

Performativity in Art, Literature, and Videogames

Darshana Jayemanne

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Darshana Jayemanne School of Arts, Media and Computer Games Abertay University Dundee, United Kingdom

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Introduction: Videogames as Performances

Daughter: Daddy, why do things get in a muddle? Father: What do you mean? Things? Muddle? (Bateson 2000, 3)

Game designer Liz England describes what she does in terms of 'The Door Problem'. While a door may seem like a straightforward enough sort of thing, it in fact presents many distinctive design issues. The first is to work out whether or not there are doors at all in the game. If yes, a whole host of questions arise. 'Can the player open them? Can the player open every door in your game? Or are some of the doors for decoration? How does the player know the difference?' (England 2014, online). The design becomes more complex in multiplayer situations. 'What if the level is REALLY BIG and can't all exist at the same time? If one player stays behind, the floor might suddenly disappear from under them. What do you do? Do you stop one player from progressing any further until both are together in the same room?...What about co-op players? What if player 1 is standing in the doorway – does that block player 2?'

England also speculated on how other workers in a studio might describe the door problem, and people wrote in with their own suggestions. The Animator: 'I made this door open and close.' For the Gameplay Programmer: 'This door asset now opens and closes based on proximity to the player. It can also be locked and unlocked through script.' The Level Designer: 'I put the door in my level and locked it. After an event, I unlocked it.' The Combat Designer: 'Enemies will spawn behind doors, and lay cover fire as their allies enter the room. Unless the player is looking

© The Author(s) 2017 D. Jayemanne, *Performativity in Art, Literature, and Videogames*, DOI 10.1007/978-3-319-54451-9_1 inside the door in which case they will spawn behind a different door.' The QA tester: 'I walked to the door. I ran to the door. I jumped at the door. I stood in the doorway until it closed. I saved and reloaded and walked to the door. I died and reloaded and then walked to the door. I threw grenades at the door' (England 2014, online).

In some ways, England's post can be read as a game design analogue of Bruno Latour's 'Mixing Humans with Non-Humans: Sociology of a Door-Closer' (1988), Bernhard Siegert's 'Doors: On the Materiality of the Symbolic' (2012) or Don Norman's 'Norman doors' (2013). In each analysis, the seemingly simple fact of a doorframe leads to complex considerations about mediation. Questions arise concerning inclusion and exclusion, rites of passage, the constitution of space, participation and resistance. England's post shows the videogame door as far more than an object that is simply open or closed. It may well operate in different ways for different actors (both human and computer-controlled, those with and without keys, certain people at certain times). Like Latour's door-closer, this supposedly inanimate object may perform actions itself, such as sensing proximity, temperature or time.

The videogame door can be seen as a frame for sets of specific design decisions about the performances that it makes possible. Performance and framing are the central themes of *Performativity in Art, Literature and Videogames*. Arguing that the full set of performances, taken across all videogames is too varied for a typological approach to be viable, the book constructs a *comparative* approach to the analysis of videogame performances. Instead of a representative list of performances, then, the book develops the concept of the 'performative multiplicity' along with a corresponding methodology that is capable of accounting for the many ways that particular performances arise from that multiplicity. Like the seemingly simple door that opens onto complex problems of design, here the question of framing devices offers new ways of conceptualizing performance in games. This leads to new insights into embodied experience, temporality and narrative.

Performance: Between Player-Centrism and Formalism

A videogame can be seen as an archive that is accessed, modified and manipulated in a very particular way: playful performance. The sequence of events as the text unfolds in any one play session is determined on the one hand by player skill and player choices; on the other by the actions of computer-controlled and designed rules, devices and entities. Performance in a videogame is hence constitutively hybrid. For Keogh (forthcoming), many accounts of active engagement in videogames tend to align with one of two broad camps: 'player-centric' arguments which focus on individual players and how they make their way through game texts, and 'formalist' arguments which focus on ludic structures and game rules. While both of these approaches have resulted in important scholarship, each gives rise to significant problems if adhered to dogmatically.

Player-centric accounts can overstate the role of player choice in determining how the game text works (Galloway 2006) probably goes furthest in this direction, assigning all meaning production in the text to 'the figure of the player'). However, player freedom is limited by the rules of the game. Their ability with a particular game may also prevent them from successfully achieving certain outcomes. On the other hand, formalist approaches which emphasize structures such as rules can downplay important elements of player experience, embodiment and desire (Murray 2005; Keogh forthcoming). Videogames create semiotic, affective, tactile and cultural effects which are just as important objects for scholarly analysis as game technology.

The concept of the performative enables *Time Invaders* to thread a path between these two positions. The discussion begins with J.L. Austin's concept of 'felicity'. For Austin, performative utterances are those which permit judgment as to their success or failure: the felicity of a given act. The various elements that England describes with regard to videogame doors can be analyzed through the lens of performative felicity. The concept of the performative does not distinguish between human and machine actors, and thus seems a particularly promising avenue of inquiry in the case of videogames.

There is, however, a significant issue with adapting Austin's concept of performance to gaming: that is, he assumes that each performance is clear and distinct, a *unit*. Austin tends to speak of an 'utterance' in his lectures, and scholars drawing on his work have developed this through the theory of specific 'speech acts'. How, though, might we precisely define a unit of performance in a videogame? This may initially seem quite straightforward – for example, in many games pressing a certain button causes the player character to jump. Could this be considered a single performative unit?

However, performing a jump in one videogame – say, a jump in a classic such as *Donkey Kong* (Nintendo 1981) – is very different from performing a jump in another, such as the more recent FPS (First Person Shooter)

Destiny (Bungie 2014). The *Donkey Kong* jump is an exquisitely tailored performance – to the degree that protagonist Mario was originally called 'Jumpman'. Its properties of height, length and timing are tightly enmeshed in its two-dimensional world, opening up myriad possibilities for navigating precarious girders and careening barrels. The *Destiny* jump is likewise fit to purpose in traversing the game's ravaged sci-fi dystopias, but its third dimension and careening barrels. but its third dimension and complex physics modeling mean that from technical, experiential and gameplay standpoints it is very different from technical, experiential and gameplay standpoints it is very different from the Mario jump. While both performances involve a character leaping into the air, they are different as they are similar. In each game, the jumping performance is integrally related to the context provided by specific level and character designs, all of which give meaning and structure to the performance. Multiply this across the entire set of videogame jumps and the performances to be analyzed becomes very large. As Newman (2012) points out, performances can differ even with respect to what is typically considered a single game if that game is run on different hardware or software setups. Performances of *Donkey Kong* vary significantly (in terms of colors, sound and control scheme) when played on its upright arcade cabinet version as opposed to, for example, its port onto home consoles such as the ColecoVision or handheld devices such as the Nintendo Game'n'Watch

such as the Nintendo Game'n'Watch.

The widespread practice of porting, converting, translating, and re-releasing give rise to a proliferation of titles, each making different claims to originality, authenticity and definitiveness, and each contributing to the story of Donkey Kong as a ludic, technological and cultural artefact. Quite simply, the more you look, the more you find. Which of these games is *Donkey Kong*? Are they all *Donkey Kong*? Is it possible, or desirable, to identify a single entity or incarnation that we can confidently demarcate as *Donkey Kong...* while a game might be resurrected *prima facie*, and we may see *Donkey Kong*'s platforms, barrels and hear its characteristically lo-fi distorted waveforms, we immediately encounter questions about the integrity of the experience of game play - the 'Donkey Kongness' of Donkey Kong. (Newman 2012, 6)

Many games are cross-platform, appearing on several different hardware setups. This is liable to create very different performances of the one 'text'. The somewhat awkward term 'gameplay' itself could refer to any number of specific activities. For example, the classic FPS *Half-Life 2* (Valve

Software 2005) can be played on a PC with a mouse, keyboard, office chair and monitor setup; or on a console controller, couch and television on PS3 or Xbox 360 (not to mention the considerable variations between those two console platforms). 'Mods' (versions of game software made by third parties) and the wide variety of hardware types (particularly among PCs) can all have significant effects on the specific qualities of a performance.

The Problems of Videogame Heterogeneity

Videogames thus display an extreme heterogeneity, which Linderoth (2015) calls their 'composite form'. As Calleja argues, 'Digital games constitute a broad family of media objects, some of which diverge so much in their constituent characteristics that they cannot all be taken as one homogenous mass...without making generalizations that impede analytical rigor' (2010, 3), while for Apperley videogames 'cannot be regarded as a consistent medium' (2006) because they differ in so many respects from one another. This characteristic heterogeneity (insofar as such a phrase makes sense) itself has many different aspects: England's discussion of the multiple disciplines that go into constructing a single virtual door shows this elegantly. Videogames' composite form is a significant problem for scholarship and recommends comparative and nuanced approaches:

any essentialist position (i.e. this is a game since it contains x, y and z, this is not a game since it only contains z, this is a border case since it contains y and z but lacks x) is often counterproductive compared to raising questions about how different components shape the production and consumption of video games. (Linderoth 2015)

This all makes coming up with a rigorous unit of performance very difficult because, as Newman puts it, 'the more the look, the more you find'. Performance in games is not a concatenation of basic units, but a complex multidimensional weave.

This is equally true of gaming performances. At what point of observing someone play do we analytically declare 'a performance' to have occurred, and how might it be possible to generalize this across all possible games and research priorities? A single button press, a playthrough of a level or a scenario, a particular play session, an entire playthrough of a game, a replay – all of these could reasonably be termed a single performative unit – a 'verb' as game designer Anna Anthropy (2013) puts it. But each is an analytic object of very different magnitude. How then might it be possible to analyze performances when it is so hard to come up with a definition of what constitutes a performance in the first place?

While thinking in terms of units of play can be an excellent tool for game designers and creators (using concepts such as verbs, core gameplay loops, minimum viable products etc.), from a theoretical point of view significant problems arise. The longer the performance, the more complex the verb becomes. In a game such as *Monster Hunter 4* (Capcom 2015), the set of performances available in tactical action gameplay sections is determined by extensive strategic preparation and management sequences in a home town. The seemingly straightforward action performances (dodging, attacking an enemy, taking cover, etc.) are therefore conditioned by other performances that may have taken place much earlier or in a completely different play session. The strategic decisions utilize players' more cognitive capabilities, whereas the action gameplay places greater emphasis on quick reflexes and hand-eye coordination. The terminologies that players develop in talking about their performances also speak to 'verbs' that are too intensely muddled to be broken

The terminologies that players develop in talking about their performances also speak to 'verbs' that are too intensely muddled to be broken down into constituent units by some enterprising theorist. Phrases such as 'Standard Macro Bio TvP Opener' and 'Chun Li can combo from her Heavy Lightning Legs to U1' are altogether arcane for those not adept in *Starcraft 2* (Blizzard Entertainment 2010) and *Street Fighter IV Ultra* (Capcom 2014), respectively. Such gnomic utterances, saturated with meaning, are characteristic of the discourse on gaming forums and in the commentary that often accompanies professional e-sports play. Similarly, some of the more elaborate videogame genre categories exhibit an attempt to capture fine distinctions, reminiscent of the hair-splitting modishness of electronic music or artisanal foodstuffs: the 'cover-based shooter' [such as *Gears of War* (Epic Games 2006)], the 'free-roaming beat'em'up' [such as *Double Dragon* (Techn⊠s Japan 1987)] and so on. Bespoke terminology, which often evolves on message boards and community websites quite independently from any input from developers, helps to ramify, convey and foster performative virtuosity amongst the player population of a given game. The efforts to which players have to go in order to define elite performances points towards the difficulty of developing a satisfactory theory of videogame performance as an overarching concept.

Increasing access to the internet has added another composite form to gaming performance in the form of the 'networked public' (boyd 2010). Games are a highly 'spreadable media' (Jenkins et al. 2013): e-sports have a long history of packing out arena-size venues (Taylor 2009), and streaming technology has made this audience even larger. Video sharing and streaming sites such as YouTube and Twitch.tv allow players to tailor their performances to a wide audience, and gamers constitute some of the most wildly popular users on YouTube. Streamers will often interact with their viewers as they play, canvassing the opinion of a chat room for important decisions, naming characters after their subscribers, pausing to share emotive scenes or moments, playing to self-referential in-jokes and so on. Such performances are therefore in some sense not simply attributable to one single performer: they are distributed across the networked public of the streamer's audience. The streamer is 'playing along' (Miller 2012) with their audience – performing both with those watching and commenting in real-time, and in anticipation of those who will watch and comment on an edited and uploaded video.

This social element is also increasingly constitutive at the level of production. When game developers pitch their projects through a crowdfunding platform (meaning their backers will have input across the development cycle), or when they adjust their games through patches and other downloads based on feedback from their forums, community engagement directly affects the ludic structures of the game in question. It is also apparent when players develop their own modifications of existing games (Terranova 2000, Hong 2013): the 'rules of the game' are not static, but influenced by community opinion, direct player modification (Egliston 2016) and increasingly, the potential for streaming before a networked public. Players actively articulate the performances they expect a game to support and thereby influence the course of design: a game's 'set of rules are bound to crack under the pressure of the player community' (Nitsche 2008).

Gaming performances are also heterogeneous in terms of the equipment and materials of which they make use. While currently the two most common gaming setups involve consoles and personal computers, game platforms can be stand-alone handheld devices such as a mobile phone (Hjorth 2011; McCrea 2011b), be housed in cabinets as in the arcades or require an extensive investment in elaborate computing equipment. It is therefore unwise to make blanket assumptions about what is being played *with* in a 'postdigital' situation where new devices, sensors, software and capabilities are formative of a complex present that likely foreshadows a still more complex future (Berry & Dieter 2015; Jayemanne et al., 2016). Game performances are likely to develop more intricate relations with domestic (Aarsand 2011; Nansen & Jayemanne 2016) and public space (De Souza E Silva and Sutko 2008; Leorke and Apperley 2013; McCrea 2011b).

Recently, 3D printing, locative games based on mobile technologies, the increasing connectivity of the 'internet of things' and crowdfunding platforms are facilitating new forms of play. Many different devices have been released for videogames, including TV screen overlays, steering wheels, cameras, light guns, musical instruments, dancing pads, luminosity sensors that change gameplay based on ambient sunlight (*Boktai: The Sun Is in Your Hand*, Konami 2003) – even, in the case of the artwork 'Painstation' (///////fur///art entertainment interfaces 2001), heating elements, electric shocks and a wire whip to hurt players who fail to play to a sufficient standard. Technologies such as the smartphone have immensely increased the scope and distribution of sensors that can feed into computer games across many mobile points of interface. Exhibits such as the ALT.CTRL.GDC special exhibit at the annual Game Developer's Conference and Now Play This at the London Games Festival showcase ongoing experimentation in gaming equipment.

The terms that developers, programmers, artists and other game makers utilize to describe their craft vividly invoke gaming's composite form. 'Assets' and 'features' are extremely broad terms that could designate a variety of discrete elements, such as a character model, a texture for a wall, a level design, an item drop rate, a musical loop, a line of dialogue in either written or voice-acted form, an artificial intelligence program or an algorithm for dynamic lighting. Sound designers and musicians, who can never be sure of just how long any given player will spend in a certain environment or how often their actions will cue the playback of a particular sound effect, speak of 'splits', 'chunks', 'samples' and 'loops' (Collins 2008) – motleys of audio elements that can be iterated and recombined as necessary. Unlike many films, there is no 'production space' sound which ties all the sonic elements together as an indexical background.

While games are often sold around a 'core mechanic' or 'core gameplay loop' – say, driving or shooting – this idea can be less concrete and determining of the types of performances in a game than it seems. It may be possible to define a core mechanic in the elegant simplicity of 'side-scrolling endless runner' *Canabalt* (Saltsman 2009), but in *Grand Theft Auto V* (Rockstar 2013) both driving and shooting are of equal importance depending on context: rather than a single determining mechanic, the game is a hybrid mélange of performances. The heterogeneity of elements is also a significant problem for quality control: many games are released only for errors, glitches and other performance issues to become apparent (perhaps requiring fixes to be released over the internet). In such cases, the game's composite form exceeded the range of the industry's standard QA processes: certain possibilities inherent in the game only became apparent through the performances of a mass public.

The Long History of Performative Media

The sheer variety of the processes that go into making up videogames contribute to the trickiness of analyzing in-game performances. Videogames present a daunting range of heterogeneous problems for close academic analysis, causing scholars to describe videogame play as 'assemblage' (Taylor 2009), 'event and collusion' (Giddings 2009), 'imbroglio' or 'mess' (Bogost 2009), 'mangle' (Steinkuehler 2006) and 'rhythm' (Apperley 2010).

In fact, as I argue in Chapter 3, these sorts of evaluations have precedent in the history of art: they have been applied since antiquity to works which seek to incorporate the viewer and guide their gaze through conspicuous techniques of framing – that is, navigable and performative texts. Such works accomplish their engagement with audiences through three main techniques: self-referentiality, bewitching illusionist realism and innovative framing. Ndalianis (2004) traces this history back to the baroque period, with its proliferation of images into complex architectural space. In such a space, there is no single frame that separates representational from nonrepresentational space. It is more appropriate to speak of multiple *framing devices*. Videogames, for Ndalianis, take their place in this history as 'neo-baroque' works.

It is here that Austin's account of performativity can be brought into proximity with work other humanist fields. Austin explicitly excludes speech acts that occur in a framed space from his discussion. According to his key criterion of performative felicity, these are inherently infelicitous because they are not done in earnest but in the pursuit of artistic effect. Such utterances are, for Austin, 'parasitic' on normal and everyday speech acts – but technology has become too pressing a question let this neat separation stand. This book links the question of the neo-baroque frame to Austin's idea of a parasitic performance in order to articulate criticism in literature, art history and visual culture with the question of performativity. If game performances are conceived as the 'putting-together' of various elements, the notion of the framing device enables this conceptualization to be agnostic about the precise nature of those elements prior to each concrete analysis.

Textual Structures and Videogame Theory

This perspective is at odds with approaches that insist on the novelty of the videogame form. According to Espen Aarseth in his important *Cybertext: Perspectives on Ergodic Literature*, for example, games are 'ergodic texts'. Such a text is 'one that in a material sense includes the rules for its own use, a work that has certain requirements built in that automatically distinguishes between successful and unsuccessful users' (Aarseth 1997, 179). As a result, he contended that games are 'radically different to stories as a cognitive and communicative structure' (Aarseth 2001, online). This position has been referred to as 'ludology' (Frasca 2001) in academia, but it is quite common to see assertions of the novelty of videogames in gaming press and developer discourse.

However, scholars have long been perfectly competent to examine nonlinear cultural phenomena such as architecture, the built environment, painting, sculpture, new media art, video installation and literature such as Oulipo poetry and Nabokov's *Pale Fire* (1962) – Frederic Jameson, for example, did not need to wait for ludology to be invented in order to conduct his celebrated analysis of being lost in the Bonaventure Hotel with an ageing Henri Lefebvre (Jameson 1992). The hard-line ludological position also begs political and aesthetic questions – under what conditions do texts acquire the static form and mode of reception Aarseth attributes to them (Barthes 1967; Foucault 1980)? Devotional modes of reading religious texts, for example, are governed by liturgical calendars, not linearity. Indeed, academic writing and research itself is highly intertextual and nonlinear, constantly sending readers through the archive across luminous, ever-proliferating connections (as well as, to be sure, many frustrating impasses).

Cinema too can be less straightforwardly linear than is often supposed. For example, the phrase 'this is where I came in' derived from the tendency of mid-twentieth-century American cinemas to screen films backto-back, so that audience members could enter and leave as they pleased. Generally, this meant that film-goers would make do with whatever situation the film happened to present them with and stay until they recognized the scenes. A sea change in this attitude occurred when Hitchcock insisted that theatres sell tickets only for full sessions of *Psycho*, to ensure a linear viewing. A 'this is where I came in' structure was changed to one that might be described as an 'arrive on time and don't tell the ending' one (Hawkins 2002, 375). Similar points could be raised with regard to photography, video, television, radio and other media – often, linearity is less a matter of an inherent quality of a media form and more one of specific (albeit perhaps dominant) uses.

Significant theorists of fragmentation and media such as Benjamin or McLuhan have much to offer the study of a fragmented, composite form such as gaming. In addressing these wider ideas and issues, this study joins work by scholars such as Ndalianis (2004), Galloway (2006), Wark (2007), Giddings (2009) and Kirkpatrick (2010), who among many others, have contributed important humanistic analyses. In modifying a concept drawn from Austin's ordinary-language philosophy with media, art and literary theory, *Time Invaders* takes an explicitly interdisciplinary approach and seeks to develop a method that will be of value to scholars from multiple traditions.¹

Cybertext is well worth exploring in this context because it too faces the problem of defining a unit of analysis for ergodic texts: the goal here is not to rehash arguments about videogame ontology so much as to clarify the question of performativity in games. In Aarseth's proposed textonomy, 'It is useful to distinguish between strings as they appear to readers and strings as they exist in the text, since these may not always be the same. For want of better terms, I call the former *scriptons* and the latter *textons*' (1997, 62). In this way, Aarseth conceptualizes performance through the term 'traversal function': 'the mechanism by which scriptons are revealed or generated from textons and presented to the user of that text'. A relatively modest field of textons can give rise to a large number of possible scripton combinations (an example is Queneau's *One Hundred Thousand Billion Poems*). The interpretative traversal function is operative in both ergodic and non-ergodic texts, but Aarseth suggests three others:

... the exploratory function, in which the user must decide which path to take, and the configurative function, in which scriptons are in part chosen or created by the user. If textons or traversal functions can be (permanently) added to the text, the user function is textonic. If all the decisions a reader

makes about a text concern its meaning, then there is only one user function involved, here called interpretation. (Aarseth 1997, 64)

The references to 'strings', 'the user' and 'a reader' whose task is to 'decide which path to take' suggest a single user making a set of discrete decisions across a particular play session about how to assemble predefined units into strings. Elsewhere, Aarseth talks of 'bivium' (1997, 7–8) or binary paths. Outcomes of a game may differ from performance to performance, but they are homogeneous insofar as they are all paths (in the storied prose of *Colossal Cave Adventure* [Crowther and Woods 1976–1977), 'You are in a maze of twisty little passages, all alike')].

Cybertext thus presupposes a textual homogeneity which, while useful for hypertext fiction, arguably forecloses on the heterogeneities of videogame performance. The traversal function (particularly in its continuous version) sits uneasily with these elements of the theory: in a situation of continuous assembly, how could it be possible to legislate on what constitutes a discrete unit? Is it then particularly accurate to describe the action of players as a series of decisions resulting in a particular string or path, given the intensity of action and reaction (Dovey and Kennedy 2006; Kirkpatrick 2010)? 'Overall, Aarseth never directly addresses the body or the material or physical aspects of interacting with cybertexts' (Harvey 2009, 3). This leads to an elision of the embodied and temporal aspects of gaming experience – just as nobody expects a ball to tell stories (Eskelinen 2001), nobody sits down with a book of road rules and mistakes it for driving a car. Embodiment is critical to thinking about video-game performance.

Complex Temporalities: Chance, Contingency and Potentiality

Furthermore, the contention that only one performance occurs at a time, thereby forming a 'string', is difficult to uphold in the videogame context because it fails to acknowledge the performances of other players or the game apparatus. As N. Katherine Hayles points out, 'Aarseth's functional approach tends to flatten multiple causalities into linear causal sequences determined by a work's functionality' as Aarseth 'neglects interactions of different modalities within electronic texts' (Hayles 2005, 37). There are thus untenable implications of – ironically enough – linear temporality, insofar as insufficient consideration is given to how future or past states of the system impend on the 'decision' at hand. This recalls the problem of

performative 'scale' mentioned above. Even in a board game with discrete, turn-based temporality such as chess, effective play rarely entails thinking only in terms of one move at a time. Complex interrelations obtain between moves (Sicilian Gambits, Catalan Openings, Tarrasch Defenses and so on). Hayles' critique also urges an attentiveness to 'different modalities' in navigable texts – again underscoring the importance of heterogeneity and composite form.

Furthermore, many videogames have multiple types of traversal functions – both discrete and continuous – and are liable to switch between types liberally. Take this screenshot (Fig. 1.1) from *Dragon Age: Inquisition* (Bioware 2015).

This muddle is about as far from a typical promotional videogame screenshot as can be – but it is just as legitimate a moment of gameplay as any other. It is difficult to see how textons and scriptons could be sorted out from such a muddle. The frenetic screenshot can be contrasted with the game's relatively well-ordered conversation sequences, where discrete menu options determine what the player character will say, and dialogue is conducted in a very cinematic shot-countershot style. The game's combat utilizes both continuous and discrete processes, whereas the conversations are more discrete.



Fig. 1.1 Dragon Age: Inquisition

Theory needs to account for both continuous and discrete performance. The clash between Aarseth's continuous traversal function and the discrete units (textons and scriptons) thus has significant conceptual limitations. These problems resemble those involved in adapting Austin's performatives to the study of games: in defining any 'ludologeme', the theory also prescribes certain relations between those elements. In practice, however, game design is forever coming up with new elements and relations.

Crucially for a study concerned with performativity, even in the unlikely scenario that sufficient ludological categories were formulated to encompass all possible types of videogame rules, there is no reason to assume that any such cognitive resources are available in the muddle of play. It cannot be assumed that textons and scriptons share a similar structure and are processed - stored in the archive and retrieved or modified in the performance of play – in a similar way by all users and by all apparatuses. In a board game, it may certainly be possible for human players both to understand the rules of the game and at a glance survey the entire field of play and its elements. However, in a videogame, the 'textons' as stored in the game files are typically computer code, the semiotic processes of which have at best an oblique correspondence with the scriptons as assembled by human or A.I. players. As Klevjer (2006) argues, 'the rule-oriented approach' struggles when it comes to 'the phenomenological status of "rules" from the point of view of the player'. A corollary of this is that it also underestimates the complexity of the passages between potential and act, and the intricate spatiotemporal schemas that can result.

Here again the problem of the unit of analysis arises: Aarseth's terminology approaches chance and contingency (Malaby 2007; Costikyan 2013) as variation in elements that are clear and distinct. Errors in parsing those elements or indeed, the continuous traversal function, are not accounted for. This has had the effect of reducing concepts such as chance, entropy, noise, repetition and redundancy to a set of differing outcomes: the performance of gaming is either an actualization of abstract rules or a voluntarist creation of meaning by the player in each actual play decision. Aarseth puts the position elegantly: 'When we look at the whole of such a nonlinear text, we cannot read it; and when we read it, we cannot see the whole text. Something has come between us and the text, and that is ourselves, trying to read' (Aarseth 1994, 769). There are many games for which this 'garden of forking paths'-style model is appropriate (those that resemble hypertexts), but it is doubtful that such an approach can account for the composite, heterogeneous and continuous aspects of the videogame muddle in general.

In Aarseth's formulation, what really differentiates the various paths is whether or not they are actualized in a particular performance: the path chosen by 'ourselves, trying to read'. Replays, errors in communication, misinterpretations, failed attempts, replays, cheats (Consalvo 2007), glitches (Krapp 2011) – it is unlikely that Aarseth would deny that these are part of videogame play, but they are subordinated in the conceptual workings of his discussion in *Cybertext*. Increasing connectivity in game hardware and platforms has enabled big data analysis through which we know that noncompletion is the norm (Van den Berghe 2013). Furthermore, research has reported a complex relation between positive and negative experiences such as character death, frustration and error in videogames (Costikyan 2013; Allison et al. 2015; Flynn-Jones 2015). This is a situation which *Videogames as Performance* registers at a theoretical level in its discussion of performativity.

FROM MESS TO MASS: WALTER BENJAMIN, BAUDELAIRE AND THE CITY

To call play a 'muddle' indicates a state in which we do not yet know what constitutes a performance. This state has an indeterminate and diffuse temporal quality – it could last indefinitely, is in some sense *indifferent* to the concept of felicity that initiates and orients Austin's inquiry into the performative. It is thus a state that is conceptually prior to that in which performance has been divided into units and not just the absence of or failure to achieve felicity. *This book's* most characteristic gesture is to investigate this state through exploring the concepts of parasitism and framing in various texts. The resulting 'aesthetics of infelicity' disturbs the concept of performance.

A discussion of what I call the aesthetics of infelicity can be found in *Cybertext*. The key passage outlines the interlinked notions of 'aporia' (when players are stuck not knowing how to proceed) and 'epiphany' (the sudden realization of the performance that continues the game successfully). This discussion is more a phenomenology of ludic experience rather a formalist method. The concept of the aporia will be discussed more thoroughly in Chapter 6, but at this stage it can be noted that the

aporia is a kind of *pervasive* infelicity that is subject to a sudden epiphany. It does not privilege either actual player choice or abstract rules, but instead indicates an experience in which both are stalled or inoperative. The aporia is thus not a matter of choices to be made so much as uncertainty as to what constitutes a possible 'choice' in the first place. It is neither felicity nor infelicity; judgment has not yet been passed. This is a very different model from one in which signs are assembled from predetermined units in a linear fashion: instead, the discrete felicitous performance arises out of a continuous *field* of possibility. Furthermore, the aporia and the epiphany are *different in kind*, and are not iterations of some base unit of performance.

The dynamic of aporia and epiphany is already linked to the framing device in a story from antiquity. The ancient painter Parrhasius displayed a picture of grapes so realistic that birds flew down and tried to eat them. His rival Zeuxis then brought forth a shrouded painting. When Parrhasius attempted to draw back the curtain to reveal the painting, he found to his dismay that Zeuxis had in fact painted a curtain. Parrhasius exclaimed, 'Parrhasius has fooled the birds; Zeuxis has fooled Parrhasius.' This story's admixture of playful performance, admiration and confusion points to the paradoxical nature of the framing device. Parrhasius thought he was standing before a frame when in fact he was already taken in. Commentators have often described baroque artworks as potentially overwhelming – an experience of becoming lost in their complexity or unnerved by their deceptive powers of illusion. In a sense, these works have a ludic character linked to the ambiguous status of the frame.

Gregory Bateson, in the characteristically dialogical epigraph to this Introduction, presents an imagined dialogue between a curious daughter and her expansive (and sometimes exasperating) father. The daughter asks about 'things' getting into a 'muddle'. The father's response enjoins her to think about why she assumes that there are pre-constituted things that subsequently get muddled: perhaps, in some sense, the muddle precedes the things. The history of thought in the humanities has provided many examples of seriously interrogating vertiginous, crepuscular or otherwise uncertain experiences and states – some well-known examples include Marx and Freud's accounts of the fetish as misrecognition, Jakobson's derivation of metaphor and metonymy from 'polar' aphasias and Lacan's understanding of the mirror phase as the illusion of wholeness projected onto a gestalt (Wilden 1972). Play, as in Bateson's discussion of the 'nip and the bite', is a key category in this tradition of fraught and ambiguous phenomena (Sutton-Smith 2001).

Rather than thinking about videogame performances as units that aggregate into various extended forms of play, then, in this book I argue we should start with the muddle and examine how particular performances arise therefrom. Games are conceived less as a set of branching paths with a single traversal function, and more in the mold of Aarseth's model of aporia and epiphany. They are a 'multiplicity of assemblages' (Mukherjee 2015b, 10) – and the concept of aporia gives one name to the experience of this multiplicity. Here, then, the central term for connecting questions of performativity with the insights of media and literary studies will be the *performative multiplicity*.

Multiplicities, Units and Muddles

The concept of multiplicity is a key component of Ian Bogost's Unit Operations: An Approach to Videogame Criticism (2006). For Bogost, videogames 'encapsulate' the multiplicity of experience as a 'unit operation', thereby making it 'fungible'. While Badiou (2005) is the key theoretical touchstone, Bogost also draws on Charles Baudelaire's poetry and its reading by Walter Benjamin. As these are also two central figures in Performativity in Art, Literature and Videogames, both the indebtedness and the departures between the two books can be discerned clearly by a closer look at their respective treatments.

Baudelaire writes in 'À une passante' of his experience exchanging glances with a widow through a bustling Parisian crowd. For Bogost, this experience of passing-by is, once written down by the poet, 'a tool that others can make fungible as a performance of the modern life' (74). The poem 'marks a strategy of lonely love, not erotic love, to come to grips with the shock of modern life...In the alienating confusion of the procedural city, Baudelaire's lyric posits the figure that fascinates as a replacement for the woman's companionship... the poet is waging a war he can never win, for he has no recourse to consummate the encounter' (77). Here Bogost seeks to generalize Benjamin's arguments about the role of media forms in facilitating adaptations to an urban environment (the 'procedural city') rife with shocks, exploitation and quotidian miseries.

This unit operation – utilizing the 'figure that fascinates' to defray the subjective shocks that fragment experience in modernity – is, for Bogost, increasingly 'encapsulated' through Bukowski, the film *Amélie* (2001) and ultimately Maxis' *The Sims* (2000), which 'finally takes the ultimate step in representing the chance encounter as a unit operation: it encapsulates it into the code of a simulation' (87). In effect, '... that strategy, the figure that fascinates, has itself compacted and become embodied as a unit of cultural currency' (79). As such, the subject² that emerges in *Unit Operations* is an entity that deploys encapsulated unit operations in order to deal with the shocks of modern life by relating them to a self-sufficient realm of cognitive experience: it is a rhetoric of compensatory possession (offering the chance to 'consummate the encounter') and control over an objectified reality. Failures or ruptures in communication (i.e. what is *not* fungible between contexts) are actively excluded from the theory.

The concept of encapsulation is problematic in its own right. In both Baudelaire and Bukowski, the gaze of the passerby's foot is 'not lascivious, nor even mildly erotic; instead, it holds the woman in suspense, keeping her at the distance required for the figure that fascinates to function' (79). Readers of the poet of 'La chevelure', an avowed fetishist (Agamben 1993b, 45), may be somewhat surprised to learn that there is nothing erotic in the fragmentary! Bogost's unit analysis yields a fungible procedural operation (one by which others can deal with the shock of a chance encounter through repeating the otherwise unrepeatable in poetic form), only by passing over the experience inscribed in 'A une passante'" - the libidinal investment in the absent object through an embodied, fleeting experience, a *passing*. Only in this way can the poem be read as incompletely 'encapsulated' and hence a precursor of a videogame simulations that facilitate control over the fascinating figure's companionship – rather than a dangerous and overdetermined relation split by the 'screen' of the widow's veil. In Bogost's reading of 'À une passante' there are two figures: the poet and the intriguing, elusive passerby. The interplay of these two figures, once encapsulated, becomes a voluntarist choice mechanism: a question of whether or not to approach the figure that fascinates.

Benjamin offers a different view. For him there is a third element to the scene – although in many ways it is a non-figure, a background element that does not establish a substantive textual appearance of its own, but is so integral that it innervates the fraught figures of both lovelorn poet and fascinating passerby:

The masses become so much a part of Baudelaire that it is rare to find a description of them in his works...In *Tableaux parisiens*, the secret

presence of a crowd is demonstrable almost everywhere . . . The masses were an agitated veil, and Baudelaire views Paris through this veil. The presence of the masses informs one of the most famous poems in *Les Fleurs du mal*.

In the sonnet 'À une passante,' the crowd is nowhere named in either word or phrase. Yet all the action hinges on it, just as the progress of a sailboat depends on the wind. (Benjamin 2006, 322)

The subject of 'À une passante' does not simply choose to either approach or avoid the figure that fascinates: the crowd is the matrix for the chance encounter by which the subject is called into being and poetic speech. The poet is fundamentally changed, shocked into self-consciousness, and speaks in remembrance of a moment in which vanishing is just as crucial as appearing. The masses remain invisible in Bogost's critique of the poem, but for Benjamin they are both the condition of appearance and passing away of the apparition – given that the woman is described as mournful and melancholic ('... en grand deuil, douleur majesteuse') their movements *are* the agitated 'veil' of the apparition.

The initial argument of *Unit Operations* – that the problem of multiplicity is a crucial one with which to grapple in studying videogames – is extremely valuable, but Bogost's various accounts understate the complexity of the emergence of figures from multiplicities. In the case of Badiou the second count-as-one (representation, the state of the situation) is elided (Jayemanne 2007); in Baudelaire's poem the activity of both widow and crowd are subordinated to the encapsulated choice of the subject. The process of encapsulation thus reduces the encounter to a bivium of well-defined, discrete outcomes. This is the presupposition for a reading in which Baudelairean infelicity prefigures the eventual felicity offered by games.

Certainly the value of simulations often lies in their simplified modeling of some features of a complex system, and this constitutes an important research problem in its own right. In criticizing *The Sims*, Bogost asserts that what is being encapsulated or counted-as-one is a multiplicity, experience or situation that is outside or exterior to the game in question. In this book by contrast, I argue that videogames themselves are multiplicities, and each videogame performance is a kind of count-asone. Rather than conceptualizing the videogame as a count-as-one of the multiplicity of experience, here performances arise out of multiplicity as a dynamic internal to and constitutive of the game. This holds the potential of rendering two major conceptual problems raised by videogames' heterogeneity – nonlinearity and the infeasibility of proposing a unit of analysis – soluble. It is the precise *ways* that particular performances arise from the game's multiplicity that the theory must account for.

The model of how particular performances relate to multiple performances proposed in *Time Invaders* thus resembles less a set of forking paths than the relationship between figure and ground in an image – or, indeed, the emergence and disappearance of a figure from the crowd. Similarly, insofar as comparisons with cinema or photography are to purpose, they should not be limited to the finalized commercial release but also the uncut film; they are not only to do with the still image but also the contact sheet and the negative. That is, per Aarseth, in film the textons are what is left on the cutting room floor – but even though they do not make the 'final cut' or commercial release, the techniques of their production have the effect of turning the filmed object into a virtual multiplicity that is capable of entering into entirely different relations. The framing device both closes off a feedback loop that describes a certain process of actualization and creates an 'outside' or 'off-frame space' as potential that conditions it.

The book traces the effect of the off-frame space as a complex interplay of presence and absence across art-historical contexts: in painting, the possibility of more painting; in photography, the possibility of other shots; in cinema, the possibility of more movement; and in videogames, the possibility of *other performances*. Like the off-frame space of painting, photography or cinema, these other performances are not necessarily actualized as any single unit of performance – but they retain a powerful effect as a potentiality, as a multiplicity of performances. Framing devices constitute feedback loops of various kinds across the history of visual culture; the computer brings to this aesthetic form the capacity to maintain, manipulate and update the status of many framing devices across wildly proliferating temporal schemas.

And indeed while there is no way he could have predicted the specificity of contemporary computer and communications technologies, Benjamin already conceived of media forms themselves as multiplicities: the celebrated thesis on the decay of the aura under conditions of technical reproducibility describes precisely a shift from unique cult value to the fragmented multiplicity of exhibition value: a 'massively expanded *Spielraum*'. This fragmentation of objects has its correlates in the conditions of reception. Shock and distraction (which Benjamin traces from the sudden, arresting emergence of the figure from the crowd in Baudelaire to the cut-shock of cinematic montage) condition the modes of dissemination and reception endemic to mass culture.

Shock – which, as a temporal phenomenon has similarities with Aarseth's notion of videogame 'epiphany' – leads to questions of tactile experience because Benjamin explicitly links these ideas in the Artwork essay by arguing that shock should be understood in physiological terms. Expanding on Benjamin's notion of shock and its tactile potentials, then, links an account of embodied experience to the themes of temporality, performativity and framing. An account of embodied experience is important to the theory of performance in gaming; as noted with great acumen by Lawrence Grossberg in 1988:

Cultural effects may or may not depend upon semiotic 'content', meaning, or claims of representation. For example, the most powerful effects of video games may be determined less by ideological dimensions than by certain forms of embodiment, by the way in which the player controls/produces the sounds and lights that engulf, produce and define a 'rhythmic body'. (Grossberg 1997, 312)

Gaming's most typical figures – space marines, wizards, elite athletes, high-tech vehicles, mutants – tend to be signifiers of intense movement and dynamism. *This book* seeks to understand the processes of engulfing, producing and defining that Grossberg speaks of under the rubric of the 'metamorphic body'. This term refers to the way that videogame performance generates bodies and renders them prone to volatility, transformation and seriality. Many discussions of embodiment in gaming approach the problem through phenomenology; by drawing on Benjamin's critique of mass culture, *this account* adds an attentiveness to *collective* embodiment and gesture.

Theorizing Potentiality, Analyzing Games

As Aarseth points out, the 'whole' of a nonlinear text cannot be directly experienced: players can only actualize a subset of possibilities in each performance. Here, the attentiveness to the aesthetics of infelicity and phenomena such as the aporia show that a performative multiplicity *can* be experienced, albeit obliquely. The infelicitous experiences of vertigo, frustration and aporia that games so often engender are precisely experiences of multiplicity in which no distinct units can be reckoned. The mess,

the muddle, the aporia: all of these may represent the failure of a given performance, but they also point beyond any particular performance to the multiplicity from which it arises.

To adapt Austin's notion of performativity to videogames, then, I argue that it is necessary to *expand* the concept of 'infelicity' beyond its obvious meaning of the failure of a particular performance. This can be difficult because the rhetoric surrounding games is so often oriented towards the aesthetics of felicity (virtuoso play, immersiveness, empowerment, technofetishism, futurism and so on). Here engagement with literary theory and art history, which have often been concerned with the paradox of framing devices that mediate the encounter between observer and work, is indispensable.

This argument draws on a diverse range of key thinkers alongside Austin and Benjamin, including Gregory Bateson, Anthony Wilden, Miriam Bratu Hansen, Victor Stoichita, Wendy Hui Kyong Chun and Giorgio Agamben. What draws this eclectic group together is that they have all explicitly thematized play in their writing. By examining play along with other paradoxical phenomena such as the frame, the toy and the fetish, these writers provide ways of exploring the vertiginous and aporetic side of the framing device and thus do the work of expanding the concept of infelicity. In particular, Benjamin's work on the medieval emblematic tradition, and its reading by Agamben as a prefiguration of the modern notion of the uncanny, provide a link between the concept of infelicity and art-historical discussions of the framing device.³ Just as play is not simply the failure to become something else and just as the fetish is not simply the failure to acquire some or another object of desire, so too is the videogame aporia not simply the failure of a particular performance, but the experience of a performative multiplicity. The framing device is an aesthetic motif which carries within it concepts similar to the 'felicity/ infelicity' dyad of Austin's performative theory, as well as the 'success/ failure' pairing central to game studies.

The aesthetics of infelicity places *this book* on a different (yet complementary) trajectory to neo-baroque studies such as that of Ndalianis and also from 'frame analysis' studies that draw on the work of Goffman (1974) to study games. This work – including Conway & Trevillian (2016), Fine (1983), Linderoth (2015), Simkins (2015), Stenros (2012) and Wanenchak (2010) – has provided effective analyses of ways that frames structure the technological, social, semiotic and ludic elements of play in both digital and nondigital games. Nested frames can certainly guide performance by demarcating types of space, but they can just as well lead to a vertiginous *mise-en-abyme*. The aesthetics of infelicity thus adds an important element to this scholarship.

Like its theoretical commitments, the book's close readings may also appear highly eclectic. A central set of case studies are a series of 'gallery scenes' which thematize framing: Willem van Haecht's The Cabinet of Cornelis van der Geest to novels such as Balzac's The Unknown Masterpiece, Pynchon's The Crying of Lot 49, Atwood's Oryx and Crake and the videogame Life Is Strange (Dontnod Entertainment 2015). What is common to all these texts is the complex use of framing devices and the close articulation of these framing techniques with experiences such as uncanniness, shock, aporia or vertigo - infelicitous aesthetics. By recursively incorporating other artworks, stories or framing devices into their textual structure, these works comment on their own mode of presentation and generate feedback loops that present challenges for audiences or readers that, in their quasi-ludic character, prefigure those of videogames. By attending to the aesthetics of infelicity across this series of gallery scenes, these readings thus show a prehistory of the sorts of processes and feedback loops that this book argues are central to videogame performativity.

The book's close readings of videogames likewise focus on games that utilize complex framing devices to recursively comment on the medium itself: *God Hand* (Clover Studios 2005), *Plansescape: Torment* (Black Isle Studios 1999), the *Half-Life* and *Portal* series, the *Metal Gear Solid* series and *Life is Strange*. In all these cases, the recursiveness of the game text is read as articulating an auto-critique of gaming. In addition to these close readings, numerous other games are examined more briefly to show the versatility and utility of the method that the book constructs for analyzing a wide variety of videogame performances.

After the paradoxes of the framing device and the concept of the performative multiplicity are developed in Parts I–III, the problem taken up in Part IV is one of outlining a comparative vocabulary capable of accounting for the various ways – continuous or discrete, linear or multifinal, player- or machine-initiated, temporal or spatial, tactile or cognitive – that performances arise from the multiplicity of a given game. The methodology developed to do this has two elements. The first draws on nonmechanistic cybernetics (in particular the work of Bateson and Anthony Wilden) to provide a language for describing how both analog-continuous and digital-discrete performances arise from the performative multiplicity of a given game. The second recruits Agamben's discussion of diachrony and synchrony to place performances within a game's overall multiplicity. This approach, called 'chronotypology', opens up a new and rigorous theoretical account of the problem of temporality and narrative in videogames.

CHAPTER SUMMARIES

In sum, then, *Time Invaders* builds towards an approach to videogame criticism and analysis which starts with the 'muddle' of play and traces the emergence of performances from this multiplicity. The pitfalls of defining a unit of performance can thus be avoided while satisfying the need for analytic rigor.

As England's blog post shows, the Door Problem is not a single 'problem' so much as a spectrum of design solutions – a multiplicity of potential framing devices that are specific to each game design in terms of how they influence performance. *Time Invaders* provides a method for tracing, describing and analyzing these solutions as they may be actualized in a particular performance and as they may be interested in a particular research project.

The book's argument develops over four sections, each of which focuses on a subordinate problem.

- Part I, expands on the paradoxes of the framing device in art history, and its possibilities for bridging performative theory and videogame analysis.
- Part II examines two aspects of how framing devices work in a videogame context.
- Part III asks about the ramifications framing devices have for bodies – both the animated and simulated bodies on the screen, and the bodies of players in the process of play.
- Part IV brings together these discussions into a coherent theoretical and methodological approach to the critique of videogame performances.

Part I: Framing Devices

Chapter 2 examines Austin's notion of the performative. The concepts of *felicity* and *uptake* are particularly useful for the study of games, but a problem arises in that Austin explicitly excludes 'parasitic' usages (such as

games) from his analysis. Ndalianis' (2004) development of the *framing device* as characteristic of neo-baroque aesthetics is shown to bridge Austin's discussion with videogames. Chapter 3 traces the artistic reflection on the framing device to antiquity. Van Haecht's painting 'The Cabinet of Cornelis van der Geest' shows a gallery scene consisting of multiple frames. Two readings – Stoichita's 'tautegorical' and Agamben's 'allegorical' approach – are contrasted to show that the framing device both aids navigation in complex media environments and also points 'beyond' itself, by way of paradoxes, to the potentialities of performance. Chapter 4 sustains this dual reading in Pynchon's novel which combines recursive structure with a thematic focus on the paradoxes of communication. The book's narrative and structure exhibit the tautegorical and allegorical readings of the framing device through uncertainty.

Part II: Anterior Motives

Chapter 5 critiques Galloway's concept of videogames as a 'collapsed allegory', contrasting it with the tautegorical reading of the framing device. During this analysis two broad classes are established: *integral* and *hypermediate* framing devices. Chapter 6 contrasts the tautegorical perspective of the previous chapter with an allegorical approach to the framing device. For Agamben, the framing device leads not to (tautegorical) navigation, command and control but to paradoxical phenomena such as the uncanny, the fetish and the toy. Like the fetish or the toy, infelicity and failure can be read not only as the failure of a particular performance but also as indicators of the way that potentiality is organized by videogame apparatuses: as giving rise to *performative multiplicities*.

Part III: The Body Eclectic

Chapter 7 takes up the concept of serial aesthetics from Ndalianis and Surman as a reflection of the theory of performative multiplicities on the *metamorphic bodies* of gaming. The emphasis and distortion common to videogame characters links them with caricature's use of serial *salient features* and what Baudelaire termed '*argot plastique*' – a propensity towards metamorphosis. Framing devices are thus not only partitions of the screen but also affect the audio-visual and performative aspects of videogame models. A variety of metamorphic bodies is explored across various games, along with the regressive tendencies serial aesthetics has fostered in terms of the representation of race and gender. Chapter 8 utilizes the connection made by Benjamin between montage and shock to explore the tactile elements of gaming: the ways that players become metamorphic in their own right. For Benjamin, cinematic montage is to be understood primarily as a tactile and physiological phenomenon that gives rise to a distracted mode of engagement and an 'optical unconscious'. Extending this thinking to videogame framing devices via a reading of Atwood's *Oryx and Crake*, distraction is used to explain how games (particularly action genres) create embodied engagement – further historicizing Benjamin's position to theorize a 'tactile unconscious' operative at both individual and collective levels.

Part IV: Performative Multiplicities

Chapter 9 proposes a critical vocabulary for the analysis of how particular performances arise from the performative multiplicities of a game. Austin proposes two classes of performative utterance: illocutionary (where following a particular verbal sequence enacts the performance) and perlocutionary (performing the act via other means). These are translated into a videogame context as *illudic* and *perludic* acts via the nonmechanistic cybernetic theory of Bateson and Wilden. Chapter 10 constructs a method, termed 'chronotypology', which enables the analysis of performative multiplicities. The methodology elaborates the terms *diachrony* and *synchrony* from Agamben and Lévi-Strauss. That which draws performances together is a synchronizing chronotype, whereas that which separates or distinguishes performances is a diachronizing one. An efficient definition of the contentious concept of narrative in videogames thus becomes possible: narrative is an element which synchronizes all performances of a particular game.

Notes

- 1. In fact, interdisciplinarity can be seen to be the norm in academic approaches to videogames, which extend at least back to Lofts & Loftus' 1983 psychological study (Apperley & Jayemanne 2012).
- 2. This reification of the subject may seem odd given that Bogost's work has since turned towards Object-Oriented Ontology, but *Unit Operations* remains his most sustained model of videogame criticism. I will not engage here with these later texts as substantively because this book seeks to offer a performative, not ontological, account.

3. Only strands of Benjamin and Agamben's work that are specifically relevant to play are explored here, but they have found wider applicability in critical approaches to gaming and technology. MacKenzie (2006) and Apperley and Clemens (2015), for example, have explored videogames in the light of Agamben's discussions of biopolitics (Agamben 1995) and 'whateverbeing', and Zehle (2012) has examined the concepts of gesture and profanation (Agamben 2007).

Framing Devices: Performative Loops in Literature and Art History

How to Do Things with Images

Language is often thought of as primarily referential: it describes some state of affairs in the world. In this view, statements can be evaluated as being either true or false, depending on whether the description they offer corresponds to reality as confirmed by some other means. This model, the seeming self-evidence of which grants it a certain everyday currency, has also been the focus of philosophical speculation as to the limits and conditions of talking about states of affairs and the modes in which they can be talked about. In investigating truth claims and verifiability, philosophers of language thus assumed themselves to be posing the question of language in general.

In the 1955 series of the William James lectures, philosopher J.L. Austin presented an alternative view which he took to be at least partially representative of wider currents in the philosophy of language. The lectures, transcribed by students and collected in the book *How to Do Things with Words*, deal with the seemingly innocuous observation that language has more uses than describing things. It is possible to *do* things with words: promising, commanding, purchasing, marrying and naming, for example, are actions and not descriptions. In saying 'Sorry...' one does not make a representation so much as an undertaking. To apologize is to perform a verbal or written action. Questions about truth or falsity, granting their importance in certain philosophical contexts, are not the only approach to thinking about language – the realm of action offers another valid line of inquiry. As Flanagan points out, 'In some sense, all games are performative, requiring some negotiation of action' (Flanagan 2009, 149). Could Austin's work, based on language, be useful in thinking about video-game performances?

In spite of his titular concern with words, Austin himself was quite happy to discuss nonverbal actions such as raising a hand to vote, nodding assent or kicking a goal on a sports field. Austin's notion of performativity is thus broader than speech, although it is clear that language is his major paradigmatic example. There is, however, a more serious issue with drawing on Austin to talk about videogame performances: he in fact explicitly excludes playful situations, along with any other situations that occur in some kind of artistically framed space, from his discussion.¹ The first section of this chapter argues that it is indeed possible to draw from How to Do Things with Words in thinking about videogame performances - in particular, the concepts of *felicity* and *uptake*. The second part critically examines Austin's attempt to exclude framed performances from his analysis on the grounds that they are 'parasitic' on normal usage. Drawing on Ndalianis' discussion of contemporary popular culture as 'neo-baroque' (Ndalianis 2004), the concept of the framing device will be presented as a link between Austin's notion of the performative and the particular case of videogames.

Austin and the Performative

What then does Austin do with words? Initially, he notes a distinction between two types of verbal utterance. The first type, 'constatives', can be evaluated by a true or false scheme – if someone asserts that the cat is on the mat, it is possible to have a look and verify whether this is in fact the case. The second type is the utterances that Austin is most interested in. He terms these 'performatives'. It is inappropriate to assign truth values to these utterances. Instead, Austin argues that they are actions and as such are evaluated as successful or unsuccessful, depending on whether or not the utterance satisfies and enacts certain conventional criteria. They are 'subject to the usual troubles and reservations about attempt as distinct from achievement, being intentional as distinct from unintentional, and the like' (Austin 2003, 110).

Performatives are thus judged in terms of whether they are happy or unhappy; felicitous or infelicitous. Performative utterances can fail or be infelicitous in various ways. Austin clearly took some trouble in coming up with illustrations that would most pique the sensibilities of his Ivy League audience:

Suppose, for example, I see a vessel on the stocks, walk up and smash a bottle hung at the stem, proclaim 'I name this ship the *Mr. Stalin*' and for good measure kick away the chocks: but the trouble is, I was not the person chosen to name it...We can all agree

- (1) That the ship was not hereby named;
- (2) That it is an infernal shame. (Austin 2003, 23)

The distinction between performative and constative is a matter of how each type of utterance is to be judged. For constatives, the appropriate standard is truth value, which is to be ascertained by procedures of verification. By demonstrating the practical existence of multiple regimes by which utterances are judged (under the general concept of 'felicity'), Austin opens a new line of inquiry. While jurists and poets may have expressed little surprise at such a perspective, Austin asserts that truth value and verifiability has been a dominant way of thinking about linguistic utterances in the philosophy of language. Thinking about performatives thus opens to analysis the cultural world's many ways of judging utterances. The use of language becomes an event rather than (simply or primarily) a representation or a description.

If they are to be happy, performatives must be carried out by someone competent to enact them (such as an authorized celebrant to oversee a marriage ceremony, or a jurist to pronounce legal judgment). They must be heard and recognized for what they are by the relevant people – it is not much use for a policeman to say 'I place you under arrest,' unless the suspect is nearby and in a position to be so prorogued. Austin calls this 'securing uptake' of the utterance. This requirement emphasizes the communicative and social character of the performative utterance. These actions may not bring about change in a physical state of affairs any more or less than they describe it. Rather, such utterances serve to constitute, break or otherwise reconfigure social relations.

In order to successfully perform an action, fulfilling both the criteria of competence and uptake, the utterer must adopt the socially sanctioned formula of a given speech community. This collective intentionality informs the *structure* to which the speech act must accede if it is to be judged

felicitous. Rather than an encoding/decoding model in which individual interiorities communicate through external signs, the performative delineates a field which structures utterance and interpretation, production and consumption, both of which can be more or less felicitous. In what amounts to a broadly legalistic² theory of language use, form constructs function as something that is what it is precisely because another is duly informed, and takes up the message. The concept of felicity already seems a good fit for videogames, which are involved in complex sequences of performance and uptake by both human players and technical apparatuses.

As Austin develops his argument, things become more complicated. Although issues related to securing uptake such as competence or good standing may be tied to various socially sanctioned signifiers, Austin also talks about a more ambiguous species of infelicity in the form of feelings and thoughts. An apology may 'fail' in some sense, for example, if the person issuing it is insincere and in spite of their assurances does not, in fact, feel sorry. Unlike cases in which the act itself is defective for structural reasons, an insincere apology may fulfill all the formal requirements of an apology. The infelicity, then, is located in the intention motivating it. Someone issuing a promise they have no intention of keeping is another apposite example. The promise has been issued successfully, the speech act is performed. The outcome is certainly not 'happy', but the manner in which it is unhappy is different from a situation in which the necessary conditions for successful performance do not obtain: the promissory note is lost, defective or issued by a party lacking in authority.

Play as Insincere Performance: The Problem of 'Parasitism'

A key subset of these 'insincere' performatives are a class that Austin in fact excludes from his discussion on the grounds that they are 'non-serious'. These include performatives uttered under some kind of threat or duress – 'we may even say the act was 'void' (or voidable for duress or undue influence)' – as well as utterances encountered in a framed space such as a work of art. It is, for Austin, incorrect to say that Walt Whitman enjoins the Eagle of Liberty to soar in the same way that two people may conclude the sale of a commodity, even though both are, in some sense, performative actions of the type under consideration.

a performative utterance will, for example, be *in a peculiar way* hollow or void if said by an actor on the stage, or if introduced in a poem, or spoken in

a soliloquy. This applies in a similar manner to any and every utterance – a sea change in special circumstances. Language in such circumstances is in special ways – intelligibly – used not seriously, but in ways *parasitic* upon its normal use – ways which fall under the doctrine of the *etiolations* of language. All this we are excluding from our consideration. Our performative utterances, felicitous or not, are to be understood as issued in ordinary circumstances. (Austin 2003, 22, emphasis original).

However, if performative utterances gain their force through social conventions, issues of power (duress) and the 'sea change' of poetic usage can be said to lie at the very *origin* of those conventions, as both provide originations of and vectors for the transmission of the collective behaviors and social rituals that structure individual speech events.

It certainly seems strange to characterize as 'parasitic etiolation' an apology enshrined in the deliberations of a parliamentary body for Statesanctioned violence, or Whitman's exhortation to the Eagle of Liberty to fly when compared, say, to someone's absent-minded promise to remember to buy milk on the way home. Furthermore, the assertion that such usages are necessarily or always *intelligibly* parasitic upon normal usage has been contested. Is it really so simple a matter to exclude parasitic utterances or determine ordinary circumstances?³ This question is important because it will determine the applicability of Austin's ideas to playfully framed situations such as videogames.

At the very least, Austin's exclusion would require that insincerity or parasitism *signify* in such a way as to be routinely distinguishable from normal usage. On the contrary, however, insincerity may function precisely through its formal indiscernibility from sincere utterances: as the open secret of a power relation or the license of poetic address. While Whitman's imperative to a metaphoric eagle may seem parasitic upon the normative situation of addressing a command or request to a real person (or well-trained eagle) who is present at the time of utterance, Swinburne's exhortation to Whitman is *both* a parasitic and ordinary performative utterance: both a poetic expression and a solicitation of real action from a real human being:

SEND but a song oversea for us, Heart of their hearts who are free, Heart of their singer, to be for us More than our singing can be; Ours, in the tempest at error, With no light but the twilight of terror; Send us a song oversea! (C.A. Swinburne, 'To Walt Whitman in America', emphasis original)

Swinburne is obviously not literally asking Whitman to sing across the Atlantic; however, he is performing a speech act (soliciting a poetic response). Whether or not such instances of multiple register of address and framing suggest grounds for a substantive critique of *How to Do Things with Words* (or speech act theory in general) has been the topic of some debate. Here might be traced a theoretical horizon along which the parasitic is not arbitrarily excluded, but somehow integral.⁴

In this context, the felicity of Austin's attempt to exclude the parasitic is interesting insofar as it returns in his own text. Utterances judged according to structures of felicity rely less on interpreting the inner 'meaning' of the utterance (implicit in judgments of truth and falsity), and more on relational, anaphoric, deictic and diacritical signs which establish, disseminate or rehearse criteria such as competence, authority, occasion and whatever other factors determine the felicity of a given performance: how utterances are *framed* is vitally important. This is in fact where Austin starts out his inquiries:

It has come to be seen that many specially perplexing words embedded in apparently descriptive statements do not serve to indicate some specially odd additional feature in the reality reported, but to indicate (not to report) the circumstances in which the statement is made or reservations to which it is subject or the way in which it is to be taken and the like. To overlook these possibilities in the way once common is called the 'descriptive' fallacy... (Austin 2003, 3).

Indication of circumstances, reservations and intentional attitudes involve the use of words which may not have a strictly grammatical function, but rather invoke socially immanent ritual requirements or issues of indication and orientation.

In fact, these elements of the approach may need to be still more emphatic in the case of videogames. As Hayles argues, 'Code that runs on a machine is performative in a much stronger sense than that attributed to language... Regardless of what humans think of a piece of code, the machine is the final arbiter of whether the code is intelligible' (2005, 50).

However, this strong sense of performativity (code is executable) becomes more complex at higher levels of code, particularly object-oriented programming languages which 'are modelled after natural languages and create a syntax using the equivalent of nouns (that is, objects) and verbs (processes in the system design)' (2005, 57).

Videogame performances are even more complex insofar as they involve a negotiated intelligibility between players and apparatuses which is a crucial goal of graphical, audio, level, character and other videogame design disciplines to achieve. Human social, psychological and physiological inputs (as well as the capacities of hardware for registering these as performances) are also integral parts of the game's cybernetic feedback loop. Austin's notion of felicity is a promising concept for constructing a comparative method for analyzing performances in videogames: less rigidly performative than executable code, but nevertheless structured as a type of what Hayles terms 'intermediation'. The performative view being developed here, then, seeks to establish a comparative field on which gaming's heterogeneous performances can be evaluated – but not homogenized, insofar as they maintain their highly variable felicity conditions and structures of judgment.

Framing Devices: Videogames and Neo-Baroque Aesthetics

A problem with Austin's theory is that he does not raise the issue of how the structures of performative judgment are disseminated in the first place – presumably because he can safely assume that members of a given speech community are trained from their early years to execute the performative utterances (promises, transactions, the rules that obtain on a sporting field, etc.) that he is interested in analyzing. This certainly cannot be taken for granted in a videogame context. In many videogames, gameplay elements are gradually introduced across several stages of play rather than all made available to players at once. Training players in the specifics of play and the structures of felicity by which their performances will be evaluated can be a very tricky aspect of game design. Players must often act in punctual and embodied fashions to novel criteria of judgment (new enemies, new puzzles and challenges) that arise constantly in the course of play. How then are performative structures disseminated in videogame play? Here we can take up Austin's notion of the parasitic utterance. The class of signifiers that indicate the difference between earnest and playful or artistic performances are *frames*: a title, a proscenium arch, a ticket price, a gallery or exhibition space and so on. 'The frame can be anything that acts as a sign of qualitative difference, a sign of the difference between marked and unmarked space' (Frow 1982, 25). Even if Austin were to be granted that such signification is routinely clear and unambiguous (and in a world in which hybrid, locative and mobile games are becoming more common, this seems an increasingly dicey proposition), it is possible to ask whether or not the simple function of distinguishing between earnest and parasitic utterances exhausts the operations performed by frames in videogames. Frames in fact perform many complex and indispensible functions in

Frames in fact perform many complex and indispensible functions in videogames—including defining structures of performative judgment. For Linderoth, a central skill of game design is 'frame orchestration' (Linderoth 2015, 296), referring to the way in which videogames bring together a 'composite form' and thereby contextualize player performance and videogame narrativity. Wanenchak (2010), Fine (1983) and Simkins (2015) have utilized Goffman's concept of frame analysis (1974) in order to analyze how players comport themselves in social play situations, while Conway (2010) has considered how 'breaking' the fourth wall as a specific type of re-framing of performance in videogames. This scholarship suggests that frames do not simply distinguish between playful and non-playful space; they also work in a wide variety of ways to generate social, ludic and material effects.

Just as Austin returned to the assumption that statements only intend truth or falsehood to discover a broad spectrum of intentional attitudes and performative structures, then, we can return to and call into question Austin's own assumption that frames signify only one of two possibilities. In doing this in the context of videogame performance, it is necessary to explore how frames involve not a simple binary (a 'magic circle' between play and nonplay), but various types of ludic felicity. If Austin characterizes such framed performances as 'in a peculiar way hollow or void', it is possible to extrapolate this in a non-pejorative sense: as the opening of ludic spaces.

The concept of multiple framing and how it relates to contemporary popular culture is central to Ndalianis' *Neo-Baroque Aesthetics and Contemporary Entertainment* (Ndalianis 2004). Ndalianis develops the concept of the *framing device*, characterizing a number of contemporary mass-media forms in terms of a 'lack of respect for the limits of the frame' (25). This tendency not only links them conceptually with baroque art but also disturbs the (putatively) stable relation between viewer and artwork: viewers must perform their navigation of the artistic space. Ndalianis' inquiry travels in the opposite direction to Austin's exclusion of parasitic utterances. The discussion covers many popular texts of contemporary culture: 'In the case of narrative space, if we consider classical narrative as being contained by the limits of the frame (as manifested in continuity, linearity, and "beginnings and endings"), then the perforation of the frame – the hidden beginnings and endings – are typical of the (neo-) baroque... The baroque's difference from classical systems lies in its refusal to respect the limits of the frame that contains the illusion' (Ndalianis 2004, 25).

The neo-baroque has three major features: polycentrism, seriality and virtuosity (33). Polycentrism describes the characteristic tendency of neobaroque narrative systems to interlink and proliferate across certain nodes such as particular characters or settings. Seriality is the tendency for repetition of specific elements in character design and narrative to extend across many works. Virtuosity refers both to the technical flamboyance of the producer of the work and to the requirement for specific types of media literacy and knowledge on the part of audiences.

Ndalianis relates these properties to the figure of the labyrinth. The metaphor of the frame acting as a window onto a represented space is replaced by a frame of multiple folds and ruptures which place performative demands on the audience. The videogame is exemplary: if baroque art and architecture required wandering a labyrinth, 'Digital technology, especially that used within the world of computer games, has created more literal labyrinths for players to traverse. Highlighting a crisis in traditional forms of symptomatic interpretation, the multilinear nature of game spaces suggests that our modes of interpretation need to reflect an equally neo-baroque multiplicity' (27). Like the baroque before it, the neo-baroque does not simply supersede classical aesthetics but enfolds and re-deploys these codes, entering into a complex dialogue with media and art history:

Embracing the classical, the (neo)-baroque often draws attention to the framing device to reflexively complicate or reject its function. The convention of frame or window onto which a parallel reality is painted or projected is taken to extreme, and the representational reality no longer seeks to frame a world of resemblance... The baroque and neo-baroque create the illusion

of the merging of an artificial reality into the phenomenological space of the audience while simultaneously inviting the spectator to recognize this deception and marvel at the methods employed to construct it. (158–159)

The distinction being drawn is not between linear classical forms and nonlinear baroque texts (in fact the latter, following Deleuze, is better thought of as a 'folding-over' or 'embracing' of the former) so much as 'unicursal' and 'multicursal' labyrinths. In both the baroque and neobaroque contexts, production and interpretation of an individual artwork recedes in favor of intertextual reading. Audiences must acquire new levels of media literacy in order to navigate a manifold of framing devices – an 'architecture of vision' (Deleuze 1992, 21).

Ndalianis's concept of virtuosity indicates that framing devices have determinate effects on felicitous action within neo-baroque spaces, obviating Austin's assumption that a frame would merely signify that a particular speech act is parasitic or nonserious. Audiences must be cued to the intertextual references that permeate the frames of different works in order to successfully navigate the neo-baroque mediascape. What is particularly useful in Ndalianis' conception of the framing device is that it is not simply outward bound but, as seriality and polyvisuality, is also conceived in terms of its effects on the internal aesthetics of the space and characters – an effect that will be examined in more detail in Chapters 6 and 7. The labyrinth is an elaborated framing device.

Framing devices thus do not only signify playfulness and parasitism: they also provide criteria necessary for felicitous navigation by informing character and level design just as the walls of the labyrinth represent possible routes through it. These performative codes inform the internal coherence and quality of the fictional space. Furthermore, the framing device in its conventional sense does more than contain the navigable space. It also *produces* an 'off-frame space' which is composed of a neo-baroque multiplicity: other texts, a multiplicity of other framing devices.

The productive rather than solely circumscriptive aspect of framing devices can be seen in some of the earliest videogames. 'One of the many elements shared by film, television and videogames is the use of on-screen and off-screen space in the creation of a diegetic world' (Wolf 2001, 51). In *Pong*, the goal is to prevent the ball from leaving the frame. In *Pac Man* (Namco, 1980) and *Donkey Kong* (Nintendo, 1982) the frame was extant as the labyrinth through which the player's character moved, but under certain conditions (wraparound gates in the former,

summiting the first screen in the latter), the spatial relations could be reconfigured. Not only does the frame delineate the difference between what is seen and unseen, but this relation to players must be constantly renegotiated in response to their performances. Martin Amis' emphatically titled large format book *Invasion of the Space Invaders: An Addict's Guide to Battle Tactics, Big Scores and the Best Machines* (Amis 1982), published in the heyday of the arcade era, figures the whole videogame phenomenon as a matter of transgressed spatial boundaries (including, as Steven Spielberg notes in his introduction, the distinction between public and domestic spaces).

Amis praises Defender (Williams Electronics, 1980) for its groundbreaking construction of space through the interplay of multiple frames. Where most games of the time had been confined to a single screen, Defender not only introduced spaces beyond the immediate screen by scrolling across a simulated landscape but also presented a map (the 'Scanner') of the overall space. The Scanner indicated the current position of the player's vessel, humans in need of the titular defending and enemy assets within the overall level. 'The Scanner is a brilliant innovation: in effect, it means that you are playing on a screen nine or ten feet wide' (Amis, 59). The Scanner in this game was located in a strip running across the top of the screen - a separate frame which also contained status information: the number of lives, auxiliary weapons and score. Games such as Pac Man, Space Invaders and Asteroids (Atari, 1979) also utilized a separate area of the display for scoring, but in these cases the off-frame space 'consists' of the abstraction of accumulated points. In Defender the off-frame space is integrated in a manner that considerably changes the way that players navigate the game. 'Using the Scanner, you can police the entire battle area; you can go looking for trouble or you can, for a time, avoid it. In really fast and desperate play you look at the Scanner more than you look at the screen ... there are long-term strategic matters to consider right from the start' (Amis, 59).

To crib a military distinction, in games in which the off-frame space is accounted for solely by the abstraction of a score, tactical play within one screen is all that matters as the only strategy is accumulation. With *Defender* and the Scanner players must be aware of the tactical situation on the immediate screen as well as the strategic context of the level as a whole. In a game such as *Space Invaders*, both strategic and tactical decisions were made within the one overall frame of the game screen. In *Defender* the off-frame space could contain multiple types of movement (including a score). This relation between two frames of reference made the game 'perhaps the most thrilling, sinister and tortuous yet devised' (Amis, 58).

Amis, at the most feverish moments, reports watching the Scanner space with an attentiveness that a player would never devote to the score in *Space Invaders*: the off-frame space was critical to felicitous performance. The successful Defender must be able to track and act upon multiple framed visual contexts at once and thereby maintain an intimate relation with the off-frame space, the quality of which is experientially transformed. An innovation in the use of framing devices produced a new experience of virtual space and a new set of performative demands. The computer is also able to update values and structures within the off-frame space with far more facility than is taken into account in most theories of intertextuality. The 'neo-baroque multiplicity' has been put to a new kind of work as a dynamic space of emerging performances.

Frames and Performance in Contemporary Videogames

Framing devices have become more complex as games have developed, and continue to play important roles in communicating structures of felicitous play. Some framing configurations have been particularly influential across several important genres. RTS (Real Time Strategy) games such as *Starcraft* (Blizzard Entertainment 1998) often present a bird's-eye or isometric viewpoint from which the player can survey large areas of terrain at once. This is essential for maneuvering troops and advantageously situating buildings. Arrayed around this window onto the game world are interface elements. This perspective was so crucial to the play situation that it was maintained as the default setting – very rarely strayed from in actual play – in the sequel *Starcraft 2* (Activision-Blizzard 2010) even though the use of polygon models and real-time physics modeling made many more viewpoints possible.

In a *Starcraft* or *Starcraft 2* match, when a player selects an existent within the game world, associated statistical information appears in another window at the bottom of the screen. In *Starcraft* and many other games of this genre the Scanner from *Defender* is echoed in a schematic representation (the 'minimap') of the overall level. This enables players to keep track of a greater expanse of virtual space than can practicably be represented on the screen at any one time. This organization of frames leads players to speak of two distinct types or regimes of

performance – short-term 'micro' control of units as they appear on the main screen and long-term 'macro' control of the economy that produces those units. Felicitous play involves the performative navigation of multiple frames that may have functions that are temporal and spatial, diegeticand non-diegetic, player-centric and ludological.

Complex framing also occurs in first-person or third-person views. Figure 2.1 gives a screenshot of *Mass Effect 3* on a PC using a mouse-and-keyboard control scheme.

The player character is offset within the screen either to the left or to the right, permitting a view of what is in front of the PC. Three interface frames provide important information. To the top is a frame containing several abilities that can be activated with the associated hotkey. To the bottom left is a 2D silhouette of the currently equipped firearm, as well as numbers indicating the total number of rounds remaining (210) as well as those currently in the clip (30). Centre bottom is another frame that contains both the shields (the blue crescent) and health (the red bars) of the PC, as well as the status of two squadmates and the skills they each have ready to use. The red circle in the center of the screen (actually the targeting reticule when it passes over an interactable object), along with the associated text frame in the top middle of the screen, work together to



Fig. 2.1 Mass Effect 3

indicate the nature of the object (a door) and a possible performance (opening the door). This context-sensitive framing device defines types of performance that are contingent on the player character's position within the game world as opposed to the actions indicated by the interface frames, which are more general in scope. All of these frames are 'parasitic' insofar as they are obvious anti-realist elements that not only highlight the playful or non-earnest nature of the acts performed in the game but also convey many different structures of performative judgment necessary to felicitous play.

Context-sensitive framing devices can also be linked to changes of state in game entities or assets. For example, Fig. 2.2 is taken from *The Elder Scrolls V: Skyrim* (Bethesda Game Studios 2011)⁵ and shows a set of performances that are possible with a container called a 'Dwemer Convector'.

The Convector is a 3D model within the game space, although it is impossible to move it (or any other such container, be it a chest, wardrobe or something more exotic like the Convector). Upon interacting with the container, a translucent overlay screen is displayed showing the contents. These items can be taken into the inventory of the player character (who in this case is called Ceridwen) where they are represented as text – even



Fig. 2.2 The Elder Scrolls V: Skyrim

items larger than the Convector in terms of 3D modeling can be placed 'inside' the container when they are simply represented as text. Selecting an item in the inventory (such as the 'Warped Soul Gem' in Fig. 2.2) brings up a free-floating polygon model that can be rotated and examined. They can also be dropped into the game world, where they become models capable of interacting with other objects through the game's physics engine once more.

The text menus of the Inventory-type screens allow items to be manipulated in various ways – destroyed, combined with other items, dropped (in which case it becomes a polygon model in the main world again) – but the spatial aspect is abstracted to 'weight', a numerical value that limits how much a character can carry (in Fig. 2.2, the character is carrying 263 out of a possible 300 units). Conversely, items appearing in the game world are subject to real-time physics modeling and graphical representation – they directly simulate spatial extension. The differences can be striking. For example, dragon bones are extremely heavy from the point of view of the Inventory, but an entire slain dragon corpse is liable to bounce around almost as if it is made of rubber when governed by the physics engine. Coins have no weight at all and thousands can be carried about with no ramifications for character movement. Any given item is thus a set of diverse properties scattered across several framing devices.

In TES V: Skyrim, while either the inventory or container frames are active, the action in the game world is suspended. It is thus possible to perform extremely involved actions in the inventory frame – such as eating several loaves of bread to recover health or donning a new set of armor – while a dragon is in the process of breathing fire in the 3D environment. By contrast, *Monster Hunter 4* (Capcom 2015) and *Dark Souls* (From Software 2010) do not pause the action while players access their inventories. Manipulating items requires a safe place or extremely nimble fingers. *Zombie U* (Ubisoft Montpellier 2012) places the inventory on the controller-mounted Wii U touchscreen, while action continues on the main screen.

The stasis of inventory screens in *Skyrim* can lead to yet more uncanny situations: for example, upon entering the town of Solitude, players witness the scripted beheading of a character called Roggvir. The severed head rolls to the edge of the raised execution platform where it is easily reachable by the player character. Although Roggvir's body is inaccessible from below the platform, it is possible to select the nearby head and thereby 'search' the body which is clearly several meters away (Fig. 2.3).



Fig. 2.3 The Elder Scrolls V: Skyrim

This somewhat morbid example shows how the inventory frame thus organizes (and articulates) two distinct regimes or sets of temporal and spatial performativity: Roggvir's head is separated from his body in the 3D real-time environment, but retains the functions of an abstract inventory frame rather like that of the Dwemer Convector, granting access to what is on his distant body.

Another example of how framing produces differing experiences of space can be seen in the most basic performance – avatar movement – as it differs across two earlier games from the *Elder Scrolls* series: *The Elder Scrolls III: Morrowind* (Bethesda Games Studios, 2002) and *TES IV: Oblivion* (Bethesda Games Studios, 2006). Like *Skyrim*, these games involve vastly expansive 'open' worlds – while they contain narratives of the typical fantasy style, players can wander off and simply explore the game world rather than pursuing them.

Due to the size of their game worlds, both *Morrowind* and *Oblivion* face a problem of orienting the player within open spaces filled with repetitive elements. Often, completing a given quest involves travelling to a particular locale and dealing with the inhabitants in some fashion. Where *Morrowind* largely left the navigational duties up to players' own industry (perhaps compiling pen-and-paper maps as they played),

Oblivion introduced two new ways of framing the game space: fast travel between locales and a 'Quest Marker' that orients the player to the next leg of whatever quest they happen to be on by placing a red indicator on the on-screen compass. These framing devices have been retained for *Skyrim*.

While these developments have ameliorated the tendency of Morrowind players to get lost and frustrated as to how to proceed in their quest, the ability to snap between locations and a compass that marks the direction to the next goal can make the sheer size of the Oblivion game world seem modest by comparison. Similarly, the compass indicator reduces the incentive to spatial exploration because players are presented with the most direct way to their destination. Some experienced players have interpreted these changes as a simplification of the series: what were once sophisticated PC titles have become more casual console-oriented fare.⁶ In response, the developers included an Easter Egg character in Oblivion who offered sarcastic and thinly veiled commentary on the changes. The character M'Aiq the Liar (a member of a feline fantasy race who tend to speak of themselves in the third person) will sometimes comment obliquely on the Fast Travel option, 'So much easier to get around these days. Not like the old days. Too much walking. Of course, nothing stops M'Aiq from walking around when he wants.' As to the compass, 'M'Aiq is glad he has a compass. Makes it easy to find things. Much better than wandering around like a fool.'

Fast Travel, unless players consciously choose to ignore it as a selfimposed rule, re-structures movement through two supplementary frames – the map and the compass – to produce a distinct regime of spatial experience. This shift integrally affects performance and aesthetics. While a great convenience for players, the compass marker can make NPCs (non-player characters) who ask the player to help find a lost artifact or gather some nearby herbs seem downright lazy: the apparent size of the *Oblivion* game world, which in terms of sheer virtual 'real' estate was very large by videogame standards, seemed compressed when there is less need to wander through it. There is, for some players, a perceived affront to the eloquence and simplicity of the gesture of walking through space that characterized the earlier title. The point from an academic perspective is not to judge whether one option is 'better' than the other so much as to note how different framing devices engender different felicities of movement, even within titles from the same game series and design studio.

'MOVING CUTTING-OFF': THE PERFORMATIVE CAMERA

This examination of frames has once again shown the eclecticism of videogame structures – calling all of the above examples 'frames' is clearly a provisional convenience at this stage. However, there is one game structure in which the relation between framing and performance is absolutely pivotal to felicitous play: the virtual camera that defines the view-points available to players. Manovich argues that the 'incorporation of virtual camera controls into the very hardware of game consoles is truly a historic event. Directing the virtual camera becomes as important as controlling perception functions in the subject in its own right' (2001, xii). In videogames, few failures stand out more immediately than a poorly implemented camera; whereas the operation of the 3D camera in the seminal *Super Mario* 64 (Nintendo 1996), helmed by Shigeru Miyamoto, is considered a pioneering triumph of game design. Camera movements are often critical to felicitous performance.

As seen in the *Defender* example earlier, the videogame camera determines the structure of viewpoints available to players – how the action is framed and how the contents of the space are visualized and animated with respect to that framing. As such, cameras tend to work very differently in various game genres. The camera may be beyond the control of the player as in the Ray Harryhausen-inspired creature-feature spectacles of *God of War* (Sony 2005) where its position is typically mandated by design. Or, as in the FPS genre, the camera could be identified with the field of view of the avatar itself (Apperley 2006; Galloway 2006; Klevjer 2006). In *Super Mario Brothers* the side-scrolling camera maintains a set field of view on either side of Mario's current position; in *R-Type* (Irem 1987) the camera moves forward inexorably, forcing players to keep up with the appearance of new threats.

Batman: Arkham Asylum (Rocksteady Studios 2009) focuses on Kane and Finger's famous comic book character, who is by turns actionoriented superhero and adventuring sleuth. The game is, for the most part, a third-person action game. However, the behavior of the camera is related to distinct gameplay types reflecting the character's various competencies. When Batman is moving in a typical space, the perspective is a third-person viewpoint that is fairly standard in the adventure genre and emulates peripheral vision. When he stops moving, the camera shifts to an over-the-shoulder view which displaces the figure from the center of the screen (similarly to the *Mass Effect 3* orientation in Fig. 2.1), allowing players to scrutinize the area necessary for detective work. He can also use 'detective vision' which simulates his perceptiveness by highlighting details that are relevant to the plot: that is, by adding new framing devices as the camera moves across the environment.

Conversely, there are two types of action sequences in the game (apart from boss fights which have their own ludic structures): the martial artsbased 'Freeflow Combat' and the stealth-oriented 'Invisible Predator'. In the martial arts sequences the camera pans back to allow the player to better appraise the enemies around them, simulating the character's superior situational awareness. In the stealth areas, when Batman's goal is to eliminate opponents via stealth and superior maneuverability, a different set of camera movements is possible. Unlike the enemies who have to move by foot, Batman can grapple from point to point (such as between the gargoyles that are common in the gothic setting). In order to facilitate this, the camera snaps to that location, while the player character arrives seconds behind. The camera does not occupy its original orientation (facing a gargoyle or a wall, for example), but an advantageous one based on the new position (peering down from the gargoyle to give a wide view of the area below). Conversance with these camera behaviors is critical to felicitous performance: in this case, punctually keeping track of the positions of enemies even across rapid movements is the key to success. These camera movements have become smoother in later open-world entries in the series such as Batman: Arkham Knight (Rocksteady Studios 2015), but the basic relations between framing and gameplay remain remarkably similar.

The Performative Camera and the 'Off-Frame Space'

Limitations on the movement or visual acuity of the camera can also be used to create tension as in the pioneering survival-horror titles *Alone in the Dark* (Infogrames 1992) and *Resident Evil* (Capcom 1996), as well as more recent games such as *Amnesia: The Dark Descent* (Frictional Games 2010) and *P.T.* (Konami 2014). Such games use impaired or ineffectual visual fields to elicit tension due to the unknown contents of the off-frame space, another type of 'frame' can be achieved by attaching vision of an area to certain conditions. Similarly, audio issuing from outside the visual field is often used to warn of the presence of danger. However, in games this tension is not simply related to audio-visual elements but also to the scripted or procedural movements of the game characters. In *Alien: Isolation* (Creative Assembly 2014), the titular creature's ability to burst suddenly out of sections of the environment that are inaccessible to the player character is a key tension-building element. This highlights that the off-frame space in games is not only a sensory phenomenon composed of graphics and sound but also by the possibility of *other performances* – whether potential movements of the avatar, the movement of other player characters or computer-controlled characters.

This notion of the off-frame space as a set or multiplicity of performances will be a key topic for exploration in upcoming chapters. The main point to make at this stage is that these off-frame performances do not have to be witnessed in order to have determinate effects on the process of play. Figure 2.4 is from the turn-based game *XCOM: Enemy Unknown* (Firaxis 2012), showing the soldier Andrea Costa's possible performances within the given turn. The game's tactical design involves the use of many framing devices. Particularly important here are the blue and yellow lines. The lines share the color scheme and aesthetic of the interface elements, clearly differentiating them from the relatively realist space of the game world itself. Each soldier is capable of two performances per turn. These can be a change of position designated by the blue frame combined with another action (shooting, healing, etc.), or involve two movement actions



Fig. 2.4 XCOM: Enemy Unknown

defined by the yellow frame (called dashing). Dashing thus eschews any other actions in favor of rapid repositioning. Dashing is perilous due to the unknown enemies occupying darkened

Dashing is perilous due to the unknown enemies occupying darkened sections of the screen (typically referred to as the 'fog of war' – see Chapter 6). These are areas that are not revealed by a squadmember's field of vision. Given the way the extreme deadliness of incoming fire, charging forward into the fog of war and ending a move outside of cover (represented by the blue shields) or the ability to take a shot is extremely dangerous – or as Austin might put it, highly liable to result in an unhappy performance. The space outside what is actually revealed by the camera thus exerts a kind of constraining force on the set of felicitous performances available in the current turn, vindicating in performative terms the game's moniker 'enemy unknown'. This off-frame space 'contains' other performances – the alien units' turns, although these are controlled by the apparatus.

The anxiety that the 'off-frame space' is capable of generating has been explored in the context of cinema by Metz in 'Photography and Fetish' (1985). Metz locates the novelty of film in the combination of technologies which mobilized temporal and spatial frames respectively: stroboscopy and photography. He argues that the major innovation in animation is the control of temporal frames, whereas photography records space at a single moment. The moment framed by the photographic image allows possession of a lost time or loved one in the form of learning to love their absence, a potential it shares with the fetish as *object*. Meanwhile, precisely due to movement and the inclusion of sound, film is more apt to be an 'extraordinary activator of fetishism' (87) as *practice*. 'Thanks to the principle of a *moving cutting off*, thanks to the changes of framing between shots (or within a shot: tracking, panning, characters moving into or out of the frame, and so forth), cinema literally *plays* with the terror and pleasure of fetishism ... ' (88).

In Metz's formulation, the cinematic apparatus 'literally plays' with movement and as such it is linked with fetishism and the ability of certain 'lively' objects to produce anxiety, frustration and arousal in the subject – horror film's games of visibility being the paradigmatic example. The distinction between a static moment in time which creates a photographic fetish object and a moving image which activates fetishism through constantly playing with visible and invisible spatial relations is explicitly related by Metz both to the 'problem of off-frame space'. Chesher (2004) has identified similar dynamics within the videogame context. Taking up Mulvey's famous linking of the interplay of voyeurism and fetishism in the cinema (1975), Chesher argues that in television the viewer's relation is more like a 'glance', whereas in videogames the player interacts through a 'glaze'.

The metaphor of the glaze has three aspects, referring to the manner in which players' eyes 'glaze over', the strategies that games use to retain interest (a sense of 'stickiness') and the distorted reflections on the surface of lacquered objects. These correspond to 'spectacular immersion, interactive agency and mimetic simulation' respectively, which are not 'sequential categories, but simultaneous layers'. Chesher elaborates on this oleaginous sensation:

Unlike the voyeurism of the cinematic gaze, the psychic relationship of the glaze is sadomasochistic. At its most basic level, the pleasure of play comes from inflicting and receiving pain within the ludostatic frame... The glaze relation is generally closer to what Laura Mulvey refers to as sadistic fetishism rather than scopophilia (the love of looking). However, there is also a strong masochistic dimension to the pleasures of glaze-play. It usually takes many failed attempts at completing difficult missions before the player finally succeeds. Failures are often more spectacular than successes... Much of the pleasure of play is in facing and cheating death. (Chesher 2004, 5)

This description of the stickiness of the glaze as bivalent – a tension between voyeurism and sadism – recalls Metz's description of cinematic fetishism. The screen is part of a game's 'cybernetic balance that maintains a hold over players', one of its 'ludostatic mechanisms' (5). For Chesher, the relation of the glaze incorporates certain traits traceable to cinema and television but involves a shift of emphasis from the metaphor of scopophilic-voyeuristic narcissism to that of sadomasochistic fetishism. Where in the former case the 'moving cutting-off' occurs at the distance of the cinematic screen, in games the relations between visible and nonvisible are (as the example of XCOM shows) performative. Framing devices thus have a very ambiguous role in performance: they are *both* structures of control and command, and also sources of anxiety and uncanny fetishistic processes. This dual signification considerably precedes videogames.

CHAPTER SUMMARY

This chapter explores J.L. Austin's notion of performative utterances and how they may be repurposed for studying videogame performances. Austin himself attempts to exclude performances inside a 'framed' space (such as a game) as 'parasitic' on normal performative acts. However, the concept of the frame is important for articulating how performances are structured and understood. As Ndalianis has argued, baroque art utilized multiple framing devices in order to orient and guide audiences' performance within a represented space. The importance of framing to videogames is demonstrated as a type of 'neo-baroque' media, through several case studies including *Defender*, *The Elder Scrolls* games and *Batman: Arkham Asylum*.

Notes

- 1. Interestingly, Austin's example of kicking a goal occurs in the framed space of a sporting field, but he is happy to include this as an example of an earnest performance while excluding works of art.
- 2. This legalism supports Austin's insistence (presumably raised against certain strains of reductive positivism) that social conventions are 'of course facts', but also his not always convincing assertions that in difficult or liminal cases 'a judge could decide' between various competing interpretations of the validity of a performative utterance.
- 3. It is striking that the idea of a zone in which sincerity and insincerity are indistinguishable has extensive precedent in writing on play; in addition to Sutton-Smith's classic *The Ambiguity of Play* (2001), commentators as diverse as Baudelaire (1995), Gadamer (2004), Huizinga (1947/1970), Benjamin (2006) and Bateson (1972) have described the putatively frivolous activity of play in terms of a constitutive seriousness. Nietzsche goes so far as to make this attitude essential to maturity in one of his aphorisms: 'Mature manhood: that means to have rediscovered the seriousness one had as a child at play' (1973, 94). The temporality posited in this reorientation toward an anterior state acts to destabilize normatively linear notions of innocence and experience.
- 4. One such debate was between Derrida and Searle (Derrida 1988) in which the possibility of ultimately deciding on whether a given utterance was parasitic or not – given that a sign or mark could be iterable outside of any original context – was a key point of contention. For a comparison of Derrida's grammatology with code, see Hayles (2005).
- 5. The Elder Scrolls will hereafter be referred to as TES.
- 6. See, for example, the unmistakably titled 'Why Oblivion Sucks': http:// sites.google.com/site/damicat/.

What Is *Rhyparography*? The Ambiguity of the Framing Device

Chapter 2 explored the ways that complex regimes of framing are integral to felicitous performance in videogames. Players are constantly putting together different forms of information in the course of play, and this navigational function aligns videogames with Ndalianis' concept of the neo-baroque framing device. However, as argued by writers such as Mulvey, Metz and Chesher, frames are paradoxical: they demarcate real and depicted space, but do not properly belong to either. Frames are also capable of generating a fetishistic investment in an unseen 'beyond' or 'outside'. A corresponding vacillation is also discernible in performative terms: framing devices in games help disseminate structures of performative judgment, but like a stage or a picture frame they also point beyond any particular performance to the possibilities inherent in play. Framing devices thus have a dual signification which this chapter will develop as the 'allegorical' and the 'tautegorical' reading, respectively.

This chapter will consider the framing device's paradoxical nature through two key 'gallery' scenes (i.e., scenes in which multiple framing devices are used to explore the problem of the frame in general). This begins a series of such scenes analyzed in this book that are drawn from the history of literature and art. The first is Willem van Haecht's *The Cabinet* of *Cornelis van der Geest*; the second is Balzac's *The Unknown Masterpiece*. In the former case, the opposing readings of scholars Victor Stoichita and Giorgio Agamben will show the paradoxical nature of the framing device in an early rendering of the modern attitude to images. In the latter, the

© The Author(s) 2017 D. Jayemanne, *Performativity in Art, Literature, and Videogames*, DOI 10.1007/978-3-319-54451-9_3 text provides a literary reflection on the framing device that highlights its paradoxical elements in a modern context. This comparative series, which will be continued in subsequent chapters with *The Crying of Lot 49, Oryx and Crake* and *Life is Strange* (Dontnod Entertainment 2015), is not intended to describe a continuous genre. Instead, the intention is to provide a series of works in which a titular frame interacts with a *mise-en-abyme* 'gallery' scene – a series of 'litmus tests' that highlight transformations in the status of the framing device.

RHYPAROGRAPHY: ANCIENT VIRTUAL REALITY

'Virtual reality' has a long history (Grau 2003). Stoichita (1997) recounts a quandary faced by Pliny the Elder concerning the painter Piraeicus. This painter created an ancient form of 'virtual reality' by painting everyday subjects (a 'minor style of painting') rather than those of an elevated nature - and in doing so, 'gave exquisite pleasure'. Pliny, 'through a play on words ... transforms the idea of *rhopography* (*minoris pictura*) into that of *rhyparography* ("sordid painting," the representation of vile, disgusting objects). To what can be attributed the fame obtained by the representation of "mundane objects"?' (18). The genre of the still-life (the 'genre scene' as such), unable to borrow the authority of an object, scene or personage from tradition, instead must induce pleasure and derive its value from the bewitchingly illusionistic depiction of its unworthy subjects. This ostentatious illusionism is from the outset a sordid, controversial, quixotic affair. If nothing else, then, the often dismissive discourse surrounding videogames indicates that they can be suitably placed in the nontradition of rhyparography.

In Pliny's estimation, playful engagement with the art object is devalued, in spite of (or perhaps because of) giving 'exquisite pleasure'. The value of such images cannot derive from their valueless subjects, and as such – disturbingly, for Pliny – the value and the pleasure involved in the representation returns to the image *as* image. These images refer not beyond themselves to the respectable reality of tradition, but draw attention to themselves as ends or goals in their own right – as clever, brilliant images. Observers have the uncanny sense that they are dealing with illusions that are somehow self-aware that they derive their appeal to the gaze from their provisional, contingent and vainglorious character. Hence Pliny's quandary regarding Piraeicus: how can something so profligate have value? The ancient historian's opinion 'confirms the emergence of still-life (and that of the genre) founded on the contrast between the insignificant, vain nature of the subject and the illusionist quality of the representation' (18). *Succès de scandale*, it seems, precedes Stravinsky or Harry Reichenbach by a good few millennia. While it is anachronistic to read more modern dichotomies such as high versus low art into Pliny's writing, some measure of the enduring quality of this opposition can be seen in Pascal's well-known line: 'How vain painting is, inviting admiration by its resemblance to things we do not admire in the originals!' (Pascal, 38).

For Stoichita, the still-life genre as it was revived and developed in the art of sixteenth- and seventeenth-century Europe revivifies and problematizes the paradox of the ancient non-genre of *rhyparography*. The still-life genre participated in a wider context: the 'recognition of the image as an image was a process widely encouraged by the Reformation' (Stoichita, 89). Max Weber notes, however, that this was not uniform across Protestant polities and contexts. Where 'asceticism descended like a frost on the life of "Merrie old England," giving rise to a 'ferocious hatred of everything which smacked of superstition, of all survivals of magical or sacramental salvation...there was room in Holland for a great, often uncouthly realistic art' (Weber 2003, 168). This 'room' for images which Weber construes in terms highly reminiscent of *rhyparography* is linked to the power of the secular forms of authority and discipline, 'the joy in life of the parvenu bourgeoisie' (169) and 'That powerful tendency toward uniformity of life, which to-day so immensely aids the capitalistic interest in the standardisation of production' (169).

Working in the Frame

If in England, protestant discourse on the image remained couched in religious terms and lead to ascetic renunciation of mediated relations to the divine, in other contexts painting began to separate images from ritual contexts. Ancient *rhopography* drew attention to that which is most 'antipictorial' – the material basis of the image – in the very same gesture by which it sought to veil this basis behind the illusionism of realist style. *Rhyparography* thus placed emphasis 'on the *techné*, in fact on art itself, which then becomes the real object of all paradox, whether it be ancient or modern' (Stoichita, 29). However, in the modern context Pliny's dismissive bemusement was no longer a sufficient critical response. New questions arose to confront observers of these paintings: 'By raising the issue of

art in terms of *function, reception*, and *context*, Protestant critics created, in a dialectical manner, the modern notion of *art*² (89).

The modern version of *rhyparography* did not reemerge in the form of independent works, but as *marginalia* or *parergon* (Derrida 1987). Naturalistic effects in painting, such as those of The Master of Mary of Burgundy, literally flourished in the frames – panels which could be opened and shut to reveal or conceal a devotional image – as *trompe l'oeil*. The inclusion on canvases of quasi-independent pictorial spaces such as embrasure, window, doorway, curtain and niche was the precondition which allowed the lavish description of everyday objects: they could emerge provided that expensive artistic time and materials still maintained a staggered relation to the devotional image. *Rhyparography* reemerged as a framing device.

A vivid example is Aertsen's *Christ in Mary and Martha's House* (1552), where the Biblical scene appears dimly through a window, almost incidental to the still-life rendition of a kitchen in which painstakingly rendered foodstuffs dominate the composition. The brushes dote on the quotidian rather than the eternal. The realism of the objects was emphasized by the illusionist depth of the niche and the casting of shadow – by tricking the eye and straddling the frame, they seem to bring the represented objects they contain from the painterly sacred scene into the phenomenological space of the observer. These transformed spatial relations allowed the vividly realized appearance of the generic object as a distinct artistic effect. Bryson (2013) registers 'Aertsen's extraordinary reversal of scale' (146), an effect that would be influential enough to be registered in Velázquez's treatment in 1618 of the same subject: 'In *Christ in the House of Mary and Martha*, the figures named in Scripture as Christ, Mary and Lazarus become impalpable and shadowy, while the image gives itself over to the nameless kitchen workers, vividly represented' (149). Finally, we have Martha's view of things.

The works that start to appear in the frame are frozen images (Alpers 1976) compared to the dynamic narrative forms drawn from tradition: 'Never has "life" been more "still" than in the incunabula of the genre already illustrating the convergence of the three major themes: the *trompe l'oeil*, the metapictorial, and the *vanitas*' (Stoichita, 21). The provenance of these works in the frames of other paintings suggests that a new thematic has been folded into those of realism and vanity characteristic of ancient *rhyparography*: the metapictorial, the problem of the frame. Stoichita claims that art history has treated these themes piecemeal,

whereas he believes that it is possible to 'determine how they relate to one another in the still-life as a whole... Born as a *marginalia*, a *reverse*, an *outside-the-work*, an *image-frame*, in a word as a *parergon*, still-life – in the seventeenth century – becomes an *ergon*' (23, emphasis original). In this way, Austin's 'parasitic' signs take on a new importance.

'VIVE L'ESPRIT': THE SKULL AS PERIPETEIA

One trope crystallizes this process of 'folding-in' of the framing device into the painterly space: 'Among the objects that were usually painted onto the backs of diptychs and triptychs is one that was destined to achieve greatness and that would still be around after the fifteenth century: the skull' (21). The skull is of particular interest because it combines the metapictorial 'reverse' of the painting, virtuoso trompe l'oeil illusionistic technique and the image of transience. The memento mori shows how the 'reverse' of the painting becomes 'obverse'. As an obverse image, the blank eyes of the skull return observers' gazes with the truth of the world and themselves: 'The constative statement "all is vanity" can only be performed by an image which, paradoxically, is itself a vanity, a bauble' (150). The terms that Stoichita uses here directly map onto those with which Austin analyses performative utterances. As such, the thematic presentation of truth (the literal and figurative reverse of the image) is itself achieved via illusion. The obverse image's truth and its nature are tightly bound; in effect, it returns the gaze as a self-aware image: 'these images are structured by the figure of peripeteia, reversal' (154). It's Hamlet's gambit: there's nothing quite like mise en abyme for catching consciousness.

Stoichita's concept of the figure of reversal thus provides a link between performativity, framing devices and visual culture which he takes to be emblematic of the modern conception of images in general. In the seven-teenth century, frames-within-frames such as the curtain, niche, map or window were supplemented by still more complex intertextual representations that turned vision into a game of the gaze: transposed paintings, maps and mirrors such as the one explored in Foucault's celebrated analysis of *Las Meninas* (1970, 17). A connoisseurship of the image flourished contemporaneously with these artistic explorations of the figure of *peripeteia*. This gusto for collecting images did not fail to become the subject of an image in its own right.

A key image of this type is Willem van Haecht's 1628 depiction of the visit of the archduke Albert and archduchess Isabella to the establishment

of Cornelius van der Geest (also among the guests are artists Rubens and Jordaens). In these paintings of gallery scenes the interlaced importance of *mise en abyme* and framing is particularly evident. In painterly representations of such collections, there is a tension between realistically portraying the disposition of the contents of the cabinet, and a need to render artistically the symbolic principles of its organization (and thereby attest to the particular genius of the collector). The documentary function, quite distinct from contemporary notions of verisimilitude, is not conceived as a reproduction of the gallery 'as it really was'. Instead, the space is conceived as alive with intellect, articulated visually through the order by virtue of which each image takes its place. The 'off-frame space' of any given painting in a gallery is determined by the binding logic of the collection itself: the set of the other images that have been included.

It is interesting in this regard to contrast Stoichita and Agamben in their readings of the van Haecht picture. For Stoichita, 'The eyes are constantly ricocheting from one spot to another, unable to stop on any one thing' (113). Agamben writes: 'The walls are literally covered, from the floor to the ceiling, with paintings of the most diverse sizes and materials, almost touching each other so as to form a pictorial magma that recalls Frenhofer's "wall of paint" and in which the single work would have had little chance of being noticed' (1994, 30). Both Stoichita's 'ricocheting' gaze and Agamben's 'pictorial magma' imply a kind of semiotic infelicity in which the gaze wanders indefinitely through a non-linear labyrinth: not the failure of any one particular performance, but an unlimited movement. However, the gaze of both scholars comes to rest on a particular point: an inscription situated above a doorway and adorned with a skull emblem: *Vive l'Esprit* ('Long live intelligence'). However, they read this enigmatic framing device in very different ways.

Stop Signals for the Gaze

In *The Self Aware Image*, the *vanitas* emblem synthesizes the overall logic of *peripeteia* that governs the gallery scene. It turns the entire gallery into a figure of reversal or obverse image. Stoichita, who uses both 'gallery' and '*Wunderkammer*' to describe the van Haecht painting, highlights its performative aspects through analyzing the comportment of the guests: 'The main theme of "Cabinets of Curiosity" is *conversation*. The structure of the representation as a whole is dialogical. Anyone looking at it must be aware of the true value of this information: We are not standing in front of

a mere description of a gallery, nor in front of a "story" needing to be deciphered...It is a *colloquium*, a *disputatio*, or, to use the term commonly used at the time, a *discussion*.' This is an implicit (if undeclared) critique of Svetlana Alpers' (1976) distinction between the descriptive and the narrative genres of the period. For Stoichita, the van Haecht painting is neither description nor narration: mediating the various styles of the period, the cabinet picture thematizes the discourse of the guests as they actively interpret the paintings for and with one another.

This then is a *performative* reading, as it is the performance of disputation, rather than the recording of a sequence of narrative events or the descriptive representation of the contents of the gallery, that is the true theme of this genre. The arrangement of the paintings, each a fragment of the whole, is such that 'It is up to the spectator to construct, step by step, a combinatory technique, to establish bridges and correlations...Linear reading is replaced by intertextual reading. The painting, which at first appeared to be a mosaic of quotations, regroups and reorganises itself' (Stoichita, 113–114). The gaze-discourse of the connoisseurs is organized by the intertextual placement of the paintings. This intertextual relationship comes to represent each individual picture to the collection. The original traditional contexts are not simply effaced in this process, as can be seen in the prominence given to certain monumental works which, serving as 'altars' or centerpieces within the collection, confer a pseudoreligious morphology upon the space.

This afterlife of the original contexts and histories of the collected artworks is the topic on which the scholarly discourse turns: 'The paintings are the visible manifestation of a discourse on art. This discourse ... unites the dramatic scenario of the question of images with the rhetorical scenario of the art of memory...' (127). The metapictorial logic of the collection supplements – while simultaneously embracing – whatever historical-mnemonic series in which the individual paintings may once have partaken, turning them into a spatial code. In Austin's terms, they become a set of performative criteria necessary for felicitous discourse within the space. In this way the *parergon* of the framing device's motto – *Vive Vesprit* – is immanent to the performance of interpretation amidst the gallery's framing devices.

The skull emblem gains a special prominence in this emerging metapictorial economy of vision. It does this by tracing the *limits* of the erudite humanist discourse that links together the fragments of the collection by representing the figure of reversal as 'the most radical intertextual relationship'. This variegates the space which would otherwise be an unintelligible sensory manifold: in this reading *The Cabinet of Cornelis van der Geest* co-implicates performance and framing. Performative criteria are inscribed in the qualities of the painting themselves as 'stop signals' that prevent the eye from ricocheting from painting to painting uncontrollably. 'To the modern eye, these signals are barely intelligible. To the eye of the original spectator, they were – one can presume – quite sufficient.

The most obvious of these stop signals, perceptible even today, are those images that, for one reason or another, are not part of the linearity: the one a 'connoisseur' is contemplating, the one not yet hanging on the wall, the first or the last of a sequence, the one that is placed on the 'bureau'/altar. (114)

Along with, it ought to be added, the motto *Vive l'Esprit* and its *vanitas* blazon. *Mise en abyme* provides stop signals for the gaze by, much like an index, representing a collection to itself. The skull emblem thus symbolizes the various forms of movement through the intertextual space which extend beyond the limits of any one of its many frames. All of these 'stop' signals can thus be classed under the 'metapictorial' or self-aware aspect which Stoichita assigns to *rhyparography*. In this way the emblem literally as well as figuratively signifies the 'end' of the gallery: the discourse of the scholars performs the interlaced tasks of excluding the exterior and organizing the interior. Not only is the gallery constructed around an intellectual code, but the stop signals internal to each composition are in fact *productive* of spatial-realist (*trompe l'oeil*), temporal (*vanitas*) and intertextual (metapictorial) schemas that govern performance within the gallery.

Performative Images

Contra Austin's assumption that parasitic signs such as frames signify only the difference between playful and earnest performances, then, Stoichita's reading of *The Cabinet of Cornelis van der Geest* provides a specific example in the history of art in which framing devices serve a variety of functions – all of which are drawn together insofar as they give structure to the felicitous performances of the human figures within the space. The Van Haecht painting displays two effects of the new art-historical consciousness on each individual depicted picture. First, the off-frame space of each of these paintings is, in effect, composed of *other paintings*: however, this is not experienced as a delimitable number of individual paintings, but as a pure multiplicity or manifold.

Second, certain compositional elements in each included painting are highlighted in the performative code that enables movement through this mutual off-frame space. These elements 'stop the gaze' that would otherwise ricochet uncontrollably throughout the gallery, constituting the *forms of movement* between paintings that structure the felicity of the connoisseur's performances. The *Vive l'esprit* emblem, returning the gaze in a figure of *peripeteia* or reversal, synthesizes this dual role of the framing device – both outward bound and integral structure.

Although the ramifications of this perspective as a model for the study of videogames will be explored more fully in Chapter 5, it is worth briefly outlining them at this juncture. The figure of *peripeteia* can help explain how visual elements take on the role of disseminating performative criteria of judgment: by creating, to use a more modern vocabulary, a set of feedback loops across multiple framing devices. This vantage offers some counter-intuitive ramifications with regard to realist graphics in videogames. Nideffer (2007, 215) has gone so far as to refer to 'the holy grail of realism' which has driven industry research and development and marketing strategies for decades. While realism may be a specific design goal or emphasis in certain games or genres, like the earlier trompe l'oeil effect it maintains a tension with the metapictorial and the *vanitas* effects. The key point is that the framing device can create the conditions for various kinds of effects: spatial-naturalist like the still-life, narrative-temporal like the vanitas or logical-indexical like the metapictorial. Computer technology maximizes these theoretical trends by making the display and manipulation of framing devices far more labile, intensifying the link between framing device and performance.

From a standpoint influenced by Stoichita, it is possible to address both the contingency of claims to realism across gaming's hardware and software generations and the robustness of the gaming experience in the face of nonrealist framing devices such as those explored in Chapter 2. Rather than conceiving of the experience of frames in videogames as inconvenient departures from a supposed ideal of an ever-more perfect verisimilitude, realism or naturalism, it can be conjectured that these elements work *as framing devices* – as parasitic signs that disseminate structures of performative judgment. Similarly, in this view the experience of game space does not involve a 'projection' into the simulated world so much as the adaptation to a particular game's set of framing devices. Like the connoisseurs in van Haecht's painting, players perform the task of navigating and assembling multiple framing devices (albeit utilizing very different technologies). A realist image – like other forms of *rhyparography* – both calls attention to its own construction (its 'virtuosity' as Ndalianis describes it) and raises the performative question of how the viewer is to situate themselves with regard to the work. In this way, realism is not seen as an asymptotic goal governing the development of videogame graphics; it can be put *into relation* with other more readily identifiable framing devices under the rubric of performativity. Before elaborating on these points in coming chapters, however, there remains Agamben's dissenting judgment of the gallery scene to take into account.

FRACTURED PRESENTS: ALLEGORY AND TAUTEGORY

Stoichita's reading is highly persuasive in reconstructing the performative dimensions of the van Haecht gallery painting, but in important respects it accedes to the rhetorical appeal of the painting: the imperial guests and noted artists are, in exhibiting their ability to navigate the multiplicity of framing devices, asserting cultural privilege and power. An infelicitous performance from such subjects is unthinkable since they enjoy privileged access to the codes by which the gallery is organized.

In Stoichita's reconstruction of the gallery painting's logic, the emblem serves as a point of convergence between sensuous manifold and discursive performance. The gallery painting represents the collection in a broadly realist pictorial style, but the arrangement of the paintings in *The Cabinet of Cornelis van der Geest* doesn't present the arrangement of the paintings 'as they were'. Instead, it thematizes the performative aspects of discussion: the discursive and gestural attitudes of the patrons by representing the paintings in metapictorial series that would be intelligible to their emerging art-historicist form of consciousness. The sensuous mass of pictures is thus subordinated to the intelligible dialogue of the visitors. It is striking that Agamben's reading is completely at odds with this: a 'pictorial magma' implies that the sensuous has overwhelmed the capacities of consciousness and attentiveness.

Furthermore, Agamben differs from Stoichita in his periodization of the painting, drawing a distinction between the modern gallery and the medieval Wunderkammer or Cabinet of Curiosities. Essentially, Stoichita looks forward from the van Haecht to our contemporary conception of art, while Agamben looks back to register a conceptual break with the middle ages. The princely medieval cabinets were even more eclectic than those seen in the seventeenth-century gallery example. The myriad objects from far-flung places were a cipher for the scope of the world of divine creation, not human ingenuity. Compared to a gallery such as that of Cornelis van der Geest, the medieval Wunderkammer is a microcosm in which 'individual objects seem to find their meaning only side by side with others, between the walls of a room in which the scholar could measure at every moment the boundaries of the universe' (Agamben 1994, 30). The later gallery scene represents a separation of its contents from the 'great world of divine creation', the cipher of a separate and effete intellect. In the space of the gallery, 'the canvases resemble the sleeping princesses of the fairy tale, prisoner of a spell whose magic formula is inscribed on the door's lintel: Vive l'Esprit' (31).

Elsewhere Agamben, reasserting 'the exemplary defence of Benjamin',¹ stresses the importance of the culture of the emblem to the intellectual life of an age 'in which the modern scientific image of the world was being formed...The emblem is in fact the central figure to which this period entrusted its most profound cognitive project and, also, its most intimate malaise' (Agamben 1993, 142). In contrast to Stoichita's treatment of performative convergence, Agamben's account holds that it is in fact precisely in the *separation* of body and soul – exemplified in language by metaphor and in visual culture by the emblem – that the 'mystical mixture' was made manifest not as human discursive performance but as a divine marvel:

Metaphor, as the paradigm of signifying by improper terms ... becomes thus the principle of a universal dissociation of each thing from its own form, of every signifier from its own signified. In emblems, in the 'amorous and heroic' *imprese*, in the blazons (heraldic arms) that now mask with their *picta poesis* (painted poetry) all the aspects of profane life, as in the *acutezza* (sharp wit, ingenuity) that is employed to the end of all signification, the link that joins each object to its own appearance, each creature to its own body, each word to its own signified is radically called into question. Each thing is true only to the extent to which it signifies another, and each thing is itself only if it stands for another. (142) The importance of the emblematic and allegorical tradition for thinkers such as Agamben and Benjamin is diametrically opposed to Stoichita's reading of the *Vive l'esprit* emblem. For these authors, the allegorical emblem seeks to present something like an experience of the inexperience-able: the radical divergence or collapse of forms of signification.

It is impossible to look at a medieval emblem – is it an object, a work, an image, an aphorism, all of the above? – and decide that it simply annexes an enigmatic visual presentation to a gnomic syntagm such that one gives the 'meaning' of the other, or that the emblem is some kind of pictorial representation of an intelligible content. In presenting such a disjunction, the emblem traces an 'original fracture of presence'. 'Early on, however, this fracture was dismissed and eclipsed through its metaphysical interpretation as the relation of truer being to less true, of paradigm to copy, of latent to sensible manifestation' (Agamben 1993, 136).

This position is related to Benjamin's *Trauerspiel* study in which he challenged 'the tyranny of the symbol as the privileged model for art theory in the nineteenth century' (Mieszkowski 2004, 45). An example of this from English Romanticism (albeit not one directly engaged with by Benjamin who was generally more concerned with German Romanticism) is Coleridge, who in *Lay Sermons I: The Statesman's Manual* champions the symbolic over the allegorical. The latter is read as a coordination of two empty, arbitrary and contingent orders of abstraction, being 'but a translation of abstract notions into picture-language, which is itself nothing but an abstraction from objects of the senses'. The former is a part representative of a whole meaning ultimately grounded in 'the translucence of the eternal through and in the temporal'. Coleridge lionizes 'tautegory', the 'speaking-same' of the symbol, over and against the 'speaking-other' of allegory.

The Uncanniness of the Frame

The difference between the interpretations of Stoichita and Agamben therefore indicates a turning point between 'allegorical' and 'tautegorical' conceptions of metaphor and symbol. The *Vive Vesprit* blazon is an emblem that has completely reversed its gesture. Far from invoking a fracture as did emblems and symbols, it is now an obverse image – a feedback loop that acts to 'stop the gaze' wandering among a multitude of potential frames or points of articulation. It thereby becomes the end point of signification conceived as a process of generating meaning. It is

this refiguring of the figural, this new metaphor for metaphor, that constitutes what Agamben terms the 'covering over and dismissal' of the original problem of the fracture of presence. However, Agamben argues that modern theories of emblematic allegory cannot completely elide the form's paradoxical import:

... the world of emblematic figurations... is not simply abolished. The world now becomes the warehouse of jetsam where the uncanny fishes for its scarecrows. The fantastic creatures of Hoffman and Poe, the animated objects and caricatures of Grandville and Tenniel, and Odradek's bobbin in Kafka's tale are, from this point of view, a *Nachleben* of the emblematic form ... In the form of the uncanny, which invades daily life with increasing force, the symbol presents itself as the new Sphinx threatening the citadel of reason. (1993, 144)

This *Nachleben* (afterlife) affects the reception of the *Vive Vesprit* emblem: separated from its historical and cultural situation, the unthinkable correlate of the Van Haecht picture comes to the fore.

What then can be said of the experience of subjects who are *not* versed in the culturally relevant performative criteria of judgment? These subjects are dimly represented by Van Haecht outside the gallery space, but they also include ourselves even if we are erudite art historians – as Stoichita admits, many of the 'stop signals' for the gaze would be evident only to sixteenth-century cognoscenti. The average contemporary gallery-goer may very well find their eye abandoned – ricocheting, as Stoichita puts it – across this representation of a baroque gallery. The very devices that structure and signify forms of movement that constitute both on- and offframe space also testify to the potential collapse of their own operations and constitutive gestures: a multiplicity of frames is also, potentially, a 'pictorial magma'.

The unification of text and image in the 'enigmatic signifier' of the emblem is itself fraught by the contingency that Pliny the Elder had already discerned in the *rhyparography* of Piraeicus. The salute to the intellect's capacity to draw disparate signs into relation coincides with the uncanny, melancholic gaze of the *memento mori*. The returned gaze is that of the skull adorning the door to the outside world – a historical world which could easily be mistaken for just another picture, but is in fact busily sweeping away the very regime of value that supports the collection.

FRENHOFER'S WALL

As Alpers (1976) has argued, by the nineteenth century the hierarchy of genres and traditions which structured the performance of the guests to Van Der Geest's gallery enters into a period of decay. Realist painting, such as that of Seurat or Courbet, becomes neither description nor narration but rather the illumination of moments in time: a 'fragmented actuality'. In this regard, it is important to note that Agamben's comparison of the gallery's 'pictorial magma' to the 'wall of Frenhofer' is not merely accidental. The Frenhofer invoked here is one of the central figures of Balzac's *The Unknown Masterpiece* (2001). A close reading of this text will register the new complexity that attended the framing device in modernity.

The climactic scene of this story occurs in a representation of a gallery that can be compared to that of *The Cabinet of Cornelis van der Geest* in order to help reckon with Agamben's assertion that the uncanny element of the emblem 'invades daily life with increasing force'. *The Unknown Masterpiece* is set in 1612, somewhat close to the era in which Van Haecht was working. It is a story of the Pygmalion type in which the painter Frenhofer vacillates between perceiving his canvas as an artwork and as a real woman. The title itself is an intriguing framing device for the text: immediately the question arises (similar to that raised by Pliny with regard to Piraeicus) as to how something that is unknown, obscure or anonymous can be given acclaim and be considered a masterpiece.

In his Introduction to the story, Danto notes a remarkable convergence of anachronistic optics: of converging and diverging ways of seeing, types of proximity and forms of movement. The novel involves two romanticized historical painters alongside the fictional Frenhofer – Porbus² and Poussin – who represent respectively the established court painter and the Balzacian 'Young Man from the Provinces' (*TUM*, xiii). Like Aertsen's embrasure, which used realistic images to intertwine with the space of the viewer, Balzac deploys the realist historical detail to establish a close connection between fiction and reality. Here, drawing on Auerbach and Lukács, I will argue that Balzac's use of realist detail as a kind of framing device connects with the performative thematics of *TUM*'s final gallery scene. The realist detail also resonates with the uncertainty inscribed in the titular frame (the masterpiece as 'unknown') and hence the allegorical aspect of the framing device. Across Balzac's great body of work, the realist detail becomes a kind of framing device that seeks to compensate for the decay of tradition that undergirded the performative thematics of Van Haecht's gallery scene. However, this attempt at assigning a tautegorical function to realism collapses into the allegorical acknowledgement of artistic performativity, contingency and entropy (Petrey 1992): the attempt to recreate and justify the world in fiction results instead in the vertiginous unveiling of the conditions of artistic production and Balzac's own performative mode of writing.

The story is structured around a number of *atelier* scenes which intertwine the travails of artistic production with the concept of the frame. The first is in Porbus' studio, which features his latest work, 'a Mary of Egypt undressing in order to pay her passage to Jerusalem' (TUM, 10–11). This subject links the theme of passage across borders with that of figural veiling and emergence. Frenhofer criticizes the work both because it makes it impossible to imagine that one can step into the frame (and hence past the figure of the saint) and because the figures themselves vacillate unhappily between graphic line and painterly fields of color. This bungled tension between styles devalues the work: 'Over here, like molten bronze cracking the mould, your rich high colours à la Titian have exploded the austere Dürer contours you poured them into. While here, the lineaments have resisted and throttled the splendid excesses of the Venetian's palette. Your figure's neither perfectly drawn nor perfectly painted...' (13).

Frenhofer invigorates the composition with a few brilliant brushstrokes while he outlines an important performative and temporal aspect to Porbus' failure. Both Danto and Serres point to Porbus' role as representative of the 'present' of Mannerist painterly style, but that this present is itself a contingency: 'Marie de Médicis will soon leave him for Rubens with his abundant reds and pinks' (Serres 1983, 52) – Rubens, who himself would teach Willem van Haecht. The three painters thus trace a historical and temporal series: Porbus is associated with the present and Poussin the future, with the wizened Frenhofer being the past master. In addition to this historical detail, Frenhofer's aesthetic critique emphasizes the complex temporality of artistic production: 'Beauty is something difficult and austere...you must bide your time, lie in wait, seize it and hug it close with all your might in order to make it yield' and moreover '...forests of pencils and acres of canvas must be used up before you're there' (14–15).

The point of perfect balance between excess and austerity, between two familiar modes of artistic presence – the sensuousness of color and the

definition of line – seem to the observer of a finished picture to be the product of spontaneous genius, as 'No one will thank us for what's underneath. Remember that!' (19). For the old master in contrast, the momentary and fleeting appearance of artistic beauty resembles Menelaus' grip on Proteus: it is spontaneous only in the sense that it is the trace of a materialist struggle across multiple performances in which beauty is sought in all the contingency of appearance. The artist is like a hunter, lurking in the scene of production to seize the performance of perfection.

Pourbus' failure, for Frenhofer, is thus to present two different stylistic performances in the one canvas and thereby reveal the constructedness of the work; whereas a beautiful painting is one in which there is no trace of any preparatory effort because it appears spontaneous even though it is not. This is also reflected in Porbus' theme (the Mary figure is halfway between states of dress and undress), and in her lack of movement (she is forever positioned on the edge of the flowing river). Frenhofer's critique of the Mary of Egypt thus links two types of 'off-frame space' through this concept of fleeting beauty: the (spatial) uncanny sensation that the figure could move of its own accord beyond the frame, and the (temporal) failed attempts and preliminary works that precede and condition the painter's hunt for the appearance of the beautiful. The theme of the multiple performances necessary for artistic production is further emphasized when Poussin executes a sketch – typically a prefatory task in the context of painting – which convinces Frenhofer to treat the untested young man as an equal, as an artist.

Frenhofer invites the two to his own studio. He however flatly refuses to let Poussin and Porbus see his current canvas – the titular Unknown Masterpiece – going so far as to suggest that this would be tantamount to sacrificing his mistress to another. He does, however, make known his lack of a suitable model for this masterpiece, called *Catherine Lescault* or *La Belle noiseuse*. This hidden work exercises a powerful pull over both younger painters, who have to this point only been allowed to hover on the threshold of Frenhofer's studio.

The next *atelier* scene is Poussin's. Gillette, his lover, discerns from the artist's pensive demeanor that something is amiss. He admits that he wants her to pose not for him but for Frenhofer, in the hope that the Unknown Masterpiece will be revealed: an exchange of mistresses which will allow the younger painters to enter the master's scene of production. This leads her to a deep uncertainty: given the nature of his request, Gillette is unable to determine if his greatest love is reserved for her or for art itself.

Three months later, Frenhofer has sunk into deep melancholy due to his inability to find a suitable model. Porbus suggests an alternative – Gillette – on the condition that the old painter allows his protégés to view The Unknown Masterpiece. Gillette and Poussin arrive; seeing her, Frenhofer accedes to Porbus' proposal.

The final scene takes place in Frenhofer's studio, a gallery scene that will be the focus of this analysis. Poussin and Porbus are admitted into the studio once the work is finished. The scene wheels vertiginously on a moment of shock and collapse. 'Seized by the keenest curiosity, Porbus and Poussin rushed into the middle of a vast studio covered with dust, where everything was in chaos; here and there they caught sight of paintings and sketches on the walls, and suddenly stopped, both of them overcome with admiration, before a life-size figure of a half-naked woman.

'Oh, don't bother with that!' Frenhofer said. 'That's just a study for a pose; as a picture it's worth nothing at all. These are my mistakes,' he continues, gesturing at the ravishing compositions hung on the walls around them.

At these words, Porbus and Poussin, astonished by this disdain for such works, sought the portrait they had been promised, without managing to find it. (39)

Gillette had posed for the *Catherine Lescault* amidst this multiplicity of frames – Frenhofer's other works, which prefigure his masterpiece at the expense of a forest of pencils and (one surmises) an ocean of pigments. Poussin and Porbus rush to view the finished painting, but they are lost until Frenhofer takes on the role of the *memento mori* and stops their gaze himself. 'You're in the presence of a woman, and you're still looking for a picture... Here's true form, the very form of a girl. Haven't I captured the colour, the energy of the line that seems to bound her body? Isn't this just the phenomenon presented by objects that live in air as fish live in water?' (39).

Frenhofer paradoxically describes his achievement as both picture and woman; both delineation and a radiant energy; both framed form and form of movement. In fact, far from a conventional feminine figure, what confronts Porbus and Poussin is a wall of paint, a swirl of incoherent color and broken lines – strikingly reminiscent of the pictorial magma that Agamben sees in *The Cabinet of Cornelis van der Geest*.

'The old fraud's pulling our leg,' Poussin murmured, returning to face the so-called painting. 'All I see are colors daubed one on top of the other and contained by a mass of strange lines forming a wall of paint.'

'We must be missing something,' Porbus insisted. (40)

All that is recognizable is a perfectly painted foot, which leads Porbus to cry 'There's a woman under there!' The 'forest' and 'acres' of preparatory works that are usually hidden from the view of the public are here plainly in view – but all at once, piled on the same canvas. Prefiguring the leg of the veiled widow in Baudelaire's 'Á une passante', only a classically rendered foot is discernible to the two painters amidst the storm of painstakingly hand-mixed pigments Frenhofer has applied over the course of a decade and which, at the time, would have cost a fortune. Frenhofer is at first horrified and then outraged at their response to the Unknown Masterpiece, turning his guests out 'as if they were thieves'.

Frenhofer, once Poussin breaks the spell, bemoans his work in terms reminiscent of Pliny's quandary: 'Frenhofer stared at his picture for a moment and staggered as if from a blow. 'Nothing, nothing! And after working ten years!' The shock of this final enframing leads Frenhofer to destroy both himself and the masterpiece – what for Van Haecht was the emblematic *memento mori* over the lintel stone now eliminates the space it once both opened and circumscribed. This destruction is in one sense in an 'incredible, slow and advancing' ocean of pigments that obliterate the figure; in another it is a sudden shock of realization that the work is a waste. The dazed reaction of Porbus and Poussin to the unveiling of *La Belle noiseuse* can be contrasted to the calm mastery of the visitors to Cornelis van der Geest's gallery. In the latter picture, the visitors exhibit a full command of their comportment and disposition. Before *Catherine Lescault* Porbus and Poussin find themselves lost and inarticulate, resembling Poe's Man in the Crowd, who has lost control of his gestures:

They look at the picture from all sides, on the right, on the left, in front, from above and below. Different points of view, phenomena. The idiots. And they turn their backs on the beautiful, living creature, the young girl behind them. The idiots. (Serres, 51)

There is no cognitive method and no mandate of tradition to 'stop the gaze'; to aid in the navigation of the pictorial magma that is *La Belle noiseuse*. Learned discourse is impossible: the unknown masterpiece has

proven itself unknowable, and the moment of judgment causes a fatal collapse. The framing devices that allowed Van Haecht to depict subjects at ease in their complete mastery are, in Balzac's historical fiction, reduced to a single identifiable fragment amidst chaos.

The Unknown and Potential

Simply to deem the painting a failure is, however, reductive. Frenhofer has after all lived 10 years in blissful pursuit of his beautiful noise, and indeed seems to have had some presentiment of the danger posed in revealing his work to others. 'Do you suppose I'd suddenly abandon ten years of felicity the way you'd take off a cloak?' (34), he retorts when Porbus suggests that he unveil the painting. The enigmatic foot emerging from the painting is a part-object (Fortin 2005) and Frenhofer's own overall narrative trajectory has a certain apotropaic dimension in a modernizing world in which painterly style is increasingly subject to change. Keeping his work secret protects the old master from forces that seek to overwhelm him – such as the passage of time, embodied by the three painters.

Serres goes further. He sees Frenhofer's labors as signs of a unique capacity. Porbus' Mary hovers half-concealed on the edge of a river and forever awaiting passage in an interminable becoming-present, but Frenhofer's Catherine Lescault is inundated. Or better, she *is* a Heraclitean river, the Scheldt or L'Escault: 'I think I know who the beautiful *noiseuse* is, the beautiful quarreler looking for *noise*... There then is the origin. Noise and nausea, noise and nautical, noise and navy have the same etymology...' (Serres, 50). For Serres, Frenhofer's canvas is the sign not of madness, but of a dwelling in potentiality, in the noise that precedes all determinate phenomena. Where Porbus' figure is trapped between styles of artistic appearance, Frenhofer explores the possibilities of expression:

His brushes multiply branches and forkings. He goes back up the thalweg of the river where Egyptian Mary stood, where the boatman vacillated, he goes up the chreod, the path, the slope of the Scheldt [l'Escault]. The Junction is no longer a low synthesis but a high opening that leads to other openings upstream . . . The old master hasn't cut or trimmed his uncertainty, he has let the possible abound. (Serres, 52-53)

Porbus' hesitation between styles (hence between performances) is reflected in Mary of Egypt's entrapment at a border and a double bind

between the depiction of form-endowed figure and flowing drapery; whereas Frenhofer's canvas is a sea of paint constituting a multiplicity of performances.

One less-often explored facet of the text is that of all the figures (whether human or painterly, male or female) that appear, only Gillette's fate is uncertain. As Frenhofer rails about his lost decade of painting and painting-over, Poussin notices her weeping and forgotten.

'What's the matter, angel?' the young painter asked, suddenly becoming a lover again.

'Kill me!' she cried. 'I'd be vile to love you still – you fill me with contempt. I admire you, yet you horrify me. I love you, and I think I hate you already!' (TUM, 43)

At this point, Frenhofer veils his painting and leads Porbus and Poussin from the gallery. At the threshold, he says 'Farewell, my little friends.'

That farewell made the two painter's blood run cold. The next day, a worried Porbus visited Frenhofer and was told that he had died during the night, after burning his canvases. (*TUM*, 44).

No mention in this of whether or not Gillette also leaves, or if she remains amidst the destruction – her status, as both a moral and physical being, is radically indeterminate. Her central concern, whether Poussin loves her or the work of art, remains unanswered.

Performativity in the Gallery

The Unknown Masterpiece has often been read in light of its astonishing prefiguration of high modernist art, and the way in which it telescopes the disparate aesthetic worlds of the fifteenth and nineteenth centuries.³ Here I wish to compare the gallery scenes as depicted by Van Haecht and Balzac with an eye to how performativity and framing function in each case.

The clear separation between art and life watched over by the *Vive l'esprit* emblem has collapsed: the 'pictorial magma' that Agamben already discerned in Van Haecht is now constitutive of the gallery space itself as Frenhofer piles work upon work in a single canvas. His life and the work end at the same time. In contrast to the composed self-mastery of the visitors in Van Haecht's gallery scene, the connoisseurs here are (as Serres

puts it) 'idiots': they have lost control of their gestures and capacities to navigate the gallery space. Combined with the stasis of Porbus' Mary of Egypt and his bungled attempt to combine multiple performances on the one canvas (which nevertheless remain distinguishable as incompatible styles), this indicates the failure of the mnemotechnics that structured performance in the Van Haecht painting (for Alpers, the hierarchy of styles; for Stoichita, the art of memory). Furthermore, where only the artistically learned and materially wealthy are admitted into Van Haecht's gallery scene, the entry of Gillette (characterized as impecunious and naïve concerning the history of art) into the scene of production marks something of a sea change. The decisive gallery scene triangulates not three viewpoints, but four.

Suspicious of art's seductive powers of metamorphosis, Gillette nevertheless has no choice but to wager with it: in choosing to model for Frenhofer, she hopes to divine if Poussin's greatest love is for her or for art. The atelier for her is the reciprocal of what it is for Frenhofer – not an opportunity to render redundant the distinction between art and life through a final triumphant performance, but an assay or experiment by virtue of which she seeks to judge between them. Her lack of a determinate fate aligns her with the 'background' and 'noise' that Serres discerns in Catherine Lescault.

Perhaps Balzac did not pronounce conclusively on the relation between model and artwork through the figure of Gillette because, quite simply, he could not. The text of *The Unknown Masterpiece* itself presents, across various versions, multiple judgments of the status and validity of aesthetic labor: 'In the text's earliest extant version, published in *L'Artiste* in July and August of 1831, Frenhofer announces that his still-unseen painting of a woman is a triumph because it is not a painting but a woman: 'cette femme n'est pas une creation, c'est une creature.' In the final version, first published in 1837, Balzac reverses his terms and defines his triumph as that of the painterly over the representational: 'cette femme n'est pas une creature, c'est une creation'' (Petrey 1992, 733). For Petrey (who has identified performative thematics in much of Balzac's *oeuvre*) this revision is symptomatic of Balzac's literary and political development as he introduced realist historical detail into his fiction and developed a legitimist political position critical of the July Monarchy:

One vision validates mimetic realism and specifies the requirements for a work totally faithful to the object inspiring it. The other is less a mimetic than a performative realism: a representation that does violence to every rule for capturing reality is taken to be reality by a man who has mastered those rules and experienced all the thrilling possibilities they open. (Petrey 1992, 735–736)

Given Frenhofer's own discourse on art, these two outcomes can be read not as simply contradictory but as deeply intertwined in a double crossing of the thematic and performative terrain – Balzac's story as itself being composed of multiple performances. This reflects the multiple judgments about art (model or reality; means or end) that can be discerned in the various versions of the novella: both Gillette's fate and the painting at the center of the gallery scene are unknown (save as a fragment). Gillette thus aligns a lay perspective with a new experimental attitude to images that echoes the ambiguity encoded in the novella's titular framing device. The decay of tradition opens room for a new strategy of reading by means of fragments even as it leaves a constitutive uncertainty in its wake, and the attempt to create a tautegorical convergence between art and life results in the allegorical 'fracture of presence' noted by Agamben.

Balzac was, of course, a prodigy of industry and *The Unknown Masterpiece* is part of the vast *Comédie humaine*, a history of manners the cast of which can be described as a multitude in its own right. And in fact the *volte-face* of Frenhofer's climactic judgment can be explained in light of this productivity: no less magisterial a reader than Auerbach notes that the description of Madame Vauquer in *Old Goriot* proceeds by an unordered mélange of moral, physiological and sociological observations, reflecting the gusto with which Balzac adopted 'the great romantic agitation for the mixture of styles' (Auerbach 2003, 481).

For Auerbach, this is part and parcel of Balzac's mode of working – an almost 'real-time' construction of the novel: 'The lack of order and disregard for the rational in the text are consequences of the haste with which Balzac worked, but they are nevertheless no accident, for his haste is itself in large part a consequence of his obsession with suggestive pictures' (471-472). The speed and the ambit that characterize Balzac's labors are not tangential to the stylistic qualities of the texts thereby produced. This is the case to such a degree that Auerbach speaks of Balzac's goal and labor in the present tense: 'His best formulations come to him in the midst of a narrative, when he is not thinking about moralizing' (479). Lukács is slightly more generous, granting Balzac's 'triumph of form' in 'each individual novel' but 'not in The Human Comedy as a whole', which suffers from a 'bad infinity' and 'demonic irrationality' (Lukács 2003, 109).

Auerbach and Lukács both express reservations towards Balzac's sustained attempts to synthesize his efforts in a moral-philosophical register, instead arguing that the most vital achievements of *La Comédie humaine* are to be found in the great surge of realist detail and the closely observed 'history of manners' rather than (or rather, in spite of) Balzac's aspirations to a grand, rational totalization of nine-teenth-century life. Unlike its divine predecessor, for the human comedy there is no Virgil and Beatrice to act as guide; no Empyreal rendezvous in light of 'The love that moves the sun and the other stars' (Dante, 347).

Not that Balzac does not *aspire* to such elevated syntheses. He claims to link the intimate detail to a general class of being through the concept of 'milieu': in his novels, which present the details of a temporally disheveled modern world, Balzac claims to raise those details to *types* that are universal rather than particular. Auerbach is having none of it: the novelist's statements 'are confused and contradictory' (474). Baudelaire too – although a great admirer – wonders at the caprice of the judgments passed on characters, asking 'to what lengths did not Balzac go to conjure fortune?' (Baudelaire, 70). Regarding the programmatic *Avant-propos* to the *Comédie humaine* (1842), in which Balzac discusses his notion of the milieu, Auerbach writes:

The particular meaning of the concept milieu, as he uses it in practice in his novels he here seems not to have fully realized...what we see is the concrete individual figure with its own physique and its own history, spring from the immanence of the historical, social, physical, etc. situation; not 'the soldier', for example, but Colonel Brideau, discharged after the fall of Napoleon, ruined and leading the life of an adventurer... (Auerbach, 476)

The milieux are constructed from superimposed stylistic elements – numerous and rapidly developed – more than from a coherent style. A multiplicity of stories and the verve with which they are told becomes the primary textual phenomenon, in spite of Balzac's claims of classicism, wholeness and coherence. The appearance of realist detail diffuses the possible *reductio ad absurdam* that might result from the novel's lack of conceptual rigor. This is much like Frenhofer's canvas,

in which a fragment comes into sharp focus against a contradictory, quixotic whole.

In practice if not in theory, then, perhaps Balzac found his own answer to Frenhofer's dilemma. Art could be both living and created being; both Gillette and Catherine Lescault. But for the critics, this is only true from a performative (not aesthetic or philosophical) point of view. As long as he was in the throes of caffeine-fueled productivity, the work had the charm of animation and verve; when he paused to decisively frame his achievements philosophically, religiously or scientifically, it chimed false. Balzac's shortcomings as a philosopher allow the vividly rendered historicist and realist details, the individual figures, to assume an importance of their own independent of the overall picture. The fragments retained the power to project worldviews or milieux as motion, even if that view was not, as Balzac supposed, best served by schematizing statements in the mode of a panoramic 'fanciful macroscopy' (Auerbach 2003, 474): the static forms and generalities he drew from biology, classicism and even theosophy (as in texts such as Louis Lambert and Seraphita). The energetic accumulation and dissolution of fragments that characterize Balzac's realist fictions thus represent a literary adaptation to an ever-changing modern reality. His work, however, shows the historicity of this adaptation: Frenhofer's manic creative performance can only delay the uncanny force of the Vive Vesprit emblem for so long.

Notes

- 1. See *The Origin of German Tragic Drama* (Benjamin 1998), in particular pp. 161–169.
- 2. 'Pourbus' is the name of the historical painter, while 'Porbus' is Balzac's spelling of his romanticized character.
- 3. These temporal crossings were fruitful in ways that the writer never could have expected: 'The sites of Balzac's fictions are nearly always real places, but so transfigured that the house at 7, rue des Grands-Augustins in Paris, where the action of *The Unknown Masterpiece* begins, belongs as much if not more to his great character, the painter Frenhofer, as to Picasso, who took it for his studio in 1937, almost certainly because he believed it to have been where Frenhofer's story was set' (Danto, viii). Émile Bernard's anecdote of Cézanne's mute, emphatic self-identification with Frenhofer as well as Rivette's *La belle noiseuse* (1991) testify to the story's enduring resonances.

'Fanciful Microscopy' – Framing Devices and Uncertainty in Pynchon's *The Crying* of Lot 49

The framing device is constitutively ambiguous, bearing both tautegorical and allegorical elements. This is legible in the tensions that run through Balzac's nineteenth-century gallery scene: Frenhofer's fraught canvas. Here the orderly disposition of the paintings collapses – in a moment of shock that signifies a new temporality – into a 'pictorial magma'. This collapse is an allegory for Balzac's use of the realist detail to create a fragmented actuality. As a discourse on art, it represents the decline of the structures of judgment that informed discursive performance in *The Cabinet of Cornelis van der Geest*, and serves as evidence of Agamben's contention that the uncanny aspect of the framing device persists in modernity.

Thomas Pynchon's *The Crying of Lot 49* (*CL49*) presents a third 'gallery scene' in the form of a stamp collection belonging to the mysterious industrialist Pierce Inverarity. This chapter's close reading of Pynchon's unique text will show that both readings of the framing device are operative in a major twentieth-century literary text. The theme of paranoia corresponds to the tautegorical reading, and the theme of melancholia evokes the allegorical reading. Both are focused through the trope of the 'clue', which pushes the paradoxes that Auerbach and Lukács register in Balzac's realism to parodic excess. Where in Balzac realist details sustained a narrative in the moment but could not sustain the author's claims to rational wholeness, in Pynchon the detail is fundamentally dubious and uncertain. The gallery scene with which the book ends prefigures a more complicated conception of Austin's notion of infelicity which will be applied to videogames in Part II of this book.

The Crying of Lot 49 is a notoriously difficult text. The book's titular framing device may be even more enigmatic than that of The Unknown Masterpiece. Pynchon himself is famously obscure. Two of the typical ways in which readers orient towards a literary text – title and author – are forestalled before the covers are even open. The book's title nevertheless frames the text in a very distinctive way, raising acute questions about entropy and communication. Like The Cabinet of Cornelis van der Geest and The Unknown Masterpiece, The Crying of Lot 49 (CL49) links an enigmatic titular framing device with a complex mise-en-abyme structure – executing a vertiginous figure of reversal in which the role of uncertainty is both greatly expanded and explicitly thematized.

As noted, *CL49* utilizes the trope of the 'clue' to explore themes of paranoia and melancholy: it is a pastiche of the detective novel. Paranoiac and melancholic traits are evident in the novel's sleuth-like protagonist Oedipa Maas, whose pressing question when confronted by a multitude of fragmentary details is 'Shall I project a world?' Oedipa's first name could be a feminization of the Sophoclean or Freudian hero; like Catherine Lescault, her surname could refer to a European river. Her paranoia insists that a punctual decision be made on the status of the clue – a decision which, unlike for Frenhofer, who enjoyed a decade of painting and paint-ing-over – presses its immediacy not just in the gallery but in the communications systems that pervade the modern world. Her melancholia represents a reluctance toward any such a decisive judgment (Agamben 1993). Towards the book's coda, a character asks, 'Has it ever occurred to you, Oedipa, that somebody's putting you on? That this is all a hoax, maybe something Inverarity set up before he died?' (*CL49*, 116).

Uncertainty is thus not a retroactively intuited dissatisfaction with the formal or rational aspirations of the text as in Auerbach's critique of Balzacian panoramism. It is no longer, as it was for Frenhofer, something that can be put off in the pleasurable details of the moment, a lack of wholeness that appears wasteful only at the end. Instead, this ambiguity is immanent at every point to the recursive textual structure of *CL49* itself, and this mixture of paranoia and melancholia suffuses through all the novel's characters. As will be shown, this remarkable textuality is most acutely realized in the book's recursive title – a unique framing device.

Through the ambiguity of its clues, the text places more intense performative demands on readers than that found in either the Van Haecht or Balzac gallery scenes. In the Van Haecht gallery scene, the intertextual links were formed by knowledge of tradition. In Balzac's human comedy, framing devices such as the realist detail provided links between the different novels and the real world. In *CL49* the realist detail becomes part of an integrated textual system which is itself game-like in its pastiche of the detective story's challenge to 'guess the ending' and 'whodunnit'. The text's movement creates a 'field' of framing devices that prefigure the labile temporalities of gaming.

Epistemological and Ontological Dominants: Critiquing Uncertainty

Oedipa receives a letter from a lawyer named Metzger stating that she has been named as executor for the will of an old flame, the property developer and amateur impressionist Pierce Inverarity. Inverarity's shadow falls over all the links and connections Oedipa pieces together in her paranoiac quest to perform his will. She finds herself on the trail of a vast conspiracy that takes the form of a rival, occult postal system operated by a group called the Tristero. Thus begins 'the languid, sinister blooming of The Tristero' (*CL49*, 36) in Oedipa's mind.

Clues hint at a shadowy struggle, which may be centuries old, between the rival mail systems of Thurn and Taxis, the German noble house that historically controlled the postal monopoly, and the mysterious Trystero.¹ The latter were defeated, but may have gone underground to operate in secret. The problem is that nothing is conclusive: the trickster Inverarity could have staged an elaborate posthumous joke on an old lover. Given his wealth (the only icon in his house was a bust of Jay Gould, 'The Mephistopheles of Wall Street'), he certainly had the means to construct such an elaborate joke, but nothing conclusively proves this one way or the other.

Myriad diaphanous threads – each what an orthodox detective story would frame as 'realist' details or clues – may or may not lead to the Tristero. This inscribes paranoiac uncertainty as both a recurring theme and a structural principle within the text: CL49 repetitively takes up the mode of exposition of detective fiction only to then abandon it. All these jockeying possibilities, which seem so liable to fizz into actuality at any moment but never quite manage it, create a sense of 'crass supernatural-ism' (McClure 2007, 17). Everywhere, the possibility that quotidian,

habitual and official channels of communication casts Inverarity's disquieting shadows. Everywhere, there is a strange muted posthorn symbol and the possibility that the recurring word 'WASTE' is in fact an acronym: 'We Await Silent Tristero's Empire'. A plot seems continually to be developing but never quite gains proper momentum, while the accumulation of clues characteristic of detective novels is overtaxed by both outrageous coincidence and sardonic humor. In *CL49*, the realist detail that served Balzac so impressively loses all momentum and becomes infused with dubiety and uncertainty.

Oedipa encounters many clues as to the existence of the Tristero throughout the novel all of which drive an abortive investigation, but two are of key importance here. The first is the *mise-en-abyme* of a Jacobean revenge play, penned by the obscure dramaturge Richard Wharfinger, called *The Courier's Tragedy*. The second is the ultimate scene of the book: the auction of Lot 49.

The Courier's Tragedy installs a literary-historical difference or parallax within the text of *CL49*. A pastiche of seventeenth-century revenge plays; it stands as a precursor to the epistemological framework of the detective genre. As W.H. Auden puts it in an apology (written in response to Raymond Chandler's robust critique of Agatha Christie) for detective fiction:

In Greek tragedy the audience knows the truth; the actors do not, but discover or bring to pass the inevitable. In modern, *e.g.*, Elizabethan, tragedy the audience knows neither less nor more than the most knowing of the actors. In the detective story the audience does not know the truth at all; one of the actors – the murderer – does; and the detective, of his own free will, discovers and reveals what the murderer, of his own free will, tries to conceal. (Auden, online)

The weaving of *The Courier's Tragedy*, a seventeenth-century (or as Auden puts it, 'modern'²) revenge play, into the mystery of *CL49* thus traces a trajectory of literary epistemologies, dramatizing a transformation in relations of knowledge around the central tragic structure. The 'freedom' of the inhabitants of the enframed space increases relative to the reference point of ancient tragedy, but this correlates with a waning epistemological status. Across the series, greater and more pressing epistemological – rather than ritual or religious – demands are placed on the audience. *Uncertainty* is the correlate of the freedom that increases across the series

established by these literary and dramatic forms, and it asserts itself through *The Courier's Tragedy's mise-en-abyme* within *CL49*.

The second clue closes the novel in a unique fashion. Although her efforts continue to be in equal measure fruitful and futile, Oedipa learns that Inverarity's stamp collection – designated 'lot 49' – is to be auctioned. Oedipa hopes to catch a member of the Tristero at the auction. Amidst the motion of dust motes that evoke Brownian pedesis and wave-particle duality, Oedipa's 'private-eye acumen' finally gives out. The strategy of reading amidst a multiplicity of frames discernible in Van Haecht's aesthetes and transformed in Balzac's panoramic vision ends in the confusion of Inverarity's dispersing stamp collection: Oedipa, who with no intention to bid is not interested in holding the collection together, is left wondering, 'Shall I project a world?' The other bidders enter, but nothing gives away which one might represent the Trystero. The book ends suspended between two worlds, symbolized by the unfurling of the avian auctioneer's limbs, 'Passerine spread his arms in a gesture that seemed to belong to the priesthood of some remote culture; perhaps to a descending angel', and the meaning of the enigmatic signifier, the book's title, becomes clear and at the same time radically open: 'Oedipa settled back, to await the crying of lot 49'.

Between Mystery and Science Fiction

Many readers of *CL49* have felt themselves to be the unwitting rubes of some sort of joke. 'Pynchon's onomastic punning produces a kind of Brechtian "alienation effect"...that the words here are only words' (MacAdam 1978, 560); the cast are 'two-dimensional, spiritually depleted... aberrations' (Leland, 48); 'Mike Fallopian cannot be a real character's name' (Geddes, online). *CL49* 'reverses the conventional pattern of the detective story, moving not towards thematic resolution but proliferating mystery and dubiety. In doing so, it parodies the causal explanations of events which structure realist narrative, by taking the principle of coincidence to excess' (Bennett 1985, 32).

The novel parodies the tropes of realism through its faux-detective story style, but in doing so it reveals how the detective story has always been a parodic realism: more like a conjuring trick than a sober portrait. Simultaneously, sleuthing highlights the historicity of literary realism because it relies on forms of life and states of affairs that quickly show their age. *CL49* thus disturbs the invigorating movement of realist detail and character that Auerbach raises to a structural and performative principle in Balzac. Through Inverarity's influence, the 'demonic irrationality' that Lukács attributes to the Human Comedy as a whole becomes integral to the movement of the individual novel – operative at every moment, acquiring an almost 'real-time' quality. Where in Balzac, realism found its footing in movement and change but could still result in a panoramic vision, in *CL49* an excess of coincidence casts a pall of doubt over just what sort of reality should be ascribed to each detail. Balzac's panoramic vision becomes the paranoiac need to project every detail into a meaningful fragment, but this is balanced against Oedipa's melancholic appeal: 'Shall I project a world?'

In an influential reading by McHale, the function of uncertainty in *CL49* is read as a tipping point between modernist and postmodernist literature. McHale redeploys the concept of the 'dominant' as developed by Tynjanov and Jakobson: 'the focusing component of a work of art...that guarantees the integrity of the system' (quoted in McHale 2001, 6). For McHale, the dominant of modernist fiction is *epistemological*, whereas that of postmodernist literature is *ontological*. *CL49* is presented as an example of 'limit modernism', insofar as it is situated between the respective dominants of modernist and postmodernist literature. The problematic of knowing and doing, interpretation and practice, organizes a paradigmatic shift in dominant.

As noted, the presence of *The Courier's Tragedy* as a *mise-en-abyme* framing device within *CL49* triangulates three different epistemological organizations of knowledge between audience and text: ancient Greek tragedy, early modern revenge theatre and the detective-style narrative of the book itself. By emphasizing the notions of entropy and noise, thematizing paranoia, taking coincidence and inference to parodic excess, and finally suspending narrative or logical closure, *CL49* itself ushers in a novel epistemological relation to its readers: it turns them into sleuths.

In fact, as McHale argues, the text's challenge to the epistemological dominant of modernist fiction is such that it foreshadows (but does not quite instantiate) a transition to the ontological dominant of postmodernist fiction. *CL49* pushes the detective genre (and with it the trope of the clue as a late version of the realist detail) beyond problems of knowledge and towards problems of being. For McHale, this entails a shift from questions concerning what it is possible to know about a given fictional world – as, for example, in a novel such as Faulkner's *The Sound and The Fury* – in order to foreground questions occasioned by the existence of

multiple worlds: 'postmodernist fiction deploys strategies which engage and foreground questions like the ones Dick Higgins calls 'post-cognitive': 'Which world is this? What is to be done with it? What of my selves is to do it?' Other typical postmodernist questions bear either on the ontology of the literary text itself or on the ontology of the world it projects' (McHale 2001, 10).

This change of dominant is linked to the mystery genre which is burlesqued in *CL49*, 'Science fiction, we might say, is to postmodernism what detective fiction was to modernism: it is the ontological genre *par excellence* (as the detective story is the epistemological genre *par excellence*), and so serves as a source of materials and models for postmodernist writers' (16). Even when modernist literature seemed to be entertaining the possibility of multiple worlds, the possibility was leavened with uncertainty: in particular, the device of the unreliable narrator or viewpoint character, of which Oedipa is exemplary. As the literary dominant swings to the ontological concerns of postmodernist fiction, however, even this alibi is jettisoned:

Oedipa does not break through the closed circle of her solipsism in the pages of this novel; nor does Pynchon break through here to a mode of fiction beyond modernism and its epistemological premises. The Tristero remains only a possibility...The dead-ending of epistemology in solipsism can be transcended, but only by shifting from a modernist poetics of epistemology to a postmodernist poetics of ontology, from Oedipa's anguished cry 'Shall I project a world?', to the unconstrained projection of worlds in the plural. (25)

Oedipa's possible apophenia, her vacillation between a world in which the postal conspiracy exists and a world in which it is merely an illusion of her own faculty for pattern-formation, can certainly be contrasted with Tyrone Slothrop's notorious dissolution as anything like a coherent character in the searing arc of *Gravity's Rainbow*. In this periodization, uncertainty acts as a barrier to the development of the ontological dominant: the relation between the multiple worlds suggested by the text takes the form of an undecidable either/or rather than a polymorphous both/and.

However, McHale is mindful of a certain provisional aspect to his own argument: 'push ontological determinants far enough and they tip over into epistemological questions – the sequence is not linear and unidirectional, but bidirectional and reversible.

A philosopher might object that we cannot raise epistemological questions without immediately raising ontological questions, and vice versa, and of course he or she would be right. But even to formulate such an objection, the philosopher would have to mention one of these sets of questions *before* the other set – inevitably, since discourse, even a philosopher's discourse, is linear and temporal, and one cannot say two things at the same time. Literary discourse, in effect, only specifies which set of questions ought to be asked *first* of a particular text, and delays the asking of the second set of questions, *slowing down* the process by which epistemological questions entail ontological questions and vice versa. This in a nutshell is the function of the dominant: it specifies the *order* in which different aspects are to be attended to, so that, although it would be perfectly possible to interrogate a postmodernist text about its ontological implications. (McHale, 11)

McHale is here proposing to act as a kind of critical Maxwell's Demon – a theoretical being which, somewhat ironically, forms the basis of The Nefastis Machine, one of CL49's clues. Much as the Demon in the Nefastis Machine sorts fast from slow particles in order to do (infinite) work by virtue of the difference, critical activity here relies on sorting out the urgency with which questions of ontology and epistemology press their suit in relation to modernist and post-modernist texts.

However, this insistence on a necessary discursive linearity is a strange point to make about a text which is always saying two things – the Tristero both exist and do not exist – at the same time. Precisely, because the Demon is such a mischievous critter, it is possible to ask not about how epistemological uncertainty retards ontological questions but about how CL49, at both structural and thematic levels, undermines these delaying tactics by failing to conclude its central mystery. This might be seen as implicit in McHale's invocation of Higgins, whose art incorporated distributed rather than linear communications technologies through infrastructures such as the postal service and computers (Higgins 1970). As Bennett puts it, 'To say that the meaning of a text is indeterminate...is not to say that it signifies indeterminacy' (35). McHale projects the book's lack of resolution back onto problems germane to a conventional novel, but this approach sets aside the challenges that CL49 brings to the 'ontology' of the literary text - such as the codex format itself, a commitment to which is implicit in McHale's insistence on the linear order in which questions must be organized.

From this view (which it should be pointed out is a perfectly understandable one for a literary critic to adopt), the book's framing device is *merely* indeterminate, a moment of hesitation that interminably defrays the structurally appropriate moment of disclosing that multiple worlds do, in fact, exist. This echoes a thread that runs through Auerbach and Alpers' reading of the realist detail in several nineteenth-century artworks. For the former, Balzac's 'immanent philosophy' and admixture of styles is more important than the totalizing moral positions that result from the development of plots. For the latter, the disturbing challenge, the 'lack of movement' that description brought to traditional narrative in the baroque and Reformation periods presaged the new temporal and spatial possibilities that opened up in the work of nineteenth-century realist painters as 'fragmented actuality'.

This theme also appears in Barthes' discussion of the 'reality effect' in nineteenth-century fiction. Barthes asserts that realist details (such as the barometer in Flaubert's 'A Simple Heart') are 'notations which structural analysis, concerned with identifying and systematizing the major articulations of narrative, usually and heretofore has left out, either because its inventory omits all details that are "superfluous" (in relation to structure) or because these same details are treated as "filling" (catalyses)...they seem to correspond to a kind of narrative luxury, lavish to the point of offering many "futile" details and thereby increasing the cost of narrative information' (Barthes 1989, 141). Ultimately, the function of such profligate detail is to provide both sensuous pleasure [akin to the rhetorical figure of *hypotyposis* (145)] and an ideological reality effect: '... eliminated from the realist speech-act as a signified of denotation, the "real" returns to it as a signified of connotation' (148). Barthes' deliberations here are remarkably reminiscent of Pliny the Elder's assessment of Piraeicus, with both authors affirming the sumptuary nature of descriptive art and the 'return' of value to the image as such: there is something about realism that challenges systematization. In both far-flung contexts the realist detail has a powerful secondary dynamic, introducing a moment of hesitation and uncertainty with regard to its place in narrative structure.

The Clue as Realist Detail and Locus of Uncertainty

The detective story trope of the clue (which *CL49* prosecutes *ad absurdam*) is a realist detail that connotes both immediate uncertainty and the possibility of seeing through a veil of appearance to what is 'really' going on: a realized certainty that structures and justifies the narrative. The speed and scale of the accumulation of realist detail that Auerbach identifies as sustaining Balzac's panoramic vision of a rapidly transforming urban environment, central to the closed room mystery story inaugurated by Poe's *Murders in the Rue Morgue*, becomes in this way a network of fragments. The process of reading a text strewn with clues acquires a ludic character. Realism's 'fanciful macroscopy' becomes the 'fanciful microscopy' of the detective's gaze.

However, the development of this technique also opens the genre to caricature and ridicule once what Barthes identifies as the connotation of reality is stripped away. The clue's uncertainty tends to return as an uncanny excess that troubles the expectation that the structure of the tale will be coterminous with the determination of it significance. Often this doesn't come off, and Pynchon is far from the first author to play on the tenuous logic of the mystery genre. As Chandler acerbically wrote, apropos a Christie plotline:

M. Poirot decides that nobody on a certain through sleeper could have done the murder alone, therefore everybody did it together, breaking the process down into a series of simple operations, like assembling an egg-beater. This...is guaranteed to knock the keenest mind for a loop. Only a halfwit could guess it. (Chandler 1950, online)

The trope of a trail of clues amounts at most to 'spillikins in the parlor', whereas Chandler seeks to reorient it to the realities of the street and urban existence. A 'keen' (i.e., linear and conventionally logical) mind is disabled in light of the shocking conclusion that Poirot reaches. Uncertainty operates at very specific moments in the text: the 'realist detail' of the clue is made to seem tautegorical and full of meaning, but in fact harbors allegorical effects: uncertainty, dubiety and anxiety.

Like the hard-boiled genre, in *CL49* the plots lead not towards an enlightening *denouement* but leave the trail of clues in suspense. This produces what Jameson (1993) has termed a 'synoptic' mode of reading, the fraught totality of which can only be suggested in dynamic meteorological metaphors. Taken together, these extra- and anti-linear synoptic characteristics of the materials from which *CL49* is fashioned suggest that McHale's thematic critique (i.e., that science-fiction confirms the many worlds that detective fiction hints at but does not confirm) can be supplemented with a *structural* one. A full appreciation of the role of uncertainty

in the text must register its use of uncertainty to create a nonlinear type of reading: the epistemological dubiety with which *CL49* charges its framing devices challenges its very ontological status as a novel.

This is most vivid in the book's titular framing device: the phrase that both opens and closes the book is read *at least twice*. These two readings can be distinguished through the way that uncertainty functions in each case. The first reading, the titular framing device, is an enigmatic signifier, prompting the following questions: who or what is crying and why, what is the meaning of the word 'crying' in this context (it could be a present participle or a gerund) and what or where is lot 49? The second reading of this framing device, although it comprises the same sequence of signifiers, is by contrast precisely situated in fictional space and time: the auction of Inverarity's stamp collection.

In terms of informational entropy, the phrase has gone from a high degree of uncertainty to an overdetermined sequence. This determinacy 'flattens' the text by recapitulating the signifiers of the title. By refusing to confirm the Trystero's existence and wrapping back to the start of the text (or indeed 'before' the text), the ending makes patent the novel's lack of linear development. Minimal resistance is raised to this textual Möbius loop by the meandering detective plot, the pitiless anti-realism or the 'spiritually depleted' characterizations: all are absurd.

The framing device thus does not merely refuse narrative closure and parody literary genre, it *also* reflects back on the trail of clues characteristic of the mystery tale to effect an uncanny doubling of their significance. Reading CL49 is, in a sense that is different from the other gallery scenes examined so far, time-critical. In light of the book's recursive ending, these clues become not a path leading to a consolidating moment of judgment but instead assert a fundamental and mutual ambiguity, a lateral and transverse rather than a linear structure. Critical responses (such as this one) dart back and forth through the comic scenes in their attempts to conjure a definitive reading. The beginning and end of the text become less like the terminal points of a line and more like axes defining a field of potential: the lack of narrative closure means that each clue becomes a locus at which two possible values – the Trystero exist or the Tristero do not exist – could potentially be assigned as if the text consisted of a series of binary logic gates.

This is a set of logic gates that will, however, forever await a definitive assignation. The recapitulation of the title as the closing line of the book takes the reading back to the start of the text – but

for this second reading which is impossible to avoid, the clues are all 'equidistant', all fully deployed, operative and significant. As such, McHale's conception of the role of uncertainty in *CL49* focuses on its refusal of a narrative closure that would confirm the reality of multiple worlds within the linear structure of the literary novel: here the point of interest is in the way that the refusal of closure and the feedback loop between beginning and end reorganizes what is putatively a linear form into a multiplicity of fragments in which any clue could potentially be a conclusive framing device.

If detective fiction pushes the realist detail up against a certain kind of literary-historical limit, in *CL49* even the realism is eroded by caustic comic stylings. Barthes' vertiginous reality effect becomes pervasive, having the potential to burst forth at any moment as incredulous laughter. What is left is a dim sense of interconnected detail, such as what Oedipa discerns in her many brushes with epiphany. The text deploys a promiscuous technologism to match its crass supernaturalism, as the theme of uncertainty and dubious contraptions mix diverse registers of scientific and occult explanation: in this text, all are equally credible insofar as all are equally implausible.

Real-Time Realism: Vertigo and Nonlinearity

What remains in the evacuation of even the hard-boiled commitment to the dispersed qualities of modern experience is a textual fabric integrally responsive to what Hansen calls the 'heteronomous structures' of mass media (see Chapter 8). The monomaniacs and cultists that populate the novel are, for the most part, obsessed with communications systems in which epistemological knowledge-practices flip over into ontological determinants. Pierce's impressions of pulp characters and stamp collecting, Dr. Hilarius' abuse of therapy as a control mechanism and Mucho Maas' morbid oversensitivity to urban detritus are only the start. The novel's textuality (like Pynchon's work in general) is shaped by the intertextual medium-specificity of other forms: the lyrical form of songs; the spry and chatty summations of the film Baby Igor and Driblette's production of Wharfinger; Inverarity's pervasive influence over the built environment of San Narciso; The Courier's Tragedy; the various disciplinary or quasidisciplinary speculations (as well as the very names) of characters such as Genghis Cohen, Mike Fallopian, Ernest Passerine, Koteks and literary historian Emory Bortz.

Oversaturated as it is with ever-multiplying plots, Balzacian *milieux*, characters or other literary structures, *CL49* also incorporates technical discourses and modes of recording and distributing sensory flows in another challenge to the conventional form of the literary text itself. The clues Oedipa must follow and the types of uncertainty to which she is subject are rarely the typical forensic or psychological framing devices of the detective tale and still less the deep interiorities of the bourgeois novel: they are media-specific, documentary, disciplinary and communicational, shaped by the materiality of media and discourses.

These characteristics have led to Pynchon's fictional techniques being designated 'encyclopaedic' (Mendelson 1976), 'data retrieval' (Kittler 1997) and even 'object-oriented' (McKenna 2000). McKenna writes that the clues pertaining to the Trystero's existence are 'encapsulated' and that CL49 '... is not a linear tale at all' (McKenna 2000, 35), prefiguring object-oriented programming techniques in computer science. The clues that suggest the existence of the Trystero have similar propensities for linking and citing: these have always been inherent in the metapictorial aspect of framing devices, but they take on a new significance in the contemporary episteme. For McKenna, Oedipa's problem is that she does not know what type of questions to ask of the communications system she has stumbled upon – or, in now familiar terms, she does not know by which criteria of judgment her performances ought to be assessed.

Through the *mise-en-abyme* of *The Courier's Tragedy* within the mystery-style narrative, *CL49* incorporates issues of changing relations of knowledge and uncertainty between text, performer and audience (tracing a trajectory from ancient to modern similar to that which Auden alludes in his defense of Christie). The recursive framing gesture anticipates, thematizes and literally performs a further transformation in this series by threading uncertainty through its structure and recursively working on its own titular frame. This frames three textual effects: the navigationalperformative function noted in various ways by Bennett and McKenna; the synoptic nonlinearity of the network of detail; and finally the 'multimedia' mélange of various communications and recording systems (songs, literary texts, technical documents, etc.). The framing device, in the face of an ongoing dissolution of tradition, increasingly becomes a site for the articulation and navigation of a multiplicity of frames, sensory flows and discourses – an organizational principle in something like what Gunning (2007) has called 'medium promiscuity' – and thereby once again taking on some of the properties Stoichita ascribes to *rhyparography*.

It is possible to integrate some of the critical observations about realist images with the historical trajectory traced by *CL49*. Auerbach and Alpers both note a hesitation or uncertainty introduced by descriptive realism into the linear structure of narrative forms (of the novel and traditional painting respectively). These positions correlate with Barthes' argument about the 'luxury' of realism, the vertiginous nature of this 'useless notation' that delays the aesthetic or semiotic production of meaning. The realist detail causes this by asserting a special relation to a referent: 'Semiotically, the "concrete detail" is constituted by the *direct* collusion of a referent and a signifier; the signified is dispelled from the sign, and with it, of course, the possibility of developing a *form of the signified*, i.e. a narrative structure itself' (1989, 147).

This invocation of a direct correspondence of sign and referent constitutes the 'reality effect'. Preceding this semiotic account, however, Barthes offers a more nuanced view of the relation between narrative and description in terms of an 'interweaving' of aesthetic-structural and descriptive-realist constraints: the 'aesthetic function, giving meaning to "the fragment," halts what we might call the vertigo of notation . . . nothing could indicate why we should halt the details of the description here and not there . . . there would always be a corner, a detail, an inflection of space or color to report; on the other hand, by positing the referential as real, by pretending to follow it in a submissive fashion, realistic description avoids being reduced to a fantasmatic activity' (145).

The notion that a reality effect occurs when a sign or sign system asserts (via connotation rather than denotation) a correspondence to a referent also appears in accounts of cinematic realism such as that of Doane (2002, 2007) that take up the Peircean concept of the index. Peirce defines indices as signs which 'represent their objects independently of any resemblance, only by virtue of real connections with them' (Peirce 1911). Their mode of signification is thus due to a causal link to a referent rather than resemblance or a system of general signifieds. For example, a plume of smoke is the index of a particular fire or a specific photo indicates a given time, place and subject. It is due to this 'adhesion to the referent' that 'Indexicality is inevitably linked with the singular, the unique, with the imprint of time in all its differentiating force' (Doane 2002, 208), such that it promotes 'resistance of meaning' and defrays the 'symbolic function' (217). As in Barthes' discussion of the reality effect in fiction, Doane

credits the indexical dimension of cinematic images with an anti-systemic quality, a type of uncertainty: 'In the face of the increasing rationalization and systemization of time, the lure of the singular instant...holds out the promise of newness itself' (208).

Where these accounts perceive the realist detail as a moment of uncertainty and hesitation in a linear semiotic, aesthetic or narrative system of movement, from a synoptic position at the end of CL49 the detail instead appears as a point of articulation for multiple forms of movement. These details are also liable to exert a strong power of fascination - as Sālgado writes in an introduction to a collection of revenge plays: 'To the Jacobean audience the poisoned picture (The White Devil), the poisoned skull (The Revenger's Tragedy), and the love-potion (The Changeling) had something of the fascination which the elaborately appointed travel-case of Fleming's 007 has for us today' (Salgado 1965, 13). The Courier's Tragedy invokes just such a fascination, and the spy's ingenuity is like that of the detective in that it represents the potential mobilization of any quotidian detail. Through CL49's vertiginous uncertainty, the detail establishes a direct relation not to a referent but to the performative criteria of judgment by which the detective novel challenges its readers to guess the ending: Barthes' reality effect becomes a virtual reality effect or, better, a set of multiple virtual reality effects, a set of felicitous forms of movement through CL49.

In the interplay between *CL49* and '... the crying of lot 49' (*CL49*, 127), 'linear reading is replaced with intertextual reading' (as Stoichita says of the *Vive l'esprit* emblem that governs *The Cabinet of Cornelis van der Geest*), and allows the possibility to 'stop the gaze' amidst many forms of motion. In the context of its uniquely recursive framing device, entropy in *CL49* becomes not a barrier to the projection of multiple worlds so much as a principle that opens the capacity to project worlds. Lot 49 is, after all, Inverarity's collection of stamps, each of which is a frame looking onto 'deep vistas of space and time', and the 'crying' is its dispersal throughout the world – the exact inverse of the bounded intertextual discourse of the gallery-goers in Van Haecht's picture.

The recursive ending gives a new temporal force to the framing device: uncertainty is no longer represented by a tiny emblem, nor a force that is structurally suspended and only appears as such at the end of a Balzacian or mystery yarn. The literary feedback loop has caught up with itself and in the process shattered into a field in which uncertainty is fully deployed: potentially updatable between success and failure states in real-time, multimedia, object-oriented and ludic.

The Inoperative Courier: Melancholia and *Mise-en-Abyme* in *CL49*

McHale argues that *CL49* stops short of positing multiple worlds. In fact the text *does* interact with another world – that of the reader. A jarring ontological shift occurs as the narrative (and its implicitly epistemological task) abruptly halts, as Oedipa and the reader are both brought by the framing device back to the beginning of the text; both are left in the same 'place', awaiting the crying of lot 49. In the transformation of the detail through the interlinked action of the internal clue and its framing device, *CL49* creates figure of reversal that prefigures the mode of experience that will come to characterize gaming. This exceeds the similar effects in the gallery scenes examined in Chapter 3 for two reasons. First, because the text's abrupt closure generates a kind of shock (see Chapter 8). Second, because Inverarity's 'gallery', his stamp collection, is dispersed far beyond any one spatial or aesthetic regime, losing itself in the general system of scientific, occult, technical and mass communications.

This is a 'paranoiac' interpretation of Oedipa's situation: the game-like imperative to assemble dispersed, fragmented framing devices. It corresponds with the tautegorical reading of the *Vive l'esprit* emblem as a moment of potential convergence. What the clues in *CL49* (like the presence of 'stop signals' for the gaze in Van Haecht's gallery picture or the realist detail in Balzac) show with great clarity is the way that the framing device is not simply an external outer limit but variegates the 'internal' space and the figures that occupy it. However, in this very movement, the dual nature of the framing device is also affirmed: the refusal of both narrative and logical closure creates a feedback loop that makes the trail of clues nonlinear and tautegorical, but in the same gesture also maximizes its vertiginous or allegorical potentials.

Oedipa herself is a paradoxical site of two different significations: instead of being seen as a paranoiac, she can be read as a melancholic. This interpretation is supported by Oedipa's encounter with Remedios Varo's painting (viewed through tears which seem to fill the gogglesunglasses that a diver would use to exclude the sea, revealing an index as yet undiscovered that, like the text's titular framing device, 'changes from cry to cry'), the saturnine tragedy of Wharfinger's play and the name Trystero which recalls *tristitia-acaedia*, the deadly sin of sloth which is in turn intimately tied to melancholia (Agamben 1993a). This reading is aligned with allegory and with Serres' discussion of noise in *The Unknown Masterpiece*, emphasizing the vertiginous aspects of the framing device and the potential of collapse.

In Serres' reading of *The Unknown Masterpiece*, the canvas itself becomes not a simple background but a prodigious noise, a paintingover: the W.A.S.T.E. symbol that bedevils Oedipa's attempts to determine the existence of the Trystero recalls Serres' conception of noise as both the breakdown of phenomena and the matrix from which they arise. This problem of textual variants and spurious attributions is a different kind of uncertainty, but one that also runs through Oedipa's attempt to reconstruct an authoritative text of Wharfinger's *The Courier's Tragedy*. Oedipa ends up at director Roland Driblette's production of the play, following yet another trail of clues that suggest another relation to the Tristero.

The play is a densely woven seventeenth-century revenge imbroglio after the manner of Kyd or Tourneur. The lurid plot concerns a war between the duchies Faggio and Squamuglia. It involves murder, incest, sacrilegious parodies of the Pentecostal and Eucharistic miracles, dismemberment and torture (a discomfited Metzger gripes that it is 'like a Road Runner cartoon in blank verse'). The text of *CL49* relates these sundry outrages in the wry observational patter of an arch literary historian – as genre tropes and structures to be expected of such a sordid text, not as horrific or traumatic representations. This remote narrative voice contrasts with the direct quotes from the play, which pastiche the lexical structures of Jacobean genre in both vocabulary and versification.

The play climaxes with a message sent by the murderous Duke Angelo of Squamuglia under the colors of Thurn and Taxis, the noble house that historically commanded the postal monopoly. However, the messenger (actually the long-lost true heir to Faggio, who was disinherited by Angelo's machinations) is intercepted by a sinister group sent by the Duke to eliminate the unwitting successor. None of the play's characters dare name these assassins except for Faggio's 'colorless administrator Gennaro', who identifies them as 'the Trystero' when the courier's body is found in 'an unspeakable condition':

He that we last as Thurn and Taxis knew Now recks no lord but the stiletto's Thorn, And Tacit lies the gold once-knotted horn. No hallowed skein of stars can ward, I trow, Who's once been set his tryst with Trystero. (*CL49*, 50)

Gennaro is played by director Driblette himself. The assassins have changed Angelo's message. What was meant to be an overture of peace is now a catalogue of the crimes committed throughout the play: a singular message is exchanged for a multiplicity of heretofore tacit communications. Only a melancholic Gennaro survives the bloodbath following on from these revelations.

Intrigued by this mention of the Trystero in *The Courier's Tragedy*, Oedipa tracks Driblette backstage. As he steps into the shower, she questions him about the production, learning that the script came from a paperback anthology purchased at a used bookstore. Driblette interprets her interest to reflect an academician desire to establish a fixed, authoritative text.

'You guys, you're like Puritans are about the Bible. So hung up with words, words. You know where that play exists, not in that file cabinet, not in any paperback you're looking for, but' – a hand emerged from the veil of shower-steam to indicate his suspended head – 'in here. That's what I'm for. To give the spirit flesh...I'm the projector at the planetarium, all the closed little universe visible in the circle of that stage is coming out of my mouth, eyes, sometimes other orifices also.' (*CL49*, 54)

Driblette asserts the imperatives of performance – the ability to project a world – against the scholastic urge to establish an authoritative, linear textual sequence that all performances must follow to be legitimate.

Oedipa later learns that in another edition, Gennaro does not mention the Tristero at all: 'No hallowed skein of stars can ward, I trow/Who once has crossed the lusts of Angelo' (70). This edition contains a preface by literature professor Emory Bortz dismissively finding 'no clear meaning for the word *trystero*, unless it be a pseudo-Italianate variant on *triste* (= wretched, depraved)' (70).³ Later Oedipa tracks down Bortz at his residence. She finds him drinking on the lawn with graduate students. Bortz is surprised to learn that Driblette performed a corrupt version:

'He was a particularly moral man. He felt hardly any responsibility toward the word, really; but to the invisible field surrounding the word, its spirit, he

was always intensely faithful. If anyone could have called up for you that historical Wharfinger you want, it'd be Randy.' (*CL49*, 105)

Oedipa notes that Bortz is speaking in the past tense. One of the grad students replies: 'Randy walked into the Pacific two nights ago...in his Gennaro suit. He's dead, and this is a wake' (*CL49*, 105). Because Driblette could evoke the historical Wharfinger, his use of the 'trystero' variant when Oedipa was in the audience seems to offer the possibility of some purchase on the reality of the shadowy organization. However, neither Driblette nor Wharfinger (as well as any final decision on the definitive textual sequence) can be definitively pinned down – dribbles, so to speak, lost in the noise of the ocean.

When Oedipa is in the audience, Driblette selects the 'tryst with Trystero' couplet rather than the 'lusts of Angelo' (or any other extant variants) in uttering a line, the very existence of which is itself a possible corruption. Given that the Trystero signify the role of uncertainty in CL49, Driblette's performance is thus a nexus between multiple versions of The Courier's Tragedy. It is not simply a particular instantiation, corruption, version of or willful departure from a universally valid canonical script because the literary scholars attest that Driblette's decisions in each performance cannot be attributed to either individualist caprice or a hollow notion of artistic genius. Rather, Driblette's performative ethics are bound to an intense loyalty to the 'spirit surrounding the word'. As The Courier's Tragedy is a mise-en-abyme, this 'spirit' must be the recursive textuality of CL49 itself. This involves both uncertainty and structure - the substitute variants in Driblette's performances are situated at a specific and delimitable locus in the both framing narrative of CL49 and the embedded text of The Courier's Tragedy.

Parasitism and Performativity

The contingency of Driblette's performative utterance differs markedly from that developed by Austin, who tended to envisage a speaking subject that was capable – more or less successfully – of making use of various procedures in order to achieve various desired conventional effects. Austin's criteria of competence and uptake acknowledge that the situation is more complex than this egalitarian conception allows: not all utterances are available to all subjects in the same way. Ultimately, the role assigned to uncertainty in *How to Do Things with Words* pertains to whether or not the requisite formula was actualized satisfactorily, and whether or not the intent behind the utterance was sincere. In the *mise-en-abyme* of *The Courier's Tragedy* both the status of the subject and the performative criteria are precarious, but this precarity is emblematic of that which is not exhausted in multiple performances: potentiality (see Chapter 6). *CL49* indicates the continued currency of Agamben's critique of metaphor in twentieth-century literature: 'Now here was Oedipa, faced with a metaphor of God knew how many parts; more than two, anyway' (75). The parasitic and the allegorical have completely infected the performative, and infelicity abounds.

Oedipa's quest begins amidst the multiple frames – multiple vistas, worlds – of Inverarity's stamp collection, and she must develop the philatelic acumen or 'fanciful microscopy' necessary to discern the variant stamps that may be the signs of the Tristero conspiracy. As noted above, the fact that the W.A.S.T.E. system parallels, shadows and facilitates conventional channels of communication suggests that the most salient question about the Trystero is not whether or not they exist, but the way that this ambiguity deepens and broadens the notion of uncertainty as such, allowing it to proliferate through the text. The Trystero's 'languid and sinister blooming' emblematizes an originary potentiality, that is the condition of possibility for every particular message.

In *The Courier's Tragedy*, the Trystero intercept and transform the Duke of Squamuglia's intended message, a sue for peace, with an account of the many underhanded deeds that secretly transpired to make that message necessary and possible in the first place. The variant stamps, parasitic on the postal system, reveal the potential noise that accompanies all communication – much as *CL49* is also 'the crying of lot 49', much as the ambiguous fates of both Gillette and Catherine Lescault emerge from Frenhofer's decade of painting and painting-over, or the way that Benjamin reads the integral presence of the mass into Baudelaire's poetics of urban experience.

This dimension is only apparent to Oedipa in fleeting moments of melancholic breakdown and despair that stall her paranoiac, sleuth-like assembly of signs: when she cries before the Remedios Varo triptych, when she learns that Driblette has walked into the Pacific and when she wanders the city among the itinerant people who, excluded from or damaged by America's licit modes of communication, subsist through the W.A.S.T.E. system. This melancholic view was, as early as Galen and Aristotle, attributed with an acute sensitivity to ruins, potentialities and phantasms (Agamben 1993b; Burton 1621).

CL49 thus performs the two aspects of the framing device. The first, the paranoiac-tautegorical mode of reading, enables the navigation of complex systems of framing devices by highlighting certain elements – the clues strewn across the text – that execute a figure of reversal. Here uncertainty acts in terms of performative felicity – either the text is navigated successfully, or it is not. The second reading of the framing device is the melancholic-paranoiac, where infelicity (uncertainties, errors, variants, etc.) points beyond the failure of a particular process of assembly, towards the potentialities of multiple performances. The deeply paradoxical nature of the framing device is at the heart of CL49.

It is fitting that the last word on melancholia should go to Pynchon himself. In 1993 *The New York Times Book Review* approached several writers to contribute pieces on one of the deadly sins. Pynchon, in a rare adoption of the essay form, chose sloth. His piece 'Nearer, My Couch, To Thee' chronicles the transformation of sloth from a reluctance to follow a path of grace into its modern connotation of simple laziness.

Any discussion of Sloth in the present day is of course incomplete without considering television, with its gifts of paralysis, along with its creature and symbiont, the notorious Couch Potato. Tales spun in idleness find us Tubeside, supine, chiropractic fodder, sucking it all in, re-enacting in reverse the transaction between dream and revenue that brought these colored shadows here to begin with so that we might feed, uncritically, committing the six other deadly sins in parallel...

However, even in the face of the continuing mediation and rationalization of temporality, the term never quite loses its association with the contemplative capacity for exploring alternative pathways and possibilities. This is not without parallel in technological media.

Sad but true. Yet, chiefly owing to the timely invention – not a minute too soon! – of the remote control and the VCR, maybe there is hope after all. Television time is no longer the linear and uniform commodity it once was. Not when you have instant channel selection, fast-forward, rewind and so forth. Video time can be reshaped at will. What may have seemed under the old dispensation like time wasted and unrecoverable is now perhaps not quite as simply structured. If Sloth can be defined as the pretense, in the tradition of American settlement and spoliation, that time is one more nonfinite resource, there to be exploited forever, then we may for now at least have found the illusion, the effect, of controlling, reversing, slowing, speeding and repeating time – even imagining that we can escape it.

It is due to this new possibility for figures of reversal, this burgeoning transformation in temporal experience, that Pynchon writes, 'Sins against video time will have to be radically redefined.'

Notes

- 1. This name is variously 'Tristero' and 'Trystero'.
- 2. *The Courier's Tragedy* is not, as in Auden's assignation, Elizabethan but Jacobean: a point at which what we now perceive as the high cultural watershed of Shakespearean drama began to reveal its inner workings through repetition.
- 3. This gloss on the word 'trystero' is itself a wry Pynchonian commentary on Sir Walter Scott's mistranslation of 'El Desdichado' the unhappy or miserable as 'The Disinherited' in *Ivanhoe*. The pseudonym is adopted by the titular character to conceal his identity when he humbles the finest Norman lances in the lists at Ashby-de-la-Zouch; according to Oedipa's historical researches, the Trystero may have been founded in the fourteenth century by one Hernando Joaquín de Tristero y Calavera who contended for the rightful ownership of the Thurn and Taxis postal monopoly attached to the estate of Ohain. 'His constant theme, disinheritance. The postal monopoly belonged to Ohain by right of conquest, and Ohain belonged to Tristero by right of blood. He styled himself El Desheredado, The Disinherited...' (*CL49*, 110–111). This intertextual moment connects the themes of error in communication systems, Gerard de Nerval's poem *El Desdichado* and the wounded Ivanhoe's melancholic absence as a heroic figure for much of a text that bears his name to the foundations of the Trystero.

Anterior Motives: Performance in Videogames

Anterior Motives – From Subjective Shot to Portal's Figure of Reversal

Since antiquity, the framing device has been a key site of transactions between performative and aesthetic problems. Across the series of gallery scenes explored in Part I, it is possible to see these questions acquire new meanings and importance as images found uses outside of traditional and ritual contexts. Departing from Austin, it seems that framing devices orient audiences toward a work through establishing logical, spatial and temporal relations. By identifying feedback loops, framing devices enable the felicitous navigation of complex intertextual systems - although the very power of framing devices to hint at the unknown off-frame space also suggests an uncanny, vertiginous aspect. Realism, far from being some veridical gold standard or unquestionable teleology for artistic achievement, has elicited a sense of unease in critics from Pliny to Barthes. The performative virtual realism of videogames can be considered in this light. Part II of this book will examine each of these aspects in turn. The current chapter will elaborate on the 'tautegorical' aspect in media and videogames and Chapter 6 will deal with the 'allegorical' reading through examining the 'aesthetics of infelicity'.

The tautegorical aspect of the framing device will be explored by way of a critique of Galloway's theory of the 'collapsed allegory'. This critique will be substantiated with a close reading of some key games in the FPS genre including *Half-Life 2*. While the collapsed allegory is not Galloway's latest thinking on videogames (see for example Galloway 2012), it is discussed in this context for two reasons. Firstly, it is a theory of

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performance insofar as it conceives of games as actions. Secondly, the collapse of signification into a simultaneity of interpretation and meaning production is explicitly a 'tautegorical' theory. Here I argue that Galloway's approach only accounts for one kind of framing device of the many that make up the FPS form, and argues for a broader theory of performativity and framing devices.

Pynchon's speculations about video and reversibility, which concluded the last chapter, already indicate some problems with Galloway's programmatic statement: 'If photographs are images, and films are moving images, then *video games are actions*', he effectively draws together a performative set of concerns with the notion of allegory. Galloway's key argument for viewing games as actions is a specific contrast between the cinematic subjective shot and the FPS viewpoint. The multiple frames characteristic of other media become one viewpoint in the videogame, constituting a 'collapsed allegory'. He argues that by comparing these two techniques it is possible to gain general insights into 'gamic vision': 'The shooter as genre and the shooter as act are bound together in an intimate unity. The shooter is not a stand-in for activity. It *is* activity... Allegory has collapsed back to a singularity in gaming...an *undivided* act wherein meaning and doing transpire in the same gamic gesture... The customary definition of allegory as "extended metaphor" should, for games, be changed to "*enacted* metaphor"' (Galloway 2006, 104–105). This is an explicitly tautegorical theory in which configurative performance and meaningproduction occur in one 'real-time' moment: everything is considered in terms of the actuality of the particular moment of play. This also implies a historical relation: the supercession of extended metaphor (cinematic montage) by enacted metaphor (gamic vision).

This can be contrasted with the argument developed in Part I: framing devices not only delimit representational space but also inform the quality of the image and have performative characteristics. For writers such as Benjamin, Metz and others, these characteristics are further intensified by technological media, inculcating 'a new plasticity of space and time' (Beller 2006, 3). As Flusser argues with regard to the practice of photography, 'The camera is not a tool but a plaything, and a photographer is not a worker but a player: not *Homo faber* but *Homo ludens*... Unlike manual workers surrounded by their tools and industrial workers standing at their machines, photographers are inside

their apparatus and bound up with it' (Flusser 2000, 27). This has ramifications beyond the individual photograph:

There is a final decision taken in the act of photography: pressing the shutter release ... In reality, however, these final decisions are only the last of a series of part-decisions resembling grains of sand ... a quantum decision. As consequently, no decision is really 'decisive', but part of a series of clear and distinct quantum-decisions, likewise only a series of photographs can testify to the photographer's intention. For no single photograph is actually decisive; even the 'final decision' finds itself reduced to a grain in the photograph.

Photographers attempt to escape this granulation by selecting some of their images in the same way as a film director cuts strips of film. But even then their choice is quantum, since they cannot help highlighting elements of a series of clear and distinct surfaces. Even in this seemingly post-camera situation of choosing the photograph, one can see the quantum, atomized structure of everything to do with photography (and everything to do with apparatus pure and simple). (Flusser 2000, 39)

Flusser is worth quoting at length here as he clearly articulates the way that the photograph appears not as a (static) image but as an event: a complex folding of continuities and discontinuities and temporal series. When a photograph is taken, it establishes a complex set of relations between off-frame space (the series, the quantum decision and the 'post-camera situation') and internal variegations (highlighted 'quantum' elements). Photography's framing resembles play more than work insofar as it establishes virtual series that allow substitution and mimesis. This resembles the way that the 'off-frame space' is constituted in *The Cabinet of Cornelis van der Geest* – albeit here the metapictorial series is constituted by a technical apparatus and not the genius of the collector.

THE SUBJECTIVE SHOT: COLLAPSED ALLEGORY, IDENTIFICATION AND ALIENATION

Montage is the key point of contention in Galloway's argument insofar as he explicitly distinguishes subjective shots from point-of-view (POV) shot/countershot montage techniques. Subjective shots superimpose the audience-

camera's gaze on that of a character within the diegesis itself. This technique leads to both identification and alienation. The subjective shot has been used to evoke crepuscular states, such as when James Stewart's character awakens in Hitchcock's *Rear Window* (1954) or an inebriated woman attacks a man (represented by the camera itself) in Samuel Fuller's *The Naked Kiss* (1964). This, along with the rarity with which this technique is used in narrative film, indicates its unsettling character in that medium.

The alienating quality of subjective shots has been used to evoke the vision of a cybernetic being in movies such as *Robocop* (1987) and *Terminator* (1984), or a stalking monster or criminal. Such sequences occur as the shark rises to attack an unsuspecting swimmer in *Jaws* (1980) and in *The Silence of the Lambs* (1991) where FBI agent Clarice Starling's vision is impaired by darkness while the serial killer she is seeking to apprehend, Jame Gumb, is equipped with night-vision goggles. The 'moving cutting-off' that Metz says invokes both terror and pleasure is operating here in the form of an expectation of shock, but the threat emanates from the camera *itself* rather than the off-frame space.

What is monstrous and alienating in film becomes a major paradigm in games, which open 'a new set of possibilities . . . for the subjective shot' (69). In film, the subjective shot alienates audiences. It is much less successful than the POV shot/countershot montage technique that is a core component of cinematic convention. Conversely, the first-person videogame utilizes the subjective shot to immerse players, while montage-like removal from that perspective (say in a cutscene) can be irritating and distracting.

This is a vanguard contribution that videogames make to visual culture: 'In games the first-person perspective is not marginalized but instead is commonly used to achieve an intuitive sense of affective motion...As far as identification is concerned, film failed with the subjective shot, but where film failed, games succeed...Where film uses the subjective shot to represent a problem with identification, games use the subjective shot to represent a problem with identification, games use the subjective shot to create identification' (69). What is at stake in Galloway's earlier underlining of the distinction between the POV shot/countershot and subjective shot techniques, then, is made patent: the former is a discontinuous montage, the latter continual movement through space without montage – the tautegory of a visual presentation of space meaning nothing but itself, as opposed to the allegorical constructions of montage. The exemplary genre is the FPS, which fully succeeds in virtually simulating the experience of moving through continuous, three-dimensional space. Although I have already noted that this account ignores developments in fields such as video, it can be contested within film history itself. Galloway's argument relies on taking narrative cinema as paradigmatic, which understates the 'success' of subjective shots in film. Documentary cinema since its early days (particularly the *Cinéma vérité* style Direct Cinema of Albert and David Maysles and D.A. Pennebaker), Victorianera actuality film (such as those of Louis and Auguste Lumière) and Vertov's *Kino-Pravda* among many other examples, has utilized subjective shots without necessarily evoking alienation.¹

Video also provides important precedents. In 1965 Nam June Paik used one of the first portable video machines to record Pope Paul VI's visit to New York City through a taxi window, simultaneously framing a subjective shot (movement of the apparatus through space) and selecting a particular framing of the pontiff and surrounds (montagist practice). As Wilson (2004) has argued, video art provides many other examples that prefigure videogame temporalities. Many aspects of contemporary 'post-cinema' (Shaviro 2010) and 'post-digital' (Berry and Dieter 2015) visual culture – from YouTube remixes of film footage to candid video blogs – show that cinematic images and subjective shots remain open to temporalities and uses beyond the context of narrative film.

ANOMALOUS, MATERIAL: FPS AND THE COLLAPSE OF ALLEGORY

The theory of the collapsed allegory implies a communication circuit without any consideration of memory, entropy or redundancy (a point that will be expanded fully in the next chapter). This is the precondition for the production of meaning to be located solely in the 'category of the gamer'. In this attempt to secure the rights of the gamer, the game design itself loses all critical determinacy. The simulated space is simply an analogue of a phenomenal spatiality, which itself is conceived as hollow and void ('3D Euclidean space'). This notion of space is not, however, conclusive. In De Certeau's well-known phrase, 'space is a practiced place' (2011) and this applies to videogame space as well (Golding 2013). Aarseth (2007) has drawn attention to Lefebvre's (1991) reflections on the production of space in discussing how games actively construct spatial relations. Chapter 2 showed that framing devices structure performance in many different ways, problematizing Galloway's generalization of the single framing device of the FPS avatar across the entire field of videogames.

Spatiality in the FPS: Half-Life, Doom, Counter-Strike

Is space in the FPS genre in fact as homogeneous as Galloway's theory of the collapsed allegory implies? And if not, what relations between continuity and discontinuity are observed? To address this problem I will examine several games, focusing on *Doom* and Valve's Half-Life series² as well as the influential mod Counter-Strike. The original Half-Life in fact begins with a cinematic framing device. The PC, postdoctoral theoretical physicist Gordon Freeman, travels via a monorail system through the very spaces from which he will soon be trying to escape. The spaces change status, transforming from nonactionable to actionable. The game also features scripted events. Players are cued to forms of performative felicity through short sequences which are essentially noninteractive (they happen quickly or in a space out of reach), but are nevertheless rendered in-engine rather than as pre-rendered cutscenes. The introduction of roof-lurking monsters, for example, is preceded by witnessing the creature's hanging tentacles ensnaring a hapless scientist. Proceeding through a level in *Half*-Life advances both spatial and narrative elements, cinematic sensibilities that were also a design feature of the sequel.

Level designs in *Half-Life 2* (and other FPS games) create a sense of freedom in what are in fact highly linear, tunnel-like level virtual spaces by setting off action sequences with spectacular open vantage points. In *Half-Life 2: Episode Two*, at the beginning of the chapter 'Freeman Pontifex', Freeman emerges from a long stint spelunking in claustrophobic underground tunnels onto an escarpment overlooking a valley. Also present are two nonplayer companions: a woman named Alyx Vance and an alien with the ability to manipulate electric currents called a vortigaunt. A far-off column of soldiers belonging to the totalitarian alien empire known as the Combine can be seen marching along a bridge. This force is heading for the rebel base called White Forest, which also happens to be where Freeman and company are bound. Some barrels clutter a path leading downward into the valley. A designer explains:

We release the player from the confines of the subterranean world and thrust them into a vast open space on a scale rarely seen in our previous games. The narrative takes advantage of this scale as well. With our allies at close range and our enemies on the distant bridge we should be reminded of the personal stakes and the larger threat all in one short sequence. (John Cook, *Half-Life 2: Episode Two, Director's Commentary, Chapter 3, No. 1 of 11*)

A shift in scale also plays a pivotal role:

Most of our dramatic scenes are constrained in such a way that the player can't progress until the scene is over. For example, there might be a gate that only Alyx or a vortigaunt can open. In this scene, where Alyx and the vortigaunt first see the Combine marching on White Forest, we simply placed a few barrels to block the way while Alyx and the vortigaunt speak. With just this slight impediment, every playtester stayed and watched the scene as intended, so no explicit gate was needed. (Doug Lombardi, *Half-Life 2: Episode Two, Director's Commentary, Chapter 3, No. 2 of 11*)

'Gates' and 'vistas' limit or manipulate player movement, but they do so in very different ways. A gate functions through game design, whereas a vista is more like cinematic *mise-en-scene*. Taken together they serve to pace the game between action sequences as well as allow for narrative vignettes: they are framing devices. Although the drums could easily be moved with the abilities at the player's disposal (particularly the game's signature 'Gravity Gun'), in practice, the spectacular 'vista' over the valley (the size of which is emphasized by the distant marching figures), and the temporary 'gate' of the barrels were sufficient to give most playtesters sufficient pause for some narrative exposition amidst all the action. This is evidence that it is important to think about the *types* of framing device that are involved in creating gaming's characteristic effects.

The column of enemy soldiers is unreachable by any means during play – they are not in Galloway's sense in 'actionable space'. This variable articulation of spatial experience and visual regimes causes a lull in the game's action-oriented impetus and affords an opportunity for dialogue between the player's companions that helps to contextualize the ensuing action. The morphology of the space exhibits montage-like heterogeneities at the level of both play and narrative, although the montage here is not between distinct still images or shots as in cinema but rather between framing devices and forms of movement distinctive to the videogame form. In many cases, gates in *Half-Life 2* are more substantial than a few barrels, sometimes being formidable enough that they can only be removed by scripted events. Often, the solution is less subtle than a vista, involving literal gates that require Alyx's hacking skills to unlock. Many cannot be opened by any force that players can generate. Such gates are destroyed in cinematic sequences featuring devices such as crashing vehicles, the vortigaunt's ability to activate dormant electrical equipment, or the powerful robot character Dog. What is common to all of these types of gates – contra Galloway's theory – is that they act to produce distinctive variegations of ludic space and time.

One particularly interesting element of Lombardi's statement is the notion that the design subtly encourages players to advance through the space: gates and vistas represent different ways of temporarily pausing this inherent forward momentum. Typical FPS gameplay involves incessantly introducing new framing devices that make new performative demands (new enemies, new areas, new mission goals, new plot points, etc.), driving the game forward as a kind of pervasive felicity. These framing devices introduce new feedback loops that make specific demands on players, and can be termed *anterior motives* to give a sense of their tendency to 'push' players to unidirectional advance. This design tendency is why FPS game levels, which are often tunnel-like when viewed schematically, do not *feel* constrained in play: there's always something to a little further down the tunnel.

There are, however, many other types of framing device in Half-Life 2. The HUD (Heads-up display), which gives information about the avatar's status in terms of health and ammunition, is another frame that is critical to felicitous performance (Freeman dons a high-tech hazmat suit which diegetically explains the display, but in many games no explanation is given for the HUD). Weapon ranges, animated motion blur, enemy types and spawning points, teleporters, the 'skybox' (an encompassing frame on which textures represent a sky), the conditions on which musical and audio clips are cued, the coincidence of sound and image such as when a weapon is discharged - all these are articulations and montagist effects, even if they happen to be cued by a computer program in real-time rather than an editor before distribution. Temporal intervals and discontinuities can also be observed between levels, in various save game structures, in enemy spawning and movement rates. Even something as simple as a ladder can present a frustrating experience compared to the ease of movement characteristic over flat terrain. In a FPS, moving between vertical elevations by means of such a convenience often involves awkwardly toggling discrete on/off states rather than a continuous spatiality.

None of this is to suggest that these discontinuities are of the same type as *cinematic* montage (and they obviously utilize very different technologies), but rather to reinforce the opening contention of this book: videogames involve the articulation of a very heterogeneous set of elements. The upshot

is that Galloway's collapsed allegory theory has only accounted for one particular form of movement within the overall ensemble that is the FPS genre. In order to conceive this space as a continuous collapsed allegory, it is necessary to empty it of its discontinuous determinants and elements. Space in the FPS is not simply 'actionable' but variegated in various ways, according to different forms of movement and framing devices. This suggests that, far from sidelining montage, it would be useful to multiply its logic: performance in videogames involves a dynamic montagist practice – a 'putting together' that makes the most of computers' ability to store, manipulate and display data and sensory flows.

Rates of Movement

Does this critique hold for Galloway's central example – avatar movement in the FPS? It may be argued that the movement of the avatar is the primary phenomenon in question, and that the other forms identified above are derivative: that is, continuous avatar movement across level terrain is the major, dominant frame – a tautegorical background against which the other frames are 'set' in various relative and subordinate ways. The frames discussed so far are highly heterogeneous – some are necessary to the ludological structure of the game, others are narrative-based, whereas others are contingent and specific to player activity or some particular situation – while the coincidence of camera and action identified by Galloway is central to the FPS genre itself. This would mean that the multiple frames of the FPS gain their consistency and meaning only through a subordinate relation to the primary one identified by means of the continuous, 'successful' FPS subjective shot.

In fact, even the FPS genre's marriage of viewpoint and movement in a single flux can be analyzed not as *simply* continuous but as the *continuous articulation* of a break, discontinuity or framing device.³ Insisting on such a distinction might seem at first blush redundant, but the necessity of this approach is easily shown: if spatiality in these games is conceived as the continuum of a collapsed allegory, there is no way to theoretically distinguish how movement differs amongst various titles within the genre or among versions of the same title appearing on different hardware platforms. Examined through the terms of Galloway's theory of the continuous subjective shot, avatar movement in all FPS games may as well be the same. Conversely, conceiving of the avatar's movement as a continuous

articulation or a coordination of one framing device among many highlights the importance of analyzing *rates* of movement.

Half-Life 2, for example, plays very differently on a console than it does on PC. In each case a distinct ensemble of technical standards and forms of movement produce the experience of space: console controllers differ from a mouse-and-keyboard PC setup. Precise rates of movement in each case are pivotal to felicitous play, and the apparatus will in many cases adjust for near misses. Generally, this 'aim assist' will be greater in a console game where the thumbstick tracks across space than in a PC game using a mouse capable of far greater readjustment and precision. The performance of aiming and firing the weapon, then, is not simply a matter of human acuity but is distributed across the human player and the specific apparatus with which a performance occurs. These sorts of snap-to-grid modifications of spatiality and movement attest to complexities of the FPS apparatus that are glossed over in Galloway's conception but are critical to thinking about performativity in videogames.

Even with regard to Galloway's key example of avatar movement, there are important differences to note: games in this genre vary greatly in terms of the relative speed with which the avatar moves through the environment. Game designer Jean-Paul LeBreton, blogging under the name 'Vector Poem', points out that *Doom*, in spite of its seminal status, is only problematically included in the FPS genre it supposedly spawned: the game is a 'coelacanth', an archaic sign of alternative potentials. The design of *Doom* predates the contemporary primacy of visual realism and real-time physics modeling – its attempts to evoke 3D spatiality utilize a very distinctive set of techniques.

One of the most striking areas in which *Doom* differs from more recent FPS games is the sheer maneuverability of the avatar, which rivals that of the game's projectiles. LeBreton compares the game to the 2D *Robotron* 2084: 'Doom feels more like a 1st person *Robotron* than a modern FPS...When you play *Doom* today, it doesn't feel much like you're controlling a human or moving through real spaces. Try this though: press the TAB key, type IDDT twice and pretend you're playing *Geometry Wars*, and the moving triangles are your enemies' (LeBreton 2010, online). The TAB key brings up the top-down vector map and the IDDT cheat code displays all entities including enemies, items and projectiles. This shift of perspective emphasizes the comparison to 2D shooters both past (*Robotron 2084, Berzerk, Tempest*) and more recent

(*Geometry Wars*), in part due to the differentials between avatar and projectile rates of movement. The vertical dimension of *Doom* was also abstract in nature (consisting of several planes rather than a vertical axis as such), the overall effect being described as '2.5D' rather than fully 3D. 'The notion of realism in FPS design wouldn't appear for another few years, and many decisions were made simply on the basis of being good for abstract shooter gameplay' (LeBreton, online).

Apart from its iconic viewpoint, then, *Doom* may have more in common with 2D shooters than the FPS games of which it is supposedly an *ur*-text. This has critical ramifications for both temporal and spatial experience:

In almost every modern FPS, the player moves fairly slowly and a huge proportion of enemies are equipped with instant hit attacks – pistols, machine guns, sniper rifles. This usually puts the player in the role of 'damage sponge' – they're intended to soak up a certain amount of damage from mostly unavoidable enemy attacks, then seek cover and heal up... Contrast all this with Doom Guy, who runs at about 50 scale miles per hour – *nonsensically* fast by modern standards. (LeBreton, online)

Although some of the enemies in *Doom* possess 'hitscan' weapons that do not model the projectile's traversal through space but instead are projected instantly across a given area, many discharge sprite-based projectiles that can be tracked visually. Doom Guy's rate of movement is unrealistically on par with the majority of this incoming fire, a feature which 'would look comical in a more realistic visual presentation' such as *Doom 3*, the series' 2004 remake.

... because the player moves so quickly in *Doom*, and because most enemy attacks are dodgeable, the player can avoid a significant amount of damage simply by moving. A skilled player can often deal with large numbers of enemies sustaining hardly a scratch. This creates a feeling that's quite rare in modern FPS: that you are powerful *because you are agile*, not because you're a tank. (LeBreton, online)

Le Breton's account highlights important design differences between *Doom* and later 3D shooter games in terms of an interrelated set of rates through which various distinct forms of movement are articulated.

Multiple forms of movement thus constitutively and integrally influence FPS spatiality, even at the basic level of avatar movement. They also ramify at the extended register of level design. LeBreton comments on the abstraction of the level designs in *Doom*:

While some of *Doom*'s levels have a very thin fiction via their title (e.g. 'Hangar') and general texturing theme, if you actually explore them you find they only resemble real locations in the loosest sense possible ... Level designers didn't have to worry about whether a change made something look less like a hangar or a barracks, just whether it was better for gameplay. (LeBreton, online)

It is this abstraction that 'allowed *Doom*'s level design to present a wide variety of interesting tactical setups' (LeBreton, online) for characters that move with an incredible rapidity that would be prohibited by a more realist simulation.

This contrasts starkly with the remake *Doom 3*, which was a design much more committed to realist verisimilitude of sound, vision and movement. This leads to markedly different 'tactical setups' and the corresponding level designs. *Doom 3* features many more tunnel-like, confined spaces occupied by small groups of enemies prone to ambushes from the darkness, whereas the original tended to alternate such haunted labyrinths with open spaces and berserker assaults *en masse*. Meanwhile, the 2016 iteration of the game (iD 2016) returned to a lurid visual style and extremely rapid avatar movement reminiscent of the original title. What the differences between *Doom, Doom 3* and the 2016 *Doom* make clear is that, from a performative point of view, the first-person viewpoint (relatively abstract in *Doom*, relatively realist in *Doom 3*) is not an explanatory variable as Galloway's theory would have it – rather, its differing operations in particular cases are in need of explanation.

The notion of framing devices gives one way of thinking through this. Doomguy's projectile-like rates of movement in the run-and-gun gameplay of *Doom* contrast with the suspense-oriented stalking of the more conventionally imagined and realized space marine of *Doom 3*. Much as all the platforms in *Super Mario World* are spaced with a view to the jumping capabilities of the protagonist, the spatial design in each *Doom* game is integrally responsive to the forms of movement of the characters and objects within it – as well as the varying aesthetic goals of each distinct game design. Each form of movement and each framing device is one component that goes into structuring the felicity of performances within the game.

From a performative point of view, the relations between spaces and rates of movement are often absolutely critical to felicitous play. A key example of this is given by David Johnston, the designer of the most popular *Counterstrike* map, 'Dust'. Johnston speculates that the major element in the map's success was a particular area equidistant from each team's starting point that acted as a kind of performative fulcrum. 'Part of building the center . . . involved me running from each side of the map into the center and seeing how long it took. The idea was to ensure each team would meet in the middle at approximately the same time, to focus the battle there' (Johnston, online).

This virtuoso calibration of the space to the forms of movement inherent in *Counterstrike* was felicitous on a massive scale: 'At any point in time, Dust is host to around 10,000 players, around 5% of all online gamers.' The map has hosted millions of matches and has been updated along with the new editions of the game. The morphology of the space and the concomitant gameplay virtues can't be assessed effectively in Galloway's terms – but they can be accounted for as a concerted regime of rates of movement. Certain areas and access points were calibrated to the speed of the avatars and the nature of the game's weaponry such that they emerge as regular flashpoints across millions of game sessions, drawing players back again and again due to this particular 'tactical setup'.

Two main points have arisen in the course of this discussion. First, there are multiple forms of movement in gaming, including in the FPS. Second, even in the case of avatar movement in the FPS, where it may seem that multiple frames have aligned completely (as Galloway puts it, 'collapsed') such that player input and movement coincide, spatial form is in fact better conceived as a 'moving cutting-off' that is continuously articulated because this allows us to account for rates of movement.

Game space is thus not necessarily either continuous or discrete, but instead produces various types of spatiality in order to facilitate various experiences and performances. The performative theory of tautegory, developed in relation to Stoichita's reading of the van Haecht painting, seems more promising than the concept of the collapsed allegory: rather than accounting for one particular type of movement, it suggests a way of thinking about the many that make up the experience and performance of space in the FPS. Multiple figures of reversal correspond to the many different types of feedback loops we observe in videogames. In this view, multiple framing devices would structure performance within the space. Like the *Vive l'esprit* emblem, certain elements would be highlighted in order to 'stop the gaze': conveying structures of performative felicity and forms of movement through multiple figures of reversal or feedback loops.

Portal: Movement, Space and Figures of Reversal

The figure of reversal is instantiated as the core mechanic of perhaps the most paradigmatic and self-critical first-person videogame: *Portal* (Valve Software, 2007). The game's intense self-referentiality is attested by the involvement of Erik Wolpaw and Chet Faliszek, two writers who came to Valve's attention in the early 2000s through their videogame criticism website *Old Man Murray*. Wolpaw and Faliszek's acerbic reviews were notorious for pitilessly cutting through the banality of many game designs. *Old Man Murray* once proposed to dispense with normal scoring systems and instead evaluated games on a 'Start to crate' metric. This measured the amount of time between beginning a game and encountering some kind of crate: lampooning the tendency to scatter useless boxes throughout levels as unimaginative *mise-en-scene*.

Of course, one of the first objects encountered by players in *Portal* is a crate (or, in the game's jargon, a 'Weighted Companion Cube'; Fig. 5.1) that actually turns out to be a valuable asset in overcoming the game's challenges. But what is particularly interesting about Wolpaw and Faliszek's 'Start to crate' metric is that it plays off a specific form of movement. It is precisely because walls, floors and other architectures were so featureless in early FPS games (generally being represented by iterated or tessellated textures) that it could be difficult to tell just how fast the avatar was moving unless generic, vaguely plausible, otherwise useless objects such as crates were scattered about. All the crates in many classic games 'contained', therefore, was game space itself. The Weighted Companion Cube thus inverts this technique, turning an empty measure of movement into a thing with gravitas.

Gameplay in *Portal* involves navigating multiple forms of movement endemic to gaming – moving platforms, timed barriers, pressure plates, deadfalls, transforming architecture and automated weapon turrets. The cube, as an object with mass (capable of depressing plates or working as a



Fig. 5.1 Portal

counterweight), was thus far from a mere marker of empty spatiality but a way of opening up some of the many forms of movement in *Portal*. In fact, players acquire the Weighted Companion Cube even before they do the signature 'portal gun', highlighting this parodic view of how games create the sense of space through repetition.

This parodic self-awareness extends to the game and level design, which is composed of white-walled rooms that make no pretense at being anything more than crates filled with arbitrary obstacles and rewards of dubious value.⁴ *Portal* comports itself with disarming candor, communicating through its design the realization that game levels are simply Skinner boxes – big crates – badly dressed up with various textures, peopled by spiritually depleted aberrations and infested with boilerplate narratives. Players are instructed by the monotonous voice of the computer GLaDOS and by gnomic signage, each of which contains the tatters of obligatory 'personality' characteristic of corporate environments. *Portal* displays the bones of its game design, sardonically reporting on how players are guided by specific framing devices and unadorned anterior motives.

The game's signature ludic elements are the titular portals (Fig. 5.2). Players fire a 'portal gun' at a surface to open a blue portal, and fire again to open an orange portal. These pairs link space. Entering or falling into

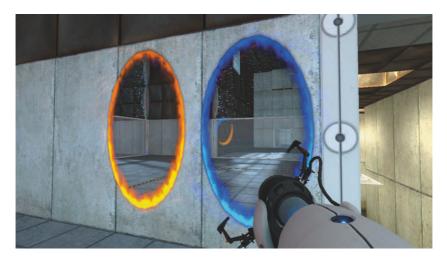


Fig. 5.2 Portal

either portal causes the avatar to appear through the other while conserving their momentum. This makes amazing forms of movement possible by articulating different points in space: for example, if the avatar or a Weighted Companion Cube falls off a great height into the orange portal and angles the blue portal correctly, their conserved momentum enables them to sail over otherwise impassable obstacles.

The portal mechanic is a redux of a game that is itself a redux of FPS game design. The game credits two seminal game critics for writing and design, both of whom have reflected at length on the characteristics of the FPS form, and instantiates the figure of reversal in the form of a literal framing device. The portal is to FPS gaming what the *Vive Vesprit* emblem is to the mirrors, embrasures and other lively frames of Reformation and baroque *rhyparography*: through the figure of reversal, it emblematizes all the various temporal, spatial and logical framing effects by which FPS videogames operate.

The capacity of portals to distribute spatiality while conserving momentum exhibits the pervasive nature of the framing device. By conserving momentum – a rate of movement – across virtual space, the portal renders visible the figure of reversal that is operative in every moment and at every point of FPS gameplay. Like the *Vive Vesprit* emblem or the trope of the clue in *CL49* it pervades and opens⁵ the virtual game space as a performative world. What *Portal* shows is that, in the FPS, the feedback loops of gaming reach an apogee such that the framing device itself is turned inside-out. As a rate of movement, it becomes a pseudo-continuous matrix in which the game's other forms of movement take place. In Metz's terminology, the capacity of the camera to generate the 'off-frame space' becomes a continuously generated effect in which virtual space and material input are performatively threaded through the figure of the avatar as a kind of 'moving cutting-off'.

Half-Life also highlights the figure of reversal: the whole point of the game is that players have to fight their way back out of spaces that they first travelled through in the opening monorail sequence (Nitsche 2008). The first chapter, 'Anomalous Materials', provides perhaps the most striking example in the way it treats the avatar itself. The mute Freeman, wearing his iconic hazard suit, is required (in a pastiche of laboratory pecking orders⁶) to push a cart loaded with an 'anomalous material' into an experimental dimension-bending apparatus. A scholar, typically thought of as an observer of phenomena, becomes subject to an integral (as the game puts it, 'quantum') entanglement. Thematically, intention and result are both intertwined absolutely and completely alienated in the figure of Gordon Freeman.

The experiment goes awry and earthly space is turned inside-out, superimposed with an alien world whose inhabitants waste little time in massacring the local academic population. The smoothly framed monorail ride is striated into a tortuously multivalent escape. Gordon's subordinate position, in which he can only perform the singular action of moving a volatile object into a position where it can be experimented upon, warps into the manifold possible lives of the videogame protagonist. The irony is that as an avatar, a moving cutting-off, a point of coordination of difference and a paradoxical mobile framing device, it is Gordon Freeman himself who is truly 'Anomalous Material'.

INTENTION SPANS: GAMES AS COLLAPSING ALLEGORIES

Rehak, extending the concept of 'suture' from psychoanalytically inflected film theory, writes, 'the FPS's direct (visual) address, updated in real time, presents one ongoing and unbroken half of the shot-reverse-shot construction, enabling a snug fit between the player and his or her gameproduced subjectivity' (Rehak 2003b, 119). With the caveat that the fit is not always particularly snug and is often outright dysfunctional (due to machine or player failure), it is possible to account for the *other* half of the construction in the context of FPS gaming: it becomes an 'off-frame space' defined by a certain rate of movement, a continuously recalculated feedback loop. Embedded within the general spatiality defined by this matrix are the circuits of multiple framing devices and multiple figures of reversal, by which structures of performative judgment are disseminated in the process of play. While games are often accused of damaging players' 'attention span', the reverse argument can also be readily made: videogames capture and redeploy attention. Videogame players' capacities for adapting to rapidly shifting fields of visual, textual, audio and other types of information can be termed the 'intention span' – a performative attitude distributed across a field of framing devices.

The advantage of this approach is that it enables the consideration of multiple types of framing device as components of the overall game design. As Nitsche argues, the spaces of videogames are a collage of various effects that reflect historical technical, artistic and social norms: 'the idea of a single all-embracing cyberspace had to break down into smaller and more specific segments once virtual worlds became available en masse in videogames' (2008, 17). This is why the versatility of a performative approach to framing devices is important, as there is in fact no unfathomable contradiction when realist and nonrealist elements occupy the game space any more than trompe l'oeil paintings share Van Der Geest's gallery with metapictorial and vanitas canvases: what is at question, instead, is the means of creating various temporal, spatial, narrative, ludic, ergonomic (etc.) effects, and the ways these effects guide performance. As in the gallery scene, the framing devices in gaming are not simply demarcations or barriers. They can also be graphical elements that 'stop the gaze' and define felicitous forms of movement. They thereby produce ludic space.

Here too the *Half-Life 2* commentaries offer valuable insight. In one scenario of *Episode 1*, players are tasked with locating a power source for an elevator. Artist Ted Backman describes the performative logic behind a particular set of visual codes:

Our art and gameplay standards encourage players to develop a visual dictionary that defines how they expect things to work in the *Half-Life* world. For instance, even though the door to the powerbox room is metal, and would probably have a metal crossbar holding it shut, we barred it with a wooden plank. Because we'd been consistent throughout the game, the

player should recognise that a wooden plank can be both broken and manipulated with the gravity gun, properties that wouldn't immediately be apparent about a metal bar. (Ted Backman, *Half-Life 2: Episode 1 Commentary*)

Backman's notion of a 'visual dictionary' and insistence on 'consistency' show that performative criteria are embedded in framing devices that effect ludic equivalents of *both* realist *trompe l'oeil* and ludic metapictorial functions. These are framing devices that operate through audio-visual design, *and* through art design as a type of neo-baroque seriality.

Backman describes the operation of the visual dictionary through the same framed object as England: the humble door. In *Half-Life 2* there are several kinds of doors (Fig. 5.3). It is established early in the visual dictionary that doors with a modeled handle that projects from the plane of the wall can be opened onto new areas, whereas doors without such a handle are simply decorative textures. The doors with handles are both a visually realist representation (along the lines of *trompe Voeil*), and a particular form of movement made familiar by repetition – a generic series.

This distinction between functional and decorative doors appears in other ways in different games. In *Mirror's Edge* (EA Digital Illusions 2008), for example, doors that can be used to traverse the *parkour*-inspired rooftop environments are colored bright red whereas merely textural doors are not highlighted. This feature is crucial to felicitous play (as the game is based on rapid traversal of the environment), and can be switched off for advanced play. As noted in Chapter 2, when players approach a door in *Mass Effect 3* an overlay frame appears at the top of the screen indicating the potential action. In *The Witcher 2: Assassins of Kings*, only one character can utilize a door at a time, meaning that characters regularly slam doors in each other's faces. In some games such as the covert operations title *Rainbow Six*, a door can be gradually manipulated with a scroll of the mousewheel to avoid alerting an opponent, or it can be slammed open for rapid access – the door can be operated in a continuous or discrete fashion, depending on the needs of the moment.

These various framing devices achieve the same basic door performances, but each gives rise to very distinctive experiences of space. In *Half-Life 2* and *Mirror's Edge*, the speed of play necessitates a much more immediate type of reaction than the latter more deliberative, cover-based, RPG-oriented, third-person games mentioned. Where *Mass Effect 3* introduces a text-based interface frame to indicate interactivity, the former 122 5 ANTERIOR MOTIVES – FROM SUBJECTIVE SHOT...



(a)



(b)



games integrate the framing device through developing a visual dictionary. It could be extrapolated from Backman's comments that there are equivalent tactile and aural 'dictionaries' at work in *Half-Life 2* as well.

Two Types of Framing: Hypermediate and Integral

Portal is the most brilliant expression of 'the door problem' in the FPS genre. The game simultaneously subverts the shooter gameplay and makes the figure of reversal a thematic as well as structural element. This leads to the question of the 'background' in which the portals are 'set': repeated, predictable visual elements. These are necessary so that players can understand what is a surface on which a portal can be felicitously placed, and where it will fizzle out uselessly. Repetition is a particularly important example of the way that games mobilize the metapictorial element of the framing device, emblematized in *Portal* by the Weighted Companion Cube.

A very common technique by which games construct environments is through tessellated or repeated textures. Similar effects can occur with regard to repeated audio or recurring NPCs. The repetition of such signs suggests that they are evaluated in the experience of play not primarily as individualized realistic descriptions, but in their reducibility to a 'beingmoved-past'. Like the design technique lampooned by the 'Start-to-crate' metric and the Weighted Companion Cube, they exist mainly as background elements that provide context to the forms of movement that are crucial to gameplay. If, as Stoichita's reading of the still-life genre indicates, *rhyparography* was tied to the depiction of generic objects and series, in gaming this propensity becomes a key method for structuring virtual space. Players largely ignore⁷ these repetitive signifiers as they search for the anterior motives that drive forward play.

The way that the *Half-Life 2* 'visual dictionary' highlights certain elements from this general background recalls the 'stop signals' for the wandering gaze in van Haecht's picture, as both structure performance in the space they govern. The game world constitutes a field of framing devices. They also recall Flusser's notion of the way that apparatuses such as the camera highlight elements and place them in virtual series – although in games, the elements signify performativity for players rather than the photographer's intentional attitude that picks out details to create

a series of photographs. In games, this 'series' encodes the game's specific modes of performativity and forms of movement.

From this performative point of view, it is possible to nominate two broad types of framing device that disseminate performative criteria in games: *hypermediate* and *integral*. Hypermediate framing devices (drawing on Bolter and Grusin's concept from *Remediation: Understanding New Media* [2000]) partition the game screen or set of screens into different functions and to some degree mutually constitute each other's off-frame space. Menus, inventories, character screens, score indicators, HUDs and so on would be key examples of hypermediate frames many of which were explored in Chapter 2.

Integral framing devices are part of the art, level, character and sound designs of a game in the manner of Half Life 2's 'visual dictionary'. They are elements of detail that serve on the one hand to 'stop the gaze' and on the other to establish a particular form of movement or a generic series that guides performance. Integral framing devices are similar to the relation that Flusser describes in the photo (as proxy for 'apparatus pure and simple') between 'highlighted elements' and the potential series of photos of a given object: salient features that are emphasized through distortion, repetition or some other focusing effect. Where hypermediate framing devices are what might traditionally be thought of as hardware or user interface elements, integral framing devices are more of an 'intra-face' insofar as they emerge from the continuum of detail that constitutes the sound, graphic, haptic and other designed elements of the game. Player's intention span is stretched across the set of framing devices presented by the game at any one time, as well as previous game states and anticipated future frames. In FPS games, the rapid introduction of new anterior motives that 'push' play forward. These tricks (punctuated by vistas and gating) mean that even though many FPS levels are essentially tunnels, they don't necessarily feel that way in the process of play.

For example, in games such as *Batman: Arkham Asylum* or *The Witcher 3: The Wild Hunt* (CD Projekt Red, 2015), hypermediate frames are usually kept to the edges of the screen so that they do not obscure the fine graphical detail of the game world. However, in certain sequences, the player character has an ability ('detective vision' in the former case or 'Witcher senses' in the latter) which allows them to add a hypermediate layer to the integral framing devices of the real-time game world (Fig. 5.4).



Fig. 5.4 The Witcher 3: The Wild Hunt

The concepts of integral and hypermediate framing devices provide a way of talking about how the performative aspects of framing can influence the form and content of what appears in the represented or simulated space. In the screenshot above, the anterior motives are indicated by the red hypermediate frames that represent the PC's extrasensory abilities. They are the gaming equivalent of the 'stop signals' for the gaze that Stoichita locates in the van Haecht painting.

Interestingly, for both Galloway's control allegory and Austin's parasitic utterance, the paradoxical itinerary of the figure of the framing device returns to a particular static value (empty, 'actionable' space and an etiolation of 'real' or unframed language use, respectively). The *multiple* operations of framing devices are sidelined in both of these conceptions. With the theory of the framing device, then, it becomes possible to add nuance to theorizing the way that framing devices guide performance. This means conceiving game play not as a collapsed or converged allegory which always yields the static value of 'actionable space', but as an ensemble of framing devices *in a state of collapse* that may arrive at different values – different felicities or infelicities. The game is only a tautegory, only a fully 'collapsed allegory' at the Game Over (see Chapter 10). Until that point, it is the ways the game 'collapses' toward an end state that structures the experience of play.

However, this is why it is important to distinguish between anterior motive (the game as structured by designer desire) and intention span (the game as structured by player desire). Videogames often sell themselves on a neat match between the two and none more so than the FPS, which derives its status as a marquee game genre from its remediation of the firstperson viewpoint, its demand for high-end hardware, optimized performance, action-hero protagonists and so on. This could be described as an aesthetics of felicity focused on the player-as-consumer. However, as Aarseth's concept of the aporia indicates, such experiences must be balanced against games' ability to cause frustration and bewilderment: the aesthetics of infelicity.

Notes

- 1. I am indebted to film scholar Alexandra Heller-Nicholas for alerting me to this history in detail.
- 2. Half-Life 2's expansions, titled Half-Life 2: Episode 1 and Half-Life 2: Episode 2, are particularly valuable because the studio has produced commentary tracks on the games which are informative documents of the creation of a high-quality game design.
- 3. See Chapter 9 for a formal terminology that can account for this: 'primary digitalization'.
- 4. The player character, for example, is promised cake by GLaDOS upon completion of the sequence of tests, but comes across graffiti repeating the phrase 'The cake is a lie.'
- 5. Benjamin's term would be 'innervation' a term that will be taken up in Chapter 8.
- 6. As security guard Barney Calhoun enthuses after Freeman manipulates a lever in *Half-Life 2*, 'Great job, Gordon! Throwing that switch and all, I can see your MIT education really pays for itself.'
- 7. Anticipating the terms fully developed in Chapters 8 and 9, players encounter these signifiers in a state of 'distracted habituation' and 'primary digitalization'.

Performative Multiplicities

APORIA, GLITCH AND EPIPHANY

'Don't we need to write a ludology for losers?' (Krapp 2011, 75), asks Peter Krapp. This would mean taking glitches, flaws and failures seriously. For Krapp, the glitch opens up a space for contingency in what threatens to be a totalizing and deterministic system, and it is this space that allows people to adapt to a world characterized by the threat of total cybernetic control. However, as MacKenzie puts it, 'There *should* be no loss of time between touch, sight and sound, between the advent of an event and its reception...However, despite the closed settings and limited focus, despite all the effort put into coding gestures, localities and images in advance, games...are exposed to the fluctuating delays endemic to the circulation of information more generally' (2006, 165). Glitches are a commonplace in gaming; given the sheer complexity and heterogeneity of the elements from which they are composed, the real surprise is that they aren't more common.

Figure 6.1 gives two screenshots from *Mass Effect 3*. The scene involves a homecoming for the character Tali, whose people are able to return to their world after being galactic nomads for many years. In a symbolic gesture, the player character Commander Shepard picks up a rock and hands it to Tali.

In the game session above, however, the clod of clay disappears at the dramatic moment – the game obviously 'forgot' to include the asset after cutting back from the close shot on Shepard. The disappearing clod is

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(a)



(b)

Fig. 6.1 Mass effect 3

quite unrealistic, but this non-diegetic occurrence is unlikely to prompt the shock or self-reflection characteristic of a Brechtian 'alienation effect'. Because videogames are muddles in which assets like Tali's pebble are liable to misbehave on a regular basis, they tend to be highly robust in the face of error. Thus while agreeing with Krapp's assertions that 'what one needs to learn from mistakes is not to avoid them but something else altogether: to allow for them; to allow room for error' and that 'The error remains the future' (92), MacKenzie's critique contains an important nuance in acknowledging that the glitch is often commonplace and unremarkable in videogames.

In gaming culture, players have indeed found room for error, making it a source of levity in the glitch video or machinima. Players 'live out a paradox in their virtual exploits' by using glitches to produce slapstick performance videos, 'feeling an immersion and embodiment in the game-world...whilst contending with and confronting a mechanical and inhuman simulation' (Hudson 2014). These video creators thus break through the constructed fictions of the game by exploring its most 'inelastic' points – those where the system breaks down or shows its absurdity from the point of view of human players. The uncanny mixture of recognition and release in the slapstick glitch video once again registers the dual nature of the framing device in gaming culture.

The glitch is only one guiding figure for how a 'ludology for losers' might be conceived: there are heterogeneous types of contingency at work in particular game designs, and across the field of gaming as a whole. Aarseth's discussion of 'aporia and epiphany' in *Cybertext*, for example, also deals with the importance of contingency to videogames, but from a very different perspective and with very different ramifications. Aporia in this context refers to the experience of being 'stuck' and not knowing how to proceed with a game. Aarseth argues that aporia 'prevents us from making sense of the whole because we may not have access to a particular part' (Aarseth 1997, 91) due to the nonlinear structure of the text. Epiphany is 'the sudden revelation that replaces the aporia, a seeming detail with an unexpected, salvaging effect: the link out'.

For Aarseth, unlike an epiphany in a literary context (suddenly understanding a gnomic poem, for example), in a game the dynamic is 'immanent: a planned construct rather than an unplanned contingency'. Aarseth also draws on Genette's 'Frontiers of Narrative' (1982) to argue that 'description is always subordinate to narration' (Aarseth 1997, 94) in a literary text. However, as Barthes' discussion of the 'vertigo' of description suggests and both *The Unknown Masterpiece* and *CL49* show (see Chapter 4), the relation may not always be so straightforward.¹ Aarseth's account of how a seemingly inconsequential 'detail' in a game shifts to reveal its performative character as an anterior motive. In the terms developed in this book, aporia can be seen as players' inability to 'stop the gaze' amidst the potential whirl of the game's detail. Aporia is uncertainty as to what constitutes a framing device and felicitous performance; epiphany is the sudden intuition of the form of movement associated with a particular set of framing devices.

Both Krapp and Aarseth seek to identify how contingency works to create a 'future'. This future, however, acts in inverse ways: for the former contingency provides an escape route out of the game when the apparatus messes up and reveals its artificiality, whereas for the latter it leads deeper into the game by resolving an infelicitous situation. In spite of this, underlying both critical responses is the highlighting of the uncanny or vertiginous experiences in gaming that recall the allegorical aspect of the framing device that was explored in Part II.

Another element common to both accounts is that the contingency of the glitch or the aporia 'disappears' once a felicitous form of proceeding is discovered: both analyses are made in terms of an eventual actualization rather than the experience of potentiality *as such*. In the case of the glitch, assuming it does not crash the game, players are likely to simply shrug in irritation and move on, or take a screenshot and post a bemused or angry comment to a forum or social media. Alternatively, particularly as connected play becomes more common, the anomaly is liable to be ironed out by one of the interminable patches or updates to which contemporary games are prone. In Aarseth's account, the epiphany simply dispels the aporia.² In light of the complex ending to *CL49*, suspended between allegory and tautegory, it would be wise to reconsider these 'sins against video time'.

If the insights of both Krapp and Aarseth point in different ways beyond what can be actualized in any particular play session or scenario, is it possible to conceptualize potentiality 'in itself'? This is important because on the one hand, formalist accounts such as ludology tend to argue that 'rules' are unproblematically actualized; on the other, player-centric accounts place the emphasis largely on the concrete activity of particular players. Most importantly from a performative point of view (and corrective to both these tendencies), Krapp's glitch and Aarseth's aporia indicate a need to expand Austin's notion of performative 'infelicity' beyond its regulative function as a criterion differentiating between successful or unsuccessful attempts to actualize a virtual norm. Like the *Vive l'esprit* emblem, the aporia is the experience of the videogame as a 'pure' potentiality or, to paraphrase Agamben's description of the Van Haecht picture, a 'performative magma'.³ Like the emblem, the glitch points to the allegorical failure of significative practices through which videogames create their many and varied effects.

There is an important temporal aspect to infelicity: the potential of the aporetic experience is not simply precursor of or aberrant to the assumed norm of a felicitous performance because it could be indefinite in duration. It cannot simply be dispelled by player effort or design finesse: it is ended by an epiphany which *suddenly occurs*, and the criteria for producing a felicitous performance are unclear. This means that the aporia should be considered in its own right as a *pervasive* kind of infelicity that exceeds the terms of Austin's discussion of performativity. One way of doing this is drawing on the accounts of the vertiginous and uncanny powers of the framing device. Here, the aporia becomes a field of undifferentiated performative potential that precedes and conditions any actual performance of a videogame.

The Fog of War as Pervasive Infelicity

An example can help clarify this perhaps abstruse point. Even in a perfectly mainstream game it is possible to *see* – in a peculiar way – one manner in which multiple performances affect each actual performance in a game like *Starcraft 2* through the fog of war (Fig. 6.2).

In a *Starcraft 2* match, the map (and the associated area of the minimap) is covered over by a haze unless the player has an asset or ability of some kind in position to provide vision. This fog includes opponent's bases, and felicitous play often demands reconnaissance to dispel the fog of war and determine what the enemy is up to – whether they have produced many low-tier units for an 'all-in' or 'rush' style of play or built facilities to acquire more advanced units in pursuit of a longer-term strategy. Given that *Starcraft 2* depends on a system of counters in which certain units convey significant advantages over other unit combinations (and because there is a certain time lag associated with acquiring the requisite counter),



Fig. 6.2 Starcraft 2

knowing what to build in response to an opponent's actions is pivotal to felicitous engagements.

Determining these possibilities does not necessarily require completely banishing the fog: over many play sessions, experienced and professional players have learned several routines called 'build orders' that allow educated guesses as to what performances may have taken place in the fog of war. Seeing more low-cost units as opposed to fewer high-cost ones; determining whether the rarer type of resource needed to access highertier technology paths (Vespene gas) is being exploited; ascertaining whether production structures or another expansion base have been built – all these clues enable experienced players to ramify the set of performances that have occurred out of sight as a particular build order or timing and adjust their play accordingly. Guessing what an opponent has been capable of in a given stage of a match is referred to as a 'timing'. Crucially, the timing is a fundamentally performative notion: competitive *Starcraft 2* matches are generally played at a sped-up rate, so the clock time is less important in itself than as a measure of the opponent's performance as a kind of possibility space. It is also possible for players to fake out their opposition by manipulating the information they are able to glean (say, building a facility in an unlikely location or hiding some units away from their main force). Players are also liable to use the styles of play currently prevalent or popular (called the 'meta-game') to guide their decision-making.

The fog of war is therefore not simply an infelicity as a failure to see (although it may well contribute to an infelicitous performance). Nor is its effect on felicitous play reducible to the actuality of the particular sequence of performances that happened to take place within it because players must act without full knowledge of this sequence. It is thus a signifier not of a performance in particular, but of a set of performances that can't be reduced to a particular sequence. While this sequence may be indeterminate, it is not simply unknowable: practiced players can discern the performances that were possible given a certain timeframe, spatial setup and logical metagame.

This considerably complicates Austin's concept of infelicity, as in his model the elimination of the fog of war could be seen as a felicitous performance in its own right. In the practice of *Starcraft 2* play, however, the relationship between revealing the map and the other performances (both of the opposition and the particular player experiencing the fog) is far more complex. The fog of war, then, can take its place alongside the glitch and the aporia as a gaming experience that cannot be reduced to any unit of performance, and in which infelicity reveals itself as a potential rather than as merely the opposite of felicity.

Like the cinematic 'off-frame space', the medieval emblem, the Pynchonian clue and the painterly framing device explored in previous chapters, these phenomena point to the potentiality that is the 'background' of every particular performance. In videogames, this gives rise to specifically performative forms and modalities of suspense (Vught and Schott 2012). The fog of war is a concrete example through which to think about the 'off-frame space' or 'background' in a videogame context: the exact sequence of what has occurred in the fog is not known, and yet it is possible to intuit the set of performative possibilities that a given ludic timeframe would have allowed. The fog does not point toward a particular sequences arise. Where in the gallery painting, the off-frame space is 'other paintings' and in the cinema it is 'other shots', in the gaming fog of war it is 'other performances'; a *performative multiplicity*.

The concept of the performative multiplicity provides a way of formulating performativity beyond the assumption of neatly delimited units, whether player-centric or formalist: the multiplicity refers to performance as a *set* (Bogost 2006). This idea of a general potential or uncertainty does not, however, mean sacrificing the specificity of each game. The various stages and types of uncertainty which Ferrari (2013) carefully parses in a *League of Legends* match are fundamentally conditioned by the possible set of performances that have occurred in each game's fog of war, and these in turn are different from the set of performances that the fog of war signifies in *Starcraft*. The performative multiplicity concept strikes a balance between potential and act that offers the possibility of thinking beyond the limits of any particular definition or unit of performativity.

This is an important modification of a theory such as Austin's in which performances are understood as individual and particular acts because, as has been argued in previous chapters, videogame performances are related in such complex ways that there can be no definitive theory of the performance-as-unit that does not arbitrarily exclude or privilege certain game designs. An enumerative or typological approach can only be ad hoc in the face of such a vast set of possibilities.

This complexity is not always easy to discern, as the resources of game design, art and marketing are often devoted precisely to covering over infelicitous breaks, failures and lacunae – toward presenting a coherent virtual world that purports to 'immerse' players in the actuality of a single performance. The aesthetics of particular videogames and game culture in general work to emphasize the actuality and felicity of each performance and the sovereign empowerment of players. There are however works that, like the glitch and the aporia, show the fragility and anxiety that underlie gaming's illusory powers. Such games and artworks, which have experienced something of a renaissance in recent years, can help to further clarify the concept of the performative multiplicity.

The Aesthetics of Infelicity

'Gmod Prop Hunt' is hide-and-seek transposed into a *Half-Life 2* mod. While hiding behind something is a viable tactic, the main method of concealment is to *become* a thing: an object or 'prop' typically found in a given map. Hunters are thus tasked with finding an object that in a normal game exists only to be 'moved-past' as an index of movement. Hunters wander about trying to determine which object is a mere inanimate, and which hosts the malign intelligence of another player. This recalls the

discussion of realism in Part 1: a realistically modeled field of objects, putatively devoted to the stable signification of a well-realized naturalism, becomes in this mod an aporetic multiplicity. Another version of this game is the 'Guess Who' mod, in which hunters must guess which of a large number of character models is being controlled by a human. The NPCs (Non-player characters) move about in characteristically computer-controlled ways, and players must imitate them.

'Prop Hunt' and 'Guess Who' both work by reversing the usual function of the framing device: elements that are typically merely background indexes of movement and videogame world-building become rule-bound objects of play, while retaining the visual character of *mise-en-scene*. Each game mixes an anterior motive in with other unremarkable models. Felicitous performance involves unlearning habits made second nature by typical game designs.

The vertiginous dynamic that results is particularly beloved of YouTubers, as it is a good recipe for frustration and humor: hunters stumble around haplessly shooting at the *mise-en-scene* while hiders scuttle around taking on the form of various objects or NPCs. In 'Prop Hunt' the objects shouldn't move (it's a giveaway when a sofa tries to make an exit); in 'Guess Who' the point is for hiders to move like a computer-controlled character. The hunters' vertigo results from the fact that they are not presented with a clear and distinct set of framing devices with which to guide felicitous performance: instead, the game involves determining what Bateson would call a 'difference that makes a difference'. These games focus their design through the experience of aporia rather than the typical videogame technique of constantly introducing new anterior motives. They thus display an *aesthetics of infelicity*.

This dynamic has an extensive history in gaming, perhaps exemplified by the notoriously coin-hungry designs of the early arcades. Adventure game players too have a term for the experience of infelicity: the 'pixel hunt'. This refers to instances in which a player is frustrated by their inability to solve a puzzle and simply scans the mouse cursor over every part of the screen hoping that it will activate the next section of the game. Like the fog of war, these aporetic experiences tend to point beyond the actuality of a given play session and toward a performative multiplicity.

Another influential genre which makes infelicity a key part of its aesthetics is the 'Roguelike'. These games feature randomly generated levels – each performance is unique. In the seminal *NetHack* (1987–ongoing, various), when a player character dies in one of these random levels, the structure of that level may be saved as a 'bones file' (along with a ghostly version of the slain character). This enshrines the level as a kind of memorial which can be exchanged between players, introducing a somber funerary note to the game's otherwise constantly novel architectures. However the bones file also introduces a new danger in the ghost, the parameters of which are not random but defined by an earlier performance of the game. A clear conceptual distinction between the performance that encounters the ghost and the performance that leaves the ghost seems difficult. They are in some sense an amalgam: an infelicitous performance influences the performance into which it has been introduced.

Similar complex attitudes to death and repetition emerge in more recent games. Carter (2015) has examined the way that DayZ utilizes permadeath in tandem with a morality mechanic tied to a given players' account. The morality system causes new avatars to assume 'hero' or 'bandit' appearances based on the player's actions with previous player characters, weaving previous performances into each new start. Demon's Souls (From Software 2009), the spiritual predecessor to the Souls series is another influential example. This game could almost be considered a MMO (Massively multiplayer-online) in negative: games such as Destiny and WoW recruit the generic traits of fantasy fiction and film in order to promote the impression of a coherent and living world that exists across the many performances that take place 'within' them. In Demon's Souls these tropes dutifully appear, but they are depleted and forlorn: the aesthetics of infelicity have overwhelmed the positive signifiers that make other games hale. The knights, witches and princes of typical fantasy fare are all present and accounted for, but they are few in number and their characteristic gestures are exhausted by a 'colorless fog' that has mutated or swept the land clear of most of its inhabitants.

In many areas the victims of the fog are survived by their personal effects *in media res* – navigating the game is like taking an extended voyage on a sadistic *Marie Celeste*. New players gingerly negotiate dark, imposing environments inhabited by misshapen and lethal enemies. Vibrant color is rare; the visual scheme favors sepia tones and greyscale. There is a general dearth of incidental and non-diegetic music, playing up the loneliness of the level designs and the haunting sounds of the world's denizens.

In an online session of *Demon's Souls*, certain spots are marked with bloodstains.⁴ These, like bones files in *NetHack*, indicate where other players, in their performances of the level, have died (Fernández-Vara

2011). By touching such a stain, a crimson and translucent image of the slain avatar appears, acting out its last moments. Witnessing an avatar cutoff from its context in this way brings out the jerky, spasmodic, desperate and repetitive aspects of videogame performance. It can also instill a sense of distinct paranoia, as players cast about trying to discern the cause of death and whether it exists in their own game session. These death vignettes are often far from heroic, and sometimes morbidly humorous, as a hapless player character plunges haplessly off a cliff-face or wanders into a trap. Players can also leave brief messages for others, but these must be constructed from a limited set of words and phrases and always have a cryptic, halting quality – they may also be malicious.

In fact the only way that players can participate in another's world is to die: that is, through an infelicitous performance. This releases their 'soul form', which is trapped in a Nexus between the various game levels. In soul form, players are able to either place a sign which allows others to summon them as a helpful Blue Phantom or invade another game as a malefic Black Phantom. In the former case they must help the other player to complete the level – that is, to *push through* the colorless fog. In the latter case they must eliminate the host player. Both, if felicitous, result in resurrection as a human in the Phantom's own world. The game thus puts into play and dramatizes the difference between the Nexus (a player existing between well-defined game levels) and the fog (a player facing a frightening push into an unknown performative multiplicity). Infelicity is not presented as 'failure' in the *Souls* series: it is a link between performances.

All told, *Demon's Souls* inscribes a sense of haunting disjointedness into the online experience through its aesthetics of infelicity. The forms of movement produced by these bizarre framing devices stagger, disjoin and alienate relations between performances that other online games are at pains to present as coherent. This is contingency not as Krapp's glitch or Aarseth's aporia, but as the creation of dynamic links and points of contact between what would be organized in most other game designs as distinct performances. The Phantom mechanic blends the felicity conditions of each performance in ways that Austin's theory cannot account for. The game's spiritual successors such as *Dark Souls* and *Bloodborne* all carry the signature motif of each performance as a potential link between worlds that are characterized in highly performative terms (as Knight Solaire says in *Dark Souls*, the various worlds can come into alignment, allowing 'jolly co-operation'). The pervasive infelicity that informs the level and character designs matches with the game mechanic of the blood stain: infelicity is not just the failure to enact a particular structure of ludic judgment and thereby bring the game to a close, it is also the means of opening onto a new modality in which multiple performances interlink and affect one another in strange ways.

The Aesthetics of Infelicity in Game Art

Italian creators La Molleindustria have utilized the aesthetics of infelicity for political ends. *McDonald's Videogame* (2006) tasks players with running a fast-food corporation. The game presents players with a set of exploitative performances including clearfelling rainforest to plant soy crops, bribing politicians, feeding cattle reclaimed waste, harshly disciplining low-paid employees and running advertising campaigns that target children or disseminate duplicitous nutritional claims. However, each of these actions has increasingly severe knock-on effects and entropy rapidly builds in the system which, having no way to renormalize itself, rapidly heads for disaster. *McDonalds Videogame* utilizes ludic failure to reintroduce the role of systemic entropy to challenge the triumphalist corporatist, consumerist or imperialist pablums and fantasies that so often govern videogame performances.

Demon's Souls enforces distinctive silences in the typically discoursesodden world of online gaming in order to highlight the austerity and paucity of videogame gestures that were so apparent in the constrained design of roguelike games. *McDonald's Videogame* caricatures seemingly plausible military, commercial and political systems only to subject them to intolerable positive feedback loops against which the integrity of any particular performance rapidly deteriorates. These games use infelicity in very different ways, but in each case it is difficult to conceive of the process of play as an aggregate of clear and distinct performances. Both games suggest that performative actions must be seen as fundamentally muddled: always traversed, interlinked, interrupted and innervated by other performances.

Game art has also engaged creatively with the aesthetics of infelicity. The duo working as Jodi created a series of 14 hacks or mods for *Quake* called *untitled game* (1999–2001). In these mods, players navigate what is in some respects a typical game space, but one subject to streams of code and glitchy phenomena that seem interpretable only by a machine: 'The work often lapses into pure data, streaming real-time code up the screen

with little or no representational imagery at all' (Galloway, 115) and in this way, it 'foregrounds the gaming apparatus' (2006, 115) – or more specifically, the constant processes of articulation performed by the apparatus.

Where Quake presents a visual space interpretable through conventions of representation such as linear perspective, the machine-oriented code of *untitled game* is a series of enigmatic signifiers. Particular strings of code and strange glitches seem as if they should signify, as if they should cohere into a message, a scene or a level design that is intelligible to human players – however, any particular visual value or signifier may as well be any other. A key aspect of the work is that sound effects are maintained – the glitchy abstraction of the graphics collides with the enmeshment in 3D space enabled by the audio design. The artwork's enigmatic visual qualities unravel the representational efforts of Quake even as they are being constructed sonically, belying the illusory smooth movement through 3D space with halting, useless, arbitrary forms of movement. The gesture of *Portal*, which links two points in virtual space through a

The gesture of *Portal*, which links two points in virtual space through a conserved rate of movement, proliferates wildly beyond the illusionistic imperatives of genteel game design. Each act of repositioning in *untitled game* is thus revealed as multiple splintering points of procedural possibility through what would, in another context, be a glitch. By placing graphical and audio forms of movement in this retrograde relation to the performative felicity of the FPS (first-person shooter), Jodi offers a vision of the apparatus as presenting at every conceivable locus of articulation a muddle of player and machine performances. This aesthetic has also been explored in Gottfried Haider's *Hidden In Plain Sight* (2008–2009), which exhibits the work of the various compilers that create the real-time virtual environment of *Quake III* on the walls and other textures of the game. The work displays the constant process of destruction and reassembly that the computer performs in order to render the game world. Brody Condon's *Adam Killer* (1999–2001) is a *Half-Life* mod that

Brody Condon's *Adam Killer* (1999–2001) is a *Half-Life* mod that contains only one type of figure apart from the player's avatar: a model of 'Adam', a friend of the artist (Cannon 2007). The only thing to do in this space is to move about and repeatedly brutally murder Adam via the many performances enabled by *Half-Life*'s considerable arsenal. As players move through the space, both the avatar's weapons and the hapless Adams leave persistent trails, afterimages of their paths through the ludic space. The movement is never 'refreshed', and the deaths superimpose to create a chaotic patchwork of forms of movement. As Adam is repeatedly shot, blown apart or succumbs to the blunt trauma of a vigorously applied

crowbar, the sheer repetitiveness of the mod (and, by association, the identikit enemies of most FPS games) is recorded in the persistent afterimages. This repetition contrasts with the biographical provenance of the character model as being based on a living person, as well as the status of 'Adam' as Biblical first human and giver of names. The game mod instills the uncanny sense that the individual identity and the phenomenological body can be pulled apart and reassembled in the process of play.

This is the central set of gestures of the FPS form boiled down, but the effect is very different from the expansive notion of space explored in *Portal*: here, it is the avatar and its potential forms of movement that are the focus. A single body is shown in all its metamorphoses, displayed across all its possible permutations, transformations and destructions to form a muddle or multiplicity. The ludological elements are stripped of the spatial and temporal extensivity of other types of design that make games what they are (level, character, sound and art design and so on), and are reduced to a violent nadir. The space of *Adam Killer* shows itself as far from a pliant emptiness or mere medium for activity, it is fulminating with potential performances.

Adam Killer presents the collapse of controlled movement into a performative magma – working backward from Aarseth's 'epiphany' (a state in which ways of acting and being are clear and distinct) to an aporetic situation in which multiple performances lead to a magmatic and pervasive infelicity. Players pile performance upon performance like Frenhofer, but the screen is not refreshed and no new anterior motives arise. This potentiality is articulated with the repeated dissolution and destruction of a named human figure. The many Adams' insertion into the game space is not a simple projection from real to virtual space but confronts players with the violent deformations inherent in this process – there is nothing to do but generate 'fog of war' for the FPS. The intensive feedback loop at the heart of FPS spatiality exhibits its penchant to both stimulate and overstimulate, to both order and disorder perception: in *Adam Killer* the techniques of immediacy or immersion employed by the genre are confounded by foregrounding their basis in repetition.

EXPANDING INFELICITY: FETISH, APPARATUS, POTENTIALITY

'Infelicity' has been used very broadly in the examples given above, standing variously for concepts such as redundancy, repetition, multifinality, failure, error, uncertainty, entropy, 'off-frame space' and so on. These concepts should not be inattentively conflated, as Costikyan's (2013) expert discussion of uncertainty in games shows. What is critical here is that such a broadened notion of uncertainty disturbs models in which infelicity denotes only the failure to actualize some formula or structure. In Austin's notion of the performative utterance, the felicitous structure is assumed to be static and unproblematic in its own right, but in a videogame players clearly do not have any sort of simple access to game 'rules' stored as code in a computer (Hayles 2005). Games that pursue an aesthetics of infelicity thus show, in various ways, a need to *expand* the concept of infelicity in thinking about performance in videogames. It is here that literary theory and philosophy provide important conceptual resources, one of which is the theory of fetishism.

Wendy Hui Kyong Chun (2011) has explored computer code through linking performativity and fetishism – an analysis in which she includes videogames. For Chun, code should not be seen as a static 'source' that stores formulae that are actualized by users and apparatuses, but as 'resource' – as a site or locus of multiple performances which is itself dynamic. Drawing on Fuller (2005), Chun elaborates this idea in the following way:

Fuller compellingly argues that the more features offered in an anxious attempt to program the user – the more codes provided – the more ways the user can go astray. Thinking in terms of this gap also means thinking of how information is undead; that is, how it returns over and over again. Second, code as re-source allows us to the [*sic*] take seriously the entropy, noise, decay that code as source renders invisible. By taking decay seriously, we can move away from the conflation of storage with memory that grounds current understandings of digital media. Lastly, understanding code as resource links its effectiveness to history and context. If code is performative, it is because of the community (human and otherwise) that enables such utterances to be repeated and executed, that one joins through such citation. (Chun 2011, 193)

For Chun, storage and memory should not be thought of in the same way: to do so is to misrecognize the dynamism of mnemo-technical processes and to reduce performativity to 'actualizations' of an archive which presents no time-bound problems of access, redaction or decay. Code is not directly experienceable – it is performative, and this links it to the fetish as 'both denial and acknowledgement' (187), resembling more 'a process rather than a stable thing' (193).

Chun's invocation of the fetish and entropy in her discussion of the performative characteristics of code recalls the allegorical reading of the framing device and Agamben's critique of metaphor. This theme of the obscure potentiality of certain aspects of material culture – aspects that are scorned by utilitarian regimes of value or seen in psychological terms as signs of infantilizing regression – has been noted by many other observers. Discussing contemporary entertainment forms, Ndalianis (2004, 207) invokes Octave Mannoni's famous formulation of fetishistic disavowal, 'I know very well, and all the same ...,'⁵ to explain the prodigiously productive artificiality of the framing device. McClintock describes through the theory of the fetish how social and colonial contradictions can be projected onto 'impassioned objects' (1995, 184) while Pietz's groundbreaking work (1985, 1987) analyses the term's functions across the spatial regimes opened by European exploration. Žižek remarks on the productive capacities of the paradoxical object: 'a fetish can play a very constructive role in allowing us to cope with the harsh reality. Fetishists are not dreamers lost in their private worlds. They are thorough "realists" capable of accepting the way things effectively are, given that they have their fetish to which they can cling in order to cancel the full impact of reality' (2001, online).⁶

A link between fetishism and framing devices was already raised in Chapter 2's discussion of framing through Metz's notion of the 'offframe space' in cinema, and developed in videogames through Chesher's 'glaze'. Johnson (2015) has also linked frustration in games with a heightened sense of what Ngai (2005) terms 'animatedness', an 'ugly affect' in which players experience the ambivalence of their agency within the game world. Animatedness is 'felt as moments when we lose control...such as when an in-game camera moves without our command to avoid elements of the game-world environment' (Johnson 2015, 594). In this species of infelicity, the apparatus asserts itself as unruly and uncontrollable, in a fashion highly reminiscent of the fetishistic attribution of powers of movement to inanimate objects (although the misrecognition here has a different status, as a videogame apparatus is of course perfectly capable of moving itself in various ways). