

FACIAL ANIMATION AND EMPATHY IN *THE LAST OF US PARTS I AND II*

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ABSTRACT

For more than a decade the videogame studio Naughty Dog has deployed increasingly sophisticated facial animations, greatly expanding its characters' abilities to convey realistic and compelling emotion. In a parallel effort, the studio has remediated cinematic forms like the closeup, integrating them with the unique affordances of videoludic media. Naughty Dog's 2020 The Last of Us Part II takes this a step further, making characters' faces a vital aspect of the game's interface: the dynamically changing emotional expression of 25 in-game characters offers fine-grained feedback regarding player choices and actions, and it also encourages players to engage with the characters less like tools or targets and more like autonomous human beings. Through a close study of a single game character, Ellie Williams, my article illuminates the narrative and gameplay impact of this merger of face and interface. Ellie began The Last of Us Part I (2013) as a non-player character (NPC) and, in some ways, an archetypal "damsel in distress," but she evolved to become a fan favourite as well as the sequel's protagonist and principal player-character (PC). Along the way, Ellie also became something of a feminist icon: she is a queer young woman who wears practical clothing, a character very different than the stereotypical heroes that dominated previous videogame generations. The success of the games and their central character, I argue, turns on their ability to encourage emotional connections, sometimes called empathy, inviting players to engage with videogame characters in ways that parallel their responses to characters in older media forms.

KEY WORDS

Game studies; *The Last of Us*; Videogame; Naughty Dog; Animation; Empathy; Closeup

INTRODUCTION

"Could we get the player to be more emotionally invested in what they're doing in the game?"
—Neil Druckmann (2010)

This article's origins can be traced to an extraordinary demo reel posted by videogame animator Keith Paciello on Vimeo's video-sharing platform (PhotoMode 2022). Paciello spent much of his career with Naughty Dog, the California game studio renowned for the "cinematic" quality of its *Uncharted* (2007-2022) and *The Last of Us* (2013-present) videogame series. His reel showcases portraits of characters from *The Last of Us Part II* (2020) created using Photo Mode, an in-game feature that allows players to capture still images during gameplay. Like the similar tools found in many contemporary videogames, Photo Mode offers a wide range of controls that mimic traditional camera and photo-editing tools, allowing players to adjust the virtual camera's

location, aperture size, shutter speed, and ISO, change the quality and direction of the scene's lighting, add filters, adjust brightness and saturation, crop, frame, and vignette, etc.

Notably, the portraits in Paciello's reel are not his own creations. Instead, he highlights virtual photography shared by players and fans on social media platforms like Instagram and Twitter. As Figures 1-3 illustrate, many players use Photo Mode to evoke the tropes and traditions of European portraiture, creating photorealistic images that conjure affective and interior lives for their favourite game characters. As artist and virtual photographer Cristiano Bonora puts it, virtual portraiture requires that its creators "look for a character's soul..." (Bonora n.d.). These carefully crafted and curated portraits exemplify two common forms of persona work engaged by online fans (Moore 2020). First, fans embrace a character constructed by Naughty Dog's interwoven systems of computer code and audiovisual artifacts, using Photo Mode to extend the character's persona through their skillful articulation of the European pictorial tradition. Second, fans then circulate these images online, shaping their own personas through their fannish embrace of specific characters and affective states, while at the same time demonstrating their skills as creators. Portraitists frequently use one of their creations as the profile image for their social media accounts, further suggesting the overlap in these parallel forms of persona building.



(Left) **Figure 1:** "Snowblack," by Cristiano Bonora, 2022. Virtual Photograph from *The Last of Us Part II* <https://www.verticalgamingphotography.com/COLLECTIONS/Portraits/i-pZ9V8Gt/A>

(Middle) **Figure 2:** "Untitled," by planetelliewilliams, 2022. Virtual Photograph from *The Last of Us Part II* < <https://www.instagram.com/p/CZipZeDtvFu/>>

(Right) **Figure 3:** "Untitled," by junkyardvertigo, 2021. Virtual Photograph from *The Last of Us Part II*, <https://www.tumblr.com/junkyardvertigo/646858215691370496>

Both a thriving vernacular practice and an emerging fine art, virtual photography has begun to draw scholarly attention (see Gerling 2018; Möring & de Mutiis 2019; Patey 2022). In what follows; however, my focus is less on the work of virtual photographers and more on the creativity that inspires it, the work of artists, animators, writers, and programmers at studios like Naughty Dog. Paciello compiled the demo reel, in part, because the fans' portraiture opens a window on the rapidly evolving medium of the videogame, which increasingly offers visual and narrative experiences akin to those found in sister arts like theatre, television, and film. As the fans' portraiture also suggests, much of this power stems from the new abilities of videogames to render compelling views of the human face.

THE “ACTIVE CINEMATIC EXPERIENCE”

In spring 2010, the developers at Naughty Dog were flush with the blockbuster reception of their most recent title, *Uncharted 2: Among Thieves*. Released in October 2009, the game proved to be an exceptional commercial and critical success, selling 3.5 million copies in four months and eventually winning more than 200 Game of the Year awards (Rohde 2010; Perona 2012). In that spring, nine of Naughty Dog’s key creatives delivered presentations at the industry’s showcase conference, the annual Game Developers Conference (GDC) in San Francisco. If taken together, these presentations do more than simply celebrate the studio’s success; they amount to something more like a manifesto.

The presentations set out Naughty Dog’s aspirations for videogames as a medium: rather than a straightforward focus on innovative and engaging gameplay, the studio sought to re-imagine the videogame, starting with *Uncharted 2*, as an “active cinematic experience.” The phrase appears in promotional paratexts supporting the game’s release and in multiple industry presentations. Since then, admirers and critics have often labelled Naughty Dog games as “cinematic” (see Bódi 2022). In important ways, however, this misses the point. What distinguishes games like *The Last of Us Part II* (2020) most are their remediation of cinema and their marriage of cinematic language with the unique affordances of videoludic media.

Closer consideration of the studio’s 2010 definition— “active cinematic experience”— thus offers insights into Naughty Dog’s innovations and can illuminate key aspects of the medium as a whole. One of *Uncharted 2*’s lead designers, Neil Druckmann, offered a careful parsing of the phrase in his GDC presentation (Druckmann & Straley 2010). “Active,” he said, invokes the special affordances of videogames as interactive media. “Cinematic” signals that the developers took many cues from Hollywood filmmaking, and in 2010, this was indeed a key distinction separating Naughty Dog’s approach from that of many of its competitors. Nevertheless, the description does not end here with something like “interactive cinema.” The phrase’s final word, “experience,” is most telling. Film form and language, like interactivity, were valuable to the extent that they shaped players’ experience—particularly, their emotional experience. Druckmann and his co-presenter, game director Bruce Straley, emphasised that it was by merging the videogame’s ludic and narrative registers—marrying its gameplay and its storytelling—that they could best pursue their principal goal: to encourage players to care about the game world and its characters, and to give weight to the player’s actions within this world. As Druckmann summarised in the question that serves as my epigraph, “Could we get the player to be more emotionally invested in what they’re doing in the game?” (Druckmann & Straley 2010). The studio pursued this effort along many tracks, but one of its most consequential innovations turns on the particular emphasis it devotes to facial animation.

FACES, INTERFACES, AND BODIES AT PLAY

For videogame developers with a story to tell, faces and interfaces exist in a kind of tension—or at least they have to date. Naughty Dog and many other game studios now aspire to create complex and affecting narrative arcs for their characters, and they often want to incorporate cinema-style closeups of their characters’ faces, for many of the same reasons that movies use them.¹ Like Hollywood studios, game studios want players to care about the goals and challenges that motivate their fictional characters, and they know that it helps if we can see their faces. Emotions are contagious, and one key vector is the million subtleties of human facial expressions. As Daniel Black points out, the face is an evolutionary marvel, uniquely suited to the conveyance of both meaning and emotion:

The development of ever more extensive musculature and its anchoring in the skin has given the face the power to dynamically reshape itself in a way impossible for any other part of the human body. Largely unobserved by its owner, the human face is constantly shifting its form in response to both conscious and unconscious directions, instinctive responses to stimuli or changes in the other faces around it (Black 2011, p. 9).

However, Black also notes full explanations for the face's expressive, communicative powers have proven elusive. Everyone with a face seems to have an opinion about its workings—including scholars in a vast range of disciplines—yet codifications of the face's definitive structures and meanings remain as partial as they are contested. As Black argues,

The face as an anatomical and perceptual phenomenon is the most mercurial, unstable, and elusive feature of human anatomy, endlessly exceeding efforts to capture it and draw a stable, generalized view of it from its endlessly shifting lived reality (2011, p. 9).

For example, the linguistic models that long dominated scholarship in the humanities and social sciences elide the corporeal and pre-linguistic aspects of facial communication. As demonstrated by Black, the recent “affective turn” in film and media studies has brought some of these aspects into clearer focus. In her investigation of “mimetic communication,” for example, affect scholar Anna Gibbs suggests that faces form a key transfer point—an interface—for the affective energies that precede, provoke, and give form to human emotion:

Of particular interest is facial expression's activation of a mimetic impulse in response to the facial expressions of observers, tending then to elicit the same affect in them. It is very difficult not to respond to a spontaneous smile with a spontaneous smile of one's own, and one's own smile provides sufficient feedback to our own bodies to activate the physiological and neurological aspects of joy (Gibbs 2010, p. 191).

This works when we are face-to-face, and mimetic communication also occurs when faces travel through audiovisual mediation. In fact, as Gibbs argues, the pervasiveness of audiovisual media in contemporary life has only amplified the ubiquity and range of the face's affective power (191).

Videogame studios have long sought to harness this power, developing increasingly sophisticated systems to capture, model, and re-create the human face's expressive mobility and range. Part of this story turns on exponential leaps in the capabilities of the tools used to create videogames, including the speed of the systems that run them. To take one rough measure, the processing speed of the Sony PlayStation 5 game console (2020) is 95 times that of the system that ran *Uncharted 2* in 2009. Game studios have devoted much of this new power to increasing photorealism, and, like Naughty Dog, many give special priority to human faces. A convenient example is Kratos (Figure 4), the protagonist of the long-running *God of War* franchise (Santa Monica Studios 2005-present). Like all three-dimensional (3D) computer graphics, Kratos's visible surfaces are built from a mesh of interconnected polygons. Raising the polygon count increases the level of fine detail possible in the character's modelling and animation, but it also demands more from the game system's processor. For Kratos's face in *God of War 2* (2007), the developers allocated 1,200 polygons. For the franchise's 2018 instalment, that count increased to 32,000, offering unprecedented control over the shapes and movements that governed the character's expressions (Shuman 2019). Although Kratos was exceptional for his time, many other studios and characters have followed his trajectory. To manage this new complexity, mainstream animation tools now include hundreds of controls keyed to versions of the facial

action coding system (FACS) first developed by clinical psychologists Paul Ekman and Wallace Friesen (1978). Increasingly, videogame characters are ready for their closeups.



Figure 4: Left: Kratos from God of War 2 (2007); Right: Kratos from God of War (2018)

Unfortunately, modern videogame interfaces were built for other things, and they often actively resist closeups. Story-rich videogames typically take place within 3D virtual worlds, and they locate the player within those worlds as a specific in-game character, called the player-character (PC) or avatar.² Games reveal these 3D worlds using virtual cameras, and modern conventions dictate that these cameras conform to one of two orientations. First-person camera perspectives are now ubiquitous, thanks to massively popular shooter games like *Counter-Strike* and *Call of Duty*. These perspectives effectively make the PC's face invisible since they align the in-game camera with the PC's line of sight. Third-person perspectives, the most common alternative, typically depend on a tracking camera that defaults to positions behind the PC's back. This gives players a good view of the world immediately surrounding them, but it once again obscures the PC's face. Closeups on non-player characters (NPCs) are also hard to come by, though for different reasons. Most narratively ambitious videogames remain games, and most are built around agonistic struggle. Game mechanics often privilege range weapons like guns, and virtual cameras stick close to the PC, and thus NPCs are most often revealed in long shots rather than closeups. For decades, the industry has marshalled enormous resources and creativity in its efforts to overcome these problems, and a key index of this can be found in the enduring importance of videogame cutscenes, which I discuss in detail below.

Because this article is about looking at faces in videogames, however, it seems important near the outset to stress that the medium is not defined by its visual register. Instead, videogames are visual/audio/haptic experiences that engage the player's sensorium in manifold, shifting, and synesthetic ways. As Black observes,

[V]ideo games are dependent for their operation on the fact that we always have an embodied, multimodal, and active engagement with what we see,

which can—to at least some degree—cause us to engage with a two-dimensional (2D) visual representation as if it were a real, physical space of action (Black 2017, p. 180).

Black also notes that this “as if” encapsulates a set of complex and contradictory affordances, with important distinctions from audiences’ engagement with the fictional 3D worlds conjured by other media, most notably cinema. As Black and others argue, the act of gameplay stretches players across the amorphous, porous boundary that separates the game world (the one inhabited by PCs and NPCs) from the material world that envelops the player’s corporeal body. In other words, videogames multiply and complicate the player’s experience of physical bodies in physical space. As Brendan Keogh observes, when we engage with videogames, “we look at, hear, and touch them with technologically augmented senses and limbs to implement some change, to feel some liminal and flickering sense of presence through the screen. But this corporeal engagement goes two ways: as we touch the videogame, it touches us back” (Keogh 2018, pp. 3-4). Naughty Dog’s remediations of the cinematic closeup should be understood in this light: they are vital to the studio’s broader efforts to entangle the player with the videogame’s audio/visual/haptic materiality. As this suggests, the argument that follows is indebted to the phenomenological investigations of Black, Keogh, and other media theorists, including David Sudnow, Vivian Sobchak, and Rune Klevjer. Their approaches to the body and media matrix allow us to make a better purchase of the new medium’s aesthetics, distinct affordances, and pleasures offered by the twinned engagement of player and videogame.

CUTSCENE “VERSUS” GAMEPLAY

Naughty Dog made its reputation with *Crash Bandicoot* (1996) and *Jak and Daxter* (2001), both kinetic platformer games with aesthetics indebted to 2D cartoon animation. However, with *Uncharted: Drake’s Fortune* (2007), Naughty Dog dramatically changed its signature style. Unlike the earlier games, *Uncharted* features human protagonists in realistic settings; its primary PC, Nathan Drake, is a treasure hunter in the mould of game characters like *Lara Croft* (1996-present). Even more than Lara Croft, however, *Uncharted* demonstrates the generative influence of Hollywood pulp adventure films like *Gunga Din* (1939), *King Solomon’s Mines* (1950), and, most importantly, the *Indiana Jones* franchise (1981-present). In a GDC talk detailing the first game’s production, its design co-lead, Richard Lemarchand, notes that the adventure film’s influence led directly to a focus on the expressiveness of characters’ faces:

From the very beginning, we also thought that excellent facial animation would be the key to depicting a relatable hero that you’d really want to root for, with the kinds of nuanced emotions for the characters that are as recognizable as they are on the faces of characters...from our favourite movies. This was a big challenge for us, of course. We were working for the first time in a much more realistic—albeit still stylized—art style (Lemarchand 2008).

In the years that followed, conveying the depth and nuance of their characters’ emotional lives only became more important at Naughty Dog. Discussing her work on *Uncharted 2*, for example, creative director Amy Hennig argued that

Our main goal in creating the Uncharted franchise from the very beginning was to capture the spirit of the classic pulp adventure serials...so to succeed we knew that we had to capture that essential humanity of the hero and his companions. They need to look, behave, and feel like relatable, genuine human beings, not just videogame caricatures (Hennig & Scherr 2010).

To that end, Hennig said, Naughty Dog borrowed production techniques from stage, film, and television. For example, the studio casts a single actor to portray each game character, rejecting the typical game-studio practice of using stunt performers for motion capture and a separate group of voice actors to record dialogue. Recording sessions were broken up over multiple weeks, giving the actors time to get familiar with the characters and their fellow actors, and their performances were scheduled, rehearsed, and blocked, much like performances created for a stage play. As is typical for motion-capture (mocap) sessions, the actors performed within a “volume,” a soundstage-like space equipped with cameras that tracked the actors’ movements and fed that data to computers. Atypically, however, Naughty Dog built its mocap sets on an actual soundstage to control extraneous noise; the actors were miked, and their vocal performances were recorded along with their movements. Finally, performances were captured in long takes that gave the actors space to interact and improvise. All these choices furthered what Hennig described as the studio’s fundamental goal, to “capture the most nuanced, organic, and emotionally authentic performances possible” (Hennig & Scherr 2010).

Crucially, this work included special attention to facial performances, which by *Uncharted 2* had become standard practice at Naughty Dog. In addition to the teams recording dialogue and bodily motion, *Uncharted 2*’s production unit included a four-camera video crew that captured closeups of the actors’ faces. Animators later used these videos to reference hand-keyed animation of the characters’ facial expressions. Much like Lemarchand, Hennig and her co-presenter, animator Josh Scherr, argued that facial animation provided the key to players’ identification with the game characters’ “humanity.” As Scherr summarises, “The emotional authenticity of the performance is paramount [and] this means placing the priority on the facial animation....” (Hennig & Scherr 2010).

Hennig and Scherr’s talk focused on Naughty Dog’s innovations with cutscenes, which often are a fraught subject for videogame developers as well as for critics. Cutscenes typically take the form of short audiovisual sequences that resemble a scene from a film or television show. They originated in the arcade games of the 1980s, and, then as now, cutscenes frequently serve to punctuate sequences of interactive gameplay, often by emphasising the outcome of the just-finished game level or by anticipating the level to come. Classically, cutscenes are defined by their lack of interactivity: players watch but cannot affect the events they see and hear on screen. This relative “passivity” has made cutscenes a target for both lay and academic theorists seeking to define videogames as games first and foremost (Klevjer 2002). Game theorist Jesper Juul, for example, describes cutscenes as “somewhat controversial,” since they “are in a sense a non-game element in a game” (2005 p. 135). Naughty Dog’s Bruce Straley made a similar point in 2010: “[R]emoving control is counter to our medium. If we all wanted to watch a movie, we’d be in a theatre” (Druckmann & Straley 2010). Unlike some other developers, however, Straley did not argue for cutscenes’ elimination. Instead, he emphasised their critical role in creating the “active cinematic experience.” Over a presentation slide depicting a balance scale with the word “emotions” on one side and a game controller on the other, Straley stated,

We use our cutscenes to get into the emotions and the character moments of the story, because they let us leverage the language of cinema...using such things as composition, closeups, wide-angle shots...dramatic editing, et cetera (Druckmann & Straley 2010).

Straley’s enumeration demonstrates two notable features here. The first is simply that closeups are included on his list. Straley and Druckmann clearly saw this shot size as a vital tool for conveying the “the emotions and the character moments” that the developers hoped to express. Also notable, however, is that the closeup is only one among multiple cinematic elements. As a

whole, Straley's enumeration suggests that the developers valued cutscenes for something like the gestalt produced by the totality of cinematic narration. As Rune Klevjer argues,

By bringing the language of the movie camera into the game, cutscenes attempt to evoke not only the mythology and imagery of cinematic fiction but also its characteristic ontology, its flavour, and its tone....By its very definition, diegetic storytelling projects characters as having a complete and autonomous existence, as persons, who act independently and intentionally, who have goals and hopes, who have a history, and who express their inner lives (Klevjer 2016, p. 307).

The worlds inscribed by the cinematic camera, then, are distinct from the spaces created by the gameplay camera, which builds a world that literally revolves around the player. But neither Klevjer nor Druckmann and Straley argue for eliminating cutscenes in the pursuit of some form of ludic purity. Instead, the question is one of balance. As Klevjer argues, "Successful games are able to establish...a dialogue between the journey of characters and the journey of players, a companionship, a bond across the ontological divide, emerging from shared histories and common destinies" (Klevjer 2016, p. 307-08). Druckmann describes something similar in an interview: "Our characters have their own wants, needs, obsessions, loves. And we're saying, 'When you're playing our game, we want you to tap into who they are and play the game as them. Not as you, as them'" (Lessons 2019). Both Klevjer and Druckmann are pointing toward something like empathy, an emotional alignment between player and character that links their goals, hopes, and history. As I argue below, fostering this player/character bond is the fundamental motivation fuelling Naughty Dog's long interest in the cinematic closeup. Furthering that argument, however, requires some initial clarification regarding an elusive idea: empathy.

Unpacking "Empathy"

The previous sentences may have raised red flags for some readers, since "empathy" has become a buzzword in the discourse surrounding videogames. Many scholarly, fannish, industry, and journalistic conversations now centre on empathy and related concepts. One key driver for this new prevalence is the explosive growth of the industry's reach, diversity, and ambitions. Once valued solely as toys for children, videogames are now (also) many other things. This increasing influence and complexity have sparked myriad efforts to reckon with games' meanings and effects. The moral panics of the 1990s form a part of this trend, as does the proliferation of empirical research seeking to gauge the impact of in-game violence. Reacting to this largely critical discourse, more positive valuations of videogames' effects—from within the industry, from fans, and academics—often champion empathy, conceived as a more elevated and pro-social experience than the simple "fun" delivered by toys.

Unfortunately, recent celebrations of games' empathic powers often seem to be talking at cross purposes. In part, the proliferating, amorphous meanings of "empathy" within these conversations stem from the nature of the thing itself. Like faces, emotions are notoriously difficult to arrest and anatomise. Another source of difficulty, however, results from these discourses' different purposes. Empathy is now used to grind a lot of different axes.

In their "Empathy and its Alternatives," for example, queer game studies scholar Bo Ruberg argues that empathy often provides cover for felt experiences with more limited, and far less radical, implications. Chief among these is sympathy, a feeling of pity or sorrow at someone else's misfortune, and allyship, the sense that identifying with an in-game character is itself a form of progressive political praxis.³ Nevertheless, Ruberg writes, unpacking empathy's role within these discourses also can recover more valuable feelings:

Some of these include caring, compassion, respect, the sorrow of loss, intimacy, love, and a surprisingly queer kind of interpersonal entanglement. These are emotional orientations that have rarely been foregrounded in the discursive networks that surround video games, formerly dominated by a reverence for fun and presently hooked on the empathy buzz (Ruberg 2020, p. 64).

Arguably “interpersonal entanglements” are always at least potentially queer, since they challenge dominant conceptions of the ideal neoliberal subject as self-contained and self-directed. Ruberg illuminates her discussion of entanglements through an extended reading of *Unravel* (2016), a puzzle/platformer game developed by Coldwood, the Swedish independent game studio. *Unravel*'s PC is a yarn doll, Yarny, that traverses the game's levels by linking its body to objects within its world. These connections put Yarny in constant danger; by extending outside of itself, Yarny always risks unravelling completely. As Ruberg suggests, this game mechanic serves as a procedural metaphor, a literalisation of empathy's tenuous, dangerous work. Notably, however, Yarny needed more than just this mechanic to connect with the player. *Unravel*'s creative director, Martin Sahlin, stresses that “Yarny had to react emotionally as well.... We wanted players to feel what Yarny was feeling, so we had to communicate that.” In other words, players' emotional engagement with Yarny depends on the character's own responsiveness to the game's environment and the NPCs within it. Yarny does not have a face, but Coldwood's artists, animators, and programmers provided the character with an exceptionally expressive body language as well as situational awareness. Yarny has multiple “mood sets” that modify the doll's postures, gestures, and gait, and the developers also attached “mood zones” to various objects and environments within the game world. Within these defined areas, “we could swap out any part of Yarny's mood set for a more emotionally charged version.” When lightning cracks, for example, Yarny's general affect turns to fear. In sum, Yarny's richly detailed emotional responsiveness encourages a resonance with the player's own. Although radically different in important ways, *Unravel* and *Uncharted* both demonstrate their developers' commitment to fostering player and character empathy, as well as their shared understanding that empathy requires some form of emotional entanglement.

Cinematic Faces

In his “The Scene of Empathy and the Human Face,” film scholar Carl Plantinga argues that empathy is something other than a single, discrete emotion. Instead, he suggests, the term describes the mix of affective experiences through which we may come to recognise and to share in the emotions felt by others (1999, p. 245). Empathy for other people does not require that we mistake ourselves for them; nor does empathy for a fictional character demand that we imagine ourselves to be that character. It does require, however, some form of affective contagion, an effect for which the human face seems perfectly designed. In Hollywood cinema, Plantinga writes, closeups on faces often are deployed to communicate a character's feelings, but they also are often tasked with more: “Viewing the human face can move beyond communication to elicit an emotional response in the viewer. That the face both communicates information about and elicits emotion is true both in our everyday lives and in our film-viewing experience” (p. 242). Plantinga suggests several bio-social processes that might undergird these effects, including affective mimicry and facial feedback, concepts that align with Gibbs's (2010) later work on mimetic communication.

On the other hand, Triple-A game developers tend toward something more like pragmatism. Like Hollywood filmmakers, they largely depend on focus groups and sales data to evaluate their work's impact, without worrying much about the mechanisms underlying those effects. Certainly, as Plantinga demonstrates, Hollywood filmmakers have devised and continue to marshal a wide range of techniques meant to draw on and intensify the face's affective

powers. Certainly, these affects were central motivators in Naughty Dog’s bid to re-vision the videogame as an “active cinematic experience.”

CONVENTIONS AND CUTSCENES IN THE *LAST OF US PART I*⁴

Just before their 2010 GDC presentation, Druckmann and Straley were named co-leads of the project that eventually became *The Last of Us Part I* (2013). In the process they helped to birth one of the most beloved characters in videogame history, Ellie Williams, who began *Part I* as an NPC but who was then elevated to principal PC for the first game’s expansion, *Left Behind* (2014), and its sequel, *The Last of Us Part II* (2020). Along the way, Ellie also became something of a feminist icon: she is a queer young woman who wears practical clothing, a PC very different from the stereotypical heroes that continue to dominate mainstream videogames. She is also a lethal and terrifying combatant, a daughter, lover, partner, artist, and musician. Naughty Dog conveys these many dimensions of Ellie’s persona through her expressive face, as revealed through a wide variety of cutscenes and in-game mechanics. This is particularly true for *Part II*, where Ellie’s face serves as a kind of emblem for the game as a whole, as is evident from promotional paratexts and the game’s loading screen (Figure 5). All of this represents a remarkable journey for a character that began her life as the object of an escort quest.



Figure 5: Promotional images, *The Last of Us Part II* (2020)

Although *Part I* routinely appears on lists of the best narrative games ever made, this is not the result of a unique plot. In fact, its story conforms to many conventions of a popular subgenre that might be labelled the “zombie shooter.” For example, *Part I* offers players a very familiar hero: its principal PC, Joel Miller, is a white American man with a talent for extreme violence. Players gradually increase Joel’s lethality, upgrading his weapons and skills while developing their own facility with the game’s mechanics. This combination locates *Part I* squarely within its genre, as these are the central pleasures afforded by many, many shooter games with role-playing elements. Also familiar is Joel’s mission: he is presented with an escort quest and a damsel-in-distress to protect, the 14-year-old Ellie Williams.

And in some ways, Ellie offers more of the same. At first glance she resembles the hundreds of videogame characters whose ubiquity made the damsel-in-distress the target of Feminist Frequency’s first three episodes in *Tropes Versus Women in Video Games*, the shortform

documentary series that debuted, like *Part I*, in 2013 (Sarkeesian 2013-17). Ellie's character art, for example, includes the large eyes, pixie-like features, and petite stature reminiscent of female stereotypes in both American and Japanese animation (Figure 6). As Naughty Dog character artist Ashely Swidowski told an interviewer, Ellie's eyes are carefully designed to convey a youthful innocence: "They're big and wide in the first game, very stylized, and this serves to remind the player that she is, despite all of her bravery and strength, a child" (Favis 2020). These qualities helped to make Ellie the foil for *Part I*'s hero; her optimism and naivete underscore Joel's numb, world-weary cynicism.



Figure 6: "Untitled," by the author, 2024. Screenshot from *The Last of Us Remastered* (2014)

Ellie is far more than just a foil, however, and in fact the entirety of *Part I*'s story builds toward a climactic confrontation, a wrenching, emotional encounter between Ellie and Joel, who by then has become a kind of surrogate father. The pair's developing relationship is what most distinguishes *Part I*'s narrative, and it is Ellie's expressive face that grounds this narrative's climax. In the game's final cutscene, Ellie confronts Joel, demanding the truth about a terrible secret. Joel doubles down on an earlier lie, believing still that this is the best way to protect her. Framed in the game's tightest closeup (Figure 6), Ellie then delivers the game's final word: "Okay." The scene cuts to black, the music swells, and the end credits roll.

As this suggests, Naughty Dog once again leaned heavily on cinematic language in its bid to strengthen these final moments' affective charge. This scene demonstrates most of the characteristics that mark the "scene of empathy" in classical Hollywood filmmaking (Plantinga 1999, p. 239-55). Building toward Ellie's closeup, for example, the animators ratchet up the scene's dramatic tension through progressively tighter framing. The scene opens with following two-shots that include both characters, but then both the camera and Ellie hesitate. As Joel walks out of frame, Ellie remains in medium shot, visibly struggling with her need to know the truth. During the confrontation that follows, the camera privileges Ellie as it cuts back and forth between over-the-shoulder medium shots, then to medium closeups, before finally lingering on her closeup. The meanings of Ellie's "okay" have been much debated, and Druckmann has acknowledged that her response is intended to remain ambiguous (Druckmann 2013). Certainly, however, the scene's power turns on the complex amalgam of emotions—including

love, loss, relief, suspicion, anger, and regret—that players are invited to read in Ellie’s eyes. Whatever she might be thinking and feeling in this moment, every element of the scene emphasizes her affective response, inviting the player “to be more emotionally invested” in this climatic moment. But this payoff only works, of course, if players already care about Ellie.

GAMEPLAY IN *THE LAST OF US PART I*

Empirical research suggests that players do care (Bopp et al. 2019; Emmerich et al. 2018; Erb et al. 2021), and recent work in persona studies reveals that players often maintain the sense that their PCs are distinct and separate “people,” even as the character also functions as the player’s avatar within the game world. Players of *Horizon Zero Dawn* (2017), for example, reported strong emotional attachments to the PC, and these feelings shaped their responses to NPCs, to the broader game world, and to their own actions within it (Burgess & Jones 2020). Ellie’s affective appeal finds further support in the vibrant communities on Tumblr, Instagram, and other Internet platforms that continue to celebrate her character through virtual photography, fan fiction, fan art, and cosplay. But as Burgess and Jones also suggest, the wellsprings of game characters’ personas extended far beyond cutscenes. Gameplay remains the centre of players’ experience of *The Last of Us*, and in this element also, Naughty Dog’s efforts to create more affecting game characters led the studio to cinema-style closeups.

Anthony Newman, the lead designer of *Part I*’s hand-to-hand (i.e. melee) combat system, noted in 2014 that at its core, “*The Last of Us* is a story of human struggle in a harsh, cruel world. The setting is just a backdrop to a story about humanity” (Newman 2014). This emphasis on humanity, Newman said, guided all aspects of the game’s development. For melee, this meant avoiding the cartoonish violence found in many other videogames: “We wanted our fights to come off as life-or-death struggles between real, human characters driven by self-preservation” (Newman 2014). As part of this effort, Newman and his team created opportunities for closeups:

One major way we expressed humanity was through facial animations. So we choreographed the combat systems so there were a lot of opportunities for the camera to get up close, to see the faces of these characters, as they kind of express their humanity. I personally think this does way more than any amount of blood or gore to make your combat seem impactful.... (Newman 2014).

The melee system, Newman argued, reinforced the goals of the game as a whole: to align the player’s affective responses with those expressed within the game world. “The humanity that’s expressed through the characters makes you empathize with them, and when you empathize you feel what is happening to them along with them, and that makes the action seem a lot more impactful and real” (Newman 2014).

For Ellie specifically, this meant that gameplay must encourage players to engage with her as they might with fictional characters in other media, rather than simply as the object of the player’s escort quest. Among other things, this required some innovative coding. Five months before ship date, Naughty Dog scrapped the artificial intelligence (AI) systems controlling Ellie’s gameplay behaviours, re-writing the code to keep her closer to the player, to add a range of new ambient animations and context-specific vocalizations, and to make her more useful in combat (Dyckhoff 2010). Druckmann later explained the rationale behind the character’s increased combat-readiness: “So much of this game is you going on this journey with Ellie. If Ellie is just hiding under a table the whole time, what’s the purpose of having this combat in the first place?” (Druckmann 2018). By the time the game shipped, Ellie could shoot and kill both zombie and human enemies, warn the player about incoming attacks, and

intervene in the player's own battles by occasionally stabbing enemies in the back. These changes align with major revisions to the game's narrative arc, giving Ellie guns and her first human kills much sooner than in earlier drafts (Druckmann 2018). The NPC that accompanies the player throughout much of the game, then, evolved from a simpler archetype into a more fully realized character, with a narrative trajectory that complicates the youthful naivete evoked by her bright-palette costuming and wide-eyed facial art.

These changes encourage players to respond to Ellie more as a partner and less as a task or a burden, and probably the most consequential of these design decisions can be found in the game's experiments with player control. Around the story's midpoint, Joel is suddenly incapacitated, and both player control and responsibility for his safety shifts to Ellie. The changed PC accomplishes many things, but three are most relevant here.

First, the shift encourages players to identify directly with the other half of the narrative's dyad through a technique that Druckmann labels "empathy through control":

This is totally unique to gaming, and we watch this over and over again as focus testers. They get to that part and they're like, "Oh my God, I'm Ellie." And you see they change how they play because now they're seeing themselves as this child, this teenager that doesn't have the stature of this large man. And they play differently, and they look at the world differently. And it's how you can use control of a character to create such strong empathy (Lessons 2019).

Second, Ellie's relative frailty subverts common conventions of the shooter-game genre, which tend to privilege feelings of dominance and mastery. When the PC changes, Joel's carefully curated arsenal is suddenly unavailable, and Ellie must rely more on stealth, as she takes damage at higher rates than Joel. Suddenly, the zombie shooter becomes more like survival horror, impacting the players' felt experience of the game world. Like purer examples of the genre, *Part I* now delivers some of survival horror's characteristic affects, which, as Tanya Krzywinska has observed, "play with and against gaming's normative expectations of mastery and its concomitant representational, symbolic, and emotional contours" (Krzywinska 2015, p. 293). Ellie ends her turn as PC in the closest thing to a boss fight that *Part I* offers, but she cannot directly attack her stronger, adult antagonist, who is both a cannibal and (subtextually) a rapist. Instead, Ellie must depend on stealth and sneak attacks; when these fail, she is impaled by a machete in one of the game's characteristically brutal finishing moves. Figure 7 documents this finisher, showcasing the work of Newman and his team to emphasise the facial expressions of both the PC and her antagonist. When she (and the player) finally triumphs, Ellie uses the same machete to hack her opponent to death in a frenzy of excessive, gory violence. Her battle doesn't end with the level, however. In the gameplay and cutscenes that follow, her face and general affect reflect a kind of numb shock as the game again works against conventions to emphasise the character's lingering trauma. As game critic Tom Bissell observes, "Games can do a lot more than make young men feel 'heroic' What's most interesting about *The Last of Us* is its almost fanatical determination to play with and subvert the average gamer's fantasy-fulfilment expectations" (Bissell 2013).



Figure 7: “Untitled,” by the author, 2024. Screenshot from *The Last of Us Remastered* (2014)

Third and finally, Ellie’s interval as PC accomplishes a more subtle function: it prepares the way for *Part I*’s final gameplay sequence when control again switches to Ellie. The earlier PC shift likely surprises many players. It turns on a sudden, devastating injury to Joel, subverting genre tropes regarding adult male heroes and the girls and women they are bound to protect. But because players already have experienced the world as Ellie, her return as PC during the game’s final sequence will feel familiar. This second PC shift occurs as Joel and Ellie walk toward the scene of their final confrontation. Like the camerawork in the cutscene that follows, in these final gameplay moments, Naughty Dog locates us firmly in Ellie’s shoes.

“EMOTIONAL SYSTEMIC FACIAL” IN THE *LAST OF US PART II*

As a final example, I return to the innovations Keith Paciello showcases in his 2022 demo reel. During work on *Part II*, Paciello proposed and led the development of a new in-game system, “emotional systemic facial,” that ultimately enabled the creation of the demo reel’s virtual portraiture. At the 2021 GDC, Paciello joined game designer Chris Wohlwend to discuss this system’s development and capabilities (Paciello & Wohlwend 2021). As Paciello related the story, during his earlier years at Naughty Dog, he was struck by the gap between the portrayal of characters in cutscenes and their portrayal during gameplay. During work on the studio’s 2017 release, *Uncharted: Lost Legacy*, Paciello had focused on cutscenes. As was typical, he and his team spent weeks animating particular scenes, shots, and even individual poses, crafting a rich and varied emotional expressiveness. During gameplay, however, these same characters often made do with one of three generic expressions: neutral, uneasy, or tense. The contrast, Paciello said, was jarring: “Naughty Dog’s games are full of emotional story beats, not only in the [cutscenes], but all throughout gameplay as well. I always wondered, ‘Could we do more if somebody put their full focus on it?’” (Paciello & Wohlwend 2021). Doing so would require systems that could automatically adjust the characters’ facial expressions in real-time, keyed to scripted events (e.g. lines of in-game dialogue), but also the choices and actions of the player and the reactive behaviours of NPCs. Paciello pitched the idea for *Part II*, and the studio’s leadership approved it. His eventual game credit, “Emotional Systemic Facial Animator,” attests to his success.

To begin this work, Paciello first sought to define a discrete set of emotions and their physical manifestations. Research led him to seven “universally recognized facial expressions,” a taxonomy that resembles the one popularised in the 1970s by Paul Ekman (Ekman 1970). Paciello began with seven emotions—joy, sadness, anger, fear, surprise, disgust, and confusion—and a single, familiar character: Ellie Williams, now five years older and the game’s principal PC (Figure 8). Paciello and his colleagues expanded from there, and the game’s systems eventually encompassed twenty distinct emotional expressions, including ecstasy, bemusement, and three levels of intensity for both anger and pain. Moreover, these individual emotions could blend together and vary in intensity, giving each character an enormous variety and subtlety of expression. The PCs were endowed with the greatest range, but the system eventually supported 25 different game characters, each of which could express 15 or more distinct emotions as well as blends and variants. This enabled the studio’s writers and artists to align the expressiveness of both PCs and NPCs with individual lines of dialogue, other narrative beats, and players’ unscripted actions within the game world.



Figure 8: “Untitled,” by the author, 2024. Screenshot from *Photomode Highlighting the Emotional Facial System on The Last of Us Part II* by Keith Paciello, 2022.

As a result, the faces of PCs, allies, and enemies take on a double function. The characters’ expressive faces invite and reinforce players’ emotional engagement as they do in the game’s cutscenes. But in a second, complementary function, they also become part of the game’s interface. Expressions now serve as feedback mechanisms, changing dynamically in response to the player’s choices and actions. If the player hides from an enemy soldier, for example, the NPC may pass by oblivious, her face blank and unaffected. However, if she makes noise at the wrong time the soldier becomes alert, her face registering surprise and tension. The player might then choose to react in multiple ways—including fleeing from, flanking, sniping, or charging their enemy—and the NPC’s face will respond accordingly. If the player confronts the soldier and defeats her, they likely will see the soldier’s shifting amalgam of anger, fear, panic, and agony. Suppose the player bungles the attack, on the other hand. In that case, they may experience one

of Naughty Dog's characteristically brutal finishing moves, and their antagonist's face will register something more like contempt and grim satisfaction.

In an even more fundamental evolution of the gameplay interface, "emotional systemic facial" also enriches *Part II's* quieter moments. In levels devoted to traversal and exploration, for example, the PC often expresses frustration, curiosity, surprise, or delight, and she frequently is paired with ally NPCs endowed with the same rich expressivity. Facial emotions also interact with other in-game systems, including, for example, "look at" targets within environments that trigger a character's directed gaze, as well as animated saccades, the tiny eye moments that suggest thought processes (McAllister 2020). These systems combine to offer another kind of emotional feedback, rewarding and reinforcing the player's exploration by aligning their felt experiences with those expressed by the characters. The goal, again, can be called empathy: an affective loop that encourages players to engage with in-game characters less like tools or targets and more like fully formed human beings.

In sum, "emotional systemic facial" and its related systems move gameplay closer to the diegetic world of cutscenes, the one populated by characters "who act independently and intentionally, who have goals and hopes, who have a history, and who express their inner lives" (Klevjer 2016, p. 307). In developing *Part II*, Naughty Dog devised powerful new ways to encourage empathy within gameplay, creating new opportunities for players to invest their in-game actions with emotional weight. Not coincidentally, *Part II's* narrative itself turns on empathy. Across the thirty or more hours of the game, players follow Ellie as she pursues a bloody vendetta targeting the game's primary antagonist, Abby Anderson, along with Abby's friends and comrades. As I have argued elsewhere, Ellie's increasing brutality—and the game's demand for players to participate—undergirds *Part II's* central themes (Spence 2024). But the game's climax subverts videogame conventions: with Abby finally in her power and at the last moment, Ellie chooses to release her. This narrative arc only works, Druckmann told an interviewer, if the player's emotional journal parallels Ellie's: first despising Abby and then, gradually, coming to empathise with her (Wilson 2020). Both characters' faces radiate exhaustion and pain during their climactic battle as both are pushed to the edges of their endurance. In a post-release interview, Paciello said this was his favourite scene in the game (McAllister 2020). The twinned characters' anguish is deeply affecting, resulting in a "final boss" battle unlike any other. Rather than achieving her revenge, Ellie wins by salvaging the last shreds of her humanity. For players, this catharsis works only if we have come to believe in Ellie's humanity, to fear its loss during the dark and bloody journey we have joined with her, and finally to experience a fragile sense of forgiveness with her.

END NOTES

¹ Of course, the meanings and effects of the cinematic closeup are themselves much debated. The evolution of film theory itself can be traced through its changing fascinations with closeups of the human face, as recent monographs by Steimatsky (2017) and Doane (2022) argue. Elsaesser and Hagener (2015) offer a useful overview of this scholarly tradition (63-93).

² As detailed in *Persona Studies: An Introduction*, the use of "avatar" to describe player/character relationships reveals their kinship with the favoured objects of persona studies (Marshall, Moore, & Barbour 2019, pp. 155-63). The same is true for "player-character": the phrase's hyphenated form suggests both a merger and a distinction between the terms on either side. For more on the shared concerns linking game studies and persona studies, see the journal's special issue, "Games and Persona," vol. 6, no. 2 (2020).

³ Although a fuller treatment is beyond the scope of this paper, *The Last of Us Part II* has a mixed record regarding allyship, LGBTQ+ players, and their larger communities. The game has many progressive traits: its principal PCs are both non-binary, Ellie is forthright about her lesbian sexuality, and yet her story is not delimited by anti-queer oppression. Abby is given a romantic relationship that marks her as cis gender female, but her muscular physique also seems perfectly designed to rattle the cages of the many, voluble bigots among contemporary Anglophone gamers (Tomkinson 2022). Part II's cast also includes Lev, one of the few overtly trans characters in Triple-A gaming. Lev is both admirable and heroic, and all three characters survive through the end credits. On the other hand, Lev's story largely is defined by the trauma he endures as the result of transphobic bigotry. His role is to suffer, to be available for rescue by Abby, and to provide the moral example that helps to redeem her. Kosciuszka (2022) and Dennin & Burton (2023) offer detailed accounts of Part II's sometimes flawed efforts toward greater equity and inclusion.

⁴ Naughty Dog released an updated version of *The Last of Us* in 2022, and strictly speaking, only this most recent version includes the "Part I" descriptor. To clarify the distinction between the first game and its sequel, however, I refer to them throughout as Part I and Part II.

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