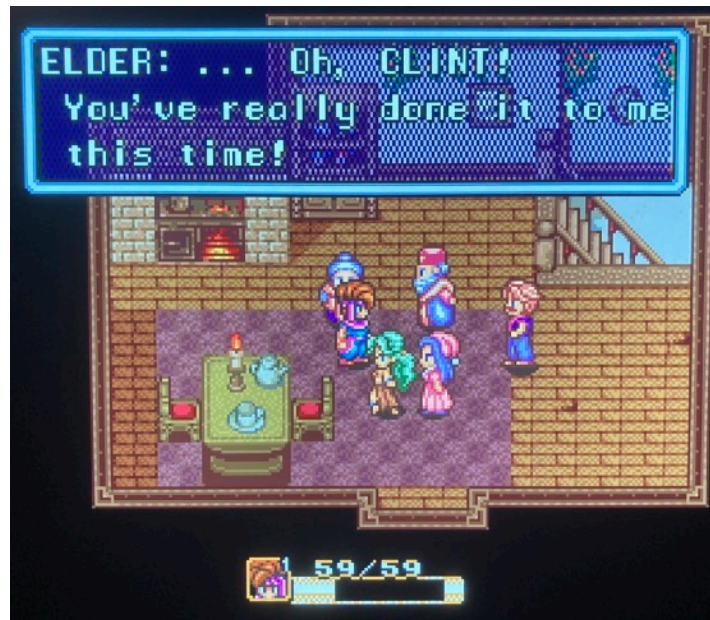


Fig. 1.3: *Secret of Mana*

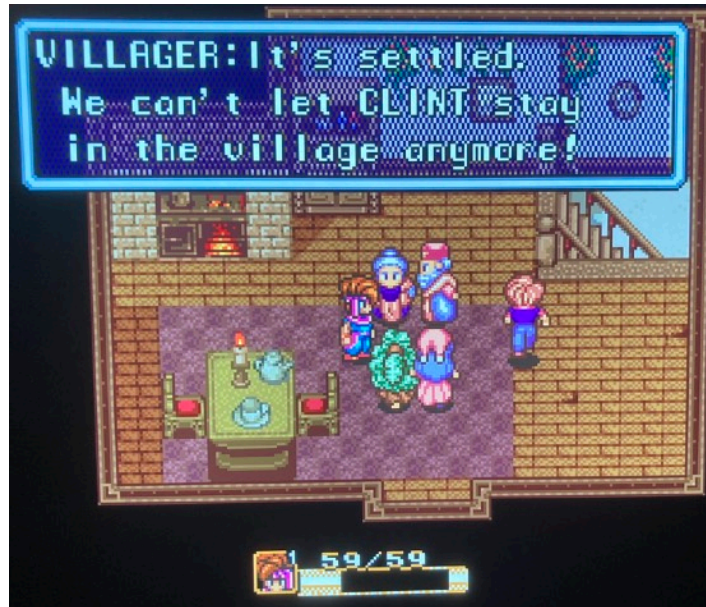


Fig. 1.4: *Secret of Mana*



Fig. 1.5: *Secret of Mana*



Fig. 1.6: *Secret of Mana*

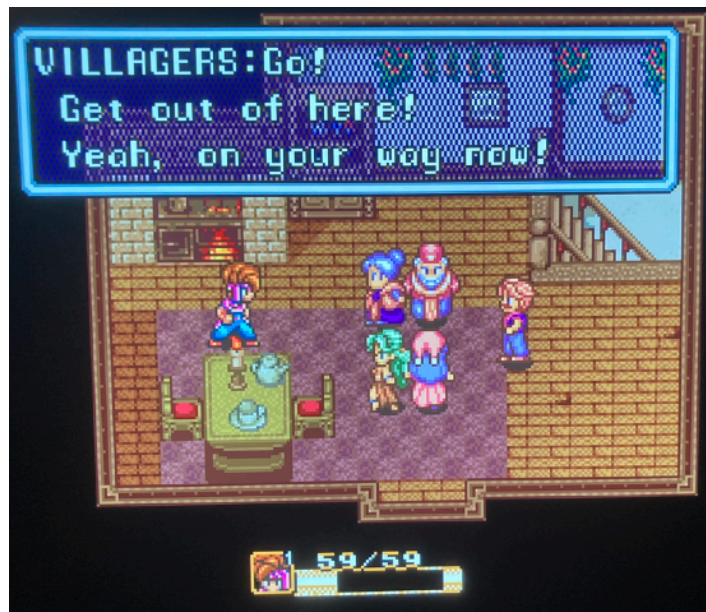


Fig. 1.7: *Secret of Mana*

After the few seconds of silence covering the villager's exclamations above, a new musical theme comes in simultaneously with the appearance of the Elder's dialogue below. The music is activated only when the player advances the dialogue with a button-press between "Yeah, on your way now!" and the Elder's final line: "I don't want to do this, but I have no choice. I'm going to have to ask you to leave the village. You can take what's in the treasure chest downstairs." This melancholic new track is very different from the previous march-like tune. Titled "A Wish," it is in a minor key, with no percussion and only two or three orchestral lines - flute, electric piano, and a subtle bass line. This user-activated musical change underscores the importance of the Elder's choice to exile Randi, and intertwines user input with audio cues defining the painful significance of the narrative.

Control of Randi is then returned to the player. If you continue as the game suggests via the Elder offering the contents of the "treasure chest downstairs," you then go down the stairs at the top-right of the frame to a basement room where the chest awaits with some money inside. The same mournful tune continues. When you return upstairs, all the characters have left except the Elder. If you speak to him, the following dialogue begins, in a sequence that again includes a musical transition:

Elder: I took you in and I raised you. But there's nothing I can do to help. Please forgive me. I know I've told you this before, but... **(Fig 1.8)**

At precisely the point that the Elder's dialogue moves from the line above to that below—signified as the beginning of a personal story—the music changes again, this time without a notable moment of silence, fading from the previous track to an equally downbeat but more dreamlike piece transforming the scene's affect from melancholic despondence to one of wistful

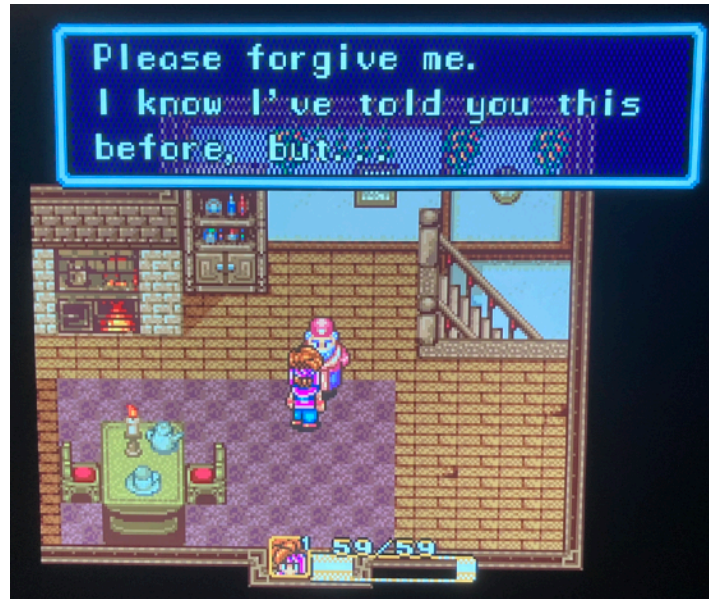


Fig. 1.8: *Secret of Mana*

regret. This new piece, “Spirit of the Night,” has only one discernible orchestral line (a two-handed electric piano melody), with gentle echo effects and possibly another subtle bass line as in the last piece.

Elder: Your mother brought you to this village when you were just a baby. Soon afterwards, she disappeared...I took you and have done my best to raise you. But now we must part. I truly hope you can find your mother someday. ... Good bye, Randi.

Randi is now expected to leave the village, but beforehand you can talk to villagers (all of whom are angry at you) and shop at village stores for items. The same music that began above during the one-on-one conversation with the Elder loops during your exploration, again prescribing the affect permeating the user’s actions. A villager blocks the exit at the map’s southeast corner and when you talk to him he asks if you are ready. If you are, he says, “You are hereby banished from Potos Village. Now, get out of here!”

The musical transitions described above change the affect of the scene in tandem with the dialogue, a deliberate aesthetic decision made to heighten the sequence’s emotional impact and

narrative stakes that surely required additional strain on the game console's processors. The first in-scene transition above is punctuated by seven seconds of silence, while the second transition (when talking to the Elder alone) is nearly instantaneous. Thus the instance of silence is a deliberate decision, meant to emphasize the villagers' screams of "Go!" and "Get out of here!", and draw attention to Randi's fearful steps backward away from their cries of opprobrium. This audio-visual correlation induces our perception of Randi's pain and guilt, marking the moment as significant with its silence and eventual transition to a new musical theme.

Critically, the three musical themes described above have a diminishing number of orchestral lines as the game moves from "Calm Before the Storm" to "A Wish." Thus the score changes from the suggestion of chamber-music instrumentation to a solo piano. As the music becomes simpler and more elemental, at least in the quantity of discernible instrumentation, the dialogue also becomes more personal for Randi as it moves from discussion of the monster attack to Randi's banishment to exposition about Randi's past and how it may affect his future. The sense of Randi being alone by the sequence's conclusion, lacking even a family, is figuratively enhanced by the musical movement from a busy march with multiple instruments to a subdued composition with only one prominent orchestral line. Though the player is supposedly selecting and choosing the actions here, the musical cues leave very little ambiguity in the emotional impact of the narrative's progression.

The combination of audiovisual elements in this sequence, and the Potos Village scene as a whole—interactions between *mise-en-scène*, music, and dialogue—is surprisingly powerful, despite their relative crudity compared to contemporary games. Design elements aid the scene's aesthetic magic, as the village, the Elder's home, and characters' costumes are composed of a

pleasant mixture of vivid primaries and warm browns, which when infused by the minor-key melodies conspire to paint the scene in a cozy, agrarian melancholy. As Randi, and the player, acutely feels what is lost by his actions, the music bathes the village setting in nostalgia for something the player has not actually yet experienced or witnessed—a normal, harmonious existence in this charming village—and thus the village's patina becomes infectiously lamentable. Appropriately, the player finds it difficult to leave the village to begin their quest when the scene is over. The proceeding game world becomes a land of regret for the player: the weight of responsibility for unbalancing the environment makes the entire quest a search to restore that pastoral equilibrium—to simply return to where you started. The villagers' rejection doesn't lose its devastating memory as the game continues, as the game has already demonstrated its ideal ending—to return back, to live once again in a seemingly uncomplicated, chirpy, brightly colored simplicity, like the early scenes in *Hobbiton* in the aforementioned *Fellowship of the Ring*. The music, in contrast to the lively warmth of the color scheme, causes this patina-fueled nostalgia for the game's pastoral beginning. The dreamy melodrama of the village scene's final tune—the most sentimental track thus far and one repeated throughout the game in other emotional scenes—evokes a feeling of the village as an idealized past, representing an innocence lost for Randi that he will desperately try to return to with greater knowledge of the delicate balance that must exist for its maintenance and survival.

This audio-visual synchronicity is intensely cinematic, perhaps as much so as more technically sophisticated recent examples, in that it is precisely designed to solicit specific, unambiguous emotional affect in the player and/or viewer. With this sequence, we see an early, technologically-constrained narrative game utilizing cinematic flow and rupture as much as

possible within the medium's 16-bit, late-1980s toolkit. With such limitations, musical scoring especially becomes a highly effective cinematic tool. The game's designers utilize the conditioned emotional responses available to them via music to evoke a cine-realistic narrative world.

This sophisticated use of music and dialogue to condition player affect challenges the notion of games from the 16-bit era as aesthetically crude or underdeveloped. Throughout this dissertation, I cannot help but use variants of the words "evolution" or "development" to describe certain innovations over time, but as *Secret of Mana* shows, later advancements that allow for more "realistic" mirrorings of cinema-like experiences in games—by which I mean cine-reality, or the intuitive sense of cinematic verisimilitude—cannot be simplistically harnessed for the teleological analysis that "evolution" may imply, lest the critic ignores these successful early attempts at pre-determining narrative-derived emotional affect through audio-visual means. While we see evolving practices and arguably 'improvement' in cinematic form in games, at any stage in the medium's history we find game designers utilizing the toolkits currently available to them and stretching them for cinematic purposes as much as possible.⁹ The same fundamental elements of cinematic flow and rupture in games are found in early examples: micro versions of in-game cut-scenes (where the player loses character control briefly, sometimes imperceptibly), precise timing of in-game events with music, and chiefly the feel of cinematic *time*. The latter, cinematic temporality, results from the combination of story, musical transitions, deliberate and unchangeable blocking and in-game events, and the inexorable

⁹ Here I am indirectly referring to art-historical debates around inherent problems with judging art of a certain period against much later work. Historical contingency's importance to art history is powerfully argued in Heinrich Wölfflin, *Principles of Art History: The Problem of the Development of Style in Later Art*, trans. M.D. Hottinger (Mineola, NY: Dover, 1950).

forward movement of music itself, which ever since the live musical accompaniments of film's silent era has been a principal aspect of providing emotional cues and marking the passage of cinematic time—or speeding it up, or slowing it down—in tandem with the image track and its own waxing and waning rhythms from editing and framing to special visual effects.

In other words, sound and vision can work together even under great technological restraints to produce profound cinematic affect—emotion or sensation resulting from the collision of audio-visual elements. Stephen Poole, in his 2000 book *Trigger Happy*, describes video games as “...superficially like films in one major respect, which is that they communicate to the player through eyes *and* ears.”¹⁰ My corrective would be that this “communication” is hardly superficial, considering that the addition of precisely timed, pre-recorded soundtracks to narrative films beginning in the late 1920s altered cinematic form more than any other major change in its history, whether technological or purely aesthetic (though the two nearly always intertwine in cinema, as in games). But regardless of one's assessment of the import of communication that happens between “eyes *and* ears,” it is inarguable that audio-visual choreography is a key element in how many moving-image works achieve organic form, in which sound and vision together harmonize to create sensorial and storytelling effects requiring individual elements to work effectively together, even if for ironic or dissonant purposes. The breakdown or ill-considered usage of a single audio-visual element can demolish the delicate balance of an organic or harmonious form, blunting the intended emotional or intellectual effect.

The balance on display in the scene of Randi's banishment, which harmonizes around the themes of regret, longing, and guilt, can be read as an artistic instantiation of the cosmological

¹⁰ Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade Publishing, 2000), 67.

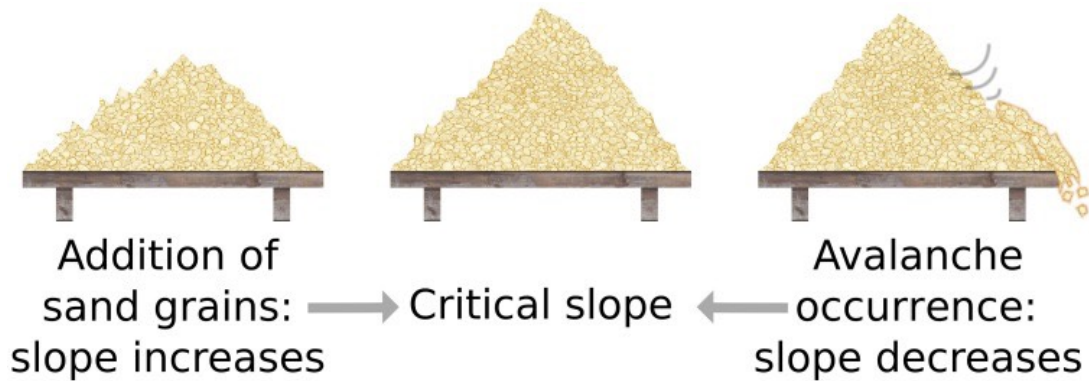


Fig. 1.9: The Sandpile Model

and physical concept of criticality, or ideal complexity, representing a critical state of aesthetic self-organization. This concept can help us understand why the aforementioned sequence operates as effectively as it does, in its aesthetically unified combination of audiovisual elements. As described by John D. Barrow in his pop-cosmology book *Between Inner Space and Outer Space*, criticality is often metaphorized as a pile of sand (or sugar) increasing in size with the steady addition of particles to the middle of the pile, as visualized in **Fig. 1.9**. As the pile increases in size, it becomes a mountain of sand with sloping sides. Grains are added, and micro-avalanches within the pile prevent it from collapsing entirely. Groups of sand particles within the pile represent sub-systems with their own individual criticality or critical point—the point at which they collapse into entropic chaos which can in turn cause collapse in other sub-systems or the disorganization of the entire pile. Thus, at peak or ideal complexity, or the “critical state of self-organization,” each sub-system of particles and the entire pile are at a critical state, or slope, representing the peak complexity of the system and its sub-systems before the addition of further particles can cause a massive avalanche disorganizing the entire pile. The state just before the “avalanche occurrence” on the right of **Fig. 1.9**, when particles begin falling off the table, is the

“critical slope” of peak complexity. Beyond this point, the system is in a state of chaos, or disorganized complexity.¹¹

In relating complex physical structures to the arts, Barrow finds music to be the simplest and most compelling example of “organized complexity” in an aesthetic system. He writes, “To my mind the creative arts, most notably music, offer wonderful examples of works of intricately organised complexity which are the results of a concatenation of mental events of unfathomable complexity.”¹² Music provides a fundamental starting point for this discussion because of its simplicity—a “one-dimensional pattern of sounds in time.” The “concatenation” above leads to results that, he writes, “...are at least as complex as the examples that we find occurring naturally.”¹³ In describing the commonalities between disparate musical traditions, Barrow notes that “special patterns” have been discovered that he suggests are “...the musical counterpart of the ‘critical’ slope of our pile of sugar. It is a musical sequence that, on average, contains patterns, what engineers call ‘correlations’, over intervals of time.”¹⁴ He elaborates:

This situation suggests that the musical compositions that we are attracted to may well be examples of a ‘critical’ state of self-organisation. Remember that such a state is characterized by its optimal sensitivity to small changes. Perhaps this is one of the things that we appreciate most about pieces of music. ... [They] possess an attractive type of unpredictability that spans intervals far longer than those of the individual notes, pauses, and movements which combine to create the whole. Variations at one place or another produce an overall impression. We like them if they help to maintain the overall organisation. Banal music lacks this sensitivity. It is invariant: dead.¹⁵

¹¹ Barrow, *Between Inner Space and Outer Space*, 110-113.

¹² *Ibid.*, 139.

¹³ *Ibid.*, 113.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

As an illustration, consider the effect of very subtle variations in a single musical composition, for example the song “4Bit” by Australian alternative-pop group #1 Dads, a whimpering ballad composed of a simple repeating piano melody accompanied by understated ambient distortions including a consistent underlay that may be processed strings but sounds more like a distorted vocal tone. The song has a thrice-repeated vocal chorus (consisting of repetitions of “Ooh, for a four bit love”), but the piano backing-melody never changes from the verse to the chorus. Thus its temporal progression as the lyrics move through the singer’s metaphorical dirge for his broken connection to the world is enhanced only by very small changes at key lyrical moments. At 2:48, a new verse begins with “tracing eyes with your eyes as you watch the news,” and just before this line a subtle shift occurs as the underlay of distorted strings slightly changes in timbre, becoming perceptibly more crisp and distinct in the right channel of two-channel stereo playback. Lyrically, this section is building towards the song’s most aggressive line, “and you can slide like the grease on a gun.”

Considering the song’s unchanging piano melody and heretofore consistent timbre, this shift has a great impact on the listener, providing a sudden quickening of the song’s melodic expression, connoting the violence of the climactic line set to arrive less than a second after this brief change in timbre. The song is elevated in this moment, buoyed by the slight increase in volume and lessening of distortion, imparting the listener with a sense of hope that the singer, and by extension himself, can eventually break through this protracted lament if enough energy is supplied. It is a fleeting hope, and the song abandons the possibility of a robust movement away from the song’s repetitive tone. But this desertion is thematically consistent with the song’s lyrics, which describe the singer’s inability to continue faking his enthusiasm for life and love.

Indeed, as the piano melody continues in an indefinite state of repetition, the final lyric is “and on and on we go.” We thus see how subtle variations in timbre can have significant impact, morphing our impression of a piece in ways that may be barely perceptible even as the emotional impact is felt: this is achieved through the critical organization of subtle changes at precise lyrical moments.

Barrow’s thoughts on the critical self-organization of music can be broadened to larger aesthetic systems that *include* music as a crucial element in their overall complexity, including of course video games and movies. Despite the aforementioned technological constraints on video game hardware at the time of *Secret of Mana*, the scene of Randi’s banishment achieves criticality by its precise timing of music, non-interactive visual movements, and the player-controlled dialogue box. These elements comprise most of the predetermined aesthetic movements that can be coordinated to produce a narrative-driven emotional effect in a game on the SNES or a contemporaneous console, particularly when we consider that this sequence is on the border between “cut scene” and a playable sequence. The game never shifts to a new visual orientation in the scene (meaning the game is still using “in-game graphics” as opposed to a pre-rendered cut scene), thus when the ability to move Randi returns after the Elder mentions the treasure in the basement, there is no “cut.”

As in much later games like the *Uncharted* series, scenes like this using in-game graphics and visual orientation for brief ‘unplayable’ sequences reside in a foggy, immersive space between passive viewing and its predetermined production of affect, and the feeling that you are, in fact, playing the game. In *Secret of Mana*, this partially results from the player needing to press a button to continue the scroll of dialogue, thus maintaining a tenuous but significant

contact between player and the advancement of predestined narrative, while in the *Uncharted* series (and countless modern examples) the illusion of interactivity usually results from the loss of character movement being both vanishingly brief and typically occurring within chaotic action sequences, timed with specific events in the environment. But their fundamentals are the same, and Randi's banishment achieves criticality in its pushing of the game system's capabilities, and the creative choices made to utilize the audio-visual toolkit at hand for cinematic affect. If the music in the scene had not changed—for example, if the upbeat march tune signifying your victory over the crab-monster continued to play under the scene of villagers screaming for Randi to leave, and later for the Elder's exposition about the tragedy of Randi's mother's mysterious disappearance—the emotional punch of the scene would be drastically diminished if not entirely dulled. We see this lack of care for audio-visual correspondence in countless moments in games of all eras, where important, high-stakes narrative information is provided through spoken or text dialogue without corresponding variation in audio-visual strategy, resulting in disorganized aesthetic complexity—multiple elements that do not harmonize. (This will be addressed later in a discussion of an aesthetically disorganized sequence from Quantic Dream's 2010 title *Heavy Rain*.) Technology, available resources, and time constraints can account for this, but like in cinema, it can also often be explained by creative laziness. Reaching for critical states of self-organization, where the disparate elements of complexly organized piles of sand within a larger pile interact to support the whole of a complex sequence or entire work, is what creates memorable and affective games and movies, or at least the most sensuous, challenging, and emotional parts of them.

The music in *Secret of Mana*, importantly, was also itself composed within severe limitations as compared to music written to be performed or recorded using traditional instruments. The SNES sound chip cannot handle anything approaching complex orchestral instrumentation or fidelity to an individual instrument's range of tonality.¹⁶ The maximum amount of total data on an SNES software cartridge does not even come close to approximating the data that could be recorded on a 1980s-era Compact Disc (CD). And with sound only a small component of the data a game like *Secret of Mana* requires, not much was left for music. Around five seconds of a sustained horn sound recorded at the fidelity of a CD would require more memory than an SNES game cartridge's entire sound data allocation, and thus the music is composed and arranged using brief *samples* of orchestral tones, requiring comparatively tiny amounts of data. While the contemporaneous Sega Genesis console had its own on-board (but severely limited) synthesizer unlike the SNES, the SNES was instead capable of using high-quality sampled tones for musical composition, thus allowing for synthetic orchestral timbres from flutes, woodwinds, horns, and percussion instruments in addition to a rudimentary effects processor for echo effects and simulated reverb. These orchestral samples were merely microseconds of recorded tones that are then heavily processed to compose actual songs (such as, for example, the catchy theme tune of Nintendo's flagship 1991 title *Super Mario World*). For example, to create a horn line, the composer would use a microsecond-long horn sample. This sample was then looped over and over with the pitch adjusted by playing the loops faster or slower. Thus different notes in a desired horn line did not have to be additionally sampled: the

¹⁶ It should be noted, however, that when the SNES was first released, its audio capabilities were not seen as "limited" by game music composers. On the contrary, they were a significant leap forward from earlier systems. *Super Mario World* (Nintendo, 1991) composer Koji Kondo discusses this at length in "Koji Kondo — 2001 Composer Interview," *shmuplations* (2001). <https://shmuplations.com/kojikondo/>

same sample was used, but the playback speed of the sample created changes in pitch. As a result, a song could be created with a mere byte of data. While the limited memory for different samples severely lessened the articulation and dynamism of the resulting orchestral timbres, the ability to sample instrumental sounds and other noises gave music on the SNES the capability for warm, earthy sonic tones necessary for the emotional effects intended in the *Secret of Mana* scene described above. The on-board synthesizer of the Sega Genesis, by contrast, could manipulate sine waves at different frequencies and multiply them by one another, allowing for greater musical complexity and more individual lines of musical noise than the SNES could offer (the beloved techno-influenced score for Sega's 1992 title *Streets of Rage 2* is an excellent example), but without the ability to sample instrumentation at all, most scores on the Genesis had an unpleasantly metallic timbre.¹⁷

But, as in any art form, restrictions like these can lead to innovation, as Poole notes in a discussion of sound experimentation in games such as the enormously-popular arcade space shooter *Defender* (Williams, 1981). With the game's crude sound chip being so limited relative to musical recordings of the time, it required "abstract experimentation," ultimately resulting in "particularly avant-garde sound design for its time, with its near sub-bass rumblings and eldritch alien buzzings offset by the heroic, almost melodic sound of your ship's weapon fending off the vicious hordes."¹⁸ Poole argues that this lent game music of the 1980s a certain distinction:

...in the far-off days of the Commodore 64 and Amiga, videogame music was far more distinct as a stylistic genre than it is now. The composers generally had to

¹⁷ For an example of the samples used to create full compositions in SNES games, see this video of sampling in *Super Star Wars* (LucasArts, 1992), which provides the completed *Star Wars* theme music as used in the game, followed by all the samples used to create it: https://www.youtube.com/watch?app=desktop&v=15PxnN0ntsc&feature=emb_logo

¹⁸ Poole, *Trigger Happy*, 67.

wrestle with programming language to force the most sophisticated sound possible out of woefully underpowered audio chips, and these strictures resulted in a flood of remarkably inventive videogame music. If polyphony — the number of notes it is possible to play at the same time — was restricted to, say, four notes, the musician might write a piece characterized by deliciously floaty buzzing arpeggios.¹⁹

This is an apt description of, for example, one of the most recognizable game themes of the 1980s, and of all time: the opening musical theme of *Final Fantasy* (Square, 1987) and re-recorded versions of its principal melody for the game’s innumerable sequels and spin-offs. It is a warm, pleasant repeating arpeggio that is nothing if not “floaty” and “buzzing.” Poole is right to note the distinctiveness of this era of game music, as its best compositions demonstrate the critical self-organization of all memorable music, despite technological constraints that would seem absurdly limiting to composers even hundreds of years earlier.

Randi’s banishment in *Secret of Mana* achieves a critical slope of organization in large part due to how the music, despite substantial compositional restraints, elegantly produces the intended emotional effect on the viewer. But in a video game or film, music must have a critical relationship to other elements to achieve this. In *Secret of Mana*, the precision of transitions between audio-visual tools as described earlier is as important to the sequence’s criticality as the music itself, as dreamy and memorable as it is.

If this dissertation was an attempt at a data-driven or mathematical analysis, which admittedly is likely impossible due to the dizzying amount of intangibles present in the subjective analysis of what would constitute a ‘critical’ state of self-organization in a game or film, I would set out to prove that sequences like our *Secret of Mana* example are attributable to

¹⁹ Ibid., 69.

the same ideas that led physicists and engineers to codify what is known as “ $1/f^a$ noise.” When $a=0$, “white noise” occurs: sound that is random and unpredictable. It lacks patterns that hold our attention and is thus easy to ignore. “Brown noise” occurs when $a=2$, such as a smoke alarm—repetitive and always fulfilling our expectation of how the noise will continue. Brown noise’s “high degree of correlation” makes it unappealing.²⁰ But when $a=1$, known simply as $1/f$ noise,

...[the] signals are moderately correlated, and hence possess ‘interesting’ patterns over all time intervals. They combine novelty with expectation in an optimal way. In 1975, Richard Voss and John Clarke, two physicists at the University of California at Berkeley, serendipitously discovered that many classical and modern musical compositions are closely approximated by $1/f$ noise over a very wide range of frequencies. Appealing music exhibits an optimal level of novelty at the spectral level: neither too predictable like brown noise, nor randomly unpredictable like white noise.²¹

Applying an equation meant for a “one-dimensional pattern of sounds in time” (a musical composition being an entity that can be transcribed as precise mathematical notations) to a larger system like a film or game sequence may be an impossibility. How does one assign a mathematical value, as one can in musical notation, to the way a narrative effect or sensation is produced as a result of a concatenation of audio-visual elements? This could, of course, occur only *after* relevant scholars in this scenario agreed on what said concatenation is actually made up of, and how each element is weighed.

The essence of the Humanities is the combination of persuasion and reason, not scientific infallibility, even as structuralist movements attempted to reach the latter.²² This is not a deficit

²⁰ Barrow, *Between Inner Space and Outer Space*, 149.

²¹ *Ibid.*, 150. (Also, Barrow notes that all music sent with the 1977 Voyager spacecraft has a $1/f$ spectrum. I would argue this represents a problematic anthropomorphization of our hypothetical sentient galactic neighbors, who may consider the sound of our fire alarms to be most relaxing.)

²² For a canonical example of structuralist film theory, see Christian Metz, *Psychoanalysis and Cinema: The Imaginary Signifier* (London: MacMillan, 1982).

of the field, but rather the only sensible approach to our objects of study when faced with the unfathomable complexity of so much art, and the simple but entirely intractable problem that the meaning of a work is rarely constant across the spectrum of those who encounter it. But we do know that certain works of game or film art are more effective than others, and an analogy to $1/f$ noise is productive in how it mirrors the organic form apparent in a work achieving critical organization.

What strikes me as powerful about this comparison is how much it accords with the seminal work of film *genre* theorists—such as Rick Altman’s book *Film/Genre*—as a metaphor for an even larger system, that of groups of films united by particular traits. The descriptions of music on the $1/f$ spectrum as “moderately correlated” and “[combining] novelty with expectation in an optimal way” sound as though they could be lifted directly from Altman discussing the peculiar alchemy of genre.²³ For Altman, patterns and balances of various audio-visual rhythms can explain why films (or games) appealing to genre-based tropes are ultimately successful or not, for audiences or critics.

Disorganized Predestination Machines

What we can see, therefore, is that games, like cinema, rely on creating a satisfying experience for their audience (in this case, the player) by fulfilling our aesthetic and/or narrative expectations in a predictable way. In other words, by providing harmonious, unified wholes. For the composition and placement of music in the aesthetic system of a game or film to be fertile and dynamic, it must harmonize with other rhythmic visual elements (editing and

²³ Rick Altman, *Film/Genre* (London: BFI, 1999). Also see Steve Neale, *Genre and Hollywood* (New York: Routledge, 2000) and Thomas Schatz, *Hollywood Genres* (New York: McGraw-Hill, 1981).

cinematography in their wondrous melodies), and perhaps especially thematic and narrative components. This harmony is not, I contend, medium-specific: it occurs in *Secret of Mana* just as it does in, say, the last two minutes of the film *Shakespeare in Love* (John Madden, 1998), where an array of audio-visual tools and voice-over narration synthesize magnificently in a hazy, contemplative meditation of the film's intersecting conflicts and romantic themes. Or, for a more abstract example, consider the frenetic opening credits montage of Ingmar Bergman's film *Persona* (1966) in its aggressive preview of the nightmare of selfhood to come. In those examples, music is integral to their critical state of organized complexity, but the point is made more cogent when analyzing examples that show 'the pile of sand falling off the table,' so to speak, as musical decisions made in designing a narrative moving-image sequence's audio-visual patterns can, and often, result in *disorganized* complexity.

Like our previous examples of aesthetics creating a sense of organized harmony, this aesthetic disorganization is not tied to any specific medium. I will demonstrate this by comparing two examples of disorganized complexity across media: one from the game *Heavy Rain* and one from the film *Nightcrawler*. In both cases, an inappropriate melding of music and thematic intent demonstrate this collapse of critical self-organization. *Heavy Rain* and *Nightcrawler* show how delicate aesthetic unity and critical organization can be in both video games and films—falling apart with seemingly slight variations—and importantly demonstrate how the collapse (or flourishing) of organization through musical choices happens in very similar ways when comparing the two media.

In the branching-narrative thriller game *Heavy Rain*, a late flashback scene reveals a tragedy in the childhood of the game's primary villain. On a stormy day, the two young brothers

Scott and John Sheppard are thrown out of the trailer home they share with their abusive father near an unfinished construction site. Despite the pounding rain, the boys decide to pass the time playing amidst the dangerous hollowed-out buildings and various structures around the site, turning the gloomy environment into a repurposed playground. As the boys' activities become more daring—jumping across chasms, using a steel support structure like monkey bars—non-diegetic music is added to the scene. But the music is nervously agitated and suspenseful, with minor-key notes from droning strings and little melody. A banal composition, it could easily be used as underscore for any number of suspenseful sequences in action or mystery movies, signifying a coming climax of danger or violence, supplying a sonic dread that signals the coming tragedy: Scott eventually falls into a drainage pipe surging with rainwater, where he drowns while John pleads for help from his drunk, comically cruel father who says Scott's death would mean "one less greedy mouth to feed." The foreshadowing engendered by the music is painfully obvious, essentially broadcasting to the player that a terrible fate will soon befall one of the kids.

The sense of the children literally *playing*, transforming the unwelcoming construction site into a joyous playground to escape their woes in a way only children can, is muted as the game bluntly signals the coming tragedy, a hackneyed form of musically-engendered dramatic irony that betrays the scene you are actively playing, where two children have a fun time horsing around to distract themselves from suffering their father's abuse. Clearly, the music is meant to provide tension, but this late in the game, when the player is keenly aware that terrible things can and will happen in this narrative world, the music's strong foreshadowing of tragedy dulls the intended suspense. No sense of playfulness is imparted by the music, and thus the experience of

the scene is dominated by the feeling that something awful is about to happen, instead of enjoying the ‘playground.’ *Heavy Rain* has a very dark story (and accompanying audio-visual palette), and its branching narrative can conclude with one of game history’s bleakest endings depending on player choice, exploratory thoroughness, and precision in QTE sequences; if the player is especially sloppy, the main character Ethan will be framed for the child murders that drive the plot, and the killer will remain at large.

But the game's power in individual sequences comes not from broadcasting forthcoming dread through dramatic irony (musical or otherwise), but rather from a focalization around the immediate emotional experiences of playable characters. With its heavy use of QTE sequences requiring rapt attention to cut scenes in case they abruptly become interactive, *Heavy Rain* works hard to keep its player in the present, tightly focused on the emotional state of the current player-character in the diegesis, and any stimuli that could affect their safety. When suspenseful music is used in other sequences, it links to the current playable character’s state of anxious arousal. In using music to foreshadow a coming tragedy instead of sonically interacting with the boys’ actions more harmoniously, which would suggest the use of a buoyant or joyful piece of music, the sequence betrays the game’s typical aesthetic organization, leading to an affectively homogeneous sequence lacking transitional movements mirroring the player’s actions, which would be in line with how the game successfully operates in most scenes.

This example demonstrates a relatively straightforward example of how aesthetic disorganization can “break” the immersive impact of a game. This is related to David Bordwell and Kristin Thompson’s concept of “aesthetic unity” in films, the notion that certain media operate within overlapping audiovisual stylistics that parallel each other in the delicacy of their

endeavors to achieve organized complexity.”²⁴ The key here is the concept of *organization*: the idea that all of the elements within a media object have been combined in a consistent, harmonious whole. The example from *Heavy Rain* offers a straightforward example of disorganization, in which the tonal mismatch between the images and the music is at odds with the organizational strategy seen elsewhere in the game. But it should not be understood that the mismatch itself is the result of the disorganization. It is possible for a seeming unity between narrative content and music to be disorganized *if* the overall organization favors ironic disparity between those elements.

We can see an example of this latter kind of disorganization in the thriller film *Nightcrawler*, which chronicles the career of Lou Bloom (Jake Gyllenhaal), a sociopathic tabloid videographer in Los Angeles as he immorally angles for success at beating law enforcement to crime scenes, raising his profile at the sleazy late-night news program that purchases his material. Though punctuated with dark humor, the film displays a grimly cynical seriousness of dramatic purpose, accomplished largely by focalization on a lead character who is utterly unrelatable and by self-consciously avoiding action-movie and suspense tropes in its screenplay, which does not treat Lou as a heroic figure.²⁵ The film’s settings—grimy late-night streets, gory car accidents, the TV station’s dim sterility, or Lou’s generically sparse, vaguely creepy apartment—reinforce the screenplay’s approach, and the film’s critical organization around its

²⁴ David Bordwell, Kristin Thompson, and Jeff Smith, *Film Art: An Introduction*, 12th Edition (New York: McGraw-Hill, 2020).

²⁵ *Nightcrawler* is highly reminiscent of *Taxi Driver* (Martin Scorsese, 1976), with the desperate loneliness and social estrangement of Travis Bickle (Robert de Niro) substituted for Lou Bloom’s (Jake Gyllenhaal) chilling at-all-costs careerism and horrifying lack of empathy.

themes approaches peak complexity when the score achieves thematic correspondence (either harmonically or contrapuntally) in concert with other audio-visual elements.²⁶

However, James Newton Howard's score is unstable in its thematic organization. It is sometimes wildly successful, adding an aggressively ironic sonic layer that bolsters the protagonist's lunatic immorality, but when the score resorts to conventional musical tropes of the action or thriller genre, thus attempting to sonically unify with the on-screen 'action' directly, the film paradoxically loses its critical organization in temporarily becoming a conventional thriller instead of the brutal, ironic, intermittently shocking, action-packed social drama that it is. In other words, since the film score's main organizational principle is the ironic *mismatch* between its music and its narrative content, it is precisely the superficial "unity" and seeming "organization" of a conventional relationship between music and narrative content that disrupt the film's *actual* organization, which is based instead on cynical counterpoint in the music: an inversion of *Secret of Mana*'s relationship between narrative and music, seemingly without unity, but no less deliberate and organized.

As an example of the ironic organization that primarily fuels *Nightcrawler*'s bracing cynicism, we can consider its primary musical theme, an uplifting guitar melody that sounds deliberately patriotic, a piece that would fit well against a slow-motion shot of American soldiers in Michael Bay's film *Pearl Harbor* (2001). When we hear it during the film's opening minutes, this cue falsely signals that the coming narrative is a triumphant American tale, and sets up the viewer for what will soon be apparent—that *Nightcrawler* is about the cruelty of American

²⁶ In its cheerful tidiness, Louis's apartment resembles a middle-class version of Patrick Bateman's insipid luxury domicile in *American Psycho* (Mary Harron, 2000), and the Ikea-catalogue apartment in *Fight Club* (David Fincher, 1999), rather than the samurai-like nobility of ascetic homes in other "male loner"-focalized thrillers such as *Drive* (Nicolas Winding Regn, 2011). The latter category tends to portray the male lead as heroic, or at least "cool."

striving—an ironic juxtaposition that becomes extremely clear directly after the brief opening montage, which shows Lou beating and possibly killing a security guard who catches him stealing scrap metal. The brief promise of a heroic narrative is pulverized. The theme music next returns around 32 minutes into the film, not long after a scene in which Lou's boss Nina, a TV news producer, describes her program thusly: “The best and clearest way that I can phrase it to you, Lou, to capture the spirit of what we air, is think of our newscast as a screaming woman, running down the street with her throat cut.” Around 32:00, Lou manages to enter the unguarded home of break-in victims while the police interview the family outside—an extremely rare opportunity. When the film’s opening musical theme becomes audible as Lou takes shots of the ransacked home, the irony of its patriotic, triumphant timbre crystallizes in this reprise. It could be argued that the music is subjectively aligned with Lou’s perspective (this is a triumph *for him*, after all), but the film’s organization has already made clear that we are not seeing the world through Lou’s eyes. This is apparent both from the opening montage—Lou is not on-screen—and the film’s cinematography, which does not utilize subjective shots from Lou’s perspective beyond occasionally showing his footage, instead slinking around spaces in a way suggesting critical distanciation, not an empathetic alignment with Lou. When he invades the privacy of the home, the uplifting theme underscoring Lou’s ‘victory’ is harnessed to make the viewer feel queasy, by forcing a subjective alignment with the character that we have not been prepared for, and are unlikely to find emotionally satisfying.

In between these successful instances of the music’s ironic counterpoint, Newton Howard employs conventional action-movie musical tropes, that, precisely *because* they are conventional, feel disharmonious and “disorganized” within the film’s overall aesthetic structure.

A particularly glaring example of this occurs at 28:00, in Lou's first police chase after hiring Rick as his barely-compensated assistant. The music here utilizes a derivative Hollywood thriller trope of an exoticized drumline, denoting "action" and "speed" and often an "exotic" setting.²⁷ In *Nightcrawler*, the trope is yawningly literal: out of place with the film's audio-visual form. The film has already revealed itself as critically distanced (especially through music), and thus by denotatively linking the music with the 'thrill' of Lou and Rick's race against the police, *Nightcrawler*'s aesthetically complex organization via ironic audio-visual commentary collapses; briefly, it becomes an inappropriately heroic action movie. What superficially appears to be "unity" has, in fact, ruptured the carefully-managed musical ironies found throughout the rest of the film.

These examples of disorganized musical strategies in *Heavy Rain* and *Nightcrawler* should serve to demonstrate that the process of peak aesthetic organization is additive or subtractive in nature, resting on a fragile balance of formal elements that recalls the carefully pre-determined placement of musical cues in *Secret of Mana*. Importantly, this organized complexity-based approach to understanding the aesthetic unity or disunity in moving-image media reveals how nascent examples within a medium—such as *Secret of Mana*, an example from the game medium's relative infancy—can achieve complex narrative effects with efficient usage of the cinematic audiovisual toolkit even under technological limitations. Constraints breed innovation in such cases, and despite the availability of lifelike animation, CD-quality sound, and processing power that would make a 1990s game console blush, the aesthetic

²⁷ This trope works reasonably well in John Williams's score for *Jurassic Park* (Steven Spielberg, 1993) considering its theme and settings, or in James Horner's scoring of the Columbian jungle infiltration sequences in *Clear and Present Danger* (Philip Noyce, 1994), which utilizes sharp, breathy flute lines. In these examples, the musical literalization of in-sequence suspense is appropriate to those movies' aesthetic structures.

complexity of a game like *Heavy Rain* can easily become disorganized due to creative decisions. While it would not be accurate to claim that technology itself *creates* this disorganization, it allows for an increased number of creative choices that can, when made indiscriminately, lessen the overall aesthetic unity of the finished game.

Nonetheless, the seismic development of cinematic style within the sub-system complexities of video games over time—an evolution that saw games move closer and closer to cinema both superficially and in their deep audiovisual structures—deserves significant attention, corresponding with technological leaps and the industrial need for the medium to retain its appeal to the burgeoning, aging masses of children and teenagers who dominated the consumer market in the 1980s and 90s. In other words, despite the cinematic complexity of some early games, it is later on in the life of the medium that we see the median mainstream video game, at least in certain genres (action-adventure, action-RPG, horror, walking simulator, and narrative-heavy “mysteries” especially) move ever closer to the foggy idea of what can be called interactive cinema, even as many game critics, players, and often designers continue to resist such an identification, often out of a defense of the medium’s supposed purifying specificity that, some argue, comes chiefly with interactivity.²⁸ As seen in the next section and later chapters, many game genres have evolved along a trajectory of increased reliance on the cinematic toolkit and its accompanying narrative dimensions, against the hopes of those promoting the medium’s future as one free of heavy cinematic influence. As the thirty-plus years of game history since *Secret of Mana* has shown, the aesthetic organization of countless popular video games has been cinematic in nature.

²⁸ An oft-cited and admittedly compelling version of this argument can be found in Markku Eskelinen, “The Gaming Situation” in *Game Studies* 1, no. 1 (July 2001). <<http://www.gamestudies.org/0101/eskelinen/>>

The Evolution of the Cinematic Toolkit: *Castle of Illusion*

Over a relatively short period of time, the tools available to game creators expanded greatly for the ‘realism’ of graphics and sound, the expansiveness and traversability of game space, and the accommodation of cinematic style, so much so that by the early 2000s, games like *Secret of Mana* were widely considered to be ‘retro.’ Turning to the 2013 “2.5D”²⁹ platformer *Castle of Illusion Starring Mickey Mouse* (a remake of a 1990 Sega Genesis game of the same name), we can see these advancements with startling clarity. This evolution is generally one of timed in-game events becoming increasingly frequent, rather than only at specific points of emotional impact as in *Secret of Mana*. “Cuts” between interactive segments and those lacking player control inch closer toward being seamless, at least when designers intend for this to be the case, as traditionally demarcated cut scenes are still common in the game. Yet as this chapter has shown, cinematic tools have been seamlessly incorporated into game design since long before cut scenes achieved greater flow within gameplay. Greater memory storage and expanded processor operations allow more of interactive space to be infused with potential cinematic and narrative energy, pervasively so—as in the case of *Castle of Illusion*—if pursued by designers as an aesthetically unified approach to a game.

Turning here to a modern platformer after *Secret of Mana* instead of a modern RPG or action-RPG may seem counter-intuitive, but the intervening augmentations in cinematic inheritance are more effective in comparison with a modern game that evokes—and is very similar to in gameplay mechanics—an early-90s genre, in this case, the 2D platformer. In terms of both audio-visual elements and gameplay itself, modern 2D platformers arguably have far

²⁹ The label “2.5D” refers to a game, usually a platformer, that is mostly played in a 2D side-scrolling fashion, but which occasionally opens into a simulation of 3D space in certain sequences or levels.

more in common with their early progenitors than modern big-budget RPGs have with generic ancestors like *Secret of Mana*. For budgetary and aesthetic reasons, depending on the example, games are still produced that self-consciously look and feel like the 16-bit titles, such as the acclaimed independently-produced meta-RPG *Undertale* (Toby Fox, 2015), which challenges its players to question the medium's baked-in equation of "player action" with violence. But a conventional platformer like *Castle of Illusion*, in retaining the gameplay style of progenitors while expanding audiovisual and storytelling elements in ways impossible twenty years prior, demonstrates more clearly how advances in technology evolved video games' productive mimicry of cinematic storytelling. Likewise, the choice of *Castle of Illusion* serves as an illustration of just how widespread cinematic principles are in the landscape of contemporary games—we need not stay confined to 'interactive movie' games or narrative-heavy actioners to find the cinematic toolkit, as even *Mario Bros.*-esque children's platformers are now drenched in cinematic style.

Chiefly among the 'evolved' cinematic aspects of later games is the increased presence of narrative temporality within actual game space. *Castle of Illusion* reveals this most prominently through the usage of voice-over narration. Its play with narrative time recalls Gretchen Papazian and Joseph Michael Sommers' contemporaneous commentary in the introduction to their essay collection *Game On, Hollywood!*, in which they write that "many of the experiments with media play, adaptation, and transmedia are happening first in texts designed for and/or by children and young adults."³⁰ When targeting children in game design is first and foremost a matter of

³⁰ Gretchen Papazian and Joseph Michael Sommers, "Introduction: Manifest Narrativity—Video Games, Movies, and Art and Adaptation," in *Game On, Hollywood! Essays on the Intersections of Video Games and Cinema*, ed. Gretchen Papazian and Joseph Michael Sommers (Jefferson, NC: McFarland, 2013), 3.

appealing, colorful graphics and accessible but challenging gameplay, designers can stealthily innovate a game's discursive style, as young players tend to be porous towards fast-paced narratives, changing perspectives, and direct address to the viewer, often learned from the ferociously rapid editing of cartoon programs since the 1980s, whose speed has not since decreased. More simply, speed and stylistic playfulness hold childrens' attention.

Castle of Illusion's mode of address is akin to the qualities of an illustrated storybook, albeit an animated, moving-image one in which an omniscient narrator comments on and provides narrative context for audio-visual events. The game opens with a four-minute non-interactive cut scene (one of very few in the game), during which a narrator explains the game's primary conflict; the evil witch Mizrael has kidnapped Minnie Mouse, and Mickey must save her from within Mizrael's "castle of illusion." But when the game becomes playable, Mickey emerging from a portal into the forest outside the castle gates, the narrator continues speaking as the player moves to the right of the 2D sidescrolling space. In the crisply-articulated, punctuated inflection of someone theatrically reading to children, the narrator says, "Mickey knew he was closer to Mizrael now. The very air around him tingled with mischief and danger."

The narrator's commentary is not just a smooth transition from the opening cut scene to playable game space but continues at fairly regular intervals throughout the game as Mickey progresses through levels. The narrator comments on notable on-screen events, 'previews' the challenges Mickey will soon face (providing both dramatic tension and a touch of dramatic irony), notes Mickey's emotions or sensations, and supplies transitions between spaces, helping to 'edit' together the different stages as well as different segments within them: since the game contains very few 'cuts' in the cinematic sense, the narrator provides them for us, lending

modularity and pacing to Mickey's experiences. For example, when you discover the sky area in the opening level, the narrator quickly comments, "Suddenly, Mickey found himself catapulted into the clouds." This present-tense narrational commentary helps provide the game a temporal cinematic flow, but in its storybook modality also demonstrates how games open avenues for fresh playfulness in combining media forms. Often the narrator is literally telling you what is happening on-screen, as in the last example, which would quickly become tiresome if, say, this was a (non-interactive) cartoon. Instead of feeling redundant, narrational commentary laid over interactive sequences makes the player feel as if the narrator is responding to the player's actions, affording an immersive liveness to the proceedings of the game.

Because the voice-over narration is so explicit and dominant in *Castle of Illusion*, a discussion of the lauded framing narration of the 2003 action-adventure game *Prince of Persia: The Sands of Time* (Ubisoft) serves well to contextualize the use of narration in modern games. While *Castle of Illusion* has mostly present-tense narration, *The Sands of Time* uses a past-tense voiceover from the titular Prince himself, framing the entire game as a flashback. When you die or fail a task, for example, the narrator-Prince will say things like, "No, that's not how it went..." as the game visually 'rewinds' to the most recent save state. As game scholar Ben S. Bunting, Jr. writes in his essay on the game, the framing voiceover "...allows the Prince to enfold basic gaming conventions like save points and the dreaded "Game Over" screen into his storytelling."³¹ The intermingling of interactive mechanics with the past-tense narration imbues

³¹ Ben S. Bunting, Jr., "Game-to-Film Adaptation and How *Prince of Persia: The Sands of Time* Negotiates the Difference Between Player and Audience," in *Game On, Hollywood! Essays on the Intersection of Video Games and Cinema*, eds. Gretchen Papazian and Joseph Michael Sommers (Jefferson, NC: McFarland, 2013), 64.

the game with a gauzy, whimsical storybook quality appropriate for the fantastical bildungsroman defining the magic-laden journey of the protagonist.

Narration in *The Sands of Time* generates a powerful liveness for the player, despite its past-tense grammar, in much the same manner as *Castle of Illusion*'s present-tense mode. Bunting argues that this is part of a "worldmaking approach" to design exemplified by the game, writing, "[r]ather than segregating ludic action from exposition, *SoT* melds them together, telling a story that occurs around the player's avatar (the titular Prince) but is also directly affected by the Prince's actions."³² This "melding" of ludic action and exposition is essentially what I mean by "in-game events," and thus the seamlessness between interactive space and micro cut-scenes, resulting in the thrilling confusion of whether or not you or the game is in control. This confusion is the essence of the productive melding of cinematic style with gameplay, and why I am uncomfortable with the phrase "directly affected" in the previous quote. While the narrative in *SoT* does not come predominantly from cut scenes (though it still has many), it *does* largely unfold via the pre-programmed, nonadaptive voiceover. *SoT* is a predestination machine like any other, and here player action can directly affect the storytelling in two—and only two—different ways: the player's 'correct' actions move along the predetermined story and narration, while 'incorrect' actions result in varying forms of the narrator protesting that the story now "isn't right," and must be fixed. Game scholarship has a tendency to imply, or directly state, the notion

³² Bunting, Jr., "Game-to-Film Adaptation...", 62-63.

that stories in games like *SoT* are “created” by their players, an assertion that rarely if ever holds up to scrutiny against video games without any formal element of user-generated content.³³

As quoted in Bunting’s essay, *SoT*’s principal creator Jordan Mechner writes in the 2007 essay “*The Sands of Time: Crafting a Video Game Story*” that, “...in a film it’s better to show than to tell, [but] in a video game it’s better to do than to watch...give the story’s best moments to the player, and he’ll never forget them. Put them in a cutscene and he’ll yawn.”³⁴ I may disagree that game cut scenes only elicit “yawns,” but Mechner’s use of the word “give” reinforces the notion of narrative games as predestination machines, as opposed to stories providing narrative control to players. Here Mechner “gives” the story’s best moments to the player, just as other game designers may offer such moments in a cut scene, as if bestowing a gift. Slyly, Mechner demonstrates his understanding of games’ polyvalent state of interactivity and predestination: the game is more fun (more immersive, engaging, memorable) if players believe their actions have a stake in a story’s authorship.

Mechner’s approach to game design, which felt revolutionary in the early 2000s, is exemplary of the trajectory of games utilizing expanded technology to allow for more narrative and world-building via in-game events rather than cut scenes. An especially strong example of how skillful manipulation of the player’s perception of their own relationship to the gameplay can be used in service to storytelling can be found in the PS2 action-adventure spy game *Metal Gear Solid 2: Sons of Liberty* (2001, Konami). The majority of the exposition in this game

³³ In the previously-cited essay “Game Design as Narrative Architecture,” Henry Jenkins considers the “embedded” narratives of video games—clues spread throughout game space in *Myst* (Cyan, 1993), for example—as dovetailing with the notion of players “creating” game stories. But his rhetoric on the subject is nuanced, as his essay directly states that he is searching for “middle ground” between the “narratologists” and “ludologists.” At the end of his essay, he considers a transparent example of user-created storytelling—that seen in *The Sims* (Maxis/EA, 2000).

³⁴ Bunting, Jr., “Game-to-Film Adaptations...”, 63.

happens almost exclusively through cut-scenes: the game’s director, the noted “game auteur” Hideo Kojima, is famous—or infamous—for his games containing hours of such unskippable expository cut scenes. It is therefore all the more powerful when *MGS2* breaks away from this pattern during the game’s most hallucinatory and memorable sequence. By providing a moment of unexpected interactivity, the game “disorganizes” itself at a particularly well-timed moment to make that disorganization a salient part of the narrative. In so doing, *MGS2* demonstrates that the complex organization of video game narrative is often most effective when interactivity is part of the equation, even in the limited sense of button-presses to advance text dialogue in our primary example from *Secret of Mana*.

Close to *MGS2*’s ending, after the nature of its narrative reality has been thoroughly questioned and confused via dialogue with a principal character who is revealed to (probably) be an artificial intelligence, among other bizarre signals that the game has become self-aware of its own identity as “video game” (the AI character asks you at one point to “turn off your console now,” while another says “sitting so close to the TV will hurt your eyes”), protagonists Snake and Raiden must battle an endless procession of ninjas in a circular room resembling a metallic proscenium. During the battle, the screen suddenly flashes white, after which the playable screen space shrinks to a small window on the upper-left corner of the screen, embedded within the game’s typical “game over” screen (**Fig. 1.10**). The music usually accompanying a “fail” state enters the soundtrack as well, but the upper-left window remains playable as it was before the fail-state interface appeared. Instead of a game-over, it is intended to imply that the game itself is glitching. Instead of the usual “Mission Failed” text at the upper-right, it reads “Fission Mailed,” and the possible commands read “Emit” and “Continent” instead of normal options “Exit” and



Fig. 1.10: *Metal Gear Solid 2: Sons of Liberty*

“Continue,” while the rest of the on-screen text is composed of random letters. This is the moment in which the narrative’s inscrutable metaphysics intrudes fully into gameplay itself, denoting the game space and its entire narrative universe as untrustworthy in its veracity.

Each time I have played through *MGS2*, the intended effect is palpable: continuing to battle ninjas as Raiden in the upper-left corner of the screen amidst an interface full of nonsense words breaks the expected connection between player and game space. While you still take action as the Raiden avatar, the feeling is that the game has phantasmically enlisted you in its own twisted simulation. This relatively brief interruption is so affectively dreamlike it temporarily makes the player feel delusional, as if the player is glitching rather than the game, when in fact it is neither; it is precisely timed as a narrational device, meant to solidify that the game world may be a simulation within a simulation. Keeping the player in ‘control’ of Raiden during this scene adds immeasurably to the situation’s surreality, proving Mechner’s point that in-game events are often (though not always, in this writer’s opinion) the strongest technique for advancing important narrative information. In *MGS2*, a deliberate choice is made to fully

destabilize the narrative world within a sequence of gameplay rather than a cut scene, despite the latter method being the game's typical course for narrative advancement to an exhausting degree. Decisions like this point clearly towards technological developments in later years that made in-game events more feasible as a consistent narrational method.

Returning to the 2013 *Castle of Illusion*, countless attributes not present in the 1990 Genesis version, including its voiceover narration, stylistically conform to an evolutionary line of cinematic audio-visual style even as the gameplay remains remarkably similar (jumping, dodging, throwing objects forward in 2-D space). The 1990 version has text interstitials providing 'plot' instead of a dynamic narrator, music designed for individual levels but non-responsive to specific on-screen events, few in-game events in the world, and when compared to the later version a greatly diminished sense of narrative immersion, temporality, and thus progress through the game world, lessened most notably in comparison by the lack of narration and the "hub world" of the later version. Technological advancements allowed the 2013 version to augment the original game in these areas, as increases in processor speeds, data quantity, and both graphics and audio chips, in broad terms, widely expanded the range of operations a game can perform. Audio processing and reproduction, for example, is as dramatic an example as any other operation. Where the 1990 *Castle of Illusion* (and *Secret of Mana*) has sonic limits definitively confined within a small range of timbres, with similarly draconian limits on how many audio tracks (including sound effects) can be mixed together and timed with the image, by 2013 industry-standard sound reproduction affords *Castle of Illusion* a crisp, CD-quality score with recognizable instrumentation (here a Danny Elfman-esque score reminiscent of a few themes in Tim Burton's 1990 hit *Edward Scissorhands*), a narrator lending a lively storybook

quality, and sound effects of seemingly-unlimited tonal variety that compare favorably in detail and fidelity to those in high-budget animated cartoons and films.

This unifies on the visual level, particularly in transitions between distinct gameplay spaces, with unexpected mobile camera movements and ‘zooms,’ a sense of depth and dimensionality to the image through occasional perspective changes and ‘2.5D’ sequences (and the fully 3D hub world of the castle entrance and hallways), and graphics design with background and character detail that strongly reference imagery in contemporary computer-animated films and cartoons. In the 2013 Enchanted Forest level, for example, the ghost enemies are lifelike and adorable, with the dimensional heft of Disney-Pixar creatures. In one brief section, you must use the bouncy, chubby ghosts as platforms to advance forward. With the charmingly mock-scary music, narration, and visual detail, the sequence resembles that of an animated film, with cinematic audio-visual flow from narration and movement between gameplay states. As you hop and bounce on the ghosts, accompanied by a pleasant ‘plop’ on the soundtrack, the narrator interjects with, “Mizrabel taunted Mickey with her evil laugh.” Mizrabel simultaneously appears in the background, zooming about on her broom. Here the game cinematically reacts to your forward advancement. And if the player happens to fall to their ‘death’ during the narrator’s line, the voice-over line continues even as the image cuts back to your previous save state at the start of the ghost-hopping section; thus, there is no interruption in the seamless cinematic flow of the narration, suggesting this is an aesthetic priority as opposed to emphasizing the player’s failure at performing the proper movements. Speedy computational abilities of hardware allow for this, but it is nonetheless an entirely aesthetic decision to prioritize the flow of the game’s various narrative modalities over player-states such as character death or

failure, in this example to the extent that the narrator's line about Mizrabel is timed to continue over player death.

This emphasis on integrated, seamless cinematic moments within gameplay—or pre-determined in-game events—is visible throughout *Castle of Illusion*, in many instances enhancing its general charm and success at crafting an immersive, eventful cartoon world. In Act 1 of the Library level, the design of which fancifully plays with scale via enormous books several times larger than Mickey or non-player figures, the villain Shadow Mickey appears and pushes you into a bottle, a portal that transports you to a busy “candyland” of oversized candy pieces serving as platforms in a creamy off-white sea. The music and sound effects are seamlessly mixed from the library to this new setting, and the narrator immediately chimes in: “Mickey was in a realm of dangerous delights and scrumptious scares. All around was a sea of ice-cold milkshake, but not the sort one wanted to dive into.”

In a sequence in the Enchanted Forest, Mickey must run towards the screen away from a giant apple rolling towards him from the background. This gameplay scenario, of running towards the camera away from a death-causing obstacle, is a common trope of both children's platformers (and action-adventures games like *Uncharted*) since its famous usage in 1996's *Crash Bandicoot* (Sony/Naughty Dog), and is obviously inspired by the opening sequence of Steven Spielberg's *Raiders of the Lost Ark* (1981). In the 1996 game, these sequences are thrilling, but objects in the image are largely static outside of the rushing boulder and the player-character Crash, and the audio is limited to the music, the sound of the boulder, and the occasional crashing disintegration of a platform. But in the 2013 *Castle of Illusion* apple race, and similar sequences in the retro revival *Crash Bandicoot 4: It's About Time!* (Activision,

2020), the worlds surrounding the gameplay scenario are rich and alive, suggesting fully-realized traversable space just out of reach. You run past rushing water and see creatures hanging out in trees or scurrying across the path in front of you. Sonic perspective audibly changes as the camera recedes away from you: new animal and environmental noises are distinguishable, and their volume recedes appropriately as it would in a film with a camera-centered aural perspective (an approach more common, or at least more consistently coherent, in video games).

In one such scene in *Crash 4* (in the level “Hit the Road”), you perform the race while running inside a steel cage. When reaching the sequence’s end, the cage breaks and Crash flies at the screen. The player then loses control as the game enters into a nearly-imperceptible cut scene mode without any cutting, and the camera movement continues apace at the speed of Crash flying through the air, his face comically terrified. As the frame-rate shifts to a slight slow-motion effect, the sheer busyness of the frame’s visual detail is briefly dizzying for the player—a sudden shift to a highly-organized cinematic spectacle reminiscent of a similar slow-motion shot in *Transformers: Dark of the Moon* (Michael Bay, 2011), when the robot Bumblebee shifts between his two primary forms (car and biped) to swipe away obstacles with the lead character ‘inside’ of him, flying at the screen in comic terror.

Paradoxically, perhaps, one innovation present in countless games in the post-*Secret of Mana* era is that of a “hub world” where the player-character accesses different levels: a development that could easily be argued as anti-cinematic, as they exist largely outside of narrative temporality. While the hub world may still largely exist outside of narrative time in *Castle of Illusion* and the seminal 3D platformer *Super Mario 64* (Nintendo, 1996), its unification with game levels advancing narrative goals nonetheless makes the experience

inherently more cinematic, as there is no longer an audio-visual—or mechanical—distinction between different portions of the game when there is no storytelling-related reason for them to be separate. Hubs for level access existed long before *Mario 64* innovated this structure, but they were often interactive, 2D maps rather than the fully 3D castle and surrounding grounds of the Nintendo 64 game. But the chief difference is that many post-*Mario 64* hub worlds (including *Castle of Illusion's*) are often traversed in the exact same fashion as the gameplay within levels: the same graphics, game engine, and player controls. This typically makes a game's narrative universe—its “world-building”—more complete and immersive, certainly in the case of *Mario 64* and *Castle of Illusion*. In the Genesis version of *Castle of Illusion*, the original *Crash Bandicoot*, or pre-64 Super Mario titles, the hub world is a simple map where the character (essentially a cursor) moves to different points to activate levels. This creates a sense of the ‘level universe’ of gameplay as distinct from the hub world, whereas the later examples unify the two with fully-traversable hubs utilizing the same audio-visual style and gameplay mechanics of levels. As in movies (outside of the avant-garde), the audio-visual universe is whole and unified: the hub world is audio-visually concomitant with game ‘levels,’ and this decreased separation again reveals the cine-real destiny of the game medium.

When *MGS2* plays with the overlapping of gameric interface and narrative in the metaphysical ‘glitching’ sequence described earlier, it is unified with the story at that point in the game. *Castle of Illusion* and *Mario 64* do not, by contrast, have narrative cause to make the player question the fabricated nature of the medium. But perhaps the most powerful aspect of the aesthetically unified hub world, beyond the way it engenders deeper player absorption in a game world, is its peculiar temporality as a ‘between-space’ of narrative causality, as something not-

quite-outside the game's temporality but not really within it either. The liminal space of the hub world provides a contrast to the immediacy of temporality within levels. We see this also in related spaces in genres far beyond children's platformers, like the feeling of safety and comfort in the save rooms of early *Resident Evil* titles (see Chapter 3) with their relaxing music and lack of danger, or the space of the protagonist Commander Shepard's ship (the "Normandy") in the first three *Mass Effect* (2007-2012) titles. It is no great stretch to suggest as well that the relaxed, almost frozen narrative temporality of these spaces effects a greater generalized realism, by which I here mean the connotation that a narrative world is inhabited by consciousness, and extends beyond the immediate space of the screen: that a world is 'realized' beyond gameplay spaces that advance your progress. The world becomes, in effect, more (cine-)“realistic” when there is some tonal variation between spaces, when all gameplay does not revolve around violent action and imminent danger. When we run around the hub world in *Castle of Illusion*, Mickey is simply an anthropomorphic mouse exploring a castle. As the player, you are allowed a break from the constant threat of death in levels, and can simply enjoy controlling Mickey in a neutral space within the game world, a state which ultimately you hope Mickey can return to: just being a goofy talking mouse. As with the village in the opening of *Secret of Mana*, it is a safe space for which the protagonist presumably longs to return.

Time and Complexity

The general concerns of time and temporality in game space, and the way time can be frozen and manipulated at the behest of game designers and by gamespace's player-explorers, returns us to the issues of organized complexity introduced earlier, as time itself—or perhaps

more accurately, rhythm—is a part of cinema stylistics and by extension that of games. Elegantly discussing the patterning and “temporal continuity” of music, and the human imperative to structure time, Barrow writes,

The most impressive feature of music is its temporal continuity. Whereas art displays pattern in space, music offers patterns in time. Just as the mind has developed acute pattern recognition abilities, so it possesses exquisite sensitivity to nuances of sound over a far greater range than it does for visual images. This is part of a wider facility. We have developed ways to make sense of time in ways that transform chains of events into a history. Legends and traditions first played this role and complemented the human understanding of events. The spatial order exhibited in painting or sculpture is heightened when endowed with a temporal aspect. This is why films are often more appealing than still photographs and why children can find video games so addictive. Unchanging images leave the viewer to look for themselves. They can look again and again, first following one sequence, then another. But music has its own sequential order of perception. It has a beginning and an end. A painting does not. Thus we see that music may be associated with a need to structure time or be derived as a by-product of an advantageous adaption for a structuring of time.³⁵

At the end of this quote, Barrow foreshadows a later conclusion in his book that, to paraphrase, humans evolved to require the structuring of time for survival, linking the early development of music and, much later in our evolutionary cycle, our all-encompassing fascination with moving images, both of which are defined by “patterns in time.”

This suggests that critical complexity in moving-image art forms depends on a unified temporal structure, since so many elements are dependent upon rhythmic—or deliberately arrhythmic—patterning of elements. Music and sound generally are components of video games inextricable from temporal patterning, as they exist exclusively within a temporal regime. Thus all aural elements of video games, as in cinema, satisfy our evolutionary imperative for temporal structure and continuity, wherein the “underscore” of music specifically satisfies this

³⁵ Barrow, *Between Inner Space and Outer Space*, 148-9.

need by structuring time with its comforting nature of rhythmic expectation. Music provides additional temporality to the spatial order of moving-image screen space.

Moving images combined with music and sound thus engender *time* as a structuring element in peak or critical complexity. Changes in musical rhythm and tonality—patterns in time—aid *Secret of Mana* in achieving criticality, likewise the usage of voiceover narration in *Castle of Illusion* and *Prince of Persia*, with the latter using past-tense grammar to reinforce the presentation of the story as legend or fable. A videogame's ingredients are sound, image, and narrative temporality—specifically the way the time of a story and the time of its telling (the *fabula* and *syuzhet*, in Russian Formalism³⁶) play and collide with each other. This is tantamount to cinematic complexity because just as in films, these elements are inextricable from each other within a game's overall audio-visual, textual form: the aesthetic complexity seen in video games is thus fundamentally cinematic. If a game's form is to feel organic, it must effectively present its many components as unified within largely the same temporal regime under which cinema operates.

As the next chapter of this dissertation departs on an analysis of the evolution of style in self-consciously cinematic action-adventure games, video games and cinema are far too similar as forms for their modes of operation to be segregated. As suggested here, it is the two media's dependence upon temporality—from music to narrative to shifting imagery—that creates an inextricable, elemental connection that supersedes other similarities, such as the tendency for games to predictably and consistently reference landmark genre films. Time-based art, from the

³⁶ For the basic tenets of Russian Formalist analysis, see Viktor Shklovsky, *Theory of Prose*, and Tzvetan Todorov, *The Poetics of Prose*. For an influential application of Russian Formalism to film analysis, see Kristin Thompson, *Breaking the Glass Armor: Neoformalist Film Analysis*.

rhythmically-cut opening minutes of the film *All That Jazz* (Bob Fosse, 1979) to the graceful movement between the changing colors and textures of the seasons in the art-game *Flower* (Thatgamecompany, 2009), is based upon the same underlying principles of predetermined rhythmic patterning among imagery, sound, and narrative, which makes the ontological severing of the forms of game and movie analytically unproductive. Interactivity is a polar node of the feedback loop with cinematic style within video games, and also, simply, another time-based element that can be utilized as a tool within a cinematic context. The ontological question of whether interactivity in video games make them severable from other artistic media is an endlessly fascinating but ultimately irrelevant question hinging on the dubious idea of any moving-image apparatus having a special phenomenological purity. We are still playing with cinema, and as time passes and technology evolves the latitude of this play has only increased in complexity.

Chapter 2

***Tomb Raider* and the Imbrication of Cinematic Style in Action-Adventure Games**

Any attempt to assert that cinema's influence on video games is minimal or unimportant—to argue for its inapplicability to games, or to argue that its sometimes-powerful sway over aspects of game design is a negative intrusion on or disruption to games' ludic purity—is misguided, and often based on willful misunderstandings of what inspires game designers and what many gamers find most impactful about the art form. Video art, and practically any screen-based art practice including video games, is rich with work that successfully challenges the notion that moving image practice must conform to the dominant methods of narrative cinema. This is inarguable, but nevertheless, cinematic ontology in its dominant processes of narrative and sensorial impact (the creation of cine-reality), is an inescapable facet of any time-based screen medium composed of changing moving images, representational sound, and the presence of narrative elements. People generally, and game designers specifically, continue to love and find inspiration in the way movies carve up space and time with narrative, dialogue, editing, cinematography, and sound in roughly the same manner they have ever since magnetic sound recording, location shooting, massive leaps in visual effects technology, lightweight cameras, and dramatically shifting cultural mores gradually codified post-classical film style from the 1950s-1970s. Until this love affair ends, cinema is here to stay.

Perhaps on another planet, video games were invented before cinema: a fun thought experiment, a seminar's worth of aesthetic provocations. But not on Earth. Here, cinema came

first, and partially as a result, we have since been blessed with the gloriously polyvalent medium of video games.

The word “polyvalent” in this context is meant to imply not just the multifaceted nature of the game medium, but the unique bonds and transformations born from the interaction of games and cinema and the resulting crystalline structure of many successful games wherein cinematic elements feel seamless. Game scholar Patrick Jagoda notes this polyvalence when providing a sensibly cautious perspective on medium specificity in the field of game studies. In the essay “Videogame Criticism and Games in the 21st Century,” after summarizing arguments such as Eric Zimmerman’s in “Manifesto for a Ludic Century,” who claims that “game-like experiences [will] replace linear media” in this century,¹ Jagoda writes:

Whether or not games are now *the* cultural dominant is a claim that remains to be observed. Arguably, the contemporary transmedia ecology privileges the merging and copresence of cultural forms (facilitated by the metamedium of the digital computer) over an obsolescence or replacement model. Moreover, if videogames are already notably polyvalent, what would it mean to claim that so diverse a form is dominant?²

Video games are thus a unique medium in their own right, but in their “merging” of cultural forms—for my purposes, the interactivity required for a text to be considered a “game” combined with cinematic audio-visual style and narration—they represent too diverse an array of influences and techniques from other media to be separated entirely from traditional “linear media.” As a point of comparison, consider how content on digital video platforms like YouTube, and especially TikTok, or the twitchy bumper advertisements on the Adult Swim Network

¹ Eric Zimmerman, “Manifesto for a Ludic Century,” *ericzimmerman*, September 9, 2013. <<https://ericzimmerman.wordpress.com/2013/09/09/manifesto-for-a-ludic-century/>>

² Patrick Jagoda, “Videogame Criticism and Games in the 21st Century,” *American Literary History* 29, no. 1 (Spring 2017): 216.

beginning in the early 2000s, reappropriate the kinetic, disjointed audio-visual editing of music videos and stylized marketing that originated in the rhythmic proto-MTV editing of Richard Lester's Beatles films *A Hard Day's Night* (1964) and *Help!* (1965), early-1970s seasons of TV's *Soul Train*, and techniques of associative editing and immersive sound design in the post-classical cinema generally. Video games are likewise heavily imbricated with the influence of the almost-century-older medium of cinema.

This chapter argues that we can see this imbrication most directly in examples from certain game genres: most notably action and action-adventure games.³ The translation of cinematic audio-visual style and its accompanying sensations has been a clear goal of games in these genres since the CD-ROM era (roughly the mid-1990s). As discussed in previous portions of this dissertation, a critical gap exists in videogame studies due to many scholars neglecting—or actively denying—a fundamental formal influence on game design, that of cinematic style, form, and narrative. To fill this gap, this chapter provides an analysis of *Tomb Raider* (Eidos/Core, 1996), an exemplary and influential action-adventure game in a period of rapid technological advance, which demonstrates the translation of the cinematic style of the action genre into the polyvalent form of the videogame; principal concerns herein are notions of medium specificity

³ Game genres—and their wide array of sub-variants—are slippery to define. Karen Collins notes in her previously-cited book *Game Sound* that in 2000, scholar Steven Poole identified nine game genres, while in 2002 scholar Mark J.P. Wolf identified 42. Some genre designations primarily denote gameplay, such as “fighting,” “racing,” or “shooter.” Others, like “role-playing” or “sports,” denote interface or interactivity types, and sometimes narrative-heavy games across plot genres are grouped as “story games” or in some cases “interactive movie games” as noted previously. This chapter's emphasis on “action-adventure” games denotes games like *Tomb Raider*: full of interactive “action” (shooting, fighting) but with both prominent narrative elements and lengthy sections of exploration. When a game is referred to as simply “action,” this typically implies that the game consists of near-constant fighting and/or shooting of enemy avatars, with only the barest of narrative elements or quieter exploration or puzzle sequences. However, it is rare to hear a *Super Mario* title called “action,” despite its players being constantly engaged with enemies. They are instead called “platformers” (because of the precision jumping required to complete them) or far more broadly as “children's games.” Game genre is arguably more fraught with dizzying overlap and mixture than movies, since genrefication can take place around certain titles because of gameplay style, demographics, narrative, game rules, interface styles, and more. “Action-adventure” is an appropriate umbrella for this chapter, both in that *Tomb Raider* is exemplary and because “action” games (sans “adventure”) typically do not have the narrative content or moments of environmental spectacle that are relevant to claims herein.

as they relate to cinematic style, the question of the cinematic qualities of first-person versus third-person perspective, and the way games can conjure contemplative spectacle akin to cinema. In keeping with previous chapters, I do not focus principally on cut scenes, but on elements that have been seamlessly integrated into game design (such as editing, sound design, and virtual cinematography), though I also attend to cinematic ruptures—moments when the player loses all or most of the game’s character control, or when a method of cinematic address (scored music, for example) is meant to grab the player’s attention. Rather than suggest that cinematic elements concatenate with passivity, I show how game play activity and viewing passivity exist in a feedback loop. At stake in this analysis is an opposition to the perspective of scholars who showcase defensiveness about the influence of other media, particularly cinema. Herein it is argued that cinematic style heavily influences game design, and specifically, by the mid-1990s, games began to ostentatiously display that influence in ways that point towards the rapid developments of the first decade of the 2000s, during which pervasive cinematic imbrication continued to develop—and arguably became even more dominant as an element of game experience—in concert with advancing game technology.

This chapter is thus concerned with formal details of how the prominent action-adventure game *Tomb Raider* translated cinematic style in a gamic context. In the action-adventure genre of which *Tomb Raider* is exemplary, obviously cinematic elements such as cut scenes are often presentations of heroic feats or wondrous environments or events, from those discussed below in *Tomb Raider* to the micro-cut-scenes in 2009’s *Batman: Arkham Asylum* (Rocksteady Studios). In the latter, selecting a specific punch or kick button during a fight sometimes triggers a rupture wherein the camera dramatically dollies to an overhead view as Batman athletically flips an

enemy over his head. These micro-cut scenes demonstrate how user input can serve not just gameplay advancement, but also develop affect, deepen characterization, and set moods. This usage of micro-cut-scenes has only increased since *Arkham Asylum*, as seen in popular titles like the legacy franchise reboot *God of War* (Sony, 2018) and its sequel *God of War: Ragnarök* (2022), both of which feature frequent, smoothly-integrated mid-battle cut scenes that meld interactive and non-interactive space, sometimes nearly imperceptibly. The fundamental question here—as in Chapter 1—is how games critically organize sequences for sensorial impact and what cinematic audio-visual tools are involved in this organization. This chapter will be primarily focused on different types of organization, chiefly from *Tomb Raider*, which exemplifies the increasingly sophisticated cinematic transmogrification of action-adventure games in the mid-to-late 1990s. The discussion in this chapter will also gesture to later games in anticipation of Chapter 3’s account of the evolution of cinematic storytelling in games from the mid-90s to the late-00s, and continuing into the 2020s.

The Fallacy of Medium Specificity in Game Scholarship

Before embarking on this analysis of *Tomb Raider*, however, we must grapple with the shortcomings of existing scholarly literature, with its clear pattern of bias against the very concept of a cinematic influence on game design. While the influence of cinematic style seems self-evident to some gamers—and certainly designers—it is a clear point of contestation in videogame scholarship that deals directly with it, or in examples that largely skirt the issue of cinematic style. While not all game scholarship exploring cinematic convergence is defensive about video games’ uniqueness as a medium, a strong current within this literature has trended

from the early days of game scholarship (the late-1990s) to work in the 2010s, a current characterized by an undercooked reflex towards a defense of video games's singular medium specificity. As was noted in Chapter 1, games scholar Ben S. Bunting, Jr has identified how innovative games like *Prince of Persia: The Sands of Time* (Ubisoft, 2003) have incorporated gameplay mechanics into their narration strategies. To Bunting, this necessarily implies medium specificity: "They [games such as *The Sands of Time*] have hit upon the quality that allows video games to be a unique expressive medium in their own right, free from the narrative baggage of books and film."⁴ While any serious purveyor of video games agrees that the medium is, or at least can be, uniquely expressive, Bunting's reflexive position against the medium's fundamental polyvalence leads to the label of cinematic influence as "baggage." This feels especially bizarre in the context of *The Sands of Time*, a game that powerfully demonstrates the thrilling possibilities of how the traditions of cinema (and literature) can be productively transmogrified in a gamic context, as discussed in Chapter 1 via the game's heavy use of spoken voice-over and 'storybook' qualities.

The Sands of Time heavily depends on cinematic style for its unfolding, and its temporality is even explicitly marked as "past" due to its narrator's frequent reminders that the player-character has done something "wrong" that does not conform to the story's purported truth. The game at its core involves a process of practice at unveiling a specific, correct series of actions that continue the game's predetermined, unbranching narrative. Its gameplay requires figuring out how to jump and swing through innumerable cavernous rooms in ways that can be performed

⁴ Ben S. Bunting, Jr., "Game-to-Film Adaptation and How *Prince of Persia: The Sands of Time* Negotiates the Difference Between Player and Audience," in *Game On, Hollywood! Essays on the Intersection of Video Games and Cinema*, eds. Gretchen Papazian and Joseph Michael Sommers (Jefferson, NC: McFarland, 2013), 69.

one way and one way only. Its story, tone, and visuals, meanwhile, are explicitly inspired by the stories of *One Thousand and One Nights*, the *Indiana Jones* films, and the 1938 film *The Adventures of Robin Hood* (Michael Curtiz), as is clear from interviews with *Prince of Persia* franchise creator Jordan Mechner, who perhaps not coincidentally enrolled in New York University's filmmaking department after the first game's success.⁵ The "baggage," as Bunting terms it, is everywhere.

Whatever we call it, from "baggage" to the aesthetic remediation of cinema in an exciting new medium, prominent game designers rarely express the same apprehension about cinema's relationship to games. Below is an excerpt from writer Kris Graft's Game Developer interview with *Dead Space 2* (Visceral/EA, 2011) Creative Director Wright Bagwell:

Graft: You mentioned references to movies. I definitely noticed a lot of *Alien* movie franchise stuff going on there, even the inclusion of a mining ship. Do you look at film quite a bit to find ways to frighten your audience?

Bagwell: Yeah, definitely. *Alien* and *Aliens* were things that we reference a lot on *Dead Space 1* and *Dead Space 2*, and I think almost everyone we talked to, the first thing they say is kind of like, "Ah, it sounds like you guys are going from *Alien* to *Aliens*." I think that's pretty fair to say. We definitely take a lot of influence from films. Everybody on the team is a film junkie. I think everyone in the game industry is. We all love entertainment. I think, though, that we've tried to do some things this time, there are a few moments in the game that I'm really proud of because I think that we're doing things that I think only games can do. We're trying to pioneer, in terms of ways to terrify or horrify the player.⁶

Here, cinema's "baggage" is a tool to play with, a task that Bagwell and countless other designers approach with a gleeful enthusiasm born from lifetimes of both cinephilia and the love of games. Above, Bagwell can both love cinema, welcoming its influence, while 'doing things

⁵ For a history of *Prince of Persia* (including Mechner's career, and commentary about film influences), see Rus McLaughlin, Scott Collura, and Levi Buchanan, "IGN Presents: The History of Prince of Persia," *IGN*, May 18, 2010, <<https://www.ign.com/articles/2010/05/18/ign-presents-the-history-of-prince-of-persia>>

⁶ Kris Graft, "New Theory of Horror: *Dead Space 2* Creative Director Speaks," *Game Developer*, January 24, 2011, <<https://www.gamedeveloper.com/audio/the-new-theory-of-horror-i-dead-space-2-i-s-creative-director-speaks>>

that only games can do’—clearly, these are not mutually exclusive. It should be no surprise that the cross-pollination between video game and cinema fandoms, stories, and especially genres—many of which were instantiated by or are primarily associated with movies, even as the game medium morphs them into new polyvalent generic forms—is reflected also in game designers themselves, and thus in audio-visual aesthetics and modes of narrative delivery. Even the reference to the shift from *Alien* (Ridley Scott, 1979) to *Aliens* (James Cameron, 1986) demonstrates a particular attention to cinematic genre, as the shift defining the epic sequel is a shift from sci-fi-horror-thriller to sci-fi-action-adventure, exemplified by a narrative more concerned with sequential character-centric situations than with internal states of fear.

Dead Space (EA, 2008) and its aforementioned sequel notably do not contain cut scenes in the traditional sense (though they have frequent micro-cut scenes or cinematic ruptures), but it is hard to imagine them even existing without the web of cinematic influence that permeates their stories and their moment-to-moment gameplay experience: that of *Alien*, *Aliens*, and perhaps most of all, the sci-fi-horror film *Event Horizon* (Paul W.S. Anderson, 1997). From their steely, dread-soaked spaceship environments and cookie-cutter corporate malfeasance plots, to their frightening soundscapes meant to keep the player in a constant state of tense expectation, the *Dead Space* series is a hybridized cinematic game text that is grounded heavily in the style and lore of those three films especially, and the targeted player’s likely extensive experience with them. Similarly hybridized is *The Last of Us* (Sony/Naughty Dog, 2013), an action-shooter with zombie-drama pretensions clearly inspired by Danny Boyle’s film *28 Days Later* (2002), TV’s *The Walking Dead* (AMC, 2010-2022), and Cormac McCarthy’s 2006 novel *The Road*, or the dreamlike anti-war-film latticework of *Spec Ops: The Line* (Yager/2K, 2012), which deliberately

and unremittingly recalls *Platoon* (Oliver Stone, 1986) and especially *Apocalypse Now* (Francis Ford Coppola, 1979).

The direction of influence on the pathways between games and cinema is frequently misconstrued by game scholars, even in the early 2000s when games and cinema were not nearly as industrially and aesthetically linked as they have become today. Writing in 2000 in *Trigger Happy*, Poole claims that cinema inherited *from games* the “hyperkinetic grammar (the exaggerated sound effects, the disregard for classical gravitational laws) in executing those same forms on the silver screen.”⁷ Here, it is as if Poole simply missed the audio-visual moving-image culture of the 1970s and 1980s. I have never heard nor read an argument that the “hyperkinetic grammar” of 80s high-concept genre cinema, from *The Hunger* (Tony Scott, 1983) to *Beverly Hills Cop* (Martin Brest, 1984) to *Die Hard* (John McTiernan, 1988), was inherited from video games. Nor does one exist, as it would be patently absurd to suggest that the era of “MTV aesthetics” and “high concept,”⁸ and the accompanying genre orientation towards the umbrella of “action” in late-70s and 80s popular feature films was an inheritance from games like *Pong* (Atari, 1972) or *Donkey Kong* (Nintendo, 1981). This orientation in Hollywood film genres of 80s and 90s is rooted in the record-breaking success of specific 70s films that were revelatory for audiences; their kinetic, aggressive audio-visual styles and convincing visual effects heightened former B-genres to the level of immersive spectacle. These films—chiefly *The Exorcist* (William Friedkin, 1973), *Jaws* (Steven Spielberg, 1975), *Star Wars* (George Lucas, 1977), and *Raiders of the Lost Ark* (Spielberg, 1980)—became the standard-bearers for much of 80s and 90s

⁷ Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade Publishing, 2000), 71.

⁸ For the canonical account of 1980s Hollywood as “high concept”—from marketing to film form—see Justin Wyatt, *High Concept: Movies and Marketing in Hollywood* (Austin, TX: U. of Texas Press, 1994).

Hollywood production, and alongside the rise of disco, MTV, and electronic pop in the music industry produced cross-pollinations like *Saturday Night Fever* (John Badham, 1977) and the Giorgio Moroder-scored 80s Paramount films *American Gigolo* (Paul Schrader, 1980), *Flashdance* (Adrian Lyne, 1983), and *Top Gun* (Tony Scott, 1986).

This misattribution of influence extends to other game scholars and critics as well. Casual complaints from newspaper, magazine, and online film critics that CGI-enhanced movie action sequences “look [or feel] like video games”⁹ are so numerous they long ago became cliché (yet remain widely expressed¹⁰), while some more recent scholarship has also taken up the issue in ways arguably as myopic as Poole’s above. In the essay “New Screen Order: How Video Games Are Changing Cinema Interiority” by media scholars David Sedman and Randy Clark, which is rife with bizarre ahistorical claims about changes to film style and narrative ‘before’ and ‘after’ the so-called “video game era” of cinema, they write; “There is no question that contemporary audiences who have grown up with gaming seek out films with quicker action sequences and more game-like onscreen sequences...Film professionals who have grown up with gaming are using many of the same tools in movies that are used in the creation of gaming.”¹¹ Here the assumption that ‘audiences seek out game-like onscreen sequences’ is curious, implying that audiences—gamers or otherwise—*want* films to look and feel like games. But in an especially

⁹ For an illuminating discussion on the critical “debate” regarding movies looking like video games, written in response to commentary on the 2017 film *John Wick: Chapter Two* (Chad Stahelski), which includes multiple links to examples from journalistic game and film criticism, see Chris Plante and Tasha Robinson, “Like a Video Game: The New Meaning of a Classic Movie Insult,” *The Verge*, February 14, 2017, <<https://www.theverge.com/2017/2/14/14602844/like-a-video-game-movie-review-john-wick-2>>

¹⁰ Richard Lawson, “*The Hobbit*: Like One Bad Video Game,” *The Atlantic*, December 12, 2012, <<https://www.theatlantic.com/culture/archive/2012/12/the-hobbit-movie-review/320567/>>

¹¹ David Sedman and Randy Clark, “New Screen Order: How Video Games Are Changing Cinema Interiority,” *The Cine-Files* 5 (Fall 2013), <https://www.thecine-files.com/new-screen-order/#_edn27>

peculiar leap of logic, they later write; “The evolving frame [“digital” filmmaking influenced by video games] has led storytellers in contemporary film to take chances that they might not have prior to the nonlinear storytelling that audiences can now accept thanks to gaming...For all intents and purposes, *Run Lola Run* [Tom Tykwer, 1998] is predominantly a video game in which the audience selects their favorite ending from the three provided by the director.”¹²

The prior statement is enough to make a film historian’s head spin, or that of a scholar attuned to demographic issues within the audiences for movies and games. First, the writers strongly suggest that modern movie audiences needed the guidance of video games to understand nonlinear audio-visual storytelling (the contemporaneous legibility of *Intolerance* (D.W. Griffith, 1916), *Citizen Kane* (Orson Welles, 1941), and *The Killing* (Stanley Kubrick, 1956) would beg to differ). Then, their comment regarding *Run Lola Run* similarly suggests that the film would not be ‘accepted’ by audiences unaccustomed to video games. I do not recall a backlash to *Run Lola Run* led by millions of viewers who have enjoyed the film—or at least viewed and understood it without difficulty—despite having little or no understanding of game design or experience with play. This also reveals Sedman and Clark’s lack of attentiveness to games’ gendered demographics, specifically that at the time of *Run Lola Run*’s release, video games were *overwhelmingly* played by young males.¹³ Under this assumption, most female viewers of *Run*

¹² Sedman and Clark, “New Screen Order,” 8.

¹³ Throughout the 2010s, it was frequently reported that gamers are now roughly 50% female. This is not necessarily inaccurate, but sidesteps data demonstrating that “hardcore gamers”—the ones who spend the most on gaming, play the industry’s most expensive and heavily-marketed single-player titles, and are thus the industry’s primary customers—remain a heavily male demographic. While far more women now play “traditional” single-player video games (ones with which this dissertation is most concerned) than ever before, and traditionally male-oriented genres have (finally) begun to consider non-male players in their designs and narratives, the huge 21st-century growth in gaming by women has been driven largely by mostly non-narrative mobile-phone games. My commentary on gendered gaming demographics here consists of broad strokes subject to much nuance I am ignoring, this being largely outside my scope, however these are not exaggerations.

Lola Run would have been dizzy with confusion, when in fact it is a film that has not demonstrated a particularly gendered following. In fact, I recall personally viewing it with my boomer-age mother (not a gamer, if it needs to be said) in the late 90s. She enjoyed it very much. Also, neither my mother nor any other viewer “chose” their favorite ending of *Run Lola Run*. The film’s three ‘endings’ are entirely sequential; the film’s obviously game-influenced narrative structure toys with the notion that in games one gets a “do-over” after failure. Lola fails to resolve the film’s instantiating drama twice; the third time, she succeeds. Lola learns from her mistakes, and corrects more of them with each attempt. The third ending is the “real” one. Regardless, *Run Lola Run* self-consciously plays with gamelike structure in building a narrative film that is perfectly coherent to practically any viewer, and does not require experience with video games to comprehend. If it did, it certainly would not have premiered on the film festival circuit in advance of release. The film won the Audience Award at the Sundance Film Festival, Best Film at the Seattle International Film Festival, and was nominated for the Golden Lion at the Venice Film Festival; in 1998, let alone today, this was a not a constituency that played video games.

What links Sedman and Clark’s analysis (and similarly that of many others, including the multitude of examples from scholarship and film criticism that they cite) is a lack of due diligence in considering the myriad of ways in which video games, from their infancy to today, borrow more from cinema than the other way around. In the article “Like a Video Game: the New Meaning of a Classic Movie Insult” from online magazine *The Verge*, which spends considerable time debunking claims from the *Esquire* article “How to Tell a Movie Is Like a

Video Game” by Nick Schager,¹⁴ writer Chris Plante refreshingly notes: “Schager points to specific cinematic flourishes that intentionally borrow from games, and yes, in these ways—POV and slo-mo action—films can resemble certain video games. But what a bland point! Most of these “video game effects” were themselves borrowed from film. You could replace video games with “anime” in Schager’s piece and it would hold up just fine.”¹⁵ Plante’s point about “anime” is instructive—that many ways modern action films resemble video games directly intersects with the notion that they resemble particularly-kinetic animation—in demonstrating what many commentators on the subject forget more than anything, that the kinetics of Hollywood genre cinema in the 1980s to at least the early 2000s were most influenced by popular East Asian moving-image culture, especially the Hong Kong cinema of the 1970s and 80s. Poole himself briefly, almost begrudgingly acknowledges this when he writes that “The primary influence on *The Matrix*’s sort of hyperkinetic action is still a filmic one: the Hong Kong guns’n’kung-fu movie...”¹⁶

Most importantly, popular Hong Kong cinema—particularly the Shaw Brothers Mandarin-language kung-fu cycle of the 1970s exemplified by *King Boxer* (Chang-hwa Jeong, 1972) and director Cheh Chang’s *Shaolin* series, among countless others—is where we find some of the earliest instances of ‘clear-the-level’ and ‘boss battle’ narrative structures in moving-image

¹⁴ Nick Schager, “How to Tell a Movie Is Like a Video Game,” *Esquire*, May 6, 2014, <<https://www.esquire.com/entertainment/movies/how-to/a28498/movies-like-video-games/>>

¹⁵ Plante, “Like a Video Game: The New Meaning of a Classic Movie Insult.” Web.

¹⁶ Poole, *Trigger Happy*, 75. For an in-depth look at popular Hong Kong cinema’s aesthetics and its enormous influence on international popular cinema, see David Bordwell, *Planet Hong Kong* (Cambridge, MA: Harvard U. Press, 2000) and Leon Hunt, “The Hong Kong/Hollywood Connection: Stardom and Spectacle in Transnational Action Cinema,” in *Action and Adventure Cinema*, ed. Yvonne Tasker (New York: Routledge, 2005) and Leon Hunt, “‘I Know Kung Fu!’: The Martial Arts in the Age of Digital Reproduction,” in *ScreenPlay: Cinema/Videogames/Interfaces*, eds. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002).

media (though it could be argued that Italy’s “spaghetti western” films exemplified this even earlier).¹⁷ This ultimately reveals the Hollywood and Western-centric positionality of many scholars and critics—the idea that stylistic attributes of *The Matrix* (Lana & Lily Wachowski, 1999) must have come from video games is only reasonable if the interlocutor has no knowledge of the Hong Kong cinema. The Hong Kong films in question typically have minimal plots, little characterization beyond motivation for revenge, and consist of long ‘clear-the-level’ fight scenes that build in intensity and nearly always culminate in a final battle with the primary antagonist or ‘boss.’ These films are often extraordinarily entertaining and formally inventive, and instantiated an internationally popular style of kinetic cinema that would become the foundation of Hollywood genre cinema in the 1980s and beyond. As noted by David Bordwell in *Planet Hong Kong* (cited above) and many others, Hollywood spent years chasing popular Hong Kong cinema’s success at a certain form of sensorially-aggressive action cinema. Again, suggesting that “game-like” movies are or were most influenced *by* games, without evidence beyond audiovisual similarities, ignores that video games—a medium which developed many of its early tropes in Japan during a period in which the country was voraciously consuming Chinese-language martial arts films (and making their own)—were pilfering from Hong Kong action cinema in ways so shameless as to include lifting the sound effects from fight scenes in movies like *The Mystery of Chessboxing* (Joseph Kuo, 1979). Here, as elsewhere in the history of game genres relevant to this dissertation, cinema was the aesthetic benchmark—the sensorial regime that games hoped to emulate in both narrative structure and audiovisual effects.

¹⁷ In yet another example of game scholars ignoring East Asian cinema, “clear-the-level plot structures” are noted by Papazian and Sommers as examples of movies “adopting mechanics of digital storytelling and gameplay” in Gretchen Papazian and Joseph Michael Sommers, “Introduction: Manifest Narrativity — Video Games, Movies, and Art and Adaptation,” in *Game On, Hollywood!*, eds. Gretchen Papazian and Joseph Michael Sommers, 10.

When movies began being commonly ‘accused’ of looking or feeling like video games in the 1990s and 2000s, game-illiterate critics making these judgments were likely most influenced by game *marketing* on television, rather than actual gameplay experience. For example, the ubiquitous marketing for Sega products in the early-90s was nervy and irritating compared to the games themselves, with ‘shots’ of gameplay edited together in blistering montages. Also, by the CD-console era of the mid-90s, which saw the introduction of sometimes-lengthy animated cut scenes, game marketing relied heavily on montages of those cut scenes rather than actual gameplay—ironically, in the very period that cut scenes and gameplay were as audio-visually disconnected from each other as they will ever be. Cut scenes made for more eye-catching marketing material from the mid-90s to at least the mid-00s, as they featured many games’ most advanced and detailed CG imagery—they were essentially animated short films created entirely outside of in-game graphics engines. Indeed, cut scenes then (and especially today) often resemble action-adjacent Hollywood cinema in their styles of editing, sound, and violent narrative content (though the amount of violence is and was of course genre-determined). But *gameplay* in genres relevant to this dissertation is usually a *continuous* audio-visual experience, wherein the vast majority of gameplay does not include any cuts between wholly different camera perspectives (shot scale changes, new angles, and so on) outside of ruptures for cut scenes and in-game events.¹⁸ Thus, the kinetic film language of Hollywood action sequences is actually alien to most gameplay.

¹⁸ “Editing” of shot scale and angle is, however, performed by game designers themselves in programs like Unity as part of a game’s creation. My point is simply that the user’s gameplay experience in most if not all games relevant to this dissertation (excluding *Resident Evil* titles analyzed in Chapter 3) is a continuous experience with minimal cuts.

A true example of video games exerting an influence on film style, therefore, would involve the *absence* of fast cutting. For example, and contrary to the notion that there is a strong influence from video games on the kinetics of rapidly-cut action movie scenes—which primarily rely on close-ups and medium close-ups in most contemporary film production, shot scales that are notably uncommon in video games outside of cut scenes—the 2019 Oscar-winning action-war film *1917* (Sam Mendes), designed to appear as though it unfolds mostly in a single uninterrupted shot, is one of the closest analogs in recent film history to the experience of *watching* a video game unfold.¹⁹ Using seamless CGI trickery to hide cuts, the film follows its central characters (British soldiers in WW1 on a dangerous mission through German-occupied French territory) in a manner surprisingly similar to recent action-adventure games like *Uncharted*, with the camera often positioned behind the characters, with variation based on the scene in question. The camera in *Uncharted* sometimes pivots to a frontal perspective forcing the player to move *towards* the camera, when such a perspective shift creates tension or simply provides an aesthetically-pleasing view on a specific environment. Being a film, *1917* naturally has more nimble onscreen camerawork—in this case a physical camera as opposed to game-design program Unity’s infinitely flexible virtual camera—which frequently swirls around the

¹⁹ A colleague suggested to me that the film *The Batman* (Matt Reeves, 2022) is another productive example. While the entirety of *The Batman* is not reminiscent of the “continuous filming” of most games in the same manner as *1917*, their point was that certain sequences recall or resemble them, such as Batman’s entrance to a nightclub to confront villain The Penguin. The camera follows Batman from behind as he makes his way to Penguin, dispatching enemies along the way, advancing to ultimately confront “the boss.” However, this colleague’s claim that sequences like this were “obviously” referencing the *Batman: Arkham* game series is dubious, as one can point to countless examples from action scenes in other films, such as the long-take fight scene in *Skyfall* (Sam Mendes, 2012) or those in the *John Wick* series, or especially the influential tracking sequence-shot that concludes *Children of Men* (Alfonso Cuarón, 2006), the latter having inspired many 2010s sequences. The following article from *Screen Rant* makes claims for *The Batman*’s supposed borrowing from the *Arkham* series, however these claims mostly consist of plot elements and visual design, and in the absence of confirmation from director Matt Reeves, all of which are just as likely to be “influenced” by Batman comics or other films (Reeves has confirmed that his main sources of inspiration were writer Jeph Loeb’s string of Batman comics, 1970s cinema, and the band Nirvana): see Melody Macready, “The Batman: 10 Pieces of Inspiration the Movie Took from the Arkham Games,” *Screen Rant*, April 17, 2022, <<https://screenrant.com/the-batman-movie-similarities-arkham-games>>

characters to display relevant aspects of the scene. Unity’s virtual camera tools are obviously more *flexible*, technically, than a live-action camera, but the end result—in most games—has far less variety than a film, due to the necessity of keeping playable characters in the frame and screen direction mostly consistent. The film’s recurring visual motif of characters running towards the retreating camera and away from background threats (for example, when the two lead characters run away from a crashing German plane) is unambiguously analogous to a bevy of similar interactive sequences in the *Uncharted* series. We see this in the hero Nathan Drake’s sprint towards the camera away from an oncoming enemy Jeep in the Nepal-set level “Urban Warfare” of *Uncharted 2*, for example (see **Figs. 2.1-2.4**), and in a plethora of other games such as *Vanquish* (Sega, 2010), *Remember Me* (Capcom, 2013), and *Dead Space 2*.



Fig. 2.1: *1917* — The protagonists see a damaged plane approaching their position.



Fig. 2.2: *1917* — The camera tracks backwards as the characters flee the plane crash.



Fig. 2.3: *Uncharted 2: Among Thieves*



Fig. 2.4: *Uncharted 2: Among Thieves*

Dead Space provides another typical example; with its lack of visually demarcated cut scenes, the sense of “continuous filming” in *Dead Space* is far closer to an unusual cinematic experiment like *1917* than it is to cinema commonly thought of as kinetic, such as the films of Michael Bay, Kathryn Bigelow or Tony Scott (e.g. *Bad Boys 2* (2003), *Strange Days* (1995), and *Deja Vu* (2006), respectively), with their notably short average shot lengths (in most sequences) and dizzying changes in shot and sound scale. While video games can certainly be aesthetically overwhelming, comparing them to the fractured audio-visual experience of most mainstream genre cinema does not hold up to scrutiny, outside of obvious connections in their narrative environments and orientation towards violence and kinetic movement as spectacle. The same goes for the cliché of Hollywood action films as comparable to theme park rides, as the experience of a rollercoaster or ride (such as “Pandora: The World of *Avatar*” at Walt Disney World in Florida) hinges upon simulated or actual continuous movement through space, which is far more like *1917*—a movie never compared to a theme park ride in the popular press as far as I can find—than breathlessly edited movies like *The Departed* (Martin Scorsese, 2006) or *Transformers* (Bay, 2007), which stimulate their audience via precise, rhythmic audio-visual patterning of changing perspectives rather than actual or illusory movement.²⁰ Comparing a film to a theme park ride is meant almost exclusively as an insult, and *1917* is a high-minded immersive war film with the pedigree of Academy Award winners including Mendes and his

²⁰ While I have indeed never seen a comparison of *1917* with a theme park ride, I am not the only one to notice the game-like quality of *1917*. On a December 2022 episode of pundit Bill Maher’s podcast “Club Random,” Quentin Tarantino said the following: “I actually liked the movie, but my friend brought something up, and oh my god, once he brought it up I couldn’t unhear it. He was complaining about it because he felt it played too much like a video game. Now, I don’t play video games, so I don’t feel that per se. So [watching the film], I’m actually thinking it feels more innovative than maybe someone who plays video games does. But the person I was speaking to said, ‘It’s ‘Wolfenstein’ the movie.’” A clip of the podcast can be found at: <<https://www.youtube.com/watch?v=FsA16kP3Wgo>>

cinematographer Roger Deakins, who ranks among the most celebrated of his profession.²¹ I find the film intensely effective, partially *because of* its (unintentional) remediation of game aesthetics. But to many film critics, this would be a heretical comparison.

My ultimate point is that the imbrication of the two media is complex and counter-intuitive, and critical discussion of their relationship is often based on comparative fallacies. Recasting literary scholar Harold Bloom's influential phrase describing poets operating cautiously under the shadow of their influential predecessors, game and film writers both demonstrate a visible "anxiety of influence."²² In both directions, the encroachment of the other's stylistic attributes, whether accurately perceived or not, is typically cast as a negative element, as if both could exist in a virginal state untouched by other media forms, despite cinema's chain of polyvalent attractions having been originally, in the late 19th century, a demonic transmutation of music, theatre, photography, popular literature, the circus, vaudeville, optical toys, and magic shows, (and much more), or the fundamental imbrication of cinema into moving audio-visual media that followed it, such as video games.

Some game scholars will often sidestep relationships to cinema, thus ignoring this dissertation's central question, by implicitly refusing to even mention movies as a point of influence or comparison, again betraying an anxiety over games' specificity.²³ A recent example is Amy Green's book *Storytelling in Video Games: The Art of the Digital Narrative*, in which her

²¹ As noted in a footnote in this dissertation's introduction, Henry Jenkins compares the spatial storytelling techniques of games and theme park rides in non-qualitative terms in his influential essay "Game Design as Narrative Architecture," as is appropriate considering the complexity of such techniques in both "mediums."

²² See Harold Bloom, *The Anxiety of Influence: A Theory of Poetry* (New Haven, CT: Yale U. Press, 1973).

²³ For an example of the "anxiety" over medium specificity within scholarship about game ontology in the late-90s and early-00s (related to the broader "narratology vs. ludology" debate), see Espen Aarseth, "Genre Trouble: Narrativism and the Art of Simulation," in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2004).

primary point of comparison is *literary* storytelling. It is in multiple ways a novel approach. A member of the English faculty at the University of Nevada, Las Vegas, Green is implicitly speaking to English scholars and produces some terrific readings, including sophisticated analyses of storytelling in *Persona 4* (Atlus, 2008) and the visual-novel game *Steins;Gate* (Nitroplus, 2009) that I would recommend to any teacher of game studies. But her unavowed refusal to analyze any of her examples in coordination with their highly-cinematic presentations and narrative forms becomes frustratingly awkward in her case studies of the *Mass Effect* trilogy and especially *The Last of Us*. On the latter, which contains no instances of interactive narrative choice or narrative branching, Green writes, “That the game itself plays along a set narrative trajectory, allowing the player no options regarding any of these major events, does not lessen the strength or power of the story, or its ability to be fully immersive.”²⁴ This strongly implies that a story with a “set narrative trajectory” (like a film) contains fundamental disadvantages preventing it from being as ‘strong’ or ‘powerful’ as an interactive narrative, and thus it becomes notable that *The Last of Us* succeeds anyway. More charitably, perhaps Green is saying that *The Last of Us* contains positive qualities of both a game *and* a movie, but will not use the latter word. In expounding upon NPR critic Jason Sheehan’s essay “Reading the Game: *The Last of Us*,”²⁵ Green writes that Sheehan’s experience of the game “on multiple occasions highlights the lack of dissonance between embodied player, character, and narrative,” and “Of important note here is his [Sheehan’s] internalized sense of responsibility over the choices in the game and that,

²⁴ Amy Green, *Storytelling in Video Games: The Art of the Digital Narrative* (Jefferson, NC: McFarland, 2018), 93.

²⁵ Jason Sheehan, “Reading the Game: *The Last of Us*,” *NPR*, December 31, 2016, <<https://www.npr.org/sections/alltechconsidered/2016/12/31/505592646/reading-the-game-the-last-of-us>>

in those final tense and bloody moments, no separation exists between digital story and embodied player.”²⁶

The arguably naive unification of interactivity with “embodiment”—a linkage that game studies has both suffered from and productively analyzed for decades—here acts as a shield against the suggestion that movies or fiction TV are relevant in this context, even in a game with an author-driven, predetermined narrative cocooned within the tropes of similar cinematic predecessors. I do not doubt that Sheehan felt a sense of “responsibility” in the characters’ choices—pre-ordained as they are—as I myself did when playing it.²⁷ But here the recourse to the player as embodied within its authored narrative is an excuse to ignore the game’s cinematic inheritance, which is ultimately an ahistorical rhetorical move that buries the game’s transmedial web of influences, such as the sequential progress through narrative situations that develop characters in set directions—critical to the cinematic action-adventure genre. It also circumvents the issue of the game’s players questioning the creators’ narrative choices, as we all do when subjectively analyzing an artwork. The fantasy of embodiment here suggests that gamers are too absorbed or immersed in the interactive framework to understand it as an authored text. In popular reception of *The Last of Us* and its sequel, and other games with controversial narrative developments (such as the ending of 2012’s *Mass Effect 3*), the “dissonance” Green claims *The Last of Us* avoids is in fact oft-discussed as a principal complaint. In a Reddit thread on dramatic irony in video games, one contributor bemoans the dissonance between their supposed agency as a player and the actions the game forces them to perform. They write, “I dont [sic] know if it's

²⁶ Green, *Storytelling in Video Games*, 92.

²⁷ For more on players’ sense of “responsibility” for avatar behavior, see Adrienne Shaw, “Does Anyone Really Identify with Lara Croft?,” in *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture* (Minneapolis, MN: U. of Minnesota Press, 2014).

relevant [to the discussion of dramatic irony], but I hate feeling disconnected from the character I'm playing. For example, if I have to kill somebody in an important scene even if I don't want to (*Last of Us* finale). Why even give me control over the character? Just show me a cut scene."²⁸

Here the commenter refers to the game's ending, in which the main character, Joel, must murder doctors belonging to a revolutionary group trying to cure the zombie virus, in order to save his surrogate-daughter Ellie from death on the operating table. Ellie is immune to the virus, but the operation to extract brain tissue to synthesize a cure will kill her. Playing as Joel, if you do not quickly kill the doctors, they will kill you, and the scene starts over. Joel's story only ends one way; he coldly murders the doctors and saves Ellie, and user-input is predestined to generate this end.

This was a common complaint about *The Last of Us*—lack of player choice—that was amplified by its sequel (2020's *The Last of Us Part II*), which similarly gives players no choice in murdering several likable secondary characters and participating in torture. The harrowing events of both games are in place to make their belabored thematic points clear: revenge is a self-destructive act, violence begets violence, humans are essentially cruel, selfish, and prejudiced outside the bonds of romantic or familial love, and so on. The game thus repeats the essential thematics of nearly every non-parodic zombie movie or TV show, and instead of demonstrating the player as a particularly embodied subject within its narrative world, it instead highlights the frustration of being a supposedly active agent in the predestination machine of a game's denouement. *The Last of Us* series is a particularly powerful example of that machine at work—the way games thrust you into a violent cinematic spectacle requiring specific controller input to

²⁸ See “Dramatic Irony in video games, how to do it ‘well?’”, *r/Games Reddit* thread (circa 2014), <https://www.reddit.com/r/Games/comments/2jtxhr/dramatic_irony_in_video_games_how_to_do_it_well/>

properly advance on its predetermined way. In *Part II*, one stomach-churning sequence makes it clear that causing the player to feel moral repulsion is an authored element of the experience. Playing as Ellie (now a young adult on a revenge mission, after the game opens with Joel's murder at the hands of the aforementioned revolutionary group), you must interrogate the character Nora for information on the whereabouts of Joel's killers. Ellie threatens to torture her if she doesn't talk, but Nora is not forthcoming. Finally, the game settles on a medium close-up of Ellie, sweaty and heaving from chasing Nora. A button icon appears over her shoulder, and the previous exchange has implied that pressing the button will cause Ellie to hurt Nora. Importantly, if you do not press the button, the shot will not change, and nothing will happen. The animation of the exhausted, angry Ellie will continue *ad infinitum* without player input. Ellie *must* torture Nora, and you must press the button to do it. User input does not simply advance gameplay, but also advances the action-adventure trope of the hero confronting her inner darkness. The game's creators are here using game operations to play with notions of embodiment to make the sequence's events even more repulsive. No choice exists, and thus the game could include the torture in the preceding cut scene in which Ellie threatens Nora. By forcing the player to input the action, the game simultaneously utilizes the vague sense of embodiment engendered by any form of "gameplay" to make the scene more affectively disturbing for the player, while also forcefully reminding us that we do not control Ellie beyond her movements and combat in playable sequences; any important decision she makes has been painstakingly authored by the game's writers and key creative staff. Here *lack* of choice can be a powerful thematic element, as it is in many action-adventure films wherein the hero must progress through dangerous situations to develop toward their destiny.

Relatedly, if the player of *The Last of Us* or any game indeed embodies the playable avatar(s), then it would be near-impossible for games to contain dramatic irony. In what now reads like an example of how the 1990s imagination for what video games could eventually achieve was quite limited, Poole makes a version of this argument in *Trigger Happy*: “But there can be no dramatic irony in videogames, because dramatic irony depends on a knowledge differential between spectator and protagonist—yet in a videogame the player is both spectator and protagonist at once.”²⁹ This observation has not aged well, as today players are accustomed to games bursting with this exact “knowledge differential”—such as in *Heavy Rain* (Quantic Dream 2010), when the player discovers the identity of the child-killer before any playable characters beyond the killer himself. Or in *Castle of Illusion Starring Mickey Mouse* (discussed in Chapter 1), as the narrator often warns us of what is to come within a level (“Little did Mickey know...”), information that Mickey does not possess. The dramatic irony in *The Last of Us* finale is more subtle than these examples, but contains an irony common to scores of games. If you avoid or fail to kill the doctors, you are killed by them and start the scene over—thus, you learn what must and will happen to continue the scene. This is a foundational part of games’ appeal—trial and error. In the grim puzzle-platformer *Limbo* (Playdead/Microsoft, 2010), for example, watching your avatar meet a grisly end over and over is essential to figuring out how to continue. Each time a game so clearly signals the proper way to advance within a sequence of narrative import, is this not dramatic irony? If not precisely, it nonetheless provides a mastery over or knowledge of some amount of future time in the game world. The way most games require players to input specific actions to advance narrative works against the notion of game characters

²⁹ Poole, *Trigger Happy*, 81.

as embodied, and instead points to them as pawns in the predestination machine of the game, or ciphers through which we get to play with cinema.

Action: Genre and Perspective

The game *Tomb Raider* is a well-known example of the broad game genre of “action-adventure” (where “adventure” implies the presence of exploration sequences instead of *constant* violence, and a notable amount of narrative), and nestled within the game category is a host of film and literary genres that contain “action sequences” (such as sci-fi, horror, fantasy, gangster, and western). The genre borrows from cinema more than any other game genre, as action movies naturally became the aesthetic and narrative baseline for many games. In games, “action” as an umbrella genre denotes gameplay heavy on combat, varying degrees of exploration, and interactive traversal of the game world, implying a fast pace and near-constant controller input (though, again, the “adventure” tag signals that it sometimes slows down). Though action narratives are rooted in literature and theatre, the action genre originated as a popularly-understood category associated with cinema, and was refined across decades from early silent shorts like *The Lonedale Operator* (D.W. Griffith, 1911) to the modern touchstone *Aliens* (James Cameron, 1986), until becoming Hollywood’s ur-genre by the 2010s, exemplified by films including *Inception* (Christopher Nolan, 2010), *Django Unchained* (Quentin Tarantino, 2012), *Sicario* (Denis Villeneuve, 2015), *The Revenant* (Alejandro G. Iñárritu, 2015) and any movie with a ‘superhero,’ despite these titles including elements from a dizzying array of sub-genres from science-fiction to historical spectacle. “Action” now links the great majority of the global film industry’s most commercially successful theatrical product, made up mostly of hybrid

genres linked by kinetically violent sequences, and this dominance of action-oriented form and narrative is historically correlated with the cresting popularity of video games. Outside of sports films and survival thrillers, “action” in cinema typically manifests as physical violence or the threat of it, a manifestation greatly intensified in games, as they are an inherently action-oriented medium in a more literal sense than cinema, for the obvious reason that they require player action (controller input) to be fully experienced. This action-violence linkage, engendered by decades of popular and influential cinema, collides with the fact that game characters must nearly always be *doing* something in their virtual worlds that maps onto a game controller's possible inputs, in ways that feel immediate to players. Beyond simply moving an avatar with a joystick or directional pad, violent actions have a notably satisfying correspondence: press a button and your character fires or strikes with their weapon. Thus, given the requirements to interlace interaction with narrative, dramatic situations in games are often centered around violence. This can create incongruities in game experiences, chief among them that even comical, breezy adventure games like *Uncharted* require you to kill hundreds to thousands of non-player-characters, a result of the fortuitous convergence of the interactive features of the medium and popular cinema's enormous influence on video game creators and players.

This influence is shown in many action-adventure games' most memorable sequences or gameplay elements, in their strong formal connections to examples from associated film genres. In *Uncharted 2*, the famous train sequence recalls examples from early cinema all the way to *Mission: Impossible* (Brian De Palma, 1996).³⁰ The opening scene of *Mass Effect 2* (2010) re-

³⁰ When playing the train sequence of *Uncharted 2* for the late, great film scholar Miriam Hansen in 2010, she quickly commented—predictably perhaps, given her work on early 20th-century popular culture—that “it’s just like Hale’s Tours.” See the Wikipedia entry on Hale’s Tours: https://en.wikipedia.org/wiki/Hale's_Tours_of_the_World

works the Starship Enterprise's battle with the Borg Cube in *Star Trek: First Contact* (Jonathan Frakes, 1996), and ultimately resembles an interactive adaptation of the contemporaneous opening sequence of the 2009 reboot of *Star Trek* (JJ Abrams), complete with the respective ship captains' heroic self-sacrifice. Examples abound, and generally speaking the operations of audio-visual and narrative flow in 21st-century action games correspond to previously-existing examples from film genres. Narrative worlds that seem to take up the most space in the webs of influence for game creators—cowboy stories, film noir and gangster narratives, sci-fi, and zombie-adjacent apocalyptic scenarios—emerge largely from the late 20th century's collective cinematic consciousness. This resulted in games like *The Godfather* (EA, 2006), *Red Dead Redemption* (Rockstar, 2010) and other Rockstar-produced titles like *L.A. Noire* (2011), *Heavy Rain* and its stylistic follow-up *Beyond: Two Souls* (Quantic Dream, 2013), zombie games like *Dead Rising* (Capcom, 2006)³¹ and *The Last of Us*, and of course the long-running *Tomb Raider* and *Uncharted* series, which could not exist outside the sphere of influence of the *Indiana Jones* film series, itself a nostalgic re-working of adventure serials from early 20th-century film and literature.

But genre in videogames rarely maps precisely onto notions of film and literary genre, as game genres have dual or even triple-pronged definitions, where terms describe the genre of narrative and setting while others describe gameplay style. An action game like *Resident Evil 4* (Capcom, 2005), for example, is an action game first and foremost because of its blistering pace and emphasis on combat, but is also commonly described in terms like “third-person-action-

³¹ Though the lawsuit was dismissed due to the judgment that “zombies in a shopping mall” was an unprotectable idea under copyright law, *Dead Rising* attracted controversy after being sued for copyright infringement by the rights-holders of George A. Romero's 1978 film *Dawn of the Dead* and its 2004 remake.

horror-shooter,” acknowledging its narrative and audio-visual atmosphere’s placement in the horror genre, as well as its gameplay style: third-person perspective and a shooter (which simply denotes that combat is primarily gun and projectile-weapon-based). Noting a third-person perspective in a game genre description is as informative as any signal of narrative content, since the gameplay experience and aesthetics of first-person perspective (FP) action games versus third-person perspective (TP) examples can be vastly different, in that TP is a more cinematic perspective inclusive of the playable avatar, while FP usually provides a more limited view of gamespace that creates a claustrophobic feel. These differences often result in strong player bias towards titles that most utilize one or the other.³²

The reasons for this dissertation’s bias towards TP over FP games should thus be made clear. As games began emulating cinematic style more directly in the mid-1990s, aided by technology allowing games to regularly feature three-dimensional imagery visually linked to contemporaneous CG animated films, as opposed to older top-down or side-scrolling two-dimensional views, the issue of TP versus FP perspective in relation to cinematic style became more relevant and it is worth expounding upon here, as their differences raise important issues for the constitution of cinematic aesthetics.

Generally, TP games resemble cinematic perspective more than FP ones for a seemingly superficial reason; in TP, you can see the playable character. Fully first-person filmmaking is a historical oddity, and though it existed decades before the existence of video games in films like *Lady in the Lake* (Robert Montgomery, 1947), it is typically utilized as a tension-creating device

³² It should be noted that some action games, such as the current-generation versions of *Grand Theft Auto V* (Rockstar, 2013-2022), and nearly all modern racing games, allow the player to switch between first and third-person perspectives at will. This is not rare, but somewhat uncommon, as most games are designed specifically for one or the other. In the case of *Grand Theft Auto V*, it was originally designed as third-person.

in discrete sequences or shots, as prominently seen in the influential first-person opening sequence of *Halloween* (John Carpenter, 1979). In the 21st century, first-person perspective as a film's dominant visual mode is now unavoidably linked to FP shooter (FPS) video games, and thus is utilized primarily in films that self-consciously experiment with game aesthetics, such as *Hardcore Henry* (Ilya Naishuller, 2015).³³ TP games, on the other hand, are often presented in a shot scale oddly similar to classical Hollywood cinema, a scale known in film history as *plan américain*, denoting Hollywood cinematography of the 1930s and 40s that heavily featured shots of characters from roughly the knees up. This allowed for depth staging of multiple characters in dialogue without resorting to shot-reverse-shot dialogue editing, exemplified by the director Howard Hawks' busy compositions in films such as *His Girl Friday* (1940). Shots of single characters with *plan américain* framing were also common, from medium-long establishing shots of characters moving through rooms in Alfred Hitchcock's *Rebecca* (1940) and countless films shot mostly on indoor soundstages, to its common use in Westerns like King Vidor's *Duel in the Sun* (1946). They are common enough in Westerns to also possess the moniker "cowboy shots," since a medium-long, knees-up shot scale includes a character's belt and holster.

Medium-long framing in TP video games, as well as the longer framings seen in *Tomb Raider* and others, thus have a comforting visual familiarity due to film antecedents, though perhaps only for fans of studio-era cinema. There are, of course, major differences: for example, in-game cameras typically display a character's backside as you move them forward in space. The cinematographic operations of games are generally much closer to "post-classical" film

³³ For a theoretical accounting of first-person perspective in both video games and cinema, see Alexander Galloway, "Origins of the First-Person Shooter," in *Gaming: Essays on Algorithmic Culture* (Minneapolis, MN: U. of Minnesota Press, 2006).

style, especially in cut scenes, but like the *plan américain* shot, games are concerned with framing characters in a way that makes their distance from each other, and their orientation to objects, abundantly clear; like classical cinema, gameplay is rarely if ever composed principally of oscillations between close-ups, as seen so often in post-1960s cinema. Additionally, the classical *plan américain* is most often shot with a neutral 35-50mm lens, while games typically employ wider (wide-angle) fields of view roughly corresponding to lens lengths of 10-25mm. However, games rarely simulate the curvilinear distortions of wide-angle film lenses, which warp and stretch the sides of images while compressing the frame's center. This device is taken to extremes with "fisheye" focal lengths of 1-10mm as seen in sequences themed around identity dissociation in films like *Seconds* (John Frankenheimer, 1966) or *Requiem for a Dream* (Darren Aronofsky, 2000), or for quasi-comedic purposes in films like *The Favourite* (Yorgos Lanthimos, 2018). Unless simulated for specific stylistic purposes within a sequence, as occasionally occurs in the first-person game *Bioshock Infinite* (2K, 2013), both TP and FP games are most commonly rendered with a rectilinear wide-angle perspective preserving perfectly-straight lines at the frame's edges. Rarely if ever do we see a game with the consistently curvilinear (wide-angle, but not "fisheye") distortion of films like Paul Thomas Anderson's *Punch-Drunk Love* (2002) or the oscillation between gently-distorted wide-angle shots and shallow-focus, telephoto ones of focal lengths up to 100mm in Anderson's *There Will Be Blood* (2007).³⁴

³⁴ It should be noted that PC versions of first-person perspective games historically had a wider field of view than console versions, for various reasons that are difficult to entirely account for. One is that PC versions of games in the 1990s especially often had a higher rendering resolution versus console versions due to greater processing power, though that advantage dwindled beginning with the "HD" console era around 2006. Wider angles of view on PC before then did often create frame-edge distortion in the manner of anamorphic film cameras. PC gamers were accustomed to the wider field, and thus unhappy when the 2007 PC release of *Bioshock* (2K) had a narrow field of view similar to the Xbox 360 console version—this was in fact done to limit frame-edge distortion. Since then, it is uncommon for PC titles to have wider fields of view than console counterparts.

Despite these important differences, it remains true that TP games generally conform more closely to a cinematic perspective, due to the on-screen presence of playable characters, and the knees-up framing seen in games across genres, from *Resident Evil 4* to *Spec Ops: The Line*. But contrary to the simplistic conflation of FP games with embodied perception, a view common to decades of game criticism and scholarship—for example, Green writes of the game *Firewatch* (Campo Santo, 2016) that “The game is played from a first-person perspective, meaning that the player sees the world as if he or she were really inhabiting it”³⁵—I would argue that TP games offer as much evidence of ocular embodiment as FP examples, due to the extension of peripheral vision allowed by TP framing and camera control. In FP games, a player’s ability to shift the viewpoint on game space has always felt more like control of the *screen* than a form of character embodiment. This is especially true of prototypical FPS games of the 1990s, such as *Wolfenstein 3D* (iD Software, 1992) and *Doom* (id Software, 1993), which lacked dual-joystick controls and relied on “strafe” buttons to move from side-to-side, while the joystick moved the character forward or backward. While modern FP games have dual-stick setups allowing for smooth control of movement with simultaneous control of the direction of vision (as do TP games), TP perspectives counter-intuitively achieve just as strong a sense of embodied vision due to the player’s enhanced ability to assess the periphery of game space *around* the onscreen character. In FP, a static shot does not allow for the shift in focus to the ocular periphery of the image as human eyes are capable of. Moving the FP character’s view, then, equates to a jerk of the head, rather than eye movement or ocular accommodation (changing the focus of one’s eyes). TP games, however, include the character’s periphery as part

³⁵ Green, *Storytelling in Video Games*, 10.

of the frame, and the right joystick—technically controlling the *camera* in TP—thus attains a loose linkage to the feeling of scanning one’s peripheral vision.

Neither FP nor TP games provide the strong sense of visual embodiment often assumed by critics in the former, but it can be argued that TP games have advantages over FP in the simulation of ocular perception, nulling the notion that FP games are ‘embodied’ experiences. The on-screen presence of playable characters in TP, and an emphasis on medium-long framing, renders TP imagery naturally more cinematic, regardless, and one could suggest that TP provides greater possibilities for embodiment when we consider the processes of *identification* inherent in any sense of embodiment in fictional characters. Do we not feel more embodied as James Bond when controlling a visible on-screen TP Bond avatar in *007: Everything or Nothing* (EA/Visceral, 2003) instead of the FP Bond of *007: Nightfire* (EA/Gearbox, 2002)? This is a nuanced question, and may be answerable only in subjective game experience, in addition to requiring analysis of the slippery gulf between *embodiment* and *identification*.³⁶ But the point stands that TP games offer a stronger corollary to cinematic perspective, and that the virtual player-controlled camera—involving a separate gameplay mode in which character movement ceases in 90s games like *Tomb Raider* or *Super Mario 64*, but adjustable “on the fly” simultaneously with character movement in countless games since — is one of the most profound ways in which games offer a unique expansion of the possibilities of moving-image artwork.

³⁶ Discussion of how players often identify with what they can *see* can be found in the previously-cited essay: Shaw, “Does Anyone Really Identify with Lara Croft?”

Tomb Raider: Environmental Presentation and Audio-Visual Correspondence

Released in 1996 for the Sony PlayStation, *Tomb Raider* typifies the early era of 3D gaming's movement towards self-consciously cinematic remediation, from its narrative content to the audio-visual presentation of in-game events. Right away, the game's opening cut-scene makes the game's stylistic forebears abundantly clear: Hollywood adventure films, especially the *Indiana Jones* series. Set in a dingy bar in Calcutta, our freelance treasure-hunting heroine Lara Croft waits to meet a courier carrying an assignment from an unidentified billionaire. He tosses a magazine, featuring Lara on the cover, on the coffee table in front of her. **(Fig. 2.5)** The scene cuts to the first direct image of Lara as she looks up at the messenger, but only about half of her face is shown. She raises her eyes to him, and we see the courier reflected in her sunglasses. **(Figs. 2.6-2.7)** At the end of the scene, after Lara has been suitably enticed by the offer to search for a treasure in the remote mountains of Peru, another cut to her face shows her cracking a smile, but in extreme close-up we still do not see her entire face. **(Fig. 2.8)** The messenger's reflection in Lara's sunglasses demonstrates careful attention to visual composition, in particular a fluency with common cinematic language for the introduction of an action-adventure film's star or hero. The deliberate withholding of her entire face recalls the careful cutting around actor Harrison Ford (portraying Indiana Jones) in the opening of *Raiders of the Lost Ark*, which withholds a full shot of Ford's face until an event activates his character's defining courage. In the film's first three minutes, the camera carefully withholds revealing Ford's visage. Several shots show him from behind, or in long shots with his face obscured by his hat or foliage in the foreground. **(Figs. 2.9-2.13)**. But when he is threatened by one of his companions, close-ups of him grabbing and then using his whip to rip his attacker's gun out of his hands (the character's

first “hero” moment) are followed by a full reveal of Ford’s face, stepping out of the shadows and into the light in a well-lit medium shot (**Figs. 2.14-2.16**), just as the first full shot of Lara’s face in *Tomb Raider* appears in concert with her first moment of action-heroism (**Fig. 2.17**).



Fig. 2.5: *Tomb Raider*



Fig. 2.6: *Tomb Raider*



Fig. 2.7: *Tomb Raider*

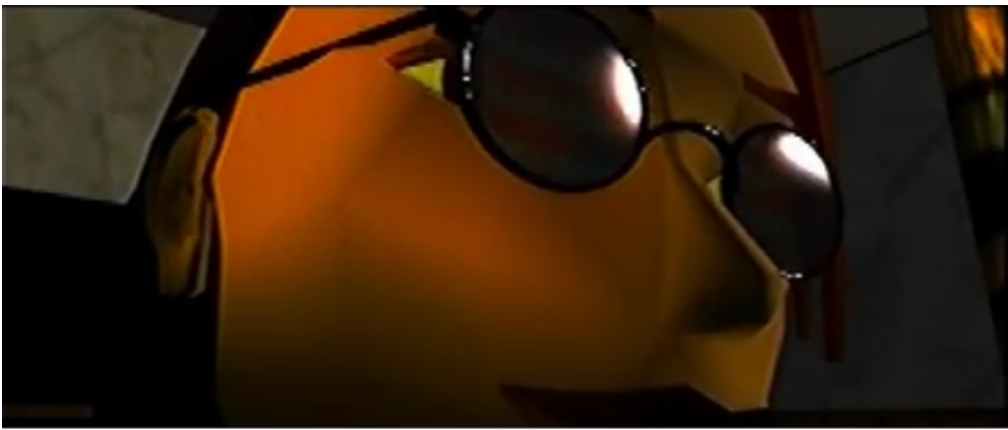


Fig. 2.8: *Tomb Raider*



Fig. 2.9: *Raiders of the Lost Ark*



Fig. 2.10: *Raiders of the Lost Ark*



Fig. 2.11: *Raiders of the Lost Ark*



Fig. 2.12: *Raiders of the Lost Ark*



Fig. 2.13: *Raiders of the Lost Ark*



Fig. 2.14: *Raiders of the Lost Ark*



Fig. 2.15: *Raiders of the Lost Ark*



Fig. 2.16: *Raiders of the Lost Ark*



Fig. 2.17: *Tomb Raider*

At the time of *Tomb Raider*'s release, the simulation of reflective surfaces was one of the most impressive (and expensive) achievements of computer graphics, requiring countless hours of rendering, and thus the aforementioned reflection in Lara's glasses served also to remind the contemporaneous player of the technical dazzle of cut-scene graphics; here, as in most games of the period, the cut scene is rendered separately from the game's graphics engine, serving dually as important narrative exposition and as advertisement for the game's technical prowess. The choices made in the *Tomb Raider* opening, especially those winking at *Raiders of the Lost Ark*,

represent the game medium complicating the notion of hyperreality—as defined by Jean Baudrillard³⁷—in that it technically denotes representational correspondence to the real, physical world (an animation of a chair is *like a chair*, but has no original referent) as any live-action or animated film does, but simultaneously signifies the particularity of a “photorealistic” *movie image* (cine-reality) and its commonly understood artificiality or constructed-ness. While Baudrillard and other relevant theorists (Siegfried Kracauer, Walter Benjamin, etc.) were concerned mostly with live-action photography and chemical film’s mediation of “reality”—wherein a photograph of a physical object, for example, contains a reproducible trace of the object’s physical reality, yet one thwarting or degrading said reality, ultimately representing the *hyper-reality* of photographic representation and its inauthenticity compared to the object itself—the animated short film (cut scene) that opens *Tomb Raider* suggests that its corresponding “reality” is codified cinematic representation or cine-reality, rather than the physical world. Recognizable attributes of popular cinema thus replace physical reality as the domain under simulation, again demonstrating cinema’s deep imbrication in game experience.

That cine-reality is the referent of video game “realism” is also seen in the opening cinematic of the contemporaneous movie-to-game adaptation *Alien Trilogy* (Acclaim, 1996), whose creators chose to precisely simulate a shot from *Aliens* of the military drop-ship landing on the planet LV-426, instead of re-imagining it from a different, perhaps more dynamic angle given the freedom of computer animation. Instead, the shot painstakingly re-creates the shot from the film, as do several proceeding shots in the sequence, advertising the game's borrowing of the film’s visual style, weapon design, and atmosphere. In other words, it simulates one of the

³⁷ Jean Baudrillard, *Simulacra and Simulation*, trans. Paul Foss (Cambridge, MA: Semiotext(e), 1983).

film trilogy's cine-realities (that of the second film, *Aliens*) as opposed to a re-imagining of the fictional space in its transition to a new medium. The post-cinematic hyperreality of video games is thus commonly mediating and simulating movies within a given game's broader lexicon of its fictional genre, as opposed to self-conscious correspondence to physical reality. In cut scenes especially, this remediation of cine-reality also extends to the generic intertext of cinema; in *Alien Trilogy*, iconography suggestive of both *Aliens* and the science-fiction genre more generally creates a hyperreal effect wherein the original referent is cinematic antecedents.

Cut scenes in more recent games differ from those in *Tomb Raider* in a fashion parallel to the continued development of digital special effects in live-action cinema—they are more visually detailed overall, with more sophisticated lighting effects and facial animations, and have more complex sound, but nonetheless rely on the same conventional strategies of framing and sound design that ultimately serve discernible continuity editing. Fifteen years after *Tomb Raider*, the cut scenes within the opening sequence of *Mass Effect 2*, a ferocious, intermittently interactive narrative action scene brimming with in-game-events and short cinematic ruptures, remain under the recognizable *modus operandi* of the post-1960s cinematic style of “intensified continuity” as described by David Bordwell, even as its integration with interactive space has become infinitely more seamless.³⁸ But for both, and for any game within this dissertation's corpus, cine-reality is foregrounded through recognizable audio-visual strategies so strongly that it is quickly established as the “real” through which game space is to be experienced. This primes players of games in the early 3D era, like *Tomb Raider*, for the fruitful collisions of cinematic style and interactivity that distinguish many of their most memorable moments of gameplay. Cut

³⁸ David Bordwell, *The Way Hollywood Tells It* (Berkeley, CA: U. of California Press, 2006).

scenes then, and still today, fascinate for their emulation of post-classical cinematic style, perhaps especially in the action genre, but it is again within gameplay where we discover the absorption of cinematic style into the real-time space of interactive events, and thus where we locate games' greatest achievements as hybridized audio-visual texts.

Tomb Raider traffics in many forms of cinematic address, and one of the most striking is found in its precisely-cued moments of “contemplative spectacle,” a term borrowed from scholar Geoff King’s model of an oscillation between such moments of contemplation versus those of “spectacular *impact*” (or “montage-impact”) in contemporary genre cinema—an evocative parallel to the common binary of passive viewer v. active gamer. Contemplative spectacle describes moments in films where the forward thrust of narrative is paused to allow viewers to immerse themselves in on-screen attractions, often meant to be experienced as sublime admiration, as seen in the “slow cinema” mode of contemporary art cinema, or in awe-inspiring sci-fi sequences such as the psychedelic conclusion of *Annihilation* (Alex Garland, 2018) or the languid “Blue Danube” spaceflight sequence from *2001: A Space Odyssey* (Stanley Kubrick, 1968), discussed again below. On the other hand, spectacular impact refers to techniques, including ultra-fast editing, to connote agitated intensity or simply *energy* (as in *City of God* (Fernando Meirelles, 2002) or *The Bourne Identity* series) or aggressive montages set to pulsating music (such as the opening montage of *Spring Breakers* [Harmony Korine, 2013], a film that also typifies this oscillation with its omnipresent sequences of contemplative beauty). King describes this oscillation thusly:

Some forms of cinematic spectacle invite the viewer to sit back in a state of admiration/astonishment, contemplating the scale, detail, convincing texture or other impressive attributes of the image. Others seek to create a more aggressive,

explosive and ‘in your face’ variety of spectacular impact. The distinction is far from an absolute one, the two styles sometimes being used in conjunction and the boundary between one and the other not always clear cut. In general, however, the more contemplative form tends to offer long and more lingering spectacular vistas while the latter is more reliant on rapid montage-style editing and/or camera movement to create its visual impact.³⁹

The oscillation between these modes can be mapped onto game experiences, as a game can offer opportunities for the contemplation of beautiful views as well as “rapid montage-style editing and/or camera movement to create its visual impact.”⁴⁰ It is important to note that while this oscillation may seem to imply the binary often drawn between “flow” and “rupture,” as outlined in this dissertation’s introduction, these opportunities for contemplation are not limited to cut scenes, meant to be viewed ‘passively,’ but can occur within the interactive portions of the game as well. This is reflected in King’s description of game and cinema interactions: “The aim for potential hybrid media might be to achieve an appropriate balance between different kinds of pleasure: the pleasure of close interactivity and control and the Hollywood-movie-type pleasure of safely underpinned loss of control over the unfolding of the action.”⁴¹ In her essay “As We Become Machines: Corporealized Pleasures in Video Games,” Martii Lahti argues that “Much of the development of video games has been driven by a desire for a corporeal immersion with technology, a will to envelop the player in technology and the environment of the game space.”⁴² Game sequences that invite players to contemplate aesthetically pleasing views within the game

³⁹ Geoff King, “Die Hard/Try Harder: Narrative, Spectacle and Beyond, from Hollywood to Videogame,” in *Screenplay: cinema/videogames/interfaces*, ed. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002), 57.

⁴⁰ Ibid.

⁴¹ Ibid., 55.

⁴² Martti Lahti, “As We Become Machines: Corporealized Pleasures in Video Games,” in *The Video Game Theory Reader*, ed. Mark J.P. Wolf and Bernard Perron (New York: Routledge, 2003), 159.

environment demonstrate game creators reaching for the “immersion” or “envelop[ing]” that Lahti describes, solicitations that became common with the first years of dominance of CD-based gaming in the mid-90s, coinciding with huge leaps in CGI technology.⁴³ The pleasure in games’ contemplative spectacle derives from the content of said spectacle itself, but also, in scholar Andrew Mactavish’s terms, from the technology on display: games’ hyperreal technological mediation of cine-reality is thus an attraction in itself, again blurring the simple distinction between passive viewers and active gamers.⁴⁴

Tomb Raider was one of the first games to consciously incorporate such moments of foregrounding the remediation of “contemplative” cine-reality into gameplay. Early in the game’s second level, in which Lara explores an underground cave system in search of a valuable artifact, you reach a platform overlooking a shimmering pool of water. Upon reaching the open space of the cavern, the game cues a melancholy musical refrain that activates a sensation of environmental spectacle, in the clear hope that the player will use their camera control functions to peer down at the shiny, iteratively animated water and in doing so feel a vertiginous effect from Lara’s great height in the three-dimensional space, peeking over the deathly drop. The game’s earlier tutorial level had explained how Lara can perform a graceful diving movement after any jump, which throughout the game has no practical usage whatsoever in completing platforming or combat tasks. Simply, the dive function is meant to enhance the visual spectacle of moments in which Lara must jump into a body of water. The game does not cue or remind the

⁴³ In a similar line of argument, game scholar Andrew Mactavish writes that games can create “exultation in the breathtaking demonstration of special effect”, and that, “for many gamers, the pleasure of computer gameplay is substantially composed of admiration for, and participation within, the game’s exhibition of advanced visual and auditory technology.” In Andrew Mactavish, “Technological Pleasure: The Performance and Narrative of Technology in *Half-Life* and Other High-Tech Computer Games,” in *Screenplay: Cinema/Videogames/Interfaces*, ed. Geoff King and Tanya Krzywinska (New York: Wallflower Press, 2002), 42.

⁴⁴ Ibid.

player to use the dive, but its creators simply hope you will remember it. In the aforementioned cavern, as the music continues, Lara can thus perform a perfectly-executed nose dive into the water, highlighting the game's ability to fluidly transition between concomitant environmental spaces (land and water) that operate under different physical rules. As nothing amounting to narrative happens in this sequence, the musical cue signals the cavern as a site of audio-visual pleasure, inviting the player's contemplation, asking them to briefly stop, look around, and consider how to embrace the moment's spectacle (hopefully, by activating a dive).

The solicitation of the player's aesthetic contemplation via accompanying musical cues is of course borrowed from the conventional narrative cinema playbook of musical scoring, but in videogames it more specifically recalls—and is influenced by—such moments in special-effects-heavy cinema, as a result of what Lahti describes above as the “desire” driving game development towards “immersion with technology.” For decades, game creators have sought players' investment in cutting-edge CG environments as a kind of spectacle in themselves, for two intertwining reasons. The first reason is competitiveness with other game developers in the design of virtual worlds—the accompanying journalistic coverage of which creates for players a satisfying fetish for technological achievement—a competition which often took the form of cinematic address: how can a game predictably deliver a desired sensorial effect using its audio-visual means? The second reason is that the answer to this question drew from influential effects-laden genre cinema, which provided foundational audio-visual techniques for the solicitation of aesthetic contemplation in a technological context.

An iconic example of such a form of contemplation through then-innovative visual effects techniques is found in *2001: A Space Odyssey*, during the aforementioned “Blue Danube”

sequence: a long, extra-diegetic depiction of a spaceship docking, set to Johann Strauss's waltz. The sequence begs for an immersive investment in the film's offering of technological wonder, and instantiated a mode of contemplative cinematic spectacle that became a dominant technique of invitations for technological immersion in cinema and games. In the film history survey book *Editing and Special/Visual Effects*, scholar Dana Polan writes of this sequence and others as defined by the "slowing down of time," creating what he calls a "contemplative rhythm."⁴⁵ Commonly activated by musical cues, such sequences, as in cinema, are abundant in *Tomb Raider* and modern action-adventure video games generally, in contrast to common critical notions of games as defined by frenetic visuals and pacing with corresponding judgments of attention-deficient mediated experience. With its meandering, quiet, vast level design and rare combat, *Tomb Raider* in particular epitomizes gamespace as a site of visual investigation and contemplation. Forward movement through levels must often be stopped for investigation of the gamespace, and the obvious solicitation—often through music cues—of the awed gaze happens once or more in most levels. Tanya Krzywinska similarly notes, "As games are deeply dependent on the traversal of space, visual investigation becomes central to the trajectory of a game as well as to the way the story unfolds."⁴⁶ This investigation is enhanced cinematically by the techniques of King's "contemplative spectacle," as opposed to those of "spectacular impact." Though not using King's terms, Polan describes *2001* as oscillating between these modes when he writes of

⁴⁵ Dana Polan, "Postwar Hollywood: 1947-1967: Editing," in *Editing and Special/Visual Effects*, eds. Keil and Whissel (New Brunswick, NJ: Rutgers U. Press, 2016), 89.

⁴⁶ Tanya Krzywinska, "Hands-On Horror," in *Screenplay: cinema/videogames/interfaces*, ed. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002), 217.

the film's famous "stargate" sequence as "...represented as a fast, psychedelic experience of sensory overload, [while] elsewhere the film is distinguished by deliberate longeurs..."⁴⁷

Tomb Raider and games like it thus rely more on the contemplative mode of spectacle, but still conform to the oscillation described with its occasional chaotic combat and timed sequences of running away from approaching threats, even as these boundaries are sometimes nebulous and do not literally include "montage." FPS and TPS games that are considerably faster-paced than *Tomb Raider* exemplify the montage-impact/spectacular-impact mode more frequently, such as *Bioshock* (2K, 2007) or *Vanquish* (Sega, 2010). Though neither of these games include much *editing* outside of cut scenes in the latter (thus, very little "montage"), the spectacular-impact mode describes their aggressive audio tracks and frenetic on-screen movement and activity, even as *Bioshock* makes room for quieter spectacle in parts. But regardless of the balance in individual examples, action-adventure games frequently demonstrate this oscillation, and this balance is also partially controlled by the player, who may choose to linger upon certain imagery without being directly cued to do so by music or other means, such as pre-programmed camera movements or micro-cut-scenes as in *Dead Space*.⁴⁸

Sequences and moments of gameplay in a contemplative mode increase the player's immersion in the game's technological spectacle, and in games like *Tomb Raider*, the player's desire to marvel at the beauty of the environments is meant to mirror the subjectivity of the controlled character, just as in *Avatar* (James Cameron, 2009) we experience the flora and fauna of the planet Pandora as pure spectacle but also subjectively 'through the eyes' of its protagonist.

⁴⁷ Polan, "Postwar Hollywood," 89.

⁴⁸ The previously-cited Geoff King essay "Die Hard/Try Harder" utilizes his terms from a fuller accounting of this oscillation—focused on cinema—in Geoff King, "Spectacle, Narrative, and the Spectacular Hollywood Blockbuster," in *Movie Blockbusters*, ed. Julian Stringer (New York: Routledge, 2003).

Lara Croft, a wealthy heiress, is in the game of treasure-hunting for “sport,” and—like Indiana Jones—to keep precious (or supernaturally dangerous) artifacts out of the hands of nefarious private buyers and instead in museums, or at least inside the cavernous Croft Manor. She seeks the thrill of conquering long-untouched physical environments in pursuit of artifacts, and it would follow that she appreciates the beauty of the natural world. This contradicts Andrew Mactavish’s argument that egregious displays of game technology can remove players from diegetic space:

Even when spectacular displays of a game’s technology are consistent with the virtual environment, they can trigger moments that disrupt immersion in a believable world but create exultation in the breathtaking demonstration of special effect. These moments of exultation may ultimately contribute to one’s immersion in a game, but they can simultaneously remove players from a game’s virtual world into the meta-space of technological admiration.⁴⁹

Mactavish here implies that these “spectacular displays” lie outside a game’s virtual world, when in fact they are often its very *raison d’être*. The gamer’s entrance into the virtual world—which Mactavish strangely *contrasts* with “immersion in a game”—often depends on the ostentatious display of technological prowess, for these moments of graphical splendor are sometimes the most detailed, textured and hence the most “believable” visual spaces in the game. Here again the notion at work is that of cine-realism, actuating the viewer-player’s subconscious, learned response to cinematic contemplative spectacle, a feeling of pleasant immersiveness. The cinematic spectacle at work in *Tomb Raider* becomes at least part of the gateway a player might move beyond to feel invested in the virtual world, unless one clings to the idea that the simple act of controlling an avatar with a joystick is the primary or even only explanation for a player’s immersive investment in a virtual game world. *Tomb Raider* largely consists of running through

⁴⁹ Andrew Mactavish, “Technological Pleasure,” 42.

corridors with little visual texture: blocky polygonal graphics simulate rock floors, dirt, and grass, with color as the primary differentiator between textures. But when the game opens onto a wide vista or a more variegated, layered environment—spaces with water effects or the forest where the first surprise tyrannosaur encounter occurs—the environments are more immersive as virtual simulacra precisely because of their quality of cinematic spectacle. This circuitous cine-reality effect is inextricable from the game’s technological spectacle, which in turn increases the likelihood that players will feel invested in participating in the unfolding of the game’s virtual world.

Spectacular display or contemplation is also a reason in itself *to play*. The desire to experience a game’s most memorable contemplative or impact-based moments of cinematic spectacle partially accounts for the widespread usage of game guides and online video walkthroughs, which lessen the “challenge” of solving in-game puzzles or simply trying to figure out where to go next. Mactavish attributes this to the pleasure of navigating virtual space:

These gameplay strategies may lessen or even eliminate feelings of aporia and epiphany, but they obviously do not make the game completely pleasure-free; otherwise, players would not use them. These strategies suggest that a player’s interaction within a game’s virtual environment, regardless of formalized aporia, can provide significant pleasure in itself. In other words, a key component of delight in computer games is user-driven exploration and discovery within a virtual space.⁵⁰

What Mactavish elides here is the connection between spectacular display—his “moments of exultation”—and its formalized solicitation of user pleasure. As virtually any player of *Super Mario 64* or *Grand Theft Auto V* can attest to, the free navigation of 3D virtual space is a pleasurable activity, but the value of this navigation is not only the ability to freely explore the

⁵⁰ Andrew Mactavish, “Technological Pleasure,” 40.

space. The purpose of navigating gamespace is also to reveal surprising and aesthetically interesting virtual objects, as well as taking the avatar to locations in the space that offer breathtaking views of the virtual world. In *Super Mario 64*, many levels are vertically oriented, and climbing to the top of the level can reveal uncannily deep views of the colorful, cartoonish gamespace, or the opportunity to assess the breadth of the level design from a bird's-eye perspective. As is often noted, gamespace is navigated for different purposes by different players, and the usage of game guides or walkthroughs is often in the service of the ability to explore the most visually interesting portions of the game world without the hassle of figuring out what to do next.

The presentation within games of expansive views of wide-open terrain and environmental spectacle can be seen as part of a larger aesthetic tradition within art history of the scenic, which arguably roots in prehistorical, adaptive human survival practice. As Barrow writes in *Between Inner Space and Outer Space*, views of water and lush natural abundance activate animistic feelings of safety experienced by modern humans as sensorial pleasure. He writes,

There is a clear adaptive advantage to be gained by choosing environments that combine places of security with clear unimpeded views of the terrain—to see without being seen. Many of the scenes we like in artistic representation or architectural construction now reveal a common thread. Expansive views and cosy inglenooks, daunting castles, the treehouse, the *little house on the prairie*, the mysterious door in the wall of the secret garden: so many classically seductive landscape scenes combine symbols of safety with the prospect of uninterrupted panoramic views or the enticement to explore, tempered by verdant pastures and water. Comfortable pastoral scenes appeal to our instinctive sensibilities because of the selective advantages that such environments first held for our ancient forebears.⁵¹

⁵¹ Barrow, *Between Inner Space and Outer Space*, 144.

Game worlds are distinguished in this context by what Poole calls their “pleasurably unreal qualities.” He writes, “Good software simulation of grass, for instance, can, in its necessary stylization, be more aesthetically interesting than fields of real grass on film.”⁵² In this way, spectacular environmental display in games like *Tomb Raider* plays upon our primitive limbic system’s assessment of environmental safety, while their unique animation style—ever-pushing towards the appearance of cine-reality—intrigues us with their environments’ surreal, defamiliarized appearance. In *Tomb Raider* we see this in the mesmerizing water effects, with their unnatural translucence and iterative swaying motions indicating liquid texture. The latter can be seen even in water that has no visible source (such as a waterfall) causing movement on the water’s surface, since graphical capabilities of the period sometimes required motion to denote texture, as the water’s translucence and color without accompanying motion would cause the liquid surface to look instead like a floor of glass. To simulate water’s distinctive shimmer, motion had to be utilized in place of lighting effects, as the latter were not yet advanced enough to signal the desired texture.

In the interactive exploration of simulated natural spaces, we find countless action-adventure games leaning in to Poole’s pleasurable un-reality, even in games reaching for a fetishistically detailed live-action cine-realism. A recent example like the “Navajo” level in the 2013 branching-narrative adventure game *Beyond: Two Souls* demonstrates this, in its deliberately surrealistic color grading. The game is a prominent example of “interactive movie”-style gameplay, in which exploration is interrupted frequently for brief cut scenes, camera control is rarely 360 degrees, and some gameplay consists entirely of quick time event (QTE)

⁵² Poole, *Trigger Happy*, 76.

button-presses that instantaneously determine different possible branches of cut scenes (and thus different pre-determined shots and audio cues). Thus the designers retain more cinematographic control than most modern 3D adventure games. In keeping with the goal of a cinematic narrative flow, *Beyond* sacrifices expansive open-world design for smaller, more restricted environments allowing for an unusually large amount of graphical detail, including bleeding-edge facial motion-capture techniques that allow film star Elliot Page—portraying the game’s protagonist—to be immediately recognizable, and rendered with an expressiveness rivaling his live-action performances. But the “pleasurable” artificiality of game worlds is nonetheless highlighted in the “Navajo” level, presumably set on the Utah-Arizona border due to the level’s signification of Monument Valley, in which itinerant protagonist Jodie (Page) briefly lives with a Navajo family battling a mysterious supernatural force in the desert. The desert’s color is dramatically over-saturated (see **Fig. 2.18**), and in a long scene of Jodie riding a horse through the empty expanse, the image blurs the uncanny line between live-action photography and rotoscoped animation. In simulating the red-sand desert of Monument Valley, the designers over-saturate the tertiary red-orange color to make the desert sand “pop,” and in doing so the borders between the sand and other colored objects in the frame—such as Jodie on her horse—are subtly but noticeably more defined than most other sequences in the game, creating a gentle rotoscope-like animation effect, which uncannily blends with the extraordinarily high amount of detail in the unnaturally sharp, deep-focus image. In this example, we see how as games inch closer to effecting believable cine-reality on the audio-visual planes, part of this evolution involves playing to infinitely mutable digital game animation’s uncanny strengths in heightening artificiality, techniques that loop back to cinema itself, in this case exemplified by the fantastical associations of color over-saturation in



Fig. 2.18: *Beyond: Two Souls*

films as diverse as the musical fantasia *My Fair Lady* (George Cukor, 1964) or the phantasmagoric horror *Mandy* (Panos Cosmatos, 2018). Cine-reality has accommodated hyperreal image and sound representation and retained believability since its codes were developed in the 1910s, and even games straining for audio-visual “realism” as arduously as *Beyond* conform to and toy with this accommodation in the context of digital animation. That decades-old techniques seen in the construction of cine-reality are both acceptable, aspired to, and desirable in a big-budget adventure game as late as 2013 is further reinforcement of cinema’s imbrication in the medium.

The pleasure and sensation of these moments of spectacular technological simulation of natural spaces, despite their physiological roots, is also accounted for by their simulation of cinematic affect on the soundtrack, such as the timing of the musical cue in the high-dive from *Tomb Raider*. As game technology rapidly progressed in the 1990s, the timing of these events became more precise, and in the process demonstrates how sonic events in gamespace began to chase cinematic sound design. However, non-interactive feature films allow for total precision in

the timing of audio-visual correspondence, an exactness that video games have historically struggled with reproducing, as discussed here by game scholar David Bessell in 2002, in relation to music:

The typical Hollywood film, involving a strong narrative thread, fits well with this linearly ordered model of music. But the inherent uncertainty engendered by interactivity presents some difficult problems in relation to music in general. How can the music be structured if the order of events are uncertain? How can music be constructed to occupy a time of uncertain duration without tedious direct repetition?⁵³

Due to technical limitations, CD-based games of the 1990s were inevitably forced to sacrifice complex sound fields with strong correspondence to visual events.

The usage of music and sound effects in *Tomb Raider* and *Alien Trilogy* (both 1996) exhibits how this problem was dealt with in early narrative action games, showing both innovation within technologically constrained circumstances, and also how limited processing power sometimes closed off the possibility of audio-visual precision. In *Alien Trilogy*, an attempt is made at heightening the inherent tension of the scenario—Ripley’s wanderings through dark corridors swarming with alien foes—via a moody electronic underscore. While the music is effective at reinforcing the dark atmosphere of the game’s visual design, it never cues on-screen events and runs on a constant loop. In one rather tense battle in the game’s second level, it might be extremely distracting to the player when the music loops back on itself during the firefight. The score track in this scene begins with subdued, arrhythmic beeping noises as a sonic allusion to the sound of the motion-tracker devices used by the marines in *Aliens*. The music eventually becomes loud and upbeat, which feels appropriate for on-screen events during the lengthy battle,

⁵³ David Bessell, “What’s That Funny Noise? An Examination of the Role of Music in *Cool Boarders 2*, *Alien Trilogy*, and *Medieval 2*,” in *Screenplay: cinema/videogames/interfaces*, ed. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002), 141.

but if the track ends during the scene, the music is silenced for about three seconds, and then the track loops back to its muted, understated beginning. This broadcasts to the player the lack of audio-visual correspondence on the music track (in contrast to the sound effects, which are suitably synchronized for the period), lessening absorption and tension in a diegetic space otherwise laboring at striking a particular atmosphere, one familiar to players literate in the *Alien* series' singular, oft-imitated environments. This example is consistent with the use of underscoring in the majority of games of *Alien Trilogy*'s generation, and many today as well, though by the 2010s any game with cinematic aspirations found elegant solutions to the problem of looping music. In the case of *Alien Trilogy* and others, each level or segment of a game is assigned a musical theme, which then endlessly repeats itself over the course of gameplay regardless of shifts in scenario-specific intensity, which cannot be predictably timed in games when a player has control over the pace of play. While the underscoring in *Alien Trilogy* is included to mimic the films' mood, hence attempting to port over cinematic traits, its repetition and lack of relation to on-screen events ultimately serves to disrupt immersion in the virtual space.

Tomb Raider takes a different approach, as no levels include consistent underscoring. Rather, scored music on its soundtrack attempts the kind of direct audio-visual correlation seen in films and many modern games, and, importantly, in even earlier games as in this dissertation's discussion of *Secret of Mana*. *Tomb Raider*'s music is always initially cued by on-screen events, as in the aforementioned moment inviting Lara to gaze down at the shimmering cavern pool. More aggressive scoring is heard when Lara encounters enemies. Their on-screen presence activates extremely loud, uptempo orchestral underscoring of pre-determined length. Thus, if you

are slow to vanquish Lara's enemy, the music may stop during the battle, while if you are faster than the length of the track, the music continues after your enemies are vanquished. In both cases, the presence or absence of the music can be jarring, inappropriate, or simply annoying, as the game is not programmed to cease the musical track upon the enemies' defeat, or to loop the track if enemies remain alive when the track reaches its conclusion. While the presence of underscoring in the combat scenes attempts to replicate the soundscape of a movie action scene, Bessell sees the general lack of underscoring in the *Tomb Raider* series to be decidedly uncinematic:

No underscore substitute is attempted and consequently large sections of the games have no music at all. This does circumvent the repetition problem, with its associated danger of boredom on repeated playing, but leaves the game rather bare musically speaking and bereft of the potential for heightened emotional impact that Hollywood has long exploited.⁵⁴

Bessell here misses the desired effect of *Tomb Raider*'s limited use of underscoring, however, which is to heighten the impact of specific moments or sequences of gameplay: battles, particularly striking imagery meant to elicit awe, and major narrative events. While the cinematic flow of the game's scored sequences is frequently blunted in their lack of durational correspondence between on-screen events and the soundtrack, *Tomb Raider* is actually closer to a Hollywood-style music track than is *Alien Trilogy*, with the latter's repetition of level-specific musical themes sometimes bearing little vertical relation to on-screen action. Though often unsuccessful in the battle scenes, *Tomb Raider* nonetheless utilizes music to punctuate *specific* moments in the game, as in a movie.

⁵⁴ Bessell, "What's That Funny Noise?", 143.

Poole, on the other hand, points to *Tomb Raider*'s paucity of scoring, compared to the "average" film, as a solution to the problem of continuous scoring (as in *Alien Trilogy*) striking unintentionally nonsensical audio-visual relationships, with the game's music thus becoming "another kind of atmosphere-heightening information."⁵⁵ Writing of the "Venice" level in *Tomb Raider 2* (1997), he observes that, "when the speakers burst into a fast cello motif or a clatter of electronic percussion, you know that something exciting is going to happen and you look round rapidly for an enemy to avoid, or watch in awe as another vaulted ceiling stretches up above you... When music in a game is this good, less is often more."⁵⁶ What Bessell and Poole's contrasting opinions on *Tomb Raider*'s music demonstrate together is that while there may be disagreement over the value of the score's diminished presence as opposed to an "average" film, its usage is impossible to separate from the desired effects of film scoring, again illustrating the imbrication of forms at work.

In concluding this discussion of *Tomb Raider*, it should be noted that technological advancements of the 10-15 years succeeding it do not necessarily track with a greater quality of cinematic style in a valuative sense. In the case of the *Tomb Raider* series, its development shows how creative choices remain as important as technological capability in the effectiveness of cinematic form for creating atmosphere and investing or immersing players in game worlds. The 2007 remake of the original game, *Tomb Raider: Anniversary* (Crystal Dynamics), demonstrates this anti-deterministic dynamic, as it shows ten years of technological advancement reflected in improvements to graphics and sound that inarguably surpass the original in certain cine-realistic

⁵⁵ Poole, *Trigger Happy*, 70.

⁵⁶ *Ibid.*, 70-71.

attributes—the detail and accuracy of color in the image, smoother barriers between cinematic flow and rupture, far higher-fidelity sound reproduction at higher bit rates—colliding with weaker creative choices. The game’s menu screen quickly announces improvements in sound: the re-recording of the game’s primary musical theme contains more complex instrumentation, some in a much higher register, and the result is a more shimmering, meditative composition than the original. In the remake of the game’s “Croft Manor” tutorial level—unscored in the original—the sequence is now scored with a version of the main title theme on piano, with the melody chimed on a xylophone-like instrument, resulting in a mournful composition that perhaps deliberately recalls the work of Philip Glass or Brian Eno in its sense of atmospheric immersion.

The increased sophistication in the musical score is quickly undermined by the opening cut scene’s dubious decision to change the setting of Lara’s meeting with the courier (essentially the same scene as the original’s opening) to a brightly-lit, high-end hotel lobby instead of the grimy backwater Calcutta pub of the original. Lara’s face is revealed in an unspectacular medium close-up lacking visual tension (**Fig. 2.19**), unlike the original’s initial shot of the courier’s reflection in her sunglasses, which keeps her full face out of frame. The effective, economical characterization of Lara from the original’s opening is compromised by the remake’s choice to introduce her in this more banal fashion. The generic, glossy hotel bar elides the amusing contrast between Lara’s millionaire playgirl trappings and her grungy antiquity-hunting hobbies that the original so effectively strikes. Moreover, the bizarre decision to not replicate the close-up of Lara’s sunglasses (it is a famous shot) both removes the wink to *Raiders of the Lost Ark* and robs Lara of much of her initial mystery and charm, as *Anniversary*’s creators choose to debut



Fig. 2.19: *Tomb Raider: Anniversary*

her visage without any drama or flair, opting instead for an unremarkable dialogue that does little to make Lara seem exceptional or distinctive.

Certain aspects of *Anniversary* provide undeniable improvement to the experience, particularly in the fluidity of Lara's interactive motion, and the game's more detailed graphics making it easier to distinguish environmental detail from interactive objects and platforms, but one of the original's most singular features—the meditative, haunting quality of its solicitation of awe—is greatly diminished. In the pool dive discussed earlier, the remake removes the accompanying musical cue, providing no solicitation of any sense of aesthetic reward, and thus little incentive to dive (rather than simply drop) into the pool. The later surprise appearance of a tyrannosaurus rex, majestic and otherworldly in the original, is now preceded by a fast-paced QTE sequence of battling velociraptor-like creatures, which rushes the scene through frenetic action-sequence beats similar to any other enemy encounter, despite this sequence providing the game's first appearance of *dinosaurs* in a narrative which to this point has remained grounded in a less fantastic world. While the remake does contain moments of environmental majesty, it is comparatively rushed overall, sacrificing the meditatively cinematic idiosyncrasy of the original

for traits that make it resemble the more popular form of the 3D action-adventure game of this later period: fast-paced experiences exemplified by the *Uncharted* series or the James Bond games of the early-to-mid-2000s, both analyzed in Chapter 3.

Reading an action-adventure game like the original *Tomb Raider* through the lens of cinematic style offers a corrective to mainstream game studies, as it reveals that the hybridization of the two media is highly visible and audible, and also complex, illuminating how critical discussion of their relationship is often based on comparative fallacies. As this dissertation moves forward to a later era, it is equally important to remember that in deploying cinematic form, creative decision-making continues to trump technological prowess as game technology rapidly advances. The increased *capacity* for cinematic correspondence in gameplay brought by advancing technology does not magically cause the materialization of cinematic intelligence on the part of game designers. Designers still require the same combination of time, resources, and imagination that their 1990s forebears (or selves) needed to create captivating interactive cinematic experiences.

Conclusion: After *Tomb Raider*

In the action genre, technological advancements over time can be productively mapped via their correlations with greater sophistication in translating cinematic modes of address; games move from demarcated and graphically dissimilar vacillations between narrative cut-scenes and gameplay in *Tomb Raider* to the smoothly continuous experience of *Dead Space*, which uses dialogue, text, and in-game events to present its chilling plot (almost) entirely without cut scenes.

Over this period, encompassing the first decade of the 2000s, the line between cinematic flow and rupture truly blurred.

Examining this era, the intersecting line of technological advancement and cinematic style is illuminated, as games not only became increasingly cinematic in the 2000s, but even began to subsume cinematic audio-visual style into attempts at simulating human experience far more quotidian than trying to survive high-body-count gun battles. In *Heavy Rain*, the task of a putting on makeup in a sleazy nightclub's bathroom to impress a gangster is redolent of a movie thriller (particularly James Cameron's 1994 action film *True Lies*), while in *Uncharted 2*, a plotless sequence of walking through a mountainside Nepalese village is bursting with the trappings of cinema, from subtle re-framings to rack focus.⁵⁷ With the evolution and refinement of these and many other cinematic techniques since at least *Tomb Raider*, we have arrived at the surprisingly stable contemporary cinematic form of video games, with their innumerable cinematic ruptures stitched together so precisely with gameplay that the effect is one of movie-like narrative flow. These contemporary games, just like *Tomb Raider*, demonstrate the supposedly-paradoxical relationship between the *activity* of viewership alongside the sometimes almost passive actions of seemingly subjective user-input: many of these actions have been pre-destined, because when playing a video game, we are also playing with movies.

Technological advancements only increase the seamlessness with which the cinematic is integrated into game experiences, or at least the possibility of harmoniousness in its remediation.

As Chapter 3 will show, it is clear that the utilization of cinematic style in more recent big-

⁵⁷ In sequences such as this in games, including in the art-game sub-genre of the "walking simulator" or "story exploration game" (such as *Everybody's Gone to the Rapture* [The Chinese Room, 2015]), I am often reminded of director Gus Van Sant's films *Elephant* (2003), *Last Days* (2005), and *Paranoid Park* (2007), which contain many lengthy shots of characters walking forward as the camera unobtrusively follows them from behind.

budget action-adventure games such as *The Last of Us Part II* or *Cyberpunk 2077* (CD Projekt Red, 2020-22)—and, correspondingly, the way these games look, feel, sound, play, and tell stories—was codified in the mid-to-late-2000s by games like *Uncharted*, *Bioshock*, *Dead Space*, *Alan Wake* (Microsoft/Remedy, 2010), *Heavy Rain*, *Red Dead Redemption*, and *Mass Effect* (2007), and remains largely unchanged today when compared to the vast gulf between the cinematic flow of games from the mid-90s versus the mid-00s. Since the early 2010s, we have seen great refinement in storytelling, significant expansion of game worlds’ size, more “lifelike” visuals and facial animations, and numerous gameplay innovations, but nothing close to the radical, rapid aesthetic upheaval of the 2000s. This suggests that technology has, at least to some extent, caught up with designers’ and storytellers’ ambitions, and that games have reached a mature phase in their ability to mimic, metamorphose, and play with cinematic style, and to provide players with an experience that feels co-familiar with that of prominent movies from related genres.

The *techno-teleology* discussed in this dissertation’s introduction argues, and game history shows, that the medium’s destination was ultimately the types of cinematically dynamic works listed above. It is not that the quantity and arrangement of elements in a complexly organized video game has “peaked,” but rather that said arrangement—in many genres, but especially action-adventure, sci-fi, horror, and affiliated generic combinations—has settled into a decidedly cinematic form that was systematized by 2010. How games in the broadly-defined action-adventure genre, and others, evolved towards this plateau of cinematic imbrication is the subject of the following chapter.

Chapter 3

From *Resident Evil* to *Uncharted 2*: A Decade of Evolving Cinematic Dynamism in Horror and Action Games

In this dissertation's earlier analyses of games including *Secret of Mana*, *Tomb Raider*, and the 2013 version of *Castle of Illusion*, what I am here calling "cinematic dynamism" has been demonstrated through many techniques; including employment of in-game narrative events and tightly constructed sequences of impactful audio-visual correspondence in which music, image, and in some cases spoken or text narration are authored as unalterable cinematic assemblages, despite being slyly interactive. As has been foreshadowed since this dissertation's Introduction, and particularly in the discussion of *Castle of Illusion*, this chapter is concerned with the evolution of cinematic dynamism from roughly the mid-1990s to the early 2010s, as cinematic style became dramatically more pervasive in a variety of genres, and ultimately stabilized by the end of this period into the hybridized cinematic system still in operation today: a system in which the visual form of cinema is replicated within a video game, but complicated by the player's ability to manipulate or otherwise interact with that form. This chapter charts the rapid evolution and seamless integration of cinematic dynamism into games during this period by analyzing discrete sequences from several games that directly engage with pre-established cinematic generic and stylistic modes. These include the *Resident Evil* series produced by Capcom, which draw much of their aesthetic and storytelling strategies from the cinematic horror genre; the action games *007: Nightfire* (Gearbox/EA, 2002) and *007: Everything or Nothing* (Visceral/EA, 2003), both adaptations of the popular James Bond film franchise; and *Uncharted 2* (Naughty Dog/Sony, 2009), an action game inspired by big-budget action-adventure films such

as those in the Indiana Jones series. In analyzing these games, this chapter examines how these games engage with the established visual language of cinema, especially as this engagement allows them to create an analogous experience within the interactive medium of gaming to the more limited spectatorial experience of viewing the films which inspired these games.

In analyzing the self-consciously cinematic operations of games across the roughly ten-year period from the early 2000s to early 2010s, we see a progression of cinematic gameplay correlating with this period's dramatic leaps in game consoles' processing power and graphical abilities, inclusive of the developments between and during the fourth and fifth generations of game consoles (in specific console terms, the PlayStation 2 and 3). This period of development solidified still-current trends across many genres—from most forms of the action game to role-playing and horror games—and is unlikely to be surpassed in its speed and ultimate import to the medium's development. Even if virtual reality devices become the dominant consoles for cinematic game genres in the 2020s or 2030s—which is far from certain—it is arguable that the foreseeable future of these genres will remain remarkably similar to games of the early 2010s in many respects, including the medium's dominant mode of cinematic style.

This dominant style is one of continuous audio-visual experience: real-time cinematic in-game events within an audio-visual context of mostly *unedited* visual space, with a user-controlled virtual camera. This chapter's discussions of *007* and *Uncharted 2* provide details of the evolution of this style, which extends back to earlier 3D games like *Tomb Raider*, demonstrating the consistency with which methods of in-game cinematic dynamism in the 2000s were deployed across a swath of action sub-genres. Ultimately, these methods became standardized during the more stylistically stable 2010s, a period that saw the solidification and

augmentation of the cine-real techniques described herein, rather than the audiovisual leaps seen between “console generations” in the 1990s to mid-00s—these techniques were already maturing by 2010. The dominant form of mostly-uninterrupted continuous visual experience, usually meant to imply the visual field of a playable character (whether first-person or third), achieved a cinematic sophistication in this period that formed the foundation of modern gaming.¹

But another form of cinematic imbrication in game design existed as early as the “interactive-movie” games of the 1980s and 1990s, such as *Dragon’s Lair* (LucasArts, 1983), *Mad Dog McCree* (American Laser Games, 1990), *Night Trap* (Digital Pictures/Sega, 1992), and *The 7th Guest* (Virgin Interactive, 1993), and was briefly popularized by Capcom’s 1996 genre-instantiating “survival horror” third-person action game *Resident Evil* and its first four sequels (*Resident Evil 2* (1998), *Resident Evil 3: Nemesis* (1999), *Resident Evil: Code Veronica* (2000), and prequel *Resident Evil 0* (2002)). The franchise now sprawls across games, novels, television, and movies. This alternative to the unbroken views in most games consists of switching camera perspectives during the course of a scene, akin to editing different angles together in live-action cinema. To summarize, when your character enters a new room in *Resident Evil*, the camera begins in a static, often dynamic shot of the space, which remains immobile despite character movement in nearly all cases. When your avatar reaches a specific portion of the 3D space, the view cuts to a new view of that space instantaneously. Thus, the avatar’s precise position within a

¹ This at least partly accounts for why the 2020s have kicked off with a wave of high-profile remakes or remasters of popular titles from the mid-00s, including remakes of *Demon’s Souls*, *Dead Space*, and *Resident Evil 4*, and a remaster of the *Mass Effect* trilogy (originally 2007-2012). The latter removes countless bugs that plagued the original releases, and gives all three games (especially the first) a fresh coat of graphical paint, while changing little else. It is striking how the new version (*Mass Effect: Legendary Edition*) still feels vital and fresh; today’s big-budget titles have not reinvented the wheel of the late 00s and early 10s. While complaints abound over the current state of the games industry, this is more a sign of maturation than stagnation.

static view of playable space determines which pre-rendered static shot of the space the game will display.

These are often called “fixed-camera” games, found as well in Capcom’s own *Dino Crisis* franchise (1999-2003) and Koei Tecmo’s *Fatal Frame* franchise (2001-present). The *Resident Evil* series exemplified this type of game, which barely exists today beyond the style’s partial revival within the new wave of “interactive-movie” titles beginning in the early 2010s, as have been mentioned elsewhere in this dissertation, particularly those of the French studio Quantic Dream (*Heavy Rain* [2010], *Beyond: Two Souls* [2013], *Detroit: Become Human* [2018]) and American studio Supermassive Games (*Until Dawn* [2015], *The Dark Pictures Anthology* [2019-present]). Considering the enormous popularity of early *Resident Evil* titles, a franchise known even to non-gamers, it may seem surprising that this kind of cinematic design was essentially abandoned. But market forces in the 2000s responded appropriately to gamers’ overwhelming preference for unedited game space, which, ironically, the *Resident Evil* series itself helped solidify with the installment *Resident Evil 4* (2005), a departure for the series that saw it both aesthetically and ludically fall in line with the era’s most popular third-person action titles, such as *Gears of War* (Epic/Microsoft, 2006). This preference is easily understood: the fixed-camera environments of early *Resident Evil* titles were perceived as the cause of a common frustration for these games’ players: simply, controlling the characters in a playable space with unpredictable visual orientation. The frequent changes in shot length, shot scale, and screen direction caused awkwardness in smoothly controlling character motion, a combination of visual style and control scheme that earned the affectionate but damning nickname of “tank controls.” While the survival-horror sub-genre is generally supposed to be frustrating in some senses—fans

of the genre expect to die frequently, for example—the navigational difficulties were not widely-seen as an organic element of the difficulty associated with the genre.

Yet despite the clunkiness of its control scheme, *Resident Evil* offered a different kind of cinematic dynamism in a mainstream game franchise—fixed camera angles with frequent visual editing—and the series’ historical peculiarity as virtually its own sub-genre is essential to understanding the cinematic possibilities of the medium, as well as the development of the aforementioned Quantic Dream titles and their many imitators (including the superb *Until Dawn*). It also, importantly, reveals how the collision of gameplay and cinematic narrative genre, particularly horror, creates predictable aesthetic problems for the medium, and how designers approach those problems in generating requisite cinematic suspense, creating a sensorial experience akin to viewing horror films. While early *Resident Evil* games and similar titles do not reflect the dominant audio-visual form of current horror or action-adventure games, their style has survived in the thriving (if small) aforementioned interactive-movie genre, and thus demand attention for this reason alone. They also demonstrate the dexterity of the game medium in its potential for translating formal elements from cinema, as one of the medium’s more direct attempts at simulating cinematic experience, even if the particular form that this attempted simulation takes in the early *Resident Evil* games was not pursued by later game designers. By understanding the roots of the horror game genre as seen through the early games in this series, we can better understand and appreciate the evolution of the genre towards its more complicated contemporary form—as an embellishment of certain aspects of the *Resident Evil* games as well as a rejection of other elements. These games’ mode of presentation also demonstrate the still-young medium’s historical status as a novel representational “attraction,” which challenges the

notion that this mode was merely a convenient workaround for graphical limitations of the period, and in turn demonstrates the webwork of linkages between gameplay genre and film or literary genre, showing that they are truly inextricable.

Notes on the Horror Game Genre

The use of cinematic techniques in the *Resident Evil* games must be understood in the context of those games' relationship to the larger horror genre, as these experiments with in-game editing, coinciding with and partially caused by the *Resident Evil* franchise's early popularity, came at a time of fecundity for horror games. Designers and players quickly recognized that the film genre was ripe for game adaptations. Writing in 2000, Stephen Poole addresses the question of horror texts as eminently adaptable:

Why is it particularly the horror genre, and to a lesser extent science fiction, that largely provides the aesthetic compost for supposedly "filmlike" videogames? No one has yet claimed that a videogame is like a good comedy film...or that a videogame tells a heartbreaking romance. The answer is that the horror genre can easily do away with character and plot; it is the detail of the monsters, the rhythm of the tension and shocks, that matter. Plot and character are things videogames find very difficult to deal with.²

Poole's commentary on "plot and character" may seem dated, as games today have established a plethora of techniques for in-game narrativization, in addition to higher-quality infrastructure for the creation of cut scenes (the game industry now frequently hires trained, professional film and television writers and performers), making narrative delivery and character depth less of an obstacle than in the 1990s. But his point about the horror genre's suitability to game adaptation, in both iconography and the adaptability of archetypal horror scenarios, is still a sensible

² Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade, 2000), 66.

argument given the genre's durability. Horror games' effectiveness at procedurally adapting horror film scenarios—familiar as they were to the dominant 1990s gamer demographic of young males—also helps explain why the genre generated a disproportionate amount of interest within game studies in the first decade of its burgeoning footprint in the humanities in the 2000s, as noted by Carl Therrien in 2009.³ This is due to the genre's complex interweaving of cinematic conventions (including narratives heavily borrowing from tropes and devices found in horror film prototypes), ludic elements, and to the relationship between interactivity and bodily response that is particularly acute in horror relative to other game genres due to the genre's dependence on fear, suspense, and revulsion.

Other issues surrounding the prevalence of horror as a game studies topic, and the comfort with which writers will compare it to cinema (something usually avoided, as discussed in Chapter 2), include the natural correspondence between specific cinematic genres and games. Violent genres such as horror translate well to games, as their scenarios allow for direct procedural adaptation (enacting violence), unlike genres like drama and comedy which include less material as easy to transcribe to controller inputs (such as shooting things). Cinematic genre is often harnessed in studies of horror games as a framework providing convenient narrative signals and iconography. As Geoff King and Tanya Krzywinska argue in *Tomb Raiders & Space Invaders*, genre does significant work primarily in providing meaningful context to game worlds. In *Doom* (id Software, 1993) and *Half-Life* (Valve, 1998), they point out, very little background expository text is required at the game's opening because the player's knowledge of generic

³ Carl Therrien, "Games of Fear: A Multi-Faceted Historical Account of the Horror Genre in Video Games," in *Horror Video Games*, ed. Bernard Perron (Jefferson, NC: McFarland, 2009), 32.

archetypes will fill in the gaps.⁴ They write, “Genre provides a context that makes the action meaningful, within an established frame of reference, rather than arbitrary—a factor that strongly increases the immersive and pleasurable potential of the experience.”⁵ Or, as Rune Klevjer succinctly puts it, “A recognizable rhetoric meets you; the voice of a genre.”⁶ Genre conventions provide motivations for player action, which have great significance and intrinsic meaning for the pop-culturally literate player. King and Krzywinska use the example of *Max Payne* (Rockstar, 2001): “Story or genre frameworks often seek to *justify* the kind of behavior required of the player-character if progress is to be made through the game. Max Payne, as operated by the player, does not just indulge in orgies of violence, but is a put-upon character left with no choice if he is to survive.”⁷ Thus, in the gritty criminal underworld of the *Max Payne* series, the gangster thriller framework exemplified by films such as Martin Scorsese’s *Mean Streets* (1973) or *Goodfellas* (1990) provides a kind of justification for its kill-or-be-killed action.

As in cinema, game genre is a *process* of recombinant form. This process-oriented approach is modeled in genre theory from film studies, specifically the work of Rick Altman and his “genre as process” and “genrification” approaches.⁸ The harnessing of generic attributes in video games is a process that involves a combination of concerns that stem from industrial, aesthetic, narratological, and ludic considerations. Bernard Perron echoes this approach in his

⁴ Harry Jenkins makes a similar point in his discussion of “enacted” and “evocative” storytelling in his previously-cited essay “Game Design as Narrative Architecture.”

⁵ Geoff King and Tanya Krzywinska, *Tomb Raiders and Space Invaders: Videogame Forms and Contexts* (New York: I.B. Tauris, 2006), 57.

⁶ Rune Klevjer, “In Defense of Curscenes,” in *Computer Games and Digital Cultures Conference Proceedings*, ed. Frans Mayra (Tampere: Tampere University Press, 2002), 201.

⁷ King and Krzywinska, *Tomb Raiders and Space Invaders*, 58.

⁸ Rick Altman, *Film/Genre* (London: BFI, 1999).

essay “Survival Horror: The Extended Body Genre,” noting that “Game genres function as collections of components or units, rather than deterministic, progressive systems.”⁹ Genre theory has taught us that for every medium that allows for imaginative representation and fiction, including literature and cinema, genres are never simply “deterministic, progressive systems.” Writing on contemporary cinema in *Neo-Baroque Aesthetics and Contemporary Entertainment*, Angela Ndaljian points to the “inadequacy of viewing genre films simply as closed systems that feed on their own heritage, history, and medium.”¹⁰ Generic hybridity is thus a defining characteristic of visual media, and has been seen in film as early as the 1890s. This is indicative of a playful porousness to the very delineation of genres, a polyvalence that makes the *process* of genre well-suited to the recombination machines that are video games.

In the essay “The Rules of Horror: Procedural Adaptation in *Clock Tower*, *Resident Evil*, and *Dead Rising*,” Matthew Weise uses a slightly different theoretical modeling of genre than the recombination-based approaches mentioned above, where horror games are “simulations” of their film counterparts, which allows for a variety of discursive approaches. Weise treats horror games as self-conscious “procedural adaptations” (or simulations) of foundational horror movies, drawing comparisons between the films of George A. Romero and the games *Resident Evil* and the zombies-in-a-shopping-mall actioner *Dead Rising* (Capcom, 2006), and between the 1980s cycle of slasher films and the point-and-click horror game *Clock Tower* (Human Entertainment, 1996).¹¹ He points out that horror games “often have extremely clear, highly codified subgenre

⁹ Bernard Perron, “Survival Horror: The Extended Body Genre,” in *Horror Video Games*, ed. Bernard Perron (Jefferson, NC: McFarland Books, 2009), 56.

¹⁰ Angela Ndaljian, *Neo-Baroque Aesthetics and Contemporary Entertainment* (Cambridge: MIT Press, 2004), 98.

¹¹ Weise notes problematic connotations of the word “translation,” and thus alters Ian Bogost’s concept of “procedural translation” in favor of “adaptation.” For more, see Ian Bogost, *Persuasive Games: The Expressive Power of Videogames* (Cambridge: MIT Press, 2007).

conventions to work from,” and utilize a variety of intermixed *game* genres and conventions to “model, embody, and express the logics of various horror [film] subgenres.”¹²

Weise argues that *Clock Tower*, in its simulation of a slasher film, gives the player the experience of embodying a “Final Girl.” This is Carol Clover’s term from her wildly popular analysis of 1970s and 80s horror films, *Men, Women, and Chainsaws*, and Weise sees *Clock Tower*’s playable protagonist Jennifer as prototypical.¹³ She is the only survivor of a mass murder at her school, and her activity consists of exploring a mansion, solving puzzles, and unraveling the mystery of the enigmatic killer Scissorman. Much of Jennifer’s time is spent evading him, and this is where we find the game’s singular simulation of the slasher: our direct experience of the Final Girl’s psychological state and her archetypal traits, which both deeply affect gameplay. If Scissorman has Jennifer in a bind, she begins to panic and her body shakes uncontrollably. An early form of the “sanity meter” found in later games like *Eternal Darkness: Sanity’s Requiem* (Silicon Knights, 2002) comes in the form of a crude image of Jennifer’s face at the bottom-left of the screen, which must be monitored lest Jennifer become immobile with fear. (In the previously-cited essay “Games of Fear,” Therrien writes that games like *Clock Tower* “thoroughly developed the concept of psychological well-being in a game.”¹⁴) Scissorman’s onslaught can be delayed, Jennifer can hide from him, and in some situations he can be rendered briefly unconscious. But even if Scissorman is subdued, the player never has the option of killing him, leading Weise to conclude that: “The player’s agency is entirely contained within Jennifer’s

¹² Matthew Weise, “The Rules of Horror: Procedural Adaptation in *Clock Tower*, *Resident Evil*, and *Dead Rising*,” in *Horror Video Games*, ed. Bernard Perron (Jefferson, NC: McFarland Books, 2009), 238.

¹³ Carol Clover, *Men, Women, and Chainsaws: Gender in the Modern Horror Film* (Princeton, NJ: Princeton UP, 1992).

¹⁴ Therrien, “Games of Fear,” 38.

psychological limits as a Final Girl.”¹⁵ Weise notes that *Clock Tower*’s focus on the slasher film’s final act is natural since “[this is where] the elements of the stalker film most clearly align with the conventions of single-player exploration-based video games.”¹⁶ In other words, the cinematic climax is where the action is. *Resident Evil*, on the other hand, adapts an action-packed sub-genre where a gun is rarely far away: the zombie story.

The Resident Evil Series and the Fixed-Camera Presentational Style

The *Resident Evil* series’ status as horror game explains one of its most distinctive visual characteristics, the fixed-camera style that I have previously discussed. As we shall see, critics have lamented that the limited camera control in these games is a regrettable shortcoming, determined by the limits of the game technology itself. I instead contend that even if the lack of camera control in early *Resident Evil* titles was technologically determined to a certain degree, what these critics ignore is how its functionality and effect on the player is tightly tied to cinematic horror convention, in which camera angles are meant to obscure important information to build tension and anticipation.

It is not difficult to understand the position of these critics. The cinematic concept of the edit—*cutting* between different views—is not natural to the game medium. The sense of controlling an autonomous body within a virtual world is not typically well-served by frequent changes in shot scale and the controlled avatar’s direction relative to camera perspective. For many players, this kind of standard cinematic visual editing—in games, embodied by the fixed-

¹⁵ Weise, “The Rules of Horror,” 244.

¹⁶ *Ibid.*, 246.

camera titles of the mid-late 1990s—negatively affects their immersion in seemingly-continuous virtual space, principally because of resulting problems with avatar navigation, as mentioned earlier. But nonetheless, fixed camera games embarked upon self-conscious experiments aimed at incorporating cinematic form—including editing—into gameplay, despite predictable complaints about these games’ awkward control schemes. At the time, the cinematic rupture of cut scenes was the most common method for the presentation of cinematic style, and became pervasive in many game genres, as Lev Manovich notes in his book *The Language of New Media*, writing that game designers of the period had “begun to incorporate cinematic language in an increasingly systematic fashion.”¹⁷ Describing the typical usage of cinematic style in 3D gaming, Manovich writes that, “Frequently, the whole game would be structured as an oscillation between interactive fragments requiring the user’s input and noninteractive cinematic sequences.”¹⁸ This oscillation between cinematic flow and rupture was starkly delineated in the period, when cut scenes were often generated using different visual assets (and a different “engine,” to use industry jargon) than interactive portions of the game, making cut scenes resemble animated short films. *Resident Evil* does this as well, as its early titles contain animated cut scenes, with the first tile even beginning with a live-action sequence that is both famously corny and sensorially effective, with its strong sound design and editing that together conjure Geoff King’s concept of “montage-impact” in modern cinema, as discussed in Chapter 2.

However, the fixed-camera style of the *Resident Evil* games possessed its own advantages for the delivery of cinematic affect within gameplay. The horror genre in all its forms relies

¹⁷ Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001), 83.

¹⁸ *Ibid.*

heavily on the restriction of narrative and/or audio-visual information—not spectacular views of environments. The navigational limitations of the fixed-camera game were thus ideal for the development of *Resident Evil*, considering the cinematic genre’s tendency to obscure visual information via cinematography; the limited visual information mimics that of the tight framing that makes horror films feel so claustrophobic, dark, and vulnerable to the sudden eruption of terrifying threats. King and Krzywinska, in their introduction to the essay collection *Screenplay: Cinema/Videogames/Interfaces*, note that certain cinematic genres translate into a gamic context more effectively than others, at least in games of the period, and for reasons beyond Poole’s argument that horror’s lack of “plot and character” account for its eminent adaptability. They write:

The appeal of such environments is partly their cinematic association but also the more prosaic fact that stylized landscapes, such as those of tech-noir, science fiction and horror, lend themselves to the limited and particular representational capacities of games (especially where priority in the use of processing resources is given to gameplay rather than the detailed quality of backgrounds).¹⁹

This technological determinism is instructive when examining influential survival horror games of the mid-to-late-1990s, particularly *Resident Evil* and *Silent Hill* (1999, Konami), which both found clever aesthetic outlets to work around technological limitations. In early *Resident Evil* titles, lovingly detailed pre-rendered 2D backgrounds are combined with 3D character models, and individual areas are demarcated by “loading screens” (each room or area in the games require three to five seconds for the console to load) with a simple animation of the door to the next area opening against a black background. The games rarely allow the player to move between different spaces or rooms in real time, a workaround for contemporaneous processing

¹⁹ Geoff King and Tanya Krzywinska, “Introduction: Cinema/Videogames/Interfaces,” in *Screenplay: Cinema/Videogames/Interfaces*, ed. Geoff King and Tanya Krzywinska (London: Wallflower Press, 2002), 11.

limitations. But as I will later argue, these animations themselves serve an atmospheric and storytelling function, amplifying the game's sense of horror. In addition, the static, pre-rendered backgrounds are non-interactive and unchanging within individual shots of the game space, allowing for greatly enhanced visual detail when compared to contemporaneous mid-late 90s games with full 3D background modeling, which require the images to move in concert with the playable character and the moving camera. In *Silent Hill*, which plays more like a modern game with its dynamic 3D camera, an enveloping fog is omnipresent in the expansive outdoor sections that works both thematically (fog having an ominous effect) and as a technical workaround, since the fog enables the map to be unobtrusively loaded in real time as the character moves through it.

If this is not intuitive to a reader inexperienced with games, consider it this way: with a pre-rendered, static background as in *Resident Evil*, the experience is akin to moving a character around *inside* a photograph.²⁰ With everything in the image static except for the 3D-modeled playable character, enemies, and non-player characters, the game does not need to process real-time lighting for the environment that would change with the camera's angle or scale. Extending this metaphor, the game is played inside 2D still images, in which depth perspective creates the illusion of 3D space: character models get larger or smaller as they move toward or away from the virtual camera. Thus, early *Resident Evil* titles appear far more visually detailed compared to contemporaneous 3D environments with moving cameras, where shot scale remains mostly consistent as the playable character moves, while the environment changes constantly, revealing new information with character movement, such as *Silent Hill* or *Tomb Raider*. In both of the

²⁰ Extending the metaphor, this could be described as an interactive version of the famous scene in the film *Blade Runner* (Ridley Scott, 1982) in which protagonist Rick Deckard investigates a photograph using a device allowing him to manipulate and enhance portions of the image.

latter, demands on mid-late 1990s console processors for real-time lighting effects necessitated a great reduction in visual detail for such 3D games when compared to fixed-camera titles like *Resident Evil* or *Dino Crisis*. (For a comparison, see **Fig 3.1** for a characteristically detailed image from *Resident Evil 2* and **Fig 3.2** for a typical example of an environment from *Silent Hill*.)



Fig. 3.1: *Resident Evil 2*'s pre-rendered backgrounds allowed for visual detail in 1998.



Fig. 3.2: *Silent Hill*'s mobile camera and real-time lighting effects necessitated blocky graphics in 1999.

Having long been beguiled by the artistry in *Resident Evil*'s pre-rendered environments, I would argue that these backgrounds are in themselves important pieces of the medium's history as a catalog of technological spectacle parallel to cinema: they are a video game-specific form of cinematic spectacle. My sense of this was deepened in an interview I conducted in 2021 with James Windeler, currently a game writer for Guerrilla Games (the *Killzone* and *Horizon* series), and at the time of the interview a writer for Monolith Productions (a Seattle-based Warner Bros. Interactive subsidiary that has produced innovative narrative-based action games including 2014's *Middle-Earth: Shadow of Mordor*). Windeler explained Monolith's internal use of the word "presentations" to refer to the kinds of in-game narrative or world-building events that I have discussed throughout this dissertation. In this context, the term denotes moments when an "event" occurs in playable space (presentations are not *necessarily* cut scenes in the traditional sense) that the designers want the player to be attentive to, usually for narrative purposes but also sometimes tied to the production of awe in the viewer-spectator. In modern games, these presentations often occur via a pre-authored *reframing* of the image (or sudden camera movement, or zoom), wherein the player briefly loses complete camera control, and usually but not necessarily avatar control as well. Essentially, this designation of "presentations" parallels my usage of terms like "micro-cut-scenes," "in-game-events," and "environmental spectacle"—moments in games that designers feel it necessary that players *see*. Also, sometimes a presentation is an in-game event without a *pre-authored* reframing, wherein situational, narrative, and aural cues may be deployed in the hope that players will move the camera and/or the avatar's position themselves and discover the event or pleasurable view, as in the example of

Lara's dive in Chapter 2, and seen frequently in games like *Alan Wake* (Remedy, 2010), which similarly uses audio-visual cues instead of pre-authored reframing to *invite* the player to look.²¹

The term “presentation,” used as such at a prominent game company, evokes Tom Gunning’s foundational scholarship on the “cinema of attractions,” his influential term for the cinema of roughly 1896-1906. For Gunning, early cinema is defined by a markedly presentational, even exhibitionist aesthetic—a cinema, in other words, which presents sights that invite you *to look*.²² After quoting cubist artist and filmmaker Fernand Léger on the cinema’s artistic potential (its power is “a matter of *making images seen*”), Gunning writes that, “It is precisely this harnessing of visibility, this act of showing and exhibition, which I feel cinema before 1906 displays most intensely.”²³ While the usually-static shots of early cinema do not directly resemble video game “presentations” in game genres relevant to this dissertation, which typically rely on camera movement, or in *Resident Evil*’s case on more dynamic changes in shot scale and angle than were seen regularly before 1906, I would nevertheless argue that there is a parallel between Gunning’s notion of these early filmic invitations and the strategies that video games use to direct the player’s attention—to *look*—or as Gunning writes, cinema’s “ability to *show something*,” and how early cinema “[presents] a series of views to an audience, fascinating because of their illusory power.”²⁴ Gunning’s concepts have been regularly theorized as

²¹ The term “presentations” could also be used to describe the micro-cut-scenes during fight sequences in *Batman: Arkham Asylum* as mentioned in Chapter 2, and some very recent games—particularly *God of War: Ragnarök*—are made up of innumerable oscillations between full avatar-and-camera-control and presentations of relevant plot events or spectacular imagery.

²² See Tom Gunning, “The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde,” in *Early Cinema: Space, Frame, Narrative*, ed. Thomas Elsaesser (London: BFI, 1990) and Tom Gunning, “An Aesthetic of Astonishment: Early Film and the (In)Credulous Spectator” in *Viewing Positions* (New Brunswick: Rutgers, 1995)

²³ Gunning, “The Cinema of Attractions,” 56.

²⁴ *Ibid.*, 57.

applicable to a wide swath of contemporary genre cinema in its production of awe and spectacular impact, and suggests that the referent of a video game presentation is the attraction of cinema, with its power to direct and redirect the attention of an audience.²⁵

Compared to other console games of the period, the *Resident Evil* series' pre-rendered backgrounds were revelatory in their detail, making them presentations in themselves. At the time of the first *Resident Evil*'s release (1996), games were advancing so rapidly that the *medium* was still an attraction—as Gunning writes of early cinema, “...in the earliest years of exhibition the cinema itself was an attraction.”²⁶ By 1996, video games had been widely-known for over twenty years, but new console generations and their associated technological leaps were so dramatic that each generation generated a fresh sense of awe. *Resident Evil*'s pre-rendered atmospheric imagery was striking in its cine-real simulation, as if you were controlling an avatar through a virtual representation of a live-action movie. The dynamic camera placement within spaces, even banal ones, utilize objects, windows, shadows, camera angle, and shot scale to dynamically present spaces, as seen in cinema contemporaneous to *Resident Evil*, and thus instead of reframings as in modern games, the presentational mode of these titles is found within the shots themselves. The strange angles and alternating scales of shots, highly cinematic in nature as they emphasize off-screen space and the extreme corners of the frame, are thus the game's principal sites of presentation for both visual pleasure and narrative or contextual information. (See Figs. 3.3-3.5).

²⁵ For a collection of essays that applies the notion of “the cinema of attractions” to late-20th-century films, see Wanda Strauven, ed., *The Cinema of Attractions Reloaded* (Amsterdam: Amsterdam UP, 2007).

²⁶ Gunning, “The Cinema of Attractions,” 58.



Fig. 3.3: *Resident Evil: Code Veronica* — playable character Claire (center) seen through an equipment cage with zombie at foreground-right.



Fig. 3.4: *Resident Evil 0* — a dramatic shot of playable character Rebecca (background) dominated by a zombie passing the camera in the foreground.



Fig. 3.5: *Resident Evil 0* — a composition that builds tension regarding off-screen space, here lying beyond piles of strange gelatinous eggs.



Fig. 3.6: *Resident Evil 2* — A “licker” creature crosses the window from left to right as the player reaches this shot. You then enter the door on the right in the same direction.

On rare but notable occasions, such as in **Fig. 3.6** from *Resident Evil 2*, enemies or events foreshadowing a future conflict will suddenly appear in a cut to a new view. In the image, the player sees a lizard-like creature quickly crawling across the window in the background from left to right, precisely at the moment the game cuts to this shot. This chilling image, which heightens expectations at what lies beyond in the next room (through the door at frame-right), is not accompanied by any change to the then-silent soundtrack, signaling that the game will not necessarily prepare the player for frightening moments with audio cues or ominous music. As it occurs early in the game, this shot warns the player that unpredictable events can occur when the game cuts—and cuts can occur several times within a single room or space.

Thus the game's editing itself is also a presentational spectacle; it is often unpredictable when and how the camera will change orientation, creating a kind of aesthetic reward with the surprise of the camera's changed position. Each room, hallway, or enclosed outdoor space in early *Resident Evil* titles is its own edited visual universe, wherein a handful of shot changes occur at the character's specific positioning in the frame, serving to describe the space visually and also to systematically build tension by restricting visual perspective.

As a demonstration of editing, shot-scale patterns, and visual detail in early *Resident Evil* titles, see **Figs. 3.7-3.11** and **Figs. 3.13-3.17**, all taken from *Resident Evil 2* (1998). **Figs. 3.7-3.11** show a carefully patterned sequence of shot scales seen throughout many spaces in early *Resident Evil* titles. In these, a space's shot pattern moves from tighter early shots to longer shots revealing more of the space. This is especially common when a new space begins in a hallway. In **Fig 3.7**, playable protagonist Claire Redfield is exploring the game's police station setting, pictured immediately after entering this hallway from the on-screen door. As the player walks

forward, she reaches the point shown in **Fig. 3.8** (the character now in a tighter long shot). At the point of **Fig 3.8**, the game cuts to **Fig 3.9**, an extreme long shot showing more of the hallway, revealing a blood stain on the floor ahead of Claire, and a chalkboard in the left foreground. Claire continues walking forward, reaching the point seen in **Fig 3.10** (again, now in a tighter long shot). Once reaching this spot, the game cuts to **Fig. 3.11**, another extreme long shot revealing the larger space at the hallway's end, which appears to be a waiting room with a coffee machine and upturned wastebasket at frame-left. This sequence, consisting of two cuts between three static background shots that each change in scale as Claire moves forward, is emblematic of the typical shot breakdown in early *Resident Evil* titles. The protagonist enters an indoor space, and shots typically move from tighter to wider views, presenting the design of spaces as miniature graphical spectacles unveiled in greater detail with each cut. For gameplay, these sequences are meant to steadily communicate more about the current environment, indicating traversable paths forward and points of interest including where items, such as ammunition and health power-ups, are located. These are the games' most common shot scale patterns, but countless others do not adhere to this pattern, as the games' variety of indoor spaces and scenarios necessitate a flexible approach based on the design or implied function of rooms, and most importantly any narrative context, puzzles, hidden items, or enemy encounters within them. (See **Fig. 3.12** for an example of how shots are framed to emphasize the placement of items.) What remains consistent is that the editing of shots ultimately imply how and where the player should look.



Fig. 3.7: *Resident Evil 2*



Fig. 3.8: *Resident Evil 2*



Fig. 3.9: *Resident Evil 2*



Fig. 3.10: *Resident Evil 2*



Fig. 3.11: *Resident Evil 2*

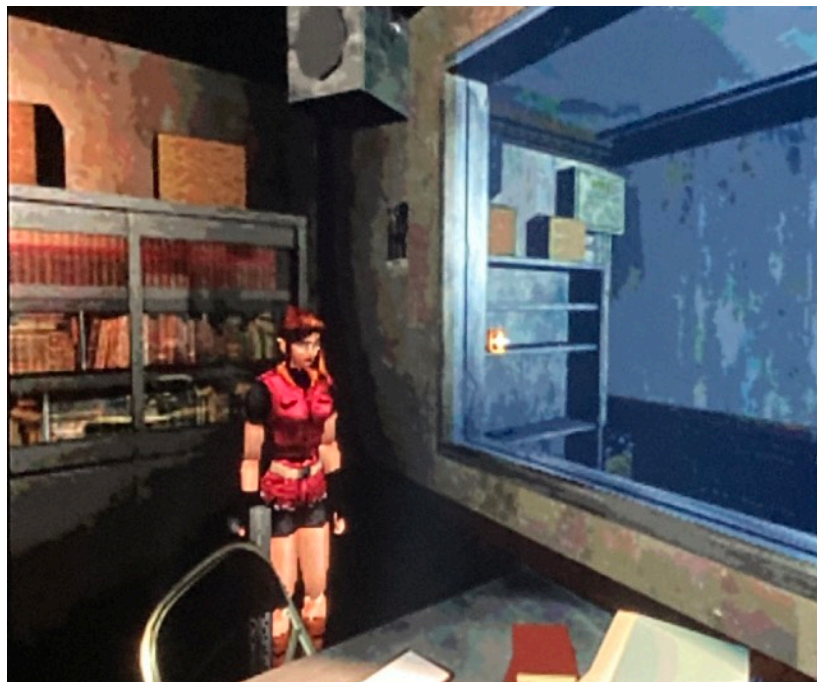


Fig. 3.12: *Resident Evil 2* — A shot revealing an item through the window to the next room (gleaming at center).

Figs. 3.13-3.17 demonstrate the games' more dynamic and unpredictable shot breakdowns, here in a rare outdoor space. In **Fig. 3.13**, Claire has entered an alleyway after rounding the corner in the shot's center background at the brick pillar that touches the fencing. As she walks by a locked gate preventing her entry into the graffiti-laden basketball court, the game includes animation of Claire's head turning as she notices a pile of corpses near the gate, suggesting that they may become threats. Soon after moving forward from the point in **Fig. 3.13**, there is a cut to **Fig. 3.14**, a similar long shot scale but now at a high angle. Note that the corpses by the gate remain in view, again implying their import. Claire moves forward in the alley until a cut to the shot in **Fig. 3.15**, an ominous overhead view revealing "realistic" environmental detail: a window with a potted plant on its sill, a fire escape, and an air conditioning unit protruding from a building. Continuing forward frame-left, Claire walks towards the white van blocking her from continuing through the alley, barely visible on the left in extreme long shot in **Fig. 3.15**. Upon reaching it, there is a cut to **Fig. 3.16**, a high-angle long shot of Claire at the back of the van, presenting an impressive view of the city's architectural detail, including a multi-colored, stained wall at frame-right. **Fig 3.16** again alters the perspective on Claire, showing her from behind, as opposed to previous shots showing her walking towards the camera or walking frame-left from overhead. Immediately after Claire retrieves an ammunition item from the back of the van, the sound of the gate opening accompanied by zombie moans is heard on the soundtrack over **Fig. 3.16**, indicating that the previously-seen zombie corpses have awoken, crashed through the gate, and are coming after you. (These screenshots were taken out of order, explaining the corpse in **Fig 3.15**.) The gate to the basketball court is now open, and after passing again through

the shots shown in **Fig. 3.14** and **Fig. 3.13**, Claire enters the court which triggers the shot shown in **Fig. 3.17**.



Fig. 3.13: *Resident Evil 2*



Fig. 3.14: *Resident Evil 2*



Fig. 3.15: *Resident Evil 2*



Fig. 3.16: *Resident Evil 2*

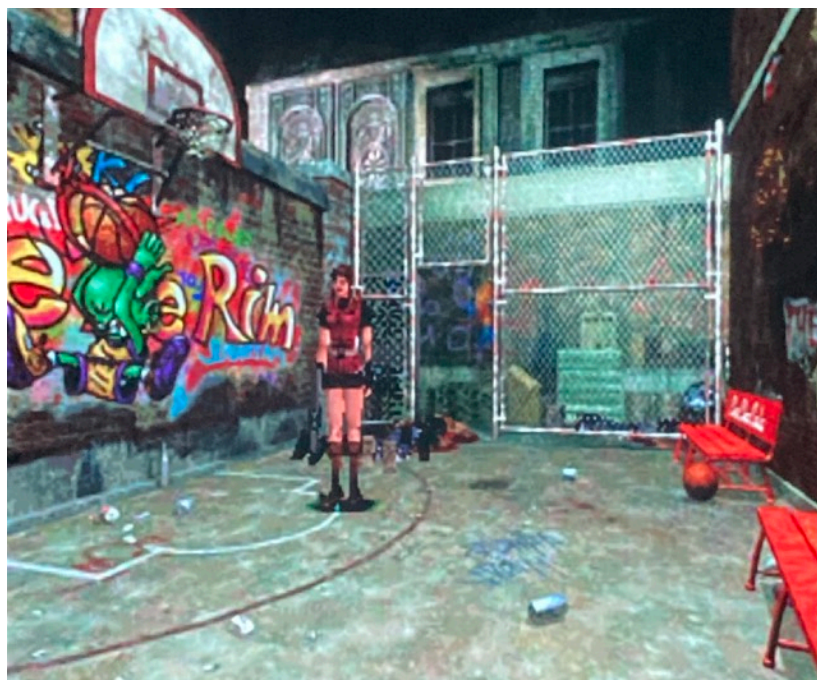


Fig. 3.17: *Resident Evil 2*

This final image is exemplary of the cinematographic intelligence seen throughout fixed-camera *Resident Evil* titles, in their attentiveness to color and the extremes of the frame. The virtual camera is placed off-center to the right of the court, achieving an angle favoring a clearer view of the colorful graffiti seen earlier through the fencing in **Fig. 3.13**, as opposed to the bland brick wall parallel to it, but with enough of the latter wall in view to indicate the size and dimensions of the court. Again demonstrating the contemporaneous graphical advantage of pre-rendered static backgrounds as opposed to *Silent Hill*'s dynamic moving 3D backgrounds, the shot in **Fig. 3.17** shot includes a plethora of rich environmental detail: the discolored backboard of the basketball hoop and its ratty net, debris scattered around the court, patches of color on the pavement suggestive of chalk markings and scuff marks from the well-worn shoes of basketball players before the zombie outbreak. A basketball sits abandoned at frame-right next to a bright red bench, the color of which matches the red in the graffiti at frame-left, framing the image with

bursts of primary color at its edges. These intricate sites call attention to their own detail, not for any gameplay purpose, but simply to provide something *to look at*, particularly when understood in its historical context, when such attention to visual detail and color was astounding in a video game. To borrow Gunning's words on early cinema, the image "directly solicits spectator attention, inciting visual curiosity" and is "of interest in itself."²⁷

I have already noted that critics have frequently described the static backgrounds and fixed camera angles of the early *Resident Evil* titles as a workaround for technical limitations that only incidentally results in a coherent aesthetic strategy. Weise, for example describes it as a strategy "[allowing] early 3D games to have highly detailed backgrounds at the expense of camera-control."²⁸ Laurie Taylor makes a similar point in her essay "Gothic Bloodlines," writing that, "The technical limitations actually led to many of the formal and the functional elements of survival horror. Perhaps the most immediately recognizable characteristic of survival horror was the limited visual scope."²⁹ But the richly textured detail, absorbing warmth, and careful framing of pre-rendered imagery in early *Resident Evil* titles do not require a technological justification for their usage: cinematic horror restricts visual information to further reduce the sense of protagonists' having control over the scenario. Thus Taylor's "formal and functional elements" above were not just caused by "limitations," but also by the translation of film style in the horror genre. (See **Figs. 3.18-3.20** for examples of the usage of dynamic camera angles and objects in the environment to frame shots, including for the purpose of obscuring or limiting the view of

²⁷ Ibid.

²⁸ Weise, "The Rules of Horror," 254.

²⁹ Laurie Taylor, "Gothic Bloodlines in Survival Horror Gaming," in *Horror Video Games*, ed. Bernard Perron (Jefferson, NC: McFarland Books, 2009), 51.



Fig. 3.18: *Resident Evil 2*



Fig. 3.19: *Resident Evil 0*



Fig. 3.20: *Resident Evil 0*

the space directly in front of the character.) Furthermore, since in *Resident Evil* views on the action have been pre-authored by the designers, this overarching visual system is inherently more cinematic than that of other zombie-action games like the open-world, mobile-camera *Dead Rising* (Capcom, 2006). In her oft-cited essay “Hands-On Horror,” Krzywinska writes on the series’s restrictive camera:

By contrast [to first-person shooters], the third-person shooter mode of *Resident Evil 3* is closer to film in this respect as the player’s ability to look around is more heavily managed by its game engine. *Resident Evil 3* imposes different camera angles onto the perspective of the viewer, withholding visual information and creating a pronounced effect of enclosure. Like a film, *Resident Evil 3* structures space and the player’s experience through editing and fixed framing, which is often used to create shock effects. The intrusive effect of pre-rendered camera angles within gameplay reminds the player that control is limited and that the gameplay is highly predetermined.³⁰

³⁰ Tanya Krzywinska, “Hands-On Horror,” in *Screenplay: Cinema/Videogames/Interfaces*, ed. Geoff King and Tanya Krzywinska (New York: Wallflower Press, 2002), 209.

In *Resident Evil* the restricted camera pre-loads the conditions for tension, fear, and/or discomfort directly into its visual aesthetics, which bears a much more direct relationship to these games' cinematic antecedents than a game like *Dead Rising*, with its 360-degree camera control and lack of cutting. *Resident Evil* strives to ensure that the player experiences fear through audio-visual means, whereas *Dead Rising* is exemplary of strategies of more recent action-horror games that have moved towards a direct, unedited experience of game space in which the player has access to more of the avatar's visual agency (via camera controls). The result is that action-horror titles like *Dead Rising* produce less affect associated with horror texts than their antecedents in games or films; simply put, they are less scary. While *Dead Rising* so blatantly and shamelessly copies from George A. Romero's film *Dawn of the Dead* (1978) that a disclaimer was later attached to the game after legal proceedings required it, it is a pale shadow of that film's production of tension. Thus, while navigation of virtual space is clunky in *Resident Evil*, its restricted visual mode made some 1990s games with static framing arguably more cinematic than the dominant mode of a user-controlled mobile camera. As King and Krzywinska describe it, "Predetermined framing of this kind acts like that of a film, to some extent, directing the attention of the player and creating visual diversity through shifts of perspective, although at the expense of player freedom."³¹

Due to the effects of predetermined framing on gameplay—the aforementioned "tank controls" problem—in addition to the stark demarcation of spaces in *Resident Evil* via the door animations, some critics and scholars have been hostile towards the series from various angles of approach. Poole criticizes the replication of cinema's "stylized shot choice" in *Resident Evil 2* as

³¹ King and Krzywinska, "Introduction: Cinema/Videogames/Interfaces," 13.

“...a fraudulent and frustrating method of inducing tension: the player can get killed by zombies not because the environment is cleverly designed but because he was deliberately hindered from seeing them coming until it was too late.”³² Poole here shows the ontological firmament on which so much discourse on video games is founded, from Reddit discussion boards to the popular press to scholarly interventions; simply, that games should maximize the functions of *playability* given tasks the avatar must address, in this case evading or killing zombies. Poole explains that in *Resident Evil*, “As with film, shots are done to you...And this shows how a purely filmic notion of camerawork cannot work in a videogame context. Film manipulates the view, but a game depends on being manipulable.”³³

What is missing from Poole’s complaints is the notion of textual adaptation in *Resident Evil*’s remediation of a horror-movie scenario. In other words, the frustration players experience with camera angles obscuring nearby dangers is a deliberate part of the experience. This is part of the *fun* of horror, and certainly its affects of tension and stress. Writing on interactive-movie horror game *Until Dawn* (Supermassive, 2015), Tanine Alison points out the relevant specificity of the horror genre, in that:

[*Until Dawn*] does not offer the kind of skill-based achievement that is found in other video games ... [It] challenges, and undercuts, such mastery, giving the player a very different experience—one of futility, confusion, insecurity, fear, and lack of control. These sensations match the genre of horror video games, which are typically meant to elicit an emotional or affective response, rather than challenging players to win in a competitive contest.³⁴

³² Poole, *Trigger Happy*, 81.

³³ *Ibid.*

³⁴ Tanine Allison, “Losing Control: *Until Dawn* as Interactive Movie,” *New Review of Film and Television Studies* 18, no. 3 (2020): 292.

Considered aside Allison's terms for horror experiences—"futility, confusion, insecurity, fear, and lack of control"—*Resident Evil* is remarkably effective at this translation, using audio-visual horror tropes (obscuring important visual information, sounds from unclear sources) to frustrate the player's desire for mastery, mirroring the horror protagonists of cinema as they experience "futility" and "lack of control." Sound is crucial to this adaptation, as Poole himself notes: "*Resident Evil*, for instance, shows a superb handling of sound effects that is directly influenced by its movie forebears. One room is eerily silent, while a large galleried hall is ominously and stressfully dominated by the solemn ticking of a clock."³⁵ Poole's complaints about not being able to precisely anticipate threats in *Resident Evil* thus seem tied to sonic horror tropes adapted by the game. The shuffling of zombie feet or their droning moans are often heard off-screen, and camera placement often makes it difficult to pinpoint their location. The game's visual regime of cinematic camera perspective—as opposed to prioritizing the playable character's field of vision—is here a procedural adaptation of the threat of *what-is-heard-but-not-seen*, and the unpredictability of attacks from off-screen so typical of horror movies. This is at the expense of character-centric perspectival realism, as sometimes an enemy will appear from a part of the screen within the character's presumed field of view yet invisible to the player due to static, non-subjective camera placement. This makes *Resident Evil's* framing an admittedly clunky adaptation of horror cinema's play with offscreen threats, since characters may be able to "see" threats that the camera stubbornly does not reveal. Yet the dominant affect of "futility" in these scenarios is nonetheless highly effective in producing tension, and thus one's acceptance of the game's methods for keeping tension elevated depends upon the individual player's enjoyment at

³⁵ Poole, *Trigger Happy*, 68.

being thrust into a position of forced insecurity antithetical to the skill-based unfolding of most games.

In the aforementioned essay “Rules of Horror,” Weise sees *Resident Evil* and *Dead Rising* as “zombie simulations” that have a direct antecedent in Romero’s films, which he demonstrates through formal elements (the “rules” or conventions of zombie behavior and physiognomy, from Romero’s *Night of the Living Dead* (1968) and its sequels) and quotes from *Resident Evil* series creator Shinji Mikami who describes Romero’s direct influence. Weise’s detailed account of the procedural adaptation of zombie “rules” is illuminating, but his argument that *Resident Evil* is a less effective modeling of zombie films than *Dead Rising*, and thus less cinematic and less faithful to the generic corpus of horror cinema, is myopic. The bulk of his argument focuses on the incompatibility between *Resident Evil* and Romero-specific zombie tropes, such as his complaints that the game’s conventional health meter defies most zombie films’ insistence that “even the smallest zombie bite is absolute,”³⁶ or that it lacks a precision aiming system allowing players to perform head shots, which Romero established as the only way to put a zombie down for good. But beyond bluntly comparing Romero’s narrative rules in film and game—despite the fact that *Resident Evil* is not an adaptation of *Night of the Living Dead*—Weise sees the visual design of *Resident Evil* as at fault for its supposedly poor simulation of a zombie film. He describes the design as “hopelessly fragmented” because of technological constraints, since activity in one space does not affect others. Enemies cannot follow you between demarcated rooms, thus according to Weise the animated sequences of doors opening that serve as load screens between self-contained spaces are “magical safe zones” that stretch narrative credulity.

³⁶ Weise, “The Rules of Horror,” 254.

He writes that this “made *Resident Evil*, essentially, a series of microcosmic instances of zombie dynamics, none of which were allowed to mix together into something larger. The game effectively recreated the experience of being in a zombie film on the level of a single room. But anything beyond that was out of the question.”³⁷ In short, Weise argues that *Resident Evil* is an insufficient simulation of the apocalyptic aspects of the modern zombie film, in which hordes of creatures should be able to progressively suffocate the protagonists’ safe space (seen in *Left 4 Dead* (Valve, 2008) and *Dead Rising*).

Weise is not inaccurate in noting *Resident Evil*’s many departures from the Romero-derived conventions of zombie films. But he glosses over components of movie horror that *Resident Evil* adapts that are *not* present in *Dead Rising*, which as mentioned previously is a game with 360-degree camera control allowing the player-character to become visually aware of enemies and obstacles outside the character’s presumed field of vision, which greatly limits the game’s production of tension or insecurity. For example, while *Resident Evil*’s door animations occasionally serve as tension-relieving safe havens when the player is fleeing enemies, they can also function as tension-building devices. The sound of the door opening and the black space around it creates anticipation; what surprise or monstrosity awaits in the next room? In certain instances, opening a door will cue underscore (non-diegetic music is very rare throughout, and thus always grabs the player’s attention) or the sound of a heartbeat, heightening tension and anticipation of the next space. The designers could have stuck to contemporaneous convention and opted for simple on-screen text indicating that the game is “loading,” instead of the door animations, but the animations are incorporated to impart an acute experience of tension arising

³⁷ Ibid., 255.

both within uncharted spaces and, importantly, *between* them. This mirrors the fetishization of doors and door handles commonly seen in horror movies, in which characters frequently investigate fragmented, confusing buildings such as large houses or hospitals.

Krzywinska writes in “Hands-On Horror” that the genre is “liminal,” in that it often toys with psychological and physical boundaries. Horror films are loaded with liminal passageways along a spectrum from corporeal to supernatural, thresholds of potential peril that are either too tempting or too contextually significant for characters to ignore. She writes:

The horror genre has a special link with the liminal, through its references to dreams, borders, the unconscious and irrationality. I would argue that games create a direct experience of the liminal, more so than commonly provided by film, precisely because of the contradictory modes encountered during gameplay.³⁸

Dead Rising rarely, if ever, builds tension through liminal devices outside of cut scenes, instead producing suspense via ever-increasing (and predictably visible) zombie hordes, and micro-narratives involving the safety of survivors. While Weise is not wrong in pointing out that *Resident Evil* lacks the “shrinking fortress” feeling of many zombie film scenarios, where a certain space becomes a safe haven only to be threatened as the film progresses, this point ignores that the plot of *Resident Evil*—and nearly all its sequels—is never focused on protecting a supposedly safe space. Rather, the series’ narratives are constructed more like a detective mystery, in which the goal is *escape* from a location through exploration and puzzles. The central location of a *Resident Evil* title is always established as decidedly unsafe from the start, and in escaping you must unravel the origins of the zombie outbreak. Additionally, the outbreaks in

³⁸ Krzywinska, “Hands-On Horror,” 219.

Resident Evil titles are geographically isolated rather than the worldwide apocalypse of a Romero film. The fortress, in other words, is already shrunk.

The “save rooms” in *Resident Evil* (**Fig. 3.21**) exemplify this emphasis on liminal passage. Entering a save room is a passage into a safe space for the character-player, as enemies never appear in these rooms.³⁹ They are the only rooms in the game that always contain underscoring; in the first game, the music is a pleasant, repeating composition of pitch-bent synthetic strings and a heavily-reverberated arpeggiation of guitar samples. This opportunity for the player to relax, with the gentle music closing off the possibility of audio-visual cues indicating an imminent attack, are reminiscent of scenes in zombie movies in which characters are seemingly safe from impending attack, during which they usually converse about their lives before the apocalypse, or tell stories of their now-dead or infected loved ones. Zombie films pace these scenes regularly as a tension-relieving device to heighten the impact of returning to horrific threats. Just as viewers are desirous of movie characters’ safety, these rooms provide a rare condition of safety for the player, helping the game break a potentially monotonous pattern of constant threats. In providing security, the save rooms are a liminal space between true safety and the threats outside of them, providing texture and variety to an affective experience that could easily become a repetitive exercise in constant suspense, recalling the pacing of many horror films, which establish moments of calm before eruptions of violence and fear—the fall before the rise of action.

³⁹ Since it became a regular feature of game consoles to auto-save player progress at regular intervals, roughly in the mid-2000s, spaces such as “save rooms” are now very rare. However, they still appear occasionally for stylistic purposes. They are used in the early-2020s *Resident Evil* series remakes, as well as the RPG *Persona 5* (Atlus, 2016).



Fig. 3.21: *Resident Evil 0* — An ornate, warmly-colored “save room.”

Resident Evil's stylistic regime of carving up virtual space into dynamic cinematic shots, and demarcating spaces as liminal audio-visual points of entry, is arguably closer to a cinematic experience than a game like *Dead Rising*, challenging Weise's notion that the latter is a more complete “simulation” of a zombie film. *Dead Rising* may be more faithful to Romero's zombie “rules,” but *Resident Evil*, in its consistent play with off-screen audio-visual elements and the way it frustrates the player's sense of control over the environment, produces a greater volume of affects that define horror, particularly in loading audio-visual spaces with tension and anticipation and toying with liminal spaces between security and futility.

Whether the first five *Resident Evil* titles, before the fixed-camera style was abandoned in *Resident Evil 4*,⁴⁰ represent a quirk of technological constraints or a truly organic ludic structure providing a cinema-like experience is less important than why they continue to fascinate; they

⁴⁰ As a reminder, the first five main-series *Resident Evil* titles were: *Resident Evil* (1996), *Resident Evil 2* (1998), *Resident Evil 3: Nemesis* (1999), *Resident Evil: Code Veronica* (2000), and prequel *Resident Evil 0* (2002).

were experiments in attempting to pre-author the moment-to-moment particulars of a game's affective experience. It should thus be no surprise that this style did not catch on outside the *Resident Evil* franchise in a medium that seeks to define itself as interactively mutable, in which "player agency" is both a literal feeling arising from interactivity and a desirable element of game design generally. In their essay "Movie-Games and Game-Movies: Towards an Aesthetic of Transmediality," Douglas Brown and Krzywinska argue that games lack film's spatial and temporal flexibility, which to them is the "price paid for agency."⁴¹ Attempting to provide a "diverse range of visual entry points," as *Resident Evil* does, collides awkwardly with players' need to traverse virtual space confidently in pursuit of specific goals. *Resident Evil* today seems almost "arty," as if the denial of perspectival interactivity, the almost-invariably static camera, and the lack of subjective shots are in service of a deliberate surveillance aesthetic akin to Michael Haneke's film *Caché* (2005). Of course, this is not the case, but the messiness of comparative aesthetics should at this point be clear: what is tense and engaging in one medium can be shockingly dull in another, and vice versa. As Brown and Krzywinska write, "While Hitchcock, for example, celebrates the way he can control very tightly the viewer's aesthetic experience, it is by contrast much less easy to control very tightly the minutiae of a player's gaming session."⁴²

Horror games today have absorbed so much of the generic content of 3D action games that they often fit better into an action-adventure framework, as *Dead Rising* certainly does. The *Resident Evil* series itself was innovative in this regard, as Capcom revamped the series in an

⁴¹ Douglas Brown and Tanya Krzywinska, "Movie-Games and Game-Movies: Towards an Aesthetic of Transmediality," in *Film Theory and Contemporary Hollywood*, ed. Warren Buckland (New York: Routledge, 2009), 87.

⁴² *Ibid.*, 88.

action-oriented direction with 2005's well-received, enormously popular *Resident Evil 4*. In that title's gameplay, the camera is settled behind the playable protagonist, and keeps him (Leon Kennedy) in the same position in the frame at nearly all times. The game does not include edits to new camera perspectives within spaces, unless a cut scene is activated. (See **Fig. 3.22** for an example of the new perspective adopted by the series in the mid-2000s.) While *Resident Evil 4* was effective in retaining a horrific, tense tone despite moving closer to being a conventional action game, the series pushed its action elements in subsequent titles too far to preserve its horror credentials. By *Resident Evil 6* (2012), the series had moved uncomfortably close to popular action titles like *Uncharted 2*, complete with over-the-top set pieces. The opening sequence includes multiple quick-time events (QTE), a hallmark of action titles, and multiple moments of spectacle that felt out of tune for the series, including a fighter jet crashing into a building that you must run away from—a standard scenario in *Uncharted* and similar games. The game's poor critical and commercial performance led Capcom to return to a horror-centric experience with the 2017 and 2021 numbered installments, including adopting a first-person perspective, which by 2017 had become the dominant mode of game horror. For many gamers, the main series' first-ever move to FPS paradoxically felt like a return to form, as FPS limits the view on game space more so than most third-person games, and the fluid 360-degree camera control of *Resident Evil 5* and *Resident Evil 6* felt overly inclusive of off-screen space in a genre that thrives on obscurity. If anything, the journey that the franchise traversed after *Resident Evil 4* demonstrated the fragility of genre-mixing in games; much like in movies, the process of recombinant form has room for surprising originality in the alchemy of generic combination, but



Fig. 3.22: *Resident Evil: Revelations* — This medium shot from behind the playable protagonist is exemplary of the perspective adopted in the *Resident Evil* series from *Resident Evil 4* to the present, excepting the first-person titles *Resident Evil 7* and *8*. The series discarded the fixed-camera style in favor of a mobile camera that keeps the protagonist mostly in the same position within the frame. Cuts only occur when a non-playable narrative sequence is activated. This placed the series in line with dominant trends for third-person action games of the mid-2000s, which remain today.

in an intellectual property with a lopsided association with a single ur-genre (in this case, horror), an imbalance in generic elements can result in critical or commercial failure.

Like science fiction, inheritance from cinematic horror in contemporary games is pervasive, though often subsumed into generic scenarios with a more tenuous link to the aesthetic attributes of cinematic horror than that of early *Resident Evil* titles or the *Clock Tower* series. *Dead Space* (EA Redwood, 2008) is emblematic, in that horror and sci-fi conventions function as mutable devices adding generic texture to dominant action elements (it is arguably a procedural adaptation of director James Cameron's 1986 action-sci-fi-horror hybrid *Aliens*). The polygeneric, interactive-movie game *Heavy Rain* is another example. It is above all a story-driven procedural mystery, but is clearly influenced by trendy scenarios in 2000s horror cinema, such as the threat of torture in one character's abduction, and *Saw*-esque death games as the

protagonist endures sadistic “trials” to save his kidnapped child, including cutting off his own finger and navigating a maze of electrified cable.

It is inarguable, overall, that an orientation towards “action” came to dominate mainstream single-player games in the 2000s, as technology advanced rapidly and allowed for seamless pre-authored in-game spectacle. The ability for big-budget games to pack space with live events, including non-player characters engaged in seemingly autonomous activity, correlating with advancements during the fourth and fifth console generations (the mid-2000s), lent itself to action-packed scenarios: presentations of awe at the great detail of shiny game environments as they inched towards live-action verisimilitude, and presentations of cinematically energetic, destructive spectacle with an in-game liveness that quickens the player’s pulse or sends chills across their skin. While the affects of fear and tension or stress overlap with this sensorium, the energy of awe-inspiring cinematic spectacle is hardly *Resident Evil’s* strength as a procedural adaptation of cinema.

While early *Resident Evil* titles may seem like a dead-end branch off the medium’s path towards the dominance of continuous visual experience—where presentation is rarely coordinated with montage techniques outside of cut scenes—their attempt at visually edited game space survives as an ancestor of the sub-genre of interactive-movie games in the 2010s and today, which similarly attempt to control the minutiae of a player’s audio-visual experience. For now, we turn to what became the dominant hybridized cinematic visual regime in games: the visually-continuous, smooth inclusion of cinematic style within (usually) playable game space. It should be noted that playable sequences in games since the mid-00s do sometimes use brief montages as presentations, to enhance the spectacular impact of kinetic sequences, as we will see

soon in discussing *Uncharted 2*. This is in productive opposition to the frequent effect of awe generated by stable, longer views of spectacular locations, corresponding with the continuum of spectacle in modern Hollywood cinema, which was discussed in Chapter 2 and described by Geoff King thusly: “A typical strategy today is to combine moments of broader, more expansive spectacle with those of tightly framed explosive-montage-impact effects.”⁴³ We can find many examples of such spectacular content in the adventures of the interactive James Bond, and the travails of *Uncharted* franchise protagonist Nathan Drake.

From James Bond to *Uncharted 2*: The Final Collapse of Interactive and Cinematic Space

When considering the development of the *007* (James Bond) game franchise as exemplary of the adaptation and evolution of cinematic style in games from roughly 2000-2010, it is hard to ignore that the franchise is a literal cross-medium adaptation of a film franchise, in this case the longest one in film history, now entering its seventh decade. The *007* games could be described as “simulations” of Bond films, where the movies themselves are “representations” in this case. I use this dichotomy to recall the use of these terms in game studies, which have often been used as sharply demarcated concepts, as scholar Patrick Jagoda notes in his game studies survey essay “Digital Games and Narrative.” Quoting influential games scholar Gonzalo Frasca, Jagoda writes that, “For him, the difference between reading a novel and playing a simulation game is immense. Even within the realm of games themselves, ‘the feeling of playing

⁴³ Geoff King, “Spectacle, Narrative, and the Spectacular Hollywood Blockbuster,” in *Movie Blockbusters*, ed. Julian Stringer (New York: Routledge, 2003), 118.

soccer cannot be compared to the one of watching a match.”⁴⁴ Jagoda by contrast argues that the difference between “representation” and “simulation” in games is overstated, writing that “...in a significant number of games these aspects are concurrent and compatible. Increasingly, digital games blur with categories such as interactive narratives or fictions.”⁴⁵ Jagoda concludes that games such as *Heavy Rain* (Quantic Dream, 2010) and *Life is Strange* (Square Enix, 2015) are principally concerned “...with world creation, decision making, and storytelling”,⁴⁶ thus arguing that representation and simulation are porous concepts, “...and by extension narrative and games [generally].” This is why, as Jagoda points out, it is useful to think of game designers as “narrative architects” rather than “storytellers,” following media scholar Henry Jenkins’s argument.⁴⁷ In this formulation, games must contend with telling stories in the context of user-controlled spatial navigation and non-linear playable space.

The *007* games in question—primarily 2002’s *Nightfire*, 2003’s *Everything or Nothing*, and 2010’s *Blood Stone* (Bizarre Creations/Activision)—demonstrate this representation-simulation concurrence in their gameplay and structure, consistently alternating between gameplay and in-game or cut-scene narrative segments. But they also raise issues about franchise games generally as “simulations” of cinematic source material, as critical discourse on movie-game adaptations has trended strongly towards negative perceptions of game adaptations of films. For both scholars and the gaming public, this is partly due to cinema being the “aesthetic

⁴⁴ Patrick Jagoda, “Digital Games and Narrative,” in *The Cambridge Companion to Narrative Theory*, ed. Matthew Garrett (Cambridge, UK: Cambridge UP, 2018), 232. Jagoda quotes Gonzalo Frasca, “Simulation versus Narrative: Introduction to Ludology,” in *The Video Game Theory Reader*, ed. Mark J.P. Wolf and Bernard Perron (New York, NY: Routledge, 2003), 224.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Henry Jenkins, “Game Design as Narrative Architecture,” in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2003), 121.

benchmark” in movie-to-game adaptations, as pointed out by Brown and Krzywinska in their aforementioned essay “Movie-Games and Game-Movies.”⁴⁸ They note that fidelity to film sources is a minefield for designers, as gamers want both a creative interpretation of the source alongside continuity with the *brand*, and write that, “The fundamental distinction between the passivity of film viewing and the active engagement of game playing seems therefore to be something of a barrier to adaptation.”⁴⁹

This idea that the essentially “passive” nature of film viewership somehow constrains the narratives found in motion pictures from being used in games even in an altered form has led to some notably myopic arguments from scholars and journalistic critics. In the essay “Translation Between Forms of Interactivity: How to Build the Better Adaptation,” Marcus Schulzke writes, “For example, Jason Begy and Mia Consalvo argue that the nature of player activity ‘[is] defined by the game’s fiction,’ and, as such, games based on movies do not allow for much agency. Gamers must adhere to the clearly defined storyline of the original film license.”⁵⁰ Begy and Consalvo’s argument is only sensible under specific circumstances, given that a gamer unfamiliar with the source material would have no intrinsic reason to respond negatively to a game following the plot beats of a literary or film source. The writers’ notions that a gamer must “adhere” to a licensed storyline is also representative of a typical movement in game scholarship towards the overstatement of “agency” and emergent storytelling generally. If a licensed game is following the storyline of its predecessor, this is no different than the prescribed storyline that

⁴⁸ Brown and Krzywinska, “Movie-Games and Game-Movies,” 92-93.

⁴⁹ *Ibid.*, 93.

⁵⁰ Jason Begy and Mia Consalvo, “Achievements, Motivations, and Rewards in Faunasphere,” in *Game Studies* 11:1 (2012), 222. (Quoted in Marcus Schulzke, “Translation Between Forms of Interactivity: How to Build a Better Adaptation,” in *Game On! Hollywood*.)

must be followed when playing, for example, the “original” (non-licensed) title *Bioshock* (2K, 2007). The latter is a predestination machine like the majority of narrative-heavy games: the gameplay styles and navigational methods of different players may make the moment-to-moment experience of *Bioshock* markedly changed when comparing playthroughs, especially in speed and the pacing of narrative segments between playthroughs (or even the existence and amount of narrative, as like many games *Bioshock* has a wealth of story information that can be skipped or simply ignored). Like many game scholars, Begy and Consalvo overstate—for the noble but dubious *a priori* goal of claiming medium specificity for games—the notion of player agency generally, implying that “original” game narratives, as threadbare and conventional as so many are, contain some magical, medium-specific ingredient providing players with storytelling agency by virtue of the fact that said narrative was written *for* a video game. It also ignores the fact that many movie-to-game franchises create “original” stories using a franchise’s narrative world and central characters. In the Bond franchise, titles like *GoldenEye 007* (Rare/Nintendo, 1997) and *From Russia With Love* (Visceral/EA, 2005) adapt specific Bond films, but for others, like *Nightfire*, *Everything or Nothing*, and *Blood Stone*, original stories were written within Bond’s narrational universe of characters, tones, typical conflicts, and so on. These latter three examples even have title sequences with original songs performed by popular music stars (including Mya and Joss Stone) in the manner of the films. Regardless of their fidelity to the structure of Bond films, it remains inarguable that for the majority of mainstream video games—specifically ones without “branching narratives”—game narrative is not a matter of player agency or choice, it is a process of unveiling encoded, immutable narrative developments that

players have no hope of changing without resorting to intertextual engagement in a different medium, such as fan fiction.

As Gretchen Papazian and Joseph Michael Sommers write in their introduction to the essay collection *Game On, Hollywood!*, it is most useful to think of adaptation as a *process*, recalling the work of theorists of film adaptation such as Thomas Leitch, James Naremore, and Robert Stam in their rejection of “fidelity” as the foundation of approaches to conceptualizing cross-medium adaptation. Papazian and Sommers write of these scholars,

Identifying adaptation as a process—rather than a pair of texts waiting to be compared—they drew attention to a complex series of operations manifest in the process. Stam, for instance, rejected the idea of there being an original text for any adaptation or any other sort of text, instead insisting, quite persuasively, that adaptations must be conceptualized as part of the “ongoing whirl of intertextual references and transformations, of texts generating other texts in an endless process of recycling, transformation, and transmutation with no clear point of origin.”⁵¹

The notion of “transmutation” feels most appropriate here, as movie-to-game titles must adapt their sources using the procedural rhetoric of video games. The goal of a game franchise like *007* is to provide a “Bond experience” within a procedural, interactive context, while allowing that context to evolve with the growing technological complexity of the games themselves.

In *007* games, this transmutation results in an oscillation between invigoratingly precise sequences of audio-visual correspondence, which retain at least the illusion of interactivity, to laughable interactive happenstance revealing how a player’s agency in navigation can work against the aims of narrative and its tone. David McGowan notes this discordance in an essay on

⁵¹ Gretchen Papazian and Joseph Michael Sommers, “Introduction: Manifest Narrativity—Video Games, Movies, and Art and Adaptation,” in *Game On, Hollywood! Essays on the Intersections of Video Games and Cinema*, ed. Gretchen Papazian and Joseph Michael Sommers (Jefferson, NC: McFarland, 2013), 11-12.

the 2010 remake of *GoldenEye 007* (Eurocom/Activision), writing here about both the original title and the remake:

In the main FPS sections, the player can do things that the cinematic James Bond would seemingly never do, such as purposely murdering an innocent bystander, or even getting killed himself. In these extreme examples, gameplay ceases and the player loses the level, implying that the player has failed to correctly embody 007. One can, however, spend minutes running in circles on the spot, or traverse most of the level in an exaggerated and unnecessary crouching position. If the objectives of the mission are ultimately met, then the narrative continues as normal—initiating another non-interactive cut-scene showing [Pierce] Brosnan or [Daniel] Craig looking suave, with no indication of the bizarre behavior that the player (as Bond) exhibited during the level itself.⁵²

The player must in certain instances “embody 007” or temporarily fail, while in others the game lacks any mechanism to punitively stall one’s progress because of an improper simulation of the cool, collected, elegant Bond. In *Everything or Nothing*, the level “The High Road” includes an exciting rooftop chase on a motorcycle, wherein the player must navigate a city via its rooftops, a sequence requiring the player to avoid countless obstacles, make wildly fast turns, and use ramps to move between gaps in buildings. In practice, the sequence is more Mr. Bean than Mr. Bond, as even a successful playthrough of the level will see the simulated Bond awkwardly running into walls, stopping the bike at regular intervals to reassess the route, or making idiotic reversals in direction. Most players will see Bond appear drunk or dazed, or at least as if he has never driven a motorcycle. Even after repetitive practice, it is near-impossible to play this sequence as elegantly as one imagines Bond would perform it in a film version. In comparative cinematic terms, it is more akin to a Jackie Chan fight sequence highlighting a character's comical ineptitude—as seen in his amusing attempts to use machinery in a car crash test facility to fight

⁵² David McGowan, “Some of This Happened to the Other Fellow: Remaking *GoldenEye 007* with Daniel Craig,” in *Game On, Hollywood! Essays on the Intersection of Video Games and Cinema*, eds. Gretchen Papazian and Joseph Michael Sommers (Jefferson, NC: McFarland, 2013), 125.

enemies at the end of *Twin Dragons* (Ringo Lam and Tsui Hark, 1992)—rather than Bond’s superhuman motorcycle skills in the chase that opens *Skyfall* (Sam Mendes, 2012). This is a generous comparison, however, as Chan gets the job done beautifully.⁵³

In translating Bond from movie to game, it is thus a messy process, but a process nonetheless, and it began to demonstrate progressively more correspondence and overlap between the two mediums’ versions of Bond as game technology advanced. The journey of the *007* game franchise over the period in question shows how the goal of a *007* game as a Bond *experience* became ever more attainable with advances in processing power and graphical verisimilitude, making the franchise a useful case study of the period’s rapid technological advancements and the way they opened possibilities for increasingly cinematic experiences, or in other words a maturing concurrence between representation and simulation. Regardless of the games’ strengths as procedural adaptation of the Bond film franchise, it is undeniable that the franchise became ever more cinematic in the 2000s, moving from the narrative-light 1997 *GoldenEye*, with its relative lack of in-game events and an experience defined by strategy and live combat as opposed to the triggering of cinematic events to the cinematically dynamic *Everything or Nothing* only six years later. Unlike *GoldenEye*, the latter utilizes frequent micro-cut scenes interspersed with gameplay and in-game events maintaining a source-appropriate cinematic affect, traits that only became stronger by the time of 2010’s *Blood Stone*.

The stylistic evolution from *Nightfire* to *Everything or Nothing* to *Blood Stone* is instructive in showing the linkage between technology and cinematic style helping games “simulate” their film counterparts successfully. In the examples below from the 2000s-era *007*

⁵³ I recommend that the reader improve their day by watching the *Twin Dragons* sequence in question here: <<https://www.youtube.com/watch?v=EGDbHrfjCo>>

franchise, we see the evolution of cinematic audio-visual correspondence and precision in the timing of cinematic events, both in-game and in cut-scene activation, and an increasing sophistication in the presentation of in-game narrative and world-building events. Many other aspects contributed to this evolution, including games' ability to simulate the spectacular location shooting of big-budget cinema, which predictably improved with processing power and the introduction of high-definition imagery. But more critically in this evolution of filmic correspondence, the audio-visual rhythm inherent in effective cinematic style—particularly in the action genre—will be shown as of increasing import in gameplay, as guided kinetic sequences requiring player input at a specific cadence became increasingly common. In these instances, performing the proper rhythm of a set of micro-objectives comprising a playable game sequence results in the intended cinematic flow. If your actions are not smoothly cinematic, you fail. (That is to say, if you are not Bond, you fail.) What we begin to increasingly see in this period—in *007* games but also across the entire landscape of mainstream narrative-inclusive action-adventure, sci-fi, and horror games—is a correlation between “correct” play and cinematic rhythm or affect.

Nightfire opens with a “tutorial” level—a common practice wherein a game's first level also teaches the player basics of play. In keeping with classic Bond film structure, it is a brief, exciting action sequence set in a recognizable or spectacular setting, here the streets of Paris. The cut scene that opens the level provides the exposition: on New Year's Eve, Bond must rescue the French intelligence agent Dominique Paradis, who is in the midst of a car chase, and with her help subsequently prevent her terrorist pursuers from detonating a nuclear weapon in the heart of the city. Unlike the prior console generation's 1997 *GoldenEye* adaptation, *Nightfire*, released in 2002, contains full voice acting for the characters (instead of only text), and the licensed likeness

of Pierce Brosnan—then the current film Bond—but not his voice (he is replaced by actor Maxwell Caulfield). The voice of M, Bond’s surly boss at spy agency MI6, is also not voiced by the contemporaneous film incarnation (Judi Dench), but *Nightfire* both retained the generation’s female M and hired a celebrated actress for the part—Samantha Eggar, best known for *Doctor Dolittle* (dir. Richard Fleischer, 1967) and *The Brood* (dir. David Cronenberg, 1979). The opening scene’s voice acting, Pierce Brosnan’s recognizable avatar, and the CD-quality music drawn from existing Bond film scores (but re-composed exclusively for the game) immediately connotes a Bond-esque film aesthetic and the urgency of action that begins nearly every Bond film. The earlier *GoldenEye*, released exclusively for the prior generation’s Nintendo 64 console, begins immediately in playable space after an “aerial shot” of the dam security station setting that opens the level, with mission context provided only by skippable text before the level’s start.

In the *Nightfire* opening, with the player now effectively thrust into the aesthetic and tonal universe of a Bond film, a mostly-playable sequence occurs with Bond tracking alongside the car chase from a helicopter, armed with a rifle. At the end of the opening cut scene, Bond is shown aiming the rifle toward the road below (**Fig. 3.23**). The next shot reverses to Bond’s viewpoint—the game’s playable first-person perspective—and the player is given control of Bond’s weapon (**Fig. 3.24**). The tutorial text instructs you to zoom in to shoot one of the cars chasing Dominique, who is driving the red car and being chased by the black sedans seen in **Fig. 3.25**. At the moment you fire the weapon and hit the car behind her, the game cuts instantaneously to a non-playable shot (which *Nightfire* denotes by switching from a full-screen to widescreen aspect ratio with black bars at the top and bottom of the image) of the car being struck by Bond’s bullet, swerving off the road (**Fig 3.26**), and eventually exploding. Interactivity



Fig. 3.23: *Nightfire*



Fig. 3.24: *Nightfire*



Fig. 3.25: *Nightfire*



Fig. 3.26: *Nightfire*



Fig. 3.27: *Nightfire*



Fig. 3.28: *Nightfire*



Fig. 3.29: *Nightfire*

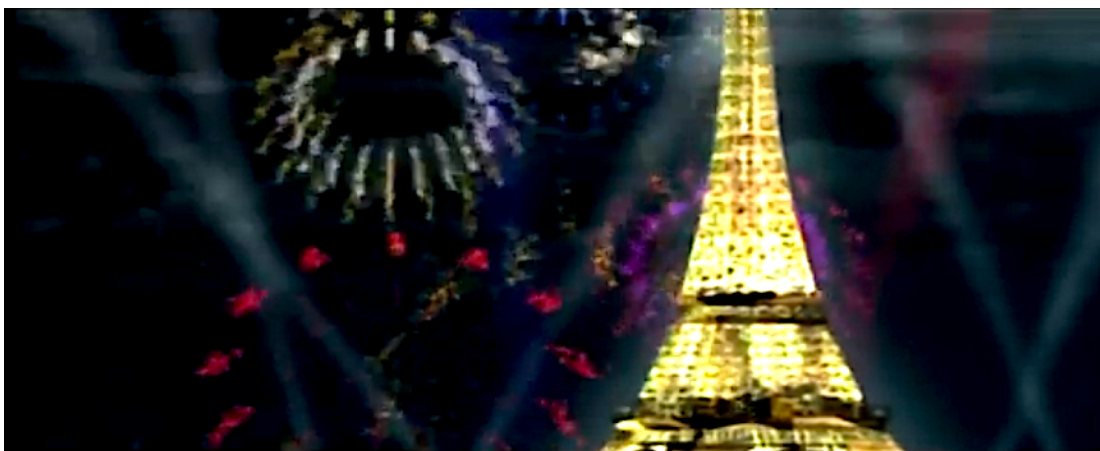


Fig. 3.30: *Nightfire*

is then restored, and the rest of the helicopter sequence requires Bond to dispatch several more cars chasing Dominique. If the sequence is completed successfully, a cut scene shows Bond rescuing Dominique by rappelling out of the helicopter and removing her from the car (**Fig. 3.27**)—a typically over-the-top Bond stunt. When completed, this introductory sequence ends with a cut scene of Bond and Dominique clinking champagne glasses and exchanging double entendres in their parked car, with the Eiffel Tower ahead of them and lit up by New Year’s fireworks. Then, in a shot quoting similar camera movements in Bond films spanning several

decades, the camera moves upwards as Bond and Dominique begin to kiss (Figs. 3.28-29), and settles upon the tower as fireworks fill the sky around it with bursts of color (Fig. 3.30). This end to the sequence provides two signature Bond elements: visual spectacle as a transitional phrase ending a scene, and a cheeky sexual metaphor or pun, with the exploding fireworks implying Bond's sexual conquest, virility, and of course the orgasms that are presumably soon to be had by both parties.

The innovation seen here, beyond the cinematic verisimilitude of the cut scenes enhanced by the full symphonic score and significantly improved graphics compared to *GoldenEye*, is in the rapid oscillation between brief cut scenes (or simply non-playable shots) and gameplay. The hardware generation of the time (*Nightfire* was available on Playstation 2, Nintendo Gamecube, Microsoft Xbox, and PC/Mac) allowed for these instantaneous transitions triggered by successful gameplay. Contemporaneous hardware could load these transitions seamlessly and more often than prior consoles, and their improved graphics meant that cut scenes could be displayed with the same graphics engine as the gameplay itself, as opposed to the example of *Tomb Raider*, which was typical of its generation in requiring lengthy load screens before beginning pre-animated cut scenes with graphical detail exceeding that of gameplay, thus separating the two visual spaces. In *Nightfire*, the contiguous aesthetic of gameplay and non-playable shots chip away at the border between the two, priming the player to expect cinematic affect and narrative events within playable space.

This co-existence of cinematic events and playable space is seen throughout the game, for example in a memorable sequence in the level "Deep Descent," in which Bond attempts to infiltrate and compromise the villain's underwater lair using a car that can convert into a

miniature submersible. Near the level's end, after planting explosives on critical points of the villain's underwater infrastructure, you have limited time to escape the area before it explodes. **Fig. 3.31**, a playable shot, shows the car racing away from the explosives with a visible on-screen countdown. If you reach the point of safety before the countdown reaches zero, the game instantly cuts to a non-playable reverse shot (**Fig. 3.32**) of the car driving towards the camera, away from the lair's exploding support structures. When the car reaches the left foreground of **Fig. 3.32**, there is another reverse cut to **Fig. 3.33**, also non-playable, showing the car moving toward the safety of the open ocean. The latter is instantly recognizable as common action-film editing, seen in films like *Star Wars* (dir. George Lucas, 1977) or *Top Gun* (dir. Tony Scott, 1986), in which a vehicle passes the screen and the image cuts to a reverse shot of the vehicle moving away from the camera. Moreover, this kinetic game level, which also simulates "tunnel chases" from the *Star Wars* franchise in an earlier sequence, contains a non-repetitive score that changes alongside gameplay triggers: the level's music begins quietly in a mysterious tone but increases in tempo and volume once reaching the point wherein the level becomes a chase against enemy submersibles. Collapsing boulders and other environmental changes occur on-screen as you traverse the various underwater caverns, which combine with the musical accompaniment and give the level a sense of cinematic liveness not possible with the technology powering the earlier *GoldenEye*. With the inclusion of familiar narrative beats, voice acting, in-game events, and smooth shifts between playable and non-playable shots in some sequences, *Nightfire* exemplifies the period's emergence of games with level-to-level progressions that begin to truly *feel* like films, at least in the sense of their overall aesthetic and narrative constructs. *Nightfire* is consistently paced with cut scenes, brief narrative set-ups provided by

voices during gameplay, and an audio track mirroring the orchestral depth of a Bond film, whereas *GoldenEye* includes recognizable but synthesized Bond melodies to meet the storage demands of the cartridge-based N64 console. The technical limitations of *GoldenEye* mean, ironically, that in some ways, the more technically sophisticated *Nightfire* could be described as less gamic, given that *GoldenEye* contains only brief, infrequent non-playable shots. Regardless, the gulf between the two in their usage of cinematic style demonstrates how the technological leaps of the period caused a parallel increase in audio-visual aspects of film narration that could be adapted to the medium of games.



Fig. 3.31: *Nightfire*



Fig. 3.32: *Nightfire*



Fig. 3.33: *Nightfire*

Only one year after *Nightfire*, the next title in the series was released (*Everything or Nothing*, hereafter *EON*), which moved the series from a first-person to third-person perspective. In the simplest terms, this shift places *EON* even closer to the Bond films, in that Bond (again, Brosnan's likeness) is *literally* on-screen for the vast majority of the game. As discussed in Chapter 2 in the context of *Tomb Raider*, third-person perspective tends to increase our sense of connection to Bond as a character, largely as a result of its more conventional cinematic style, but this is not the most important way in which *EON* exhibits increasing sophistication in the incorporation of cinematic audio-visual style when compared to *Nightfire*. Rather, *EON* demonstrates a highly sophisticated relationship between cut scenes or non-playable shots, in-game events, and playable space, including single, unbroken shots that contain both playable and non-playable segments. In effect, the distinction between “cinematic” elements and “gamic” elements have been blurred or effaced altogether, a considerable evolution from the limited cinematic content of *GoldenEye* or the conventional cut scenes of *Nightfire*, in the direction of a hybrid media form—a ‘playable movie.’ As designers improved at taking advantage of the period's hardware capabilities, games like *EON* contained sequences evincing the techniques for meshing cinematic form with gameplay that would quickly become dominant, and fundamentally remain in place at the time of this writing.

In *EON*'s early level “A Long Way Down,” an opening cut scene depicts Bond planting a bomb inside a chemical weapons facility operated by the game's comically maniacal villain (portrayed by Willem Dafoe). Bond proceeds outside to escape, and the building explodes behind him as he runs toward the camera (**Fig. 3.34**). An extreme long shot then reveals that Bond is running from the explosion on a roof terrace (**Fig. 3.35**). Reaching the end of the platform, the

game cuts to a closer, slow-motion view of Bond leaping from the ledge. He twists his body around and fires a rappel gun at the building (**Fig. 3.36**). The next shot starts at a low angle below him, as Bond's silhouette is blasted away from the explosion (**Fig. 3.37**). His attached rappel cable snaps him back to the building in the same shot; the camera follows his movement and pushes in to a medium-long view of Bond standing on the side of the building (**Fig. 3.38**). The camera then moves in a semi-circle to Bond's left (**Fig. 3.39-40**) as the black bars that indicate an unplayable cut scene begin receding at the frame's top and bottom, disappearing to denote that the shot is about to become playable. Once the camera resolves to the game's roughly standard shot scale for playable sequences, directly behind Bond (**Fig. 3.41**) and here pointing down at the vertiginous scale of the drop below, the camera ceases moving and the shot becomes playable. Now controlling Bond, you must push forward to move down the building fast enough to avoid the explosions, increasing in intensity behind and in front of Bond. From the start of the shot when Bond leaps from the building (**Fig. 3.37**) to the resumption of interactivity, there are no cuts.

In just a few seconds, this brief playable-cut-scene-hybrid encapsulates the experiential future of cinematic gameplay in related mainstream interactive genres, in that the space between the traditional "cinematic" mode of video games (unplayable cut scenes) and interactive gameplay has nearly collapsed. The audiovisual spaces of cut scene and gameplay become concomitant and simultaneous. Beyond and including the notion of the in-game "event," whether events deemed cinematic or otherwise, the shot merges cinematic and interactive space and thus can lay claim to a more full-bodied procedural adaptation of Bond film aesthetics—and action film aesthetics generally—than its predecessors in the game franchise. At the shot's end, a silver



Fig. 3.34: *Everything or Nothing*



Fig. 3.35: *Everything or Nothing*



Fig. 3.36: *Everything or Nothing*



Fig. 3.37: *Everything or Nothing*

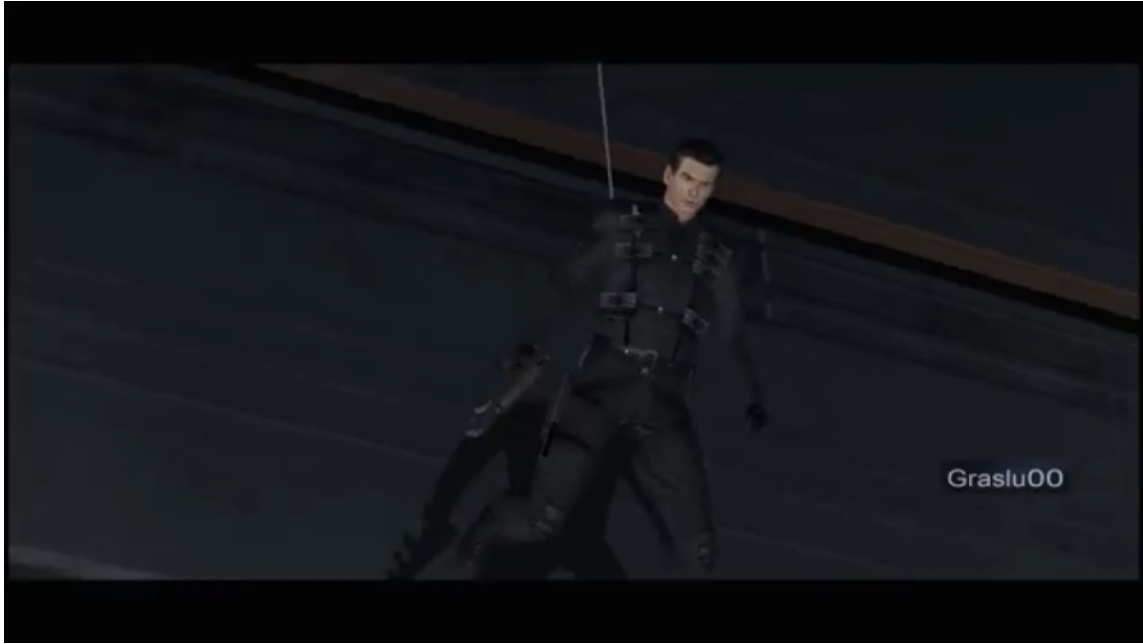


Fig. 3.38: *Everything or Nothing*

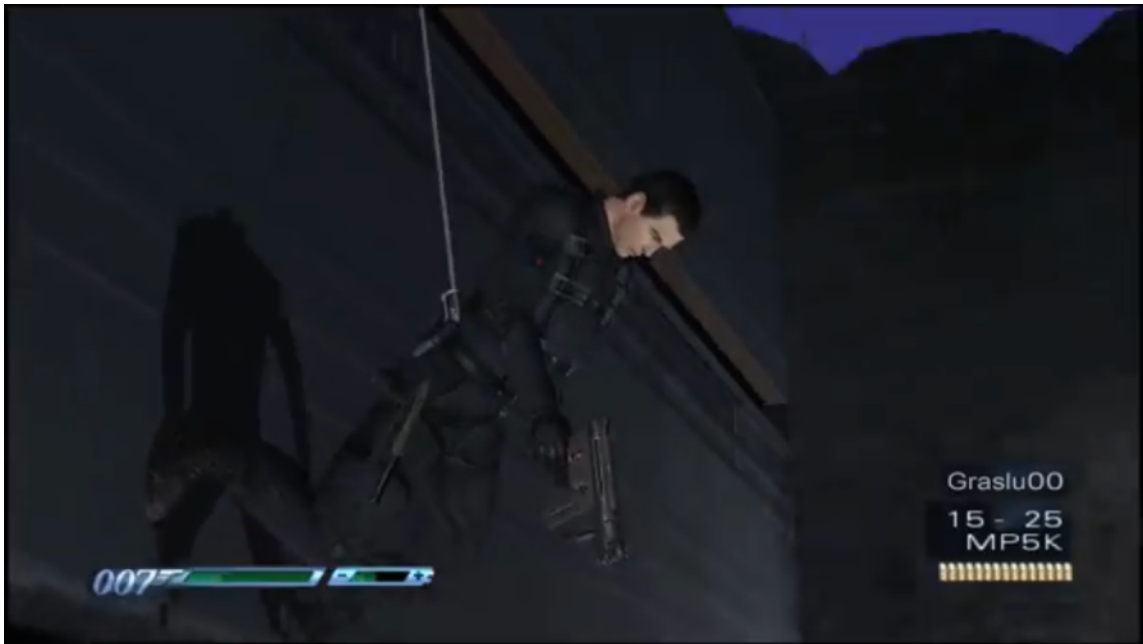


Fig. 3.39: *Everything or Nothing*



Fig. 3.40: *Everything or Nothing*



Fig. 3.41: *Everything or Nothing*

“007” logo flashes on the screen, the game’s indication that you have performed a “Bond Moment.” In drawing attention to the preceding events as a “classic Bond moment,” the game signals the shot as worthy of the player’s awe, here accomplished by one of the game’s most technologically demanding characteristics, its ability to merge predetermined cinematic audiovisual space with gameplay in a manner respecting the illusionistic continuity of cinema. Irregardless of critical assessment of the overall quality of gameplay or level design of *EON* against its franchise predecessors, including my own, never before did Bond’s feats of superhuman, action-film precision feel this embodied in his game adventures.⁵⁴

Describing such sequences as “interactive montage” is thus hardly a flimsy notion, as interactivity and predetermined audiovisual space can feel dazzlingly integrated. Poole wrote only a few years earlier that this was a doomed approach: “...montage creates a sense of rhythm and motion, but such an approach would be fatal in a videogame, where the player...requires a continuous, unbroken viewpoint.”⁵⁵ While Poole was partially addressing his distaste at *Resident Evil*-style constant viewpoint changes—a style that has barely survived—it is nonetheless

⁵⁴ In the period’s rapid movement towards concomitance of cinematic and playable audiovisual space, it is notable that the early-mid 2000s also saw a rapid decline in the use of medium shifts to denote cut scenes versus gameplay. As mentioned previously, it was common through the 1990s and early 2000s for cut scenes to shift into a different animation engine than the game itself, to provide greater visual detail in important unplayable narrative moments, such as in the occasional cut scenes of the first five *Resident Evil* titles. As game-engine graphics improved, designers nearly ceased the practice of pre-rendered cut scenes containing more detailed animation than the engine itself. It thus became rare for games to make such shifts, and the tactic survived primarily in games without the cinematic gameplay seen in the Bond franchise. Medium shifts occur in examples including the cartoonish *Sideway New York* (Playbrains, 2011), a skating game in which the player leaves graffiti around a city, or in racing and sports games like *Need for Speed: Undercover*, an arcade-style racer with brief, corny live-action cut scenes starring the actress Maggie Q. In summary, the further a game sub-genre is from cinematic aims, the more likely it is to have medium shifts in narrative setups. Typically, this connotes a genre in which narrative is largely irrelevant to the unfolding of gameplay experience, such as racing, sports, platformers, fighting games, and hybrids like the *Twisted Metal* series, which takes place in a violent dystopia providing its titles the anchor of a world-building premise, but one that is ultimately an irrelevant if occasionally entertaining scaffolding to the game’s “car combat” genre.

⁵⁵ Poole, *Trigger Happy*, 83.

notable that this approach has become commonplace, even expected, within sequences of action-adventure games and in related genres.

Later in *EON*, in the level “The Pontchartrain Bridge,” Bond must chase the villain Jaws (who is driving a truck full of dangerous chemicals) down a long stretch of freeway on a motorcycle. A short sequence combining a micro-cut-scene and gameplay again demonstrates *EON*’s gameplay as predictive of the 21st-century standard. Near the end of the freeway chase, the camera zooms far ahead of Bond (without cutting) to non-playable shots of Jaws’s vehicle striking a massive semi-truck, which sends the truck into a tailspin until it fills the freeway horizontally, blocking Bond’s path. Bond approaches at a blistering speed, careening towards the huge obstacle. Before hitting the semi (and presumably dying), a prompt appears on the screen for the player to perform an “action slide” using a specific controller command (**Fig. 3.42**). Pressing the button causes an immediate cut to a spectacular unplayable shot (**Figs. 3.43-44**) depicting Bond performing a daring stunt: he pushes his speeding bike towards the ground to slide underneath the small gap between the road and the stalled semi. A nearby enemy, having used a crashed car as a ramp, flies through the air and fires at you (**Fig. 3.43**). Once Bond is about to reach the truck, there is a reverse cut to the other side of the semi (**Fig. 3.45**). Bond emerges from beneath the semi just as it explodes in an enormous fireball. Bond positions his bike upright and speeds toward camera right away from the explosion, in a shot similar to that in countless action films from *Terminator 2* (James Cameron, 1991) to *The Matrix Reloaded* (Lana & Lily Wachowski, 2003). A cut then returns the frame to the typical playable visual space, with the camera placed behind Bond in the center of the frame.



Fig. 3.42: *Everything or Nothing*



Fig. 3.43: *Everything or Nothing*



Fig. 3.44: *Everything or Nothing*



Fig. 3.45: *Everything or Nothing*

The speed at which the game moves between interactive and unplayable shots in this scene is the essence of what could be called game montage, wherein cinematic editing is utilized to enhance the sequence's sensational affect while retaining an interactive liveness on either side of the two unplayable shots. Importantly, the player-performed "action slide" is required to instantiate the unplayable shots; without this action, Bond slams into the truck and dies. Thus, the player experiences the sensation that the cinematic montage on display is player-activated. This illusion of narrative emergence caused by correct play—the successful triggering of the "action slide" quick-time event (QTE)—is responsible for generating the montage effect of the sequence.

Gamers and scholars alike have long argued over the merits of QTE, with some decrying them as unwelcome intrusions of supposedly-passive film style. As before, this roots from the naive notion that if a player has control of any specific aspect of an avatar's body (for example, the ability to walk or traverse a space in some way) then the player is truly *in control* of that avatar, despite the severe limitations placed on what the player can do with the avatar.

McGowan, again writing on the 2010 *GoldenEye 007* remake, describe this debate:

The QTE remains a controversial element of game design. On the one hand, these moments offer an almost-cinematic level of spectacle, and allow some (minor) participation in narrative sequences that are varied from the usual run-and-shoot model of the game; on the other, the player is forced to concede control of Bond.⁵⁶

But the implication that ceding control of Bond even for a second or two is a negative aspect, for these scholars or any other gamer, is especially odd in the context of a Bond game. The activation of QTE still occurs on the player's controller, providing some level of interactive agency, and the result is a rush of signature-Bond action virtuosity that deepens the player's

⁵⁶ McGowan, "Some of This Happened," 126.

immersion in audiovisual and narrative gamespace, and as a result similarly deepens the sense of embodiment of the player-as-Bond. By the time of the release of 2010's *Blood Stone*, QTE remained a heated subject of debate but had become commonplace in action-adventure and related genres, and the now Daniel Craig-starring game series found the player frequently performing brief QTE in short sequences linking narrative cut-scenes with gameplay, as seen in **Fig. 3.46** when the player must slam a button repeatedly for Bond to escape being chained to a wall.



Fig. 3.46: *Blood Stone*

Blood Stone arrived after a spate of successful games in the first high-definition console generation (Playstation 3, Xbox 360), which saw big-budget action-adventure and horror titles like *Uncharted*, *Dead Space*, and *Bioshock* take cinematic gameplay to new experiential heights. Technology of the period, now based on high-definition blu-ray discs with ten times the data storage of previous DVD-based consoles, allowed for more “realistic” high-definition graphics, and was fueled by processors that could accommodate a vastly higher number of predetermined

in-game events. Two Bond titles straddled the generations of *EON* and *Blood Stone* that were simultaneously released on consoles of different capabilities (e.g. the Playstation 2 and 3)—*From Russia With Love* and *Quantum of Solace* (Eurocom, 2008)—that achieved some small advancements in playable narrative sequences. For example, *From Russia With Love* includes a playable interstitial level with Bond (uncannily portrayed and voiced by Sean Connery at 42 years older than the game character, in one of his final performances) visiting the laboratory of MI6's technology expert Q. Until the Craig era of Bond films beginning with 2006's *Casino Royale* (Martin Campbell) ushered in a grittier, less silly Bond character, this scene was repeated in nearly every Bond film as a scene of winking humor, wherein Bond blithely listens as Q demonstrates his latest gadgets and fires off a few quips that always comically enrage the exasperated Q. *From Russia With Love* made this scene mostly playable for the first time. As the Connery-Bond avatar, you wander around Q's laboratory and interact with different gadgets, which activate Q's admonishments to "not touch anything" or to "please return the equipment in one piece, 007." By the mid-2000s, game designers were becoming more comfortable with narrative-driven playable sequences replacing traditional lengthy cut scenes, reaching towards a hybrid of cinematic absorption and interactive immersion.

Increased immersion in playable space, or perhaps increased *believability* in gamespace as a virtual reality, defined the advances of the period, a combination of increased graphical detail and processor-heavy operations that could fill the screen with events that connoted the worlds of Hollywood genre cinema. In *Blood Stone* we see this immediately in the first level: Bond begins on the helipad of a yacht and soon must chase his enemies in a speedboat. In comparison to *EON* or *From Russia with Love*, the environment is notably crisp and detailed

(Fig. 3.47), with a cliffside mansion visible in the background in deep focus, detailed models of sailboats in the near-background, and reflections on the water accurately delineating the visual borders between water and other surfaces in the image. While *EON*'s visuals retained elements of the blocky graphics of 1990s console games, the smoothness of surfaces in *Blood Stone*, and the lack of digital borders separating different elements of the frame (similar to scan lines seen in early digital film effects and in analog process effects before them), all conspire to give the game world a wholeness, an enhanced verisimilitude. This is aided by more dynamic and unpredictable game space, more detailed, cine-real environments (helped greatly by improved lighting effects), more organic behavior from non-player characters, and ultimately more sophisticated and natural in-game events, including more effective simulacra of the “mood” of Bond films, including Bond’s debaucherous behavior.



Fig. 3.47: *Blood Stone*

We can see the new fullness of gamespace defining lifelike scenarios—or if not exactly lifelike, then effective simulations of the expensive, glossy location shoots of a Bond film—in *Blood Stone* sequences set in Monaco, Istanbul, and Bangkok. In Monaco, Bond must infiltrate a

society party hosted by the game’s villain. In **Figs. 3.48-51**, the player’s 360-degree camera control includes the potential to create dynamic shots mirroring the deep-staged spectacle of similar sequences in the Bond films. The characters in **Fig. 3.50** behave relatively naturally when compared to the clunky non-player characters in *Nightfire* and *EON*, who creepily stare at Bond during looped, repetitive movements. In *Blood Stone*, these NPCs behave organically within the scene’s context—milling about, sipping champagne, and appearing in conversation with each other. Such behavior is also seen in the beginning of the Istanbul level (**Fig. 3.52**) when you encounter NPCs smoking and chatting in front of a bus. Later, in the game’s Bangkok sequence, Bond rendezvouses with an informant in a spectacular aquarium (**Fig. 3.53**), complete with awed tourists and the extraordinary sight of humpback whales swimming in the background. The advancements of the period thus allowed a sense of audiovisual world-building that could compete with cinematic representation, chiefly the illusion that the depicted spaces are concomitant with a lifelike world surrounding it, similar to the gamic notion of “open worlds,” even in games like *Blood Stone* that have entirely linear plots and no ability to move between locales of different levels at will.

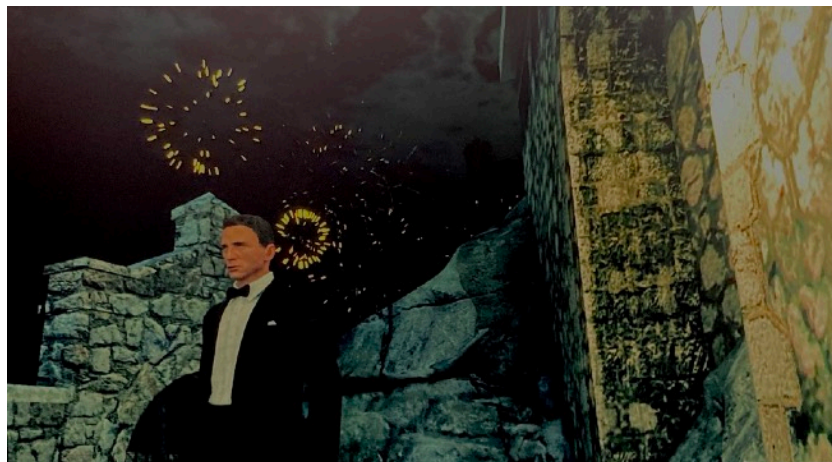


Fig. 3.48: *Blood Stone*



Fig. 3.49: *Blood Stone*



Fig. 3.50: *Blood Stone*



Fig. 3.51: *Blood Stone*



Fig. 3.52: *Blood Stone*



Fig. 3.53: *Blood Stone*

As impressive as the increasingly sophisticated marriages of playable spaces and immersive storytelling are in the *007* games, it is the *Uncharted* series—particularly the second game, released a few months before *Blood Stone*—that best demonstrates the advancements of the mid-late 2000s and their codification of the porousness of cinematic flow-and-rupture operations. *Uncharted 2*'s enormous success certainly spawned direct imitators, such as the revamped 2010s *Tomb Raider* series, but more importantly it popularized a new cinematic fecundity in gameplay. Micro-cut-scenes paired with dynamic cinematographic artistry—such as flashy camera movements and frequent shot scale and framing adjustments that emphasize the detail of game worlds—began to feel so indivisible from interactive visual space that players may not even notice brief lapses in avatar control within interactive gameplay. An inverted but related comment in critic Pete Metzger's 2009 review of the game in the *Los Angeles Times* is illustrative of just how fiercely cinematic the game feels. He describes not how the game causes the player to forget they have *lost* control, but rather that, "*Uncharted 2* is ridiculously

immersive, so much so that you forget you are controlling the actions of treasure hunter Nathan Drake.”⁵⁷ In other words, recalling the second epigraph in this dissertation’s introduction, to some viewers/players it really just feels like a movie.

A wide variety of big-budget single-player titles now functionally feel like *Uncharted* clones to this day—or more accurately, clones of developer Naughty Dog’s in-house style, inclusive of the grittier horror-action series *The Last of Us* (2013-present)—to the point that its DNA is prominent in titles as otherwise diverse as the recent *Resident Evil* series remakes (2019-present) or the *God of War* reboot (Santa Monica Studio/Sony, 2018), and even in the enhanced cinematic dynamism of *Super Mario Odyssey* (Nintendo, 2017). Franchises like *Tomb Raider* and *Prince of Persia* remade themselves in *Uncharted*’s image, and while the series had built upon the innovations of countless progenitors such as RockStar’s *Grand Theft Auto* series and *Prince of Persia: The Sands of Time* rather than completely reinventing the wheel, its extraordinary audiovisual precision, blistering narrative pace, and surprisingly competent script felt revelatory at the time, finally proving that video game developers could create involving adventures on par with Hollywood’s most hallowed, Spielbergian genre classics.

By the time that the *Uncharted* games hit the market, game designers had already begun to experiment in cinematic “liveness.” Games like 2005’s *King Kong* (Ubisoft), an adaptation of Peter Jackson’s blockbuster film remake of the same year, pointed towards the future of cinematic immediacy with its lack of distracting on-screen interfaces and inclusion of relevant gameplay information within the “diegesis” (the game’s playable character comments aloud when his ammunition is low, for example). But *Uncharted 2* and *3* took these developments and

⁵⁷ Pete Metzger, “Taking Fun to an Uncharted Land,” *Los Angeles Times*, October 21, 2009, <<https://www.latimes.com/archives/la-xpm-2009-oct-21-et-gameday21-story.html>>

combined them with traditional cut scene interruptions, creating a film-game hybrid style that persists in the 2020s. Brown and Krzywinska write of *King Kong* that “The strength of the game lies in the way that it translates the affective power of the film into both the audio-visual and the ludic qualities of the game.”⁵⁸ The same could be said of the *Uncharted* series, if it were literally an adaptation of *Raiders of the Lost Ark* (Steven Spielberg, 1981) instead of being an inspired, if obvious, homage. Its “affective power” is indeed a potent hybrid of cinematic and ludic representation.

A brief sequence in a Tibetan village demonstrates this hybridity. The playable protagonist Nathan Drake has been rescued from certain death by the treasure hunter Tenzin and regains consciousness in his idyllic cliffside village. After Nathan awakens in a brief cut scene, you control him as he follows Tenzin through the village to meet his waiting comrades. In a sequence that is now *de rigueur* in similar games, the player loses control of weaponry and fighting commands, as you are meant to simply explore the space and experience the goings-on of the village, which are carefully programmed to appear naturalistic and non-repetitive. At one point in the walk, Nathan encounters some children playing soccer. The children accidentally kick their ball in his direction, and you can choose to kick it back to them with a button command. **(Fig. 3.54)** In another moment, a passing villager speaks to Nathan, and you can choose to greet him with a handshake. **Fig. 3.55** shows Nathan approaching the villager in a deep-focus shot, and once you perform the on-screen command to greet him, the camera pushes in to a medium-long two-shot that centers the characters in the frame and blurs the background **(Fig. 3.56)**. This fussy play with focus—here the camera moves from its typical deep-focus style

⁵⁸ Brown and Krzywinska, “Movie-Games and Game-Movies,” 99.

to a telephoto-lens shallow focus—demonstrates the lengths that the game’s designers go to present such brief moments in a cinematic fashion, with shallow focus connoting a paradoxical cinematic “realism.” Here, once again, cine-reality is so ingrained in the minds of players as a mark of verisimilitude that the perceptually artificial focus-pulling of the virtual camera lends the moment an exciting liveness. Sequences like this village stroll are now so common as to be cliché, but admittedly they are always welcome, providing a gentle break in action games’ violent gameplay and reinforcing the important illusion that games exist within a fully-realized world.⁵⁹



Fig. 3.54: *Uncharted 2: Among Thieves*

⁵⁹ A typical *Uncharted*-influenced example is seen in *God of War: Ascension* (Santa Monica Studio, 2013). During a level in a cavernous sewer, playable protagonist Kratos reaches a cellblock filled with screaming prisoners. While you retain player control, your movements are slowed to a walk (Kratos is usually running) as the camera cuts to a position inside the prison cells. The camera pans right, through the cells, as the player walks in the same direction and is visible through the prison bars. Here the game labors to remind the player that the gamespace is a “world” with events outside of the button-mashing action. Again, the cinematic value of the latticed, layered shot connotes verisimilitude.



Fig. 3.55: *Uncharted 2: Among Thieves*



Fig. 3.56: *Uncharted 2: Among Thieves*

Naturally, montage in the style of Hollywood action sequences is an important element in *Uncharted 2*'s adaptation of cinematic style, and in many game sequences the editing is meant to blur playable and non-playable space, challenging the notion that there is a fundamental border between the two within game experience. A typical account of this divide is seen in Wee Liang Tong and Marcus Cheng Chye Tan's essay "Vision and Virtuality: The Construction of Narrative Space in Film and Computer Games," as the scholars compare narrativization via in-game events versus those that are "cinematically presented:"

The difference between a cinematically presented conversation and a verbal exchange that takes place as an event in the game environment is an important one for they signify dissimilar modes of visualizing and alternate ways of narrativising game spaces. The immersion of a gamer in an interactive simulated 3D environment, in real-time, precludes the employment of cinematic framing and editing techniques, the stylistic *modus operandi* in the construction of filmic narrative. Although games can, and often do, consist of both immersive interactivity and cinematic cut-scenes, these are two distinct modes of visualizing the game-environment that cannot be synthesized. When the gamer loses control of the camera/character, thus ceding control to pre-set camera positions that direct the field of vision autonomously, in accordance with a predetermined script, the game effectively enters into something closer to a cinematic mode.⁶⁰

Tong and Tan's argument here raises the question of whether the user-controlled camera can itself be "cinematic"—since with camera control players can choose to frame "shots" as they please—but nonetheless they accurately describe these two "dissimilar modes" within game experience. Yet *Uncharted 2* challenges their conclusion that immersive interactivity and cinematic cut scenes "cannot be synthesized." While the game's levels are usually connected through cut scenes reminiscent of chapter breaks in games at least as early as *Tomb Raider*, *Uncharted 2* also employs micro-cut-scenes (sometimes single shots) that fluidly arise with

⁶⁰ Wee Liang Tong and Marcus Cheng Chye Tan, "Vision and Virtuality: The Construction of Narrative Space in Film and Computer Games," in *Screenplay: Cinema/Videogames/Interfaces*, ed. Geoff King and Tanya Krzywinska (New York: Wallflower Press, 2002), 104.

gameplay, and more organically than seen in previous innovations like *EON*, where similar moments are typically flashy level openings that draw attention to themselves.

The train level at the game's halfway point, in which Nathan battles enemies while running across the roofs of speeding train cars, contains some of the most stunning examples of this pleasurable fluctuation between playable and "cinematic" space. In one climactic scene, Nathan is continuing his way forward (**Fig. 3.57** shows the typical visual orientation of the sequence) when the camera moves to his left for a perpendicular view revealing that a heavily-armed enemy helicopter has joined the fight (**Fig. 3.58**). You run forward as quickly as possible to avoid the helicopter's attacks, which has now moved directly behind Nathan, and when jumping from one specific car to the next (a player-controlled action), the game smoothly cuts from the typical behind-avatar perspective on his jump, to a reverse shot of Nathan completing the jump to the next car, showing Nathan gripping the side of the car as a missile fired by the helicopter destroys the car you had jumped from (**Figs. 3.59-60**). The destroyed car is detached in the fiery explosion and begins to roll forward toward Nathan. But just as the train car is about to land on Nathan, the train enters a tunnel and the debris hits the tunnel wall in mid-air. The camera then pushes forward and moves to the right in a curvilinear motion that resolves directly behind Nathan, upon which player control is reinstated.

The "cut scene" described above—the portion from the reverse-cut until the tunnel, wherein the player can resume moving Nathan forward—comes and goes so smoothly, its impact so visceral within the scene, that the few seconds of non-interactivity is barely noticeable. The player has no time to put down their controller and passively enjoy the sequence before the action resumes, lest they are shot down by a villain. Writing several years before games like



Fig. 3.57: *Uncharted 2: Among Thieves*



Fig. 3.58: *Uncharted 2: Among Thieves*



Fig. 3.59: *Uncharted 2: Among Thieves*



Fig. 3.60: *Uncharted 2: Among Thieves*

Uncharted 2 were released, it may be that Tong and Tan simply could not imagine such smooth transitioning when they wrote that, “Any attempt to maintain a sense of visual continuity between the game sequence and the cut-scenes, through the consistent use of a similar 3D graphics platform, is inevitably attenuated by the employment of certain elements of cinematic style in the cut-scenes.”⁶¹ Attenuation of visual and spatial continuity still exists in *Uncharted 2*—usually, it is not difficult to tell when the game has entered a cut scene mode. But as games like *Uncharted 2* mostly ceased changing aspect ratios for cut scenes and began making other efforts to de-emphasize transitions between “passive” and “active” sequences, it is clear that visual and spatial continuity between modes became a conscious goal of game designers in the attempt to make certain games attendant to cinematic experience.⁶² These short, almost-imperceptibly passive cut scenes within action sequences raise narrative stakes within scenes, giving the player the impression of being acted upon by the game’s deep structure, and providing a greater sense of purpose and design to the carnage.

This sequence and others in the *Uncharted* series are breathlessly cinematic, re-framing perspectives on action in pre-determined movements to highlight in-game elements, and utilizing short cut scenes (or simply unplayable portions of shots) to mimic the pacing and momentum of cinematic influences. Though sequences like this do not invalidate Tong and Tan’s division of modes, it does complicate the borders between them. Generally, I agree that visual continuity is somewhat “attenuated” by cut scenes, but in the years after the first two *Uncharted* titles, third-person games modeled on cinematic action genres became so sophisticated in collapsing the

⁶¹ Tong and Tan, “Vision and Virtuality,” 103.

⁶² In *EON* and many contemporaneous games, cut scenes were presented with black bars in a 2.35:1 ratio while gameplay is in a screen-filling 1.33 or 1.78 ratio.

borders between flow and rupture that they beg for analysis of devices that exhibit a mutually-reinforcing relationship between modes rather than sharp divisions.

Dexterous, dynamic cinematography within playable space similarly provides a cinematic experience in the *Uncharted* series, as seen in the preponderance of deeply-staged shots and changing shot scales that highlight in-game events or exist simply to show off enticing views of gamespace. For example, all the series' titles (especially *Uncharted 3*) occasionally use playable extreme long shots to break the monotony of the series' typical behind-the-avatar third-person view. In this shot from *Uncharted 2* (**Fig. 3.61**), the long view reveals an enemy at frame-right that Nathan (centered) must avoid—here cinematographic variety is harnessed for gameplay purposes, allowing the player a sufficient view of the nearby enemy's position. In **Fig. 3.62**, also from *Uncharted 2*, the playable Nathan (barely visible on the stairway) climbs stairs leading to a ruined ancient temple, and the extreme long shot provides a wide view of the ruin—here the view lacks a gameplay function as in the latter, and is purely for the sake of environmental spectacle. In **Figs 3.63-65**, all playable shots from *Uncharted 3*, changing shot scales provide variety and visual spectacle in the levels set in the Arabian Rub' al Khali desert, prioritizing cinematic presentation while remaining interactive. This is seen in a variety of locales in *Uncharted 3*, including a sinking ship (**Fig. 3.66**, with playable Nathan barely visible in frame-center) and in a shot of Nathan and his comrades crossing a sewer catwalk (**Fig. 3.67**), during which a rat is seen scurrying across the screen in the foreground. While these shots are playable, they blur the border between presentational and ludic modes with their self-conscious cinematographic perspectives, as again seen in **Fig. 3.68**, in which the game cuts to a reverse shot as flooding water rushes towards the player, recalling the below-decks flooding sequence of

Titanic (James Cameron, 1997). In-game elements that might have been introduced with the direct rupture of a cut scene begin happening without cuts or even lapses in interactivity, such as in **Figs. 3.69-70**, a dramatically ironic playable shot in *Uncharted 2* in which Nathan climbs a wall in extreme long shot while an as-yet-unrevealed monster appears menacingly in the foreground, seen by the player but not by Nathan within the diegesis.⁶³ Or, the visual space becomes “subjective” in scenes of Nathan under the forced influence of mind-altering drugs, as in **Fig. 3.71** and its exaggerated distortion of on-screen figures and objects indicating Nathan’s altered state.



Fig. 3.61: *Uncharted 2: Among Thieves*

⁶³ As mentioned previously in this dissertation, the notion that dramatic irony is impossible in games due to protagonists being “embodied” by the player is easily proved false by the preponderance of examples to the contrary, including countless games in which cut scenes show events that playable characters do not have diegetic awareness of.



Fig. 3.62: *Uncharted 2: Among Thieves*



Fig. 3.63: *Uncharted 3: Drake's Deception*



Fig. 3.64: *Uncharted 3: Drake's Deception*



Fig. 3.65: *Uncharted 3: Drake's Deception*



Fig. 3.66: *Uncharted 3: Drake's Deception*



Fig. 3.67: *Uncharted 3: Drake's Deception*



Fig. 3.68: *Uncharted 3: Drake's Deception*



Fig. 3.69: *Uncharted 2: Among Thieves*



Fig. 3.70: *Uncharted 2: Among Thieves*



Fig. 3.71: *Uncharted 3: Drake's Deception*

Whether achieved through literal editing or montage, or through reframings and camera movement that alter shot scale, the *Uncharted* series and many titles since, plus contemporaneous games like *Dead Space*, show that games can hybridize interactive and “cinematic” space. This notion is antithetical to the strain of scholarship that Rune Klevjer has coined “radical ludology,” which Klevjer describes (before criticizing) as the theory that “Everything other than the pure game mechanics of a computer game is essentially alien to its true aesthetic form.”⁶⁴ Years after games like *Uncharted* began challenging this division, scholars such as Kevin Veale, in his 2012 essay “Interactive Cinema Is An Oxymoron, but May Not Always Be,” continued the line of this medium-specific theoretical separation, using titles marketed as “interactive movies,” such as the simplistically literal example *Phantasmagoria* (Williams, 1995), to argue that games can *alternate* between the “affective experiences” of cinema and gameplay, but “...are not experientially hybrids of the two.”⁶⁵

Veale’s argument is not unreasonable when looking at his specific 1990s “interactive movie” examples—which alternated corny live-action cut scenes with point-and-click, low-resolution gameplay—but such analysis problematically cuts off consideration of games like *EON* and the *Uncharted* series, which actively attempt a hybridization of these modes within their very structures. Indeed, as we have seen throughout this chapter, designers have been attempting to create games that hybridize the experience of film viewing with gameplay across the last several generations of game consoles. What scholars like Veale perhaps overlook is that these designs have not been primarily focused on recreating the narrative logic of film

⁶⁴ Klevjer, “In Defense of Cut Scenes,” 191-192.

⁶⁵ Kevin Veale, “Interactive Cinema Is an Oxymoron, but May Not Always Be” *Game Studies* 12, no. 1 (2012). <<http://gamestudies.org/1201/articles/veale>>

storytelling, but instead recreate the affect of film genres using the particular affordances of the video game medium.

In the case of the early *Resident Evil* games, this manifests in how the games' creators marshaled available game technology to constrain the player's visual perspective and thus their immediate knowledge of the game world. The pre-rendered backgrounds found in these games do not facilitate the constantly moving camera and uninterrupted flow of visuals that we now regard as especially gamic, but rather than treating this as a limitation, it was used as an opportunity to imbue the gameplay experience with the same sense of frustration and dread that a horror movie can instill in its audience.

We have also seen how game designers used the new array of storytelling tools made available by increased processing and rendering power in recent generations of action-adventure games. In the evolution of the *007* franchise across multiple console generations, we saw an increasing level of complexity in how designers have been able to combine cinematic storytelling modes with gameplay, in other words an enhanced cinematic dynamism. The earlier games in the series, such as *GoldenEye* and *Nightfire*, in some ways bear out Veale's contention that games can "alternate" between cinematic and gameplay modes, but cannot fully combine them. However, the increasing complexities of game design, virtual camera programming, and processing speed ultimately led to the creation of games like *EON* and later *Blood Stone*, in which these modes have been combined in a hybrid form, where the traditional video game cut scene has become a potentially playable experience, rather than a fully spectatorial one.

Finally, we have seen through the example of *Uncharted 2* how designers have devised an aesthetic of pure spectacle unique to the game medium, rather than merely replicating that of

cinema. The complex pre-authored camera moves and cuts to new perspectives found in *Uncharted 2* resemble the visual style of traditionally popular modern action movies, but translate this style into a mode that uniquely engages the player in experiencing this spectacle *actively*. It is in games like *Uncharted 2* that we find one of the fullest expressions of the intersection between the interactivity of video games and the visual experience of film spectatorship, unifying these two media in a hybrid form combining the ludic strengths of the former with the spectacular and narrational strengths of the latter, wherein cine-real hybridization is presented as the reward for the player's "correct" input, activating the predestination machine that is the fundamental infrastructure of the game.

Concluding Remarks: **The Endurance and Expansion of Cinematic Style**

As quoted in Chapter 3, Lev Manovich accurately summarized the aesthetic and technological landscape of video games in the 1990s—while also showing prescience about the medium’s future—when he wrote the following in his 2001 book *The Language of New Media*:

The area of computer culture where the cinematic interface is being transformed into a cultural interface most aggressively is computer games. By the 1990s, game designers had moved from two to three dimensions and had begun to incorporate cinematic language in an increasingly systematic fashion.¹

As will likely be clear to the reader of this dissertation, I strongly agree with Manovich. The imbrication of cinema into the design of video games—particularly within certain types of games, but also within an even wider set of genres than this dissertation deals with—is utterly pervasive, both in the infancy of the medium and even more so at the time of this writing in the early 2020s. It can be argued, as in Chapter 1, that the influence of cinematic style on game design (and cinema’s “interface” generally, a term that wisely includes significant overlaps among technology used in the creation of games and movies²) was no more prevalent today than in the 1990s, but today it is more easily *seen* in the completed works that make it to consumers.

More specifically, Manovich also writes:

Frequently, the whole game would be structured as an oscillation between interactive fragments requiring the user’s input and noninteractive cinematic sequences, that is, “cinematics.” As the decade progressed, game designers created increasingly complex—and increasingly cinematic—interactive virtual

¹ Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001), 83.

² The way that players can manipulate the camera in games is technologically indistinguishable from how layout designers in CG animated movies manipulate camera positions, and both are ultimately descended from “virtual camera” programs written for the Jet Propulsion Laboratory in the late 1970s. Thus, there is a direct link between player-controlled cameras in video games and technology used to create conventional forms of digital cinema.

worlds. Regardless of a game's genre, it came to rely on cinematography techniques borrowed from traditional cinema, including the expressive use of camera angles and depth of field, and dramatic lighting of 3-D computer-generated sets to create mood and atmosphere.³

Having read Manovich's book within a few years of its publication, which jump-started my interest in media theory alongside D.N. Rodowick's *The Virtual Life of Film*, I do not doubt that these words leapt up a level in my subconscious the first time I played *Dead Space* in 2009. The phrase "expressive use of camera angles and depth of field, and dramatic lighting of 3-D computer-generated sets" loomed in my mind during the game's opening sequence, which was like nothing else I had experienced in my lifetime of engaging with moving-image art, or at least nothing like it in which I also had some semblance of control.

The game's simultaneously haunting and celestial opening begins with a distorted video message from a woman, quickly revealed to be protagonist Isaac Clarke's girlfriend Nicole, a member of the derelict *USG Ishimura*—a "planet cracker" spacecraft to which Clarke and his crewmates have been sent to investigate a distress call. The recording of the clearly-anguished Nicole ends with her ominous line, "Strange...such a little thing..." after which the virtual camera slowly zooms back, her message revealed as being played on a screen on the deck of the *USG Kellion* rescue ship, the zoom continuing until the shot reveals the game's protagonists gathered in front of huge windows with outer space beyond. The view into space reveals a dazzling composition: the *Ishimura* orbiting around a vibrant red planet within a sparse asteroid field. In the background is the system's star, which bathes the deck in yellowish light in a demonstration of the game's extraordinary gradient lighting effects—astounding at the time on game consoles, as this was the period of the huge graphical leaps seen on the first generation of

³ Lev Manovich, *The Language of New Media*, 83.

“high-definition” consoles. Like in the 2009 film *Star Trek* (JJ Abrams, 2009), which employs excessive computer-generated lens flares on the high-tech starship *Enterprise*, the computer’s mastery over lighting effects is representative of a technological sublime, where the vast array of colors and shapes of light are a visually fetishistic substitute for exposition on the functions and origins of the world’s futuristic technology. In *Dead Space*, following the non-interactive slow zoom to a wider field of view, the player can control the camera angle within roughly ten to twenty degrees (the game affords this control to the player at the exact moment that the zoom ends), allowing them to slightly change the camera position, offering the ability to block the starlight from the camera by angling it so the *Ishimura* or an asteroid lies precisely between the star and camera. These player-controlled movements dramatically effect ambient light on the ship deck, allowing the player to experiment with the creation of shadows and to light different parts of the frame, as the player-character’s crewmates argue over their mission.

The player’s ability to adjust camera angle and position in this scene—limited as that control is—was the root of my inspiration for this dissertation. *Dead Space*, however, virtually never oscillates between “cinematics” (an early term for “cut scenes” used far less today) and “interactive fragments.” Like *Half-Life* and its sequel, and a few other major games before it, *Dead Space* presents all narrative and contextual information within interactive portions (via “in-game events,” defined in this dissertation’s introduction), except rare occurrences in which the player loses control within an unbroken “shot” (the game is generally presented as an uninterrupted “single shot”) for a presentation of a major in-game event, before interactivity (of the camera at least) is quickly returned. The game virtually never cinematically *ruptures* the

game space—it is a game of cinematic *flow*, with occasional flow-rupture hybridization for presentations of in-game events but without cuts.

While many games still weave demarcated cut scenes throughout gameplay, and also utilize *Dead Space*'s techniques of cinematic flow at other points (such as the foundational example of the *Uncharted* series), the cinematic liveness of *Dead Space* is most influential on current games in action, action-adventure (and multitudinous subgenre variants of action-adventure), and role-playing games from major game studios. In-game events, micro-cut-scenes, and the increasingly seamless flow between them—following the liveness of *Dead Space* but with occasional rupture—is now the norm in major titles. That this liveness is *cinematic* is critical: games are partially modeled on notions of 'real-life experience' for the purpose of immersion—they want you to *feel like you're there*, in marketing-speak—but they are modeled just as heavily on audio-visual and narrational cinematic convention, which is why they resort so frequently to short (or, in some cases, very long⁴) cut scene ruptures and in-game events in which players lose camera control to be shown precisely what a game's designers want them to *look at*.

Manovich ultimately claims that cinema is “*the cultural interface*” in representational systems generally and computers particularly, arguing that:

Element by element [including cinematography and editing conventions, the mobile camera, and narrative structures], cinema is being poured into a computer ... Rather than being merely one cultural language among others, cinema is now becoming *the cultural interface*, a toolbox for all cultural communication, overtaking the printed word. ... Cinema's aesthetic strategies have become basic

⁴ Superstar game director Hideo Kojima famously incorporates lengthy cut scenes: one in *Death Stranding* is 31 minutes long, while his *Metal Gear Solid 4: Guns of the Patriots* contains the longest of all time—71 minutes.

organizational principles of computer software. ... In short, what was cinema is now the human-computer interface.⁵

One prominent visual strategy of notable recent games (or, more accurately, post-*Uncharted* games), dovetailing with Manovich's commentary on cinema as "interface," is the *removal* of most of the literal interface overlaid onto gameplay that is historically typical of the medium—the visually-overlaid health and status bars, weapon information, radars, and so on. As Bolter and Grusin note in *Remediation*, the "logic of immediacy dictates that the medium itself should "disappear and leave us in the presence of the thing represented."⁶ They also write that "Immediacy depends on hypermediacy,"⁷ which in this dissertation's specific context equates to the hypermediation of cinematic style, narrative, and (lack of) interface in many games, the latter of which sometimes negating the "normal" gamic requirement of a visual overlay of information during interactive game space.

The spectacular cinematic intensity of the opening sequence of the 2020 remake of *Resident Evil 3* is illustrative here, demonstrating both the disappearance of the interface and the resulting enhancement in immediacy, and in parallel the end point of this dissertation's claims about the "evolution" of cine-real style in a gamic context over the last 30 years. Clearly inspired

⁵ Manovich, *The Language of New Media*, 86. Manovich notes that during a presentation on this subject at SIGGRAPH 1996, Microsoft researchers spoke of encoding "cinematographic expertise" and translating the "heuristics of filmmaking" into computer software and hardware as a major goal. See Li-wei He, Michael Cohen, and David Salesin, "The Virtual Cinematographer: A Paradigm for Automatic Real-Time Camera Control and Directing," SIGGRAPH 1996, <<http://research.microsoft.com/SIGGRAPH96/96/VirtualCinema.htm>>

⁶ Jay David Bolter and Richard Grusin, *Redmediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999, 5-6.)

⁷ Ibid.

by the opening scene of *The Last of Us* (2013),⁸ after a short expository cut scene you awake in control of protagonist Jill Valentine in her Raccoon City apartment. It is dark in the apartment, and you briefly explore—in first-person perspective—before reaching the bathroom. Looking in the mirror, you begin to morph into a rotting zombie. It was a dream; you wake up again as Jill in the well-lit apartment. You explore the space—in first-person perspective—and eventually wash your face in the bathroom. As you look in the mirror, the camera curves around her and then rests at the game’s normal third-person over-the-shoulder perspective (this transition is a playful acknowledgment of the series’ turn to first-person in the recent “main series” titles beginning with 2017’s *Resident Evil: Biohazard*). Soon, after glimpsing a news report about the deadly virus sweeping the city, a concerning phone call from her colleague Brad (“Jill, you’ve gotta get outta there *now!*”) is cut short when a nearby brick wall explodes, exposing the room beyond. A giant monster emerges through the ruined wall to attack Jill. She grabs her gun and shoots it in the head several times, to no avail. There are no cuts in the prior moments, but only brief interactivity (having to reach for her gun, for example). After Jill escapes into the building’s hallway, movement control resumes and you move your way through the building, until the monster finds and attacks you again, activating another brief non-interactive segment (without cuts) followed by a resumption of movement control to again run from the monster, and then a series of oscillations in interactivity in the ensuing escape. Once outside and controlling Jill’s

⁸ Originally a Playstation 3 exclusive title, *The Last of Us* was also released in a 2014 remaster for Playstation 4, and in a 2022 Playstation 5 “remake” titled *The Last of Us Part I*, timed to build anticipation for the wildly successful 2023 HBO television adaptation of the game. This is yet another sign of a stylistic “plateau” seen in the 2010s that continues today. Games from roughly 2006-2013 (the first era of high-def consoles) are ripe for “remakes” that feel more like “remasters” (i.e., not fundamentally different as gameplay experiences) taking advantage of 2010s advancements. What is striking is that little else needs to change—conversely, if “remaking” a big-budget 1991 action-adventure or role-playing title in 2001, a similar span of time, its entire system of gameplay and cine-real hybridization would require a nearly ground-up re-building to satisfy contemporaneous gamers.

movements through the streets, you quickly encounter Brad, and discover that the city has rapidly descended into zombie chaos: hungry flesh-eaters everywhere, buildings on fire, helicopters zooming overhead, sirens blazing, gunfire all around.

In the roughly ten minutes of *Resident Evil 3* described above, there are nearly twenty discrete oscillations between player control and micro-cut-scenes, all without image cuts, which were called “presentations” in Chapter 3. Here the presentations are for spectacular impact (as opposed to contemplative impact), and serve the cine-real gamic ends of *showing* the player what must be seen to achieve the designers’ goals for the scene as a spectacular film-game hybrid narrative experience. No on-screen visual interface material appears at any time, the hybridization of cinematic flow and rupture is unpredictable and thrilling, in-game events occur all around the player during interactive portions, and the sheer cinematic spectacle of it all has the palpable feel of a conventional, modern cinematic representation of the apocalypse—recalling George A. Romero’s classic zombie films, as was touched on in Chapter 3, but in its spectacular impact more directly recalling 21st-century zombie films like *28 Weeks Later* (Juan Carlos Fresnadillo, 2007), the 2004 remake of *Dawn of the Dead* (Zack Snyder), which opens similarly to *Resident Evil 3* above, *World War Z* (Marc Forster, 2013), and most of all the aforementioned opening of the first *Last of Us* game (itself inspired by some of the same films, along with its re-working of Cormac McCarthy’s 2006 novel *The Road*).

The *Resident Evil* franchise, and games of its action-adventure ilk, have traveled far since the quiet, haunting spaces of the original 1999 *Resident Evil 3* and its contemporaries, as analyzed in Chapter 3. Where those games featured a mostly-static camera and frequent changes of perspective—a creepy “surveillance camera” aesthetic prioritizing the obfuscation of audio-

visual information—the *Resident Evil 3* remake instead feels, in the sense of gameplay, narrative development, and systems of cinematic flow-rupture hybridization, practically indistinguishable from game studio Naughty Dog’s *Uncharted* series or its *The Last of Us*. In other words, the Naughty Dog style has become dominant in big-budget action-adventures across narrative genres. The remake of *Resident Evil 3* is indeed also a “horror” game, but in the parallels listed above this is only a minor matter; the important point to take away is that major-studio single-player narrative-inclusive games seem to have settled on a remarkably stable approach to hybridizing interactivity with cine-reality. In everyday conversation, I could not count the number of times that I and others have uttered the phrase “everything feels like *Uncharted* now.” *Resident Evil 3* demonstrates steady 2010s improvements in game technology that have shown continued enhancement in areas such as graphical detail, facial animation, load times, and data processing speeds accommodating in-game-events and micro-cut-scenes with little limitation. But, still, in the way *Resident Evil 3*—and many other notable *highly cinematic* games of the 2020s—both *feels* and *plays*, it is inarguable that its fundamental operations are ones developed and soon solidified in the innovative, fertile mid-to-late-00s period exemplified by games such as *Dead Space*, *Uncharted*, *Mass Effect*, *Red Dead Redemption*, *Batman: Arkham Asylum*, and others.

Do big-budget highly-cinematic games need formal innovation? Perhaps, by some accounts. But the medium having landed in various states of *maturity* in the last ten to fifteen years is not necessarily something to bemoan. There might never again be such a period of rapid innovation as the one that took place in the mid-to-late-00s, but we should be wary of assuming or suggesting that the current state of these kinds of games represents an “end-of-history”

moment, as such predictions in any artistic medium (or in society and politics) are essentially always undermined by future developments or revealed to be extensions and evolutions of past developments.⁹ Nonetheless, the charge of “stagnation” within this corpus is not unreasonable. For example, *Uncharted 4: A Thief’s End* (2016), the first *Uncharted* entry to appear on the Playstation 4 (the first three, as well as *The Last of Us*, were developed for the Playstation 3), and its follow-up *Uncharted: The Lost Legacy* (2017) are both notable for their improvement upon and extension of devices utilized in previous Naughty Dog titles, and were near-universally received as qualitatively excellent games—but neither contain gameplay or cine-real hybridization techniques that represent meaningful leaps of innovation beyond those introduced in the first *Uncharted* title from 2007. Playing *The Lost Legacy*, I was astounded by the enhanced *precision* of the game’s collision-detection functions, the technology determining how games handle playable avatars’ spatial relationships to non-playable characters (NPCs), environments, and objects. In the game’s early scene in which I navigated protagonist Chloe through a busy market in India, my avatar’s interaction with her surroundings felt almost tactile, to a degree I had never experienced—the sense of concomitance between Chloe and the environment felt truly seamless, illuminating the results of decades of slow, steady enhancement in how games present characters as existing *within* a world, as opposed to the feeling of playable avatars being simply dropped into an pre-existing virtual space. However, it was hardly the first time I had played a game sequence successfully simulating a character walking through an urban or “lived-in” space in a way that felt notably organic.

⁹ For example, “post-modernism” in representational culture was originally conceived as a theory along “end-of-history” lines, one that predicted, or at least implied, a future collapse of existing representational structures into a sort of consumer-capitalist marketing-oriented hellscape of corporate control. Yet however one defines it, to use the example of cinema, traits of “post-modernism” seem to have simply become new stylistic and industrial norms nestled within and hybridizing existing corporate and aesthetic operations.

Cine-reality in the video game context has nonetheless expanded to become more immersive, seen in sequences like the “dinner scene” in *Resident Evil: Biohazard*, in which the player character is tied to a chair around the dinner table of a cannibalistic rural family in a direct simulation of the same scenario in seminal horror film *The Texas Chainsaw Massacre* (Tobe Hooper, 1974). The visual detail available to the player, the scene’s limited camera control, the overlapping conversation and impressive cine-realism of NPC movement and behavior, the way the fictional world feels *complete*—these aspects and more combine to give major late-10s and 2020s games a sense of cine-real liveness that is indeed more unified than innovative titles of the early high-definition era of the mid-to-late-00s. Nonetheless, the point stands that these games are notably consistent with much earlier innovations in their operations—again, this is surprising only in that gamers who have lived through the medium’s development since the 1980s were once accustomed to seismic developments every few years. The solidification of game genre styles from the late 00s to the present unsurprisingly mirrors the same solidification of the operations of personal computing. For the purposes with which I use it—admittedly limited—the relatively new laptop computer on which I am writing these words is barely distinguishable from the one I purchased over ten years ago. But it is (slightly) lighter and (marginally) faster!

It could be argued that in their evolution to today’s conventional hybridized cine-real operations, games are now in a period roughly analogous to the “classical” period of Hollywood cinema (1930-1960), for two reasons; first, because of the standardization of cine-real stylistics and gameplay in so many mainstream genres, mirroring the stability of style in classical Hollywood, and second, because of the game industry’s classical-studio-system arrangement of major game companies having, essentially, “in-house” styles. In the era of Hollywood’s

vertically-integrated major studios, those studios were known for producing specific and identifiable types of films: Warner Brothers was known for its social realist dramas and gangster films, MGM for its lavish big-budget musicals and period costume pictures, Universal for its Gothic horror movies. By specializing in certain genres and styles, the studio craftspeople were able to hone their precise skills and re-use certain assets in multiple productions. The game industry is similar today; BioWare makes expansive open-world sci-fi role-playing action-adventure hybrids, Rockstar is known for a specific type of open-world non-linear gameplay that can be approached as both traditional narrative or as “chaos simulator,” Infinity Ward makes industry-standard first-person shooters, Square is associated principally with the genre of “JRPG” (Japanese role-playing games), and as previously noted Naughty Dog’s games are easily recognizable by their deft mixture of cinematic address with shooting mechanics, and so on. Much of the technology and talent held by these companies are carefully-guarded in-house assets. While talented designers in various game industry professions do move between studios—their contracts are not *as* restrictive as those of classical Hollywood professionals, though game-industry contracts can indeed be burdensome—the industrial system resembles Hollywood's classical studio era more than the independent-contractor system the U.S. film industry has employed since the mid-1960s, both in that modern Hollywood talent is not as tied to specific studios, and because game talent is not *unionized* like most areas of the film industry are.¹⁰ Unionization in Hollywood—along with the eventual results of the 1948 Paramount Decrees, which ended the studios’ vertically integrated ownership of exhibition operations—helped lead to the industry’s post-classical flowering of diversity in style, narrative, genre, and

¹⁰ Unsurprisingly, the one creative area of the film industry that is notably *not* yet unionized is the one with the most aesthetic and personnel overlap with the games industry: visual effects professionals.

overall film form, as talent became more competitively motivated to innovate without the guarantee of steady studio employment, which while stable for some film professionals was often creatively stifling and closed off opportunities for advancement, or shifts to different professions within the industry.¹¹

But to return to the clarification about my use of the term “video game” from the early pages of this dissertation, it must be taken into consideration that the *corpus* of games discussed in this text has been openly limited from the beginning. As stated previously, video games are a medium with a massive constellation of different styles and genres. Like most cinephiles, I am open to the variety of experiences provided by practically any cinematic sub-genre or style. But like most avid gamers, there are significant and large game “categories” that I simply have no interest in playing, and likely never will, such as interface-and-menu-heavy role-playing games in which huge portions of gameplay are devoted to in-game resource management, and the majority of sports titles, two categories that I personally find quite boring. But when this dissertation was in its early outlining stages, it included a greater variety of hybridized cine-real game titles that was ultimately too expansive to analyze in a single research project. Thus while the “highly cinematic” corpus is limited, it still includes a wider variety of games than is covered in these pages. For one, I have not included sustained discussion of the 2010s and current genre of “interactive-movie” branching-narrative titles, beyond discussion of a scene in *Heavy Rain* in Chapter 1. This mainstream “genre,” inclusive of titles like *Life is Strange*, *Detroit: Become Human*, and *The Walking Dead: The Game*, exhibits an extraordinarily complex hybridization of

¹¹ Many other factors contributed, of course, including the widespread and seismic cultural changes of the 1960s, competition from television, the rise of film schools and related influence of “auteurism,” and much more, but it is not an exaggeration to claim that unionization and the rise of Hollywood’s independent-contractor system were significant developments.

cine-real aesthetics and interactivity and deserves significant further research. And while Chapter 3 notes the divergent path that cinematic games took away from the fixed-camera aesthetics of *Resident Evil* toward the “unedited” game space of *Uncharted*, the “interactive-movie” genre demonstrates how the style of *Resident Evil* and similar games of its period has certainly not been closed off, as games like *Heavy Rain* retain significant portions of its operational DNA.

In limiting myself to explication of major, popular game genres and their cine-real effects, the most unfortunate casualty is that of “art” games (and specifically what are sometimes referred to as “walking simulators” or “story exploration” games), which as a nebulously-defined sub-genre includes within it the most radical hybridizations of movies and games, in that they are capable of offering embodied narrative experiences that inarguably go *beyond* what cinema is conventionally capable of. My caveat to the previous phrase “most radical” is that these games’ hybridizations are closer to the cinematic genres of “character drama” or the mode of “art film.” Thus, I am dealing with certain categories as they have been denoted within film and media studies and critical culture more broadly; as such, one could argue that the hybridization seen in the opening of the *Resident Evil 3* remake is in many ways not “radical.” Nonetheless, I still argue that in its unique combination of multi-layered cinematic form hybridized with *thematically significant* interactivity, and the resulting psychological effects on the player, the scene I will briefly describe below—from the art-game-drama *What Remains of Edith Finch* (Annapurna Interactive, 2017)—is the most formally and radically affective predestination machine that I have encountered.

Edith Finch is a “story exploration” game, a small but relatively popular category of narrative art-game characterized by a lack of shooting, fighting, and related “action” mechanics.

They are most often played in a first-person perspective (including *Edith Finch*), and chiefly involve the player exploring an environment at a “walking” pace—from a single space like the house in *Gone Home* (Fullbright, 2013) to the empty town of *Everybody’s Gone to the Rapture* (The Chinese Room, 2015) or the expansive forest of *Firewatch* (Campo Santo, 2016)—in which clues to a narrative are usually designed to be revealed in an ordering dependent upon the player’s routes of exploration, culminating in an ending revealed once the player has uncovered enough clues (often found in notes, audio messages, video recordings, and objects in the environment). In *Edith Finch*, the player portrays Edith as she returns to her seaside ancestral home in Orcas Island, WA, years since it has been occupied, to re-live her memories and assess the objects left behind by multiple family members who lived there over decades, all of whom are dead, each having met a tragic end. The spaces of the game—always hauntingly beautiful with warm, detailed lighting effects—are thusly infused with grief, loss, and a melancholy nostalgia at every turn, as Edith uncovers the mysteries of her family’s history and their disturbing deaths. Edith—and thus the player—experiences this history, including a series of deaths in which the player embodies now-dead family members, by interacting with objects and spaces that activate “mini-game” narrative flashback vignettes that deftly mix gamic genres, while relying heavily on QTE-style gameplay (i.e. onscreen prompts for the viewer to press buttons at specific moments), and also mix animation and narrational styles. The veracity of these vignettes is nearly always in question, as the game signals the unreliability of Edith’s memory and her interpretations, the truth of what she had been told in the past, and the ambiguity of the physical traces her family left behind in death.

These vignettes use both gamic and film/literary genres to ultimately cinematic ends; in powerful and visible ways, game mechanics are here truly hybridized with storytelling. This polymorphic approach to representation and gameplay mechanics in different vignettes exemplifies a game expanding the boundaries of cinematic storytelling via affective immersion that *results* from player agency, even in a game with an entirely pre-determined, non-branching narrative (while the game's vignettes can be played in different orders, there is no significant change in the content of those vignettes regardless of where they are played in the game). The player's interactive participation is, unlike the vast majority of non-experimental video games, complexly intertwined with the game's story and its characterizations, resulting in affect experienced by the player that is "embodied" in an identifiable, physically-measurable way that few games have ever achieved.

The scene in which we witness and feel this radical hybridization most acutely is the mini-game vignette telling the story of Edith's brother Lewis, who struggled with severe addiction and mental illness. In the scene, Lewis is working at a fish cannery, where his monotonous, repetitive work consists of cutting off the heads of dead salmon on a conveyor belt. The scene begins on a top-down image of the conveyor belt—the fish emerge from frame-right, and with a flick of the controller's right stick the player chops each salmon's head off and pushes it into a basket on the left. Lewis's mind begins wandering, as a voice-over relays a letter Edith has discovered written by Lewis's psychotherapist and addressed to their mother, concerning Lewis's deteriorating health. Lewis's imagination soon emerges in a visual representation, as the world in his mind begins slowly fading in on the left side of the screen. His imagination becomes yet another game-within-the-game, as the player controls Lewis's avatar in the imagination-space

at frame-left, now using the game controller's left stick. This overlaid interactive space first depicts a wizard-like avatar moving forward through a crudely but fully animated labyrinth lit by the wizard's torch, recalling the "dungeon" levels of role-playing games. As you progress, the therapist continues her letter while you simultaneously chop fish heads with the right stick and control his imaginative avatar with the left stick. Slowly, Lewis's gamic internal world fades into more elaborate, larger spaces. The "wizard" (Lewis) walks through a town that a sign designates as "Lewistopia." Musicians greet your arrival, and Lewis seems to be a prince or other person of importance in this vaguely medieval fantasy world. Slowly, this world begins taking up more and more of the multi-window visual field, even as the salmon are still visible, and still must be chopped. In the fantasy, Lewis gets on a boat, and faces a choice of following a "handsome queen" or a "beautiful prince"—the game signaling its goal of immersive player embodiment, here attempting to maintain the embodied illusion by giving the player the choice of aligning Lewis with the player's gendered romantic preferences.

When Lewis reaches a new shore in front of an imposing palace with the queen/prince at his side, the graphics of the fantasy world having steadily become much more detailed and "beautiful" compared to the crude dungeon sequence earlier, the visual field has become almost entirely dominated by this fantasy world—but the salmon keep coming in the background, and you keep chopping. As you walk toward the palace door, the "real world" of the cannery now completely disappears from the image, but again the dead salmon continue arriving on the conveyor—it is invisible but heard, and by this point the player knows roughly where the salmon are in the frame, and thus continues chopping with the right control stick. Entering the palace door ceases the conveyor, and suddenly the player finds their avatar in the locker room at the

cannery. You walk back to the salmon-processing room, and walk up a rising escalator with a window at its terminus, through which a bright light shines. The window then opens and reveals a grand palace entry hall, where a crowd of people are cheering for you, implying that you have “conquered” these wondrous lands with your courageous quest. The implication, however, is that Lewis kills himself in the cannery, unable to reconcile his imagination with the realities of his substance abuse, mental illness, and their symbolization via his unceasingly repetitive work at the cannery, a metaphor for the looping, recurrent, cyclical experience of mental illness.

The player’s control of two lines of action—the fish-chopping and the fantasy avatar—in which one is in Lewis’s head and one is purportedly “real,” is a powerful ludic representation of the simultaneity of the human imagination and reality. Using a near-endless variety of techniques, films can similarly represent two such worlds as overlapping or contingent, but the way this sequence extends beyond the power of cinematic narration results from the “agency” of interactivity. Forced to both repetitively chop salmon heads and control Lewis’s imagination, this lack of unity in the player’s interactions—controlling two distinct spaces simultaneously—not only metaphorically represents the mental states of both being lost in a daydream and suffering from mental illness (the narrative context through which we receive our knowledge of Lewis makes the connection entirely direct), it also forces a physical, palpable empathy in the player through ludic reinforcement of the aforementioned disunity. Controlling these two spaces as knowledge of Lewis’s mental state unfolds in voice-over affectively embodies the player in Lewis’s mind so powerfully that the word *embodiment* does not feel like an exaggeration, as it does to me in the vast majority of cases in which the notion is claimed in a video game context. The monotony of endlessly chopping the fish rhythmically but without variation, while also

being forced to ponder Lewis's mental state and simultaneously experiencing the safe harbor he attempts to reach in his mind (but without ever fully transporting there, as the fish—his cycles of severe depression—are never far away) has the effect of making the player feel significant perceptual and psychological discomfort, as they attempt to keep two entirely discrete ludic environments in mind simultaneously. This discomfort mimics the internal dissonance of mental illness while instantiating that dissonance in the player's own brain.

When I first played this sequence, I truly felt *insane*. I believe that even players who have no personal experience with mental health problems would still be made to feel this profound transference of Lewis's mental state, as the sequence is organically—and successfully—organized in such a complex and precise manner as to nearly ensure that players' experience with it are somewhat predictable. I have watched thousands of movies, and it is difficult for me to recall a personal cinematic experience that approaches the degree of emotional, psychological, and physical affect that this game sequence engendered—I was sweating, my mind was spinning, I started shaking, I could feel the blood pulsing in my thumb as I chopped the fish heads, I nearly cried, and I felt as Lewis felt, in other words I became deeply ambivalent about the real world, and desirous of escape. The combination of mental and physical affects at work here has only one analog that comes to mind in my experience with cinema—watching *mother!* (Darren Aronofsky, 2017) by myself in an empty theatre in Kowloon, Hong Kong. But the intensity of that experience was felt mostly after the fact. Having been intellectually pummeled by a surrealist sensual assault meant to highlight the cyclical cruelty of human beings—from the way we treat each other to the way we treat our planet—I found myself in a daze of depression of existential crisis, perhaps strongly influenced by these feelings occurring during a planned walk

around Kowloon, the world's most densely populated urban area and one rather alien to me at the time (not only had I never been there, at that point I had only left the United States one other time). In other words, it was a very specific set of circumstances—I was not just in my living room, as I was with *Edith Finch*.

In the early 2020s, the utilization of the cinematic toolkit in video game genres as currently constituted is at a technological plateau of innovation. However, to repeat a claim I made in the introduction, one argued within the example from *Edith Finch* above, the view from this plateau is a stunning vista of interactive narrative experience within the frameworks of cine-reality—the techniques of film form as codified in the last 50-60 years since the emergence of a so-called “post-classical” film style. Big-budget action-adventure and role-playing games may bear striking resemblance to those of the 2000s, but they continue to innovate in narrative, gameplay, accessibility, and enhancements to cine-real hybridization.

Like cinema, many forms of games are in a period of micro-level experimentation and refinement of existing operations and styles, and in parallel to personal computing and mobile technology, it is remarkable that the medium has come this far in the last three decades. The advances since this dissertation's earliest in-depth examples (from the early 1990s) are so significant that gamers now *expect* audio-visual and narrative sophistication that rivals mainstream cinema. That this has occurred is striking, considering that less than twenty years ago it was still considered somewhat rare for a game to contain narrative elements (especially dialogue) or “filmmaking” techniques that were anything but risible; though it has since become a meme among gamers, *Resident Evil's* most famous line—“Jill, here's a lockpick. It might be handy if you, the master of unlocking, take it with you.”—did not seem quite so terrible at the

time. Among many positive attributes of games' current period of maturity is that *aesthetic* competition has replaced the bruising technological competition of previous generations. Gamers are accustomed to shiny "photorealistic" graphics and the seamless integration of in-game events. For many if not most gamers, the specific qualities of gameplay operations, story, characters, dialogue, pacing, theme, and spectacular impact take precedence over a game's immediately-apparent technological advances, which are now more difficult to identify than ever before. Perhaps this has always been the case for many gamers, but the point stands that new forms of technological wizardry do not sell themselves on that basis alone, and instantiating a new form is now extraordinarily difficult.

The presence of video games in the wider Western cultural landscape has changed in kind; games are now respectable. For better or worse, their path to cultural legitimacy—through academia, museums and other cultural institutions, serious journalistic criticism of the medium, and talent from the ranks of already-"legitimized" art forms (such as cinema) working in the games industry—has followed roughly the same trajectory as that of once-"low" art forms (again, such as cinema). Video games have not meaningfully challenged the high/low binary of elite cultural production and criticism; like with cinema, game designers and players have trumpeted the greatest achievements of the form to open paths toward elite cultural recognition. The same elitist distinctions between categories and genres that film culture continues to operate under, including middlebrow notions of "prestige content" and "auteurism," have been harnessed with gusto by video game thought leaders to gain legitimacy for the medium in ways virtually indistinguishable from the same struggles in film culture in the 1950s—roughly the decade in which the notion of cinema as an "art form" crept into mainstream discourse and soon became a

rallying call. The discursive processes within cultural conversation surrounding video games in the last ten to fifteen years especially—particularly in the creation of a “canon” of aesthetically significant games—mirrors the earlier legitimization of cinema as a worthwhile art form.

But questions remain as to how games—at the mainstream level—can expand beyond the narrative and thematic limitations inherent to the necessity of interactivity, or user input. How can popular games move beyond their generic pigeonholing within violent scenarios? The divide between “drama” games, or art-games, and practically all other types, is rarely breached. A “drama” game is usually an art-game with “simple” interactive elements, as opposed to the “complex” gameric operations of a violent first-person shooter requiring high-level manual dexterity (with video game controllers, at least), or a role-playing game with a dizzyingly complicated system of menus requiring the player to learn a game’s system of endless weapon and armor upgrades. The divide here is also more simply one of violence-oriented gameplay (nearly all popular video games) and that which is not. As cross-pollination between the worlds of cinema and games becomes ever more fertile, what innovations are in store for the expansion of mainstream narrative games into cinematic genres that have little violence? Interactivity is a barrier, but not necessarily an insurmountable one.

Games like the *Mass Effect* series and the generic category of “interactive-movie”-like titles (*Detroit: Become Human*, *Life Is Strange*, et al) offer a path forward as they continue to innovate. With their branching narratives and sequences with (pre-authored) dialogue options, these games push perceived limits on narrative emergence in a ludic context, even as they continue to recall *Chose Your Own Adventure* stories in their often-simplistic binaries. In *Mass Effect* titles, for example, conversational options are both a delightful respite from hours of

spectacle-laden battle scenes, and immensely aggravating; the games' operations in this context are indeed procedural, but the volume of available procedures is extremely limited. Available conversation with NPCs becomes limited very quickly, as the enormous amount of *writing* required in games with branching narrative and dialogue creates obvious limitations, but even more limiting is the reality that if branching options are *too* different from one another, the player will be sent off on a completely different narrative arc. This works well—as they are designed as such—in games like *Detroit*, which is composed of discrete sequences in enclosed spaces that branch off depending on player choice. But in an open-world game like *Mass Effect*, which is a true hybrid of cine-real and interactive aesthetics, branching choices that deeply effect narrative outcomes would necessitate entire additional games to be made within the game. If the drama between two *Mass Effect* characters changes the narrative of its expansive open world too much, then the resulting offshoot must essentially become its own gigantic game. Thus, in games outside of linear, sequence-based, interactive-movie-type titles like *Detroit* or *Life Is Strange* that do not allow for significant exploration or ludic play, branching plot elements and dialogue can never effect too much, lest the linear narrative of the game's "main story" be thrown off the rails. Once a player reaches the end of the *Mass Effect* trilogy and looks back on the seemingly significant choices they have made throughout, it is difficult to find ways in which player choice influenced much of anything.

This is where the potential of AI technology comes into play. For games to effectively hybridize interactivity with cinematic and literary genres such as drama, comedy, and others light on violence, much more advanced systems of narrative emergence must be developed to upend the medium's reliance on violent scenarios. While AI's applications in gaming are currently

being debated extensively, with some calling them over-hyped,¹² the possibilities are not science-fiction: sophisticated NPC-personality AI and potentially limitless dialogue options, as well as the technology's potential for altering and even creating sequences and game spaces practically on the fly, could result in open-world games with truly emergent narrative interactivity. AI, rather than Virtual Reality—technology that has not yet resulted in a viable system beyond cumbersome, headache-inducing wearable computers, some requiring waist-mounted battery packs, nor has it led to storytelling innovation beyond the obvious benefits of audio-visual immersiveness—is the most promising avenue for the next major leap in cine-real game experience, particularly in terms of deepening the ludic elements of these experiences. The shackles of the predestination machine could come off. In the meantime, we have more glossy remakes of decades-old games to look forward to, which will doubtlessly make fine use of current technology. But considering how powerfully affective, thematically rich, and audio-visually spectacular so many games today are, the current status quo is not so bad.

¹² See this piece from *Wired* debating the contours of current conversations about AI's potential future effects on game development (<https://www.wired.com/story/generative-ai-video-game-development/>) and this piece from *American Literature* (<https://read.dukeupress.edu/american-literature/article/95/2/435/344239/Artificial-Intelligence-in-Video-Games?guestAccessKey=3fb57142-6829-4240-8808-00af8f0ee75e>).

Ludography (Video Games)

Entries below are alphabetical by game title and adhere to the following format:
Game Title. Developer. Year.

007: Blood Stone. Bizarre Creations. 2010.
007: Everything or Nothing. EA Redwood Shores. 2004.
007: From Russia with Love. EA Redwood Shores. 2005.
007: Nightfire. Eurocom. 2002.
007: Quantum of Solace. Eurocom. 2008.
The 7th Guest. Trilobyte. 1993.
Alan Wake. Remedy Entertainment. 2010.
Alien Trilogy. Probe Entertainment. 1996.
Apocalypse. Neversoft. 1998.
Batman: Arkham Asylum. Rocksteady Studios. 2009.
Beyond: Two Souls. Quantic Dream. 2013.
Bioshock. 2K Boston/Australia. 2007.
Bioshock Infinite. Irrational Games. 2013.
Braid. Number None. 2008.
Castle of Illusion Starring Mickey Mouse. Sega. 1990.
Castle of Illusion Starring Mickey Mouse. Sega Studios Australia. 2013.
Chrono Cross. Square. 1999.
Clock Tower. Human Entertainment. 1996.
Crash Bandicoot. Naughty Dog. 1996.
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Undertale. Toby Fox. 2015.
Until Dawn. Supermassive Games. 2015.
Vanquish. PlatinumGames. 2010.
Virginia. Variable State. 2016.
The Walking Dead: The Game. Telltale Games. 2012.
What Remains of Edith Finch. Giant Sparrow/Annapurna Interactive. 2017.
Wolfenstein 3D. id Software. 1992.

Filmography

Entries below are alphabetical by film title and adhere to the following format:

Film Title (Director, Year)

28 Days Later (Danny Boyle, 2002)
28 Weeks Later (Juan Carlos Fresnadillo, 2007)
2001: A Space Odyssey (Stanley Kubrick, 1968)
1917 (Sam Mendes, 2019)
The Adventures of Robin Hood (Michael Curtiz, 1938)
Alien (Ridley Scott, 1979)
Aliens (James Cameron, 1986)
All That Jazz (Bob Fosse, 1979)
American Gigolo (Paul Schrader, 1980)
American Psycho (Mary Harron, 2000)
Amores Perros (Alejandro G. Iñárritu, 2000)
Annihilation (Alex Garland, 2018)
Apocalypse Now (Francis Ford Coppola, 1979)
Avatar (James Cameron, 2009)
Bad Boys 2 (Michael Bay, 2003)
The Batman (Matt Reeves, 2022)
Beverly Hills Cop (Martin Brest, 1984)
Black Mirror: Bandersnatch (David Slade, 2018)
Blade Runner (Ridley Scott, 1982)
Blade Runner 2049 (Denis Villeneuve, 2017)
The Brood (David Cronenberg, 1979)
Caché (Michael Haneke, 2005)
Casino Royale (Martin Campbell, 2006)
Children of Men (Alfonso Cuarón, 2006)
Citizen Kane (Orson Welles, 1941)
City of God (Fernando Meirelles, 2002)
Clear and Present Danger (Philip Noyce, 1994)
Dawn of the Dead (George A. Romero, 1978)
Dawn of the Dead (Zack Snyder, 2004)
Deja Vu (Tony Scott, 2006)
The Departed (Martin Scorsese, 2006)
Die Hard (John McTiernan, 1988)
Django Unchained (Quentin Tarantino, 2012)
Doctor Dolittle (Richard Fleischer, 1967)
Drive (Nicolas Winding Regn, 2011)
Duel in the Sun (King Vidor, 1946)

Edward Scissorhands (Tim Burton, 1990)
Elephant (Gus Van Sant, 2003)
Event Horizon (Paul W.S. Anderson, 1997)
The Exorcist (William Friedkin, 1973)
The Favourite (Yorgos Lanthimos, 2018)
Fight Club (David Fincher, 1999)
Flashdance (Adrian Lyne, 1983)
The Flowers of Shanghai (Hou Hsiao-hsien, 1998)
Ghost in the Shell (Mamoru Oshii, 1995)
Goodfellas (Martin Scorsese, 1990)
Halloween (John Carpenter, 1979)
A Hard Day's Night (Richard Lester, 1964)
Hardcore Henry (Ilya Naishuller, 2015)
Help! (Richard Lester, 1965)
His Girl Friday (Howard Hawks, 1940)
The Hunger (Tony Scott, 1983)
Inception (Christopher Nolan, 2010)
Intolerance (D.W. Griffith, 1916)
Jaws (Steven Spielberg, 1975)
John Wick: Chapter Two (Chad Stahelski, 2017)
John Wick: Chapter Four (Chad Stahelski, 2023)
Jurassic Park (Steven Spielberg, 1993)
The Killing (Stanley Kubrick, 1956)
King Boxer (Chang-hwa Jeong, 1972)
L'Eclisse (Michelangelo Antonioni, 1962)
Lady in the Lake (Robert Montgomery, 1947)
Last Days (Gus Van Sant, 2005)
The Lonedale Operator (D.W. Griffith, 1911)
The Lord of the Rings: The Fellowship of the Ring (Peter Jackson, 2001)
Magnolia (Paul Thomas Anderson, 1999)
Mandy (Panos Cosmatos, 2018)
The Matrix Reloaded (Lana & Lily Wachowski, 2003)
Mean Streets (Martin Scorsese, 1973)
mother! (Darren Aronofsky, 2017)
My Fair Lady (George Cukor, 1964)
The Mystery of Chessboxing (Joseph Kuo, 1979)
Nashville (Robert Altman, 1975)
Night of the Living Dead (George A. Romero, 1968)
Nightcrawler (Dan Gilroy, 2014)
Paranoid Park (Gus Van Sant, 2007)
Pearl Harbor (Michael Bay, 2001)
Persona (Ingmar Bergman, 1966)
Platoon (Oliver Stone, 1986)

Psycho (Alfred Hitchcock, 1960)
Punch-Drunk Love (Paul Thomas Anderson, 2002)
Raiders of the Lost Ark (Steven Spielberg, 1981)
Rebecca (Alfred Hitchcock, 1940)
Requiem for a Dream (Darren Aronofsky, 2000)
The Revenant (Alejandro G. Iñárritu, 2015)
Saturday Night Fever (John Badham, 1977)
Seconds (John Frankenheimer, 1966)
Shakespeare in Love (John Madden, 1998)
Sicario (Denis Villeneuve, 2015)
Skyfall (Sam Mendes, 2012)
Spring Breakers (Harmony Korine, 2013)
Star Trek (JJ Abrams, 2009)
Star Trek: First Contact (Jonathan Frakes, 1996)
Star Wars (George Lucas, 1977)
Strange Days (Kathryn Bigelow, 1995)
Taxi Driver (Martin Scorsese, 1976)
Terminator 2: Judgment Day (James Cameron, 1991)
The Texas Chainsaw Massacre (Tobe Hooper, 1974)
There Will Be Blood (Paul Thomas Anderson, 2007)
Titanic (James Cameron, 1997)
Top Gun (Tony Scott, 1986)
Transformers (Michael Bay, 2007)
Transformers: Dark of the Moon (Michael Bay, 2011)
True Lies (James Cameron, 1994)
Twin Dragons (Ringo Lam and Tsui Hark, 1992)
Unbreakable Kimmy Schmidt: Kimmy vs the Reverend (Claire Scanlon, 2020)
Under the Skin (Jonathan Glazer, 2013)
World War Z (Marc Forster, 2013)

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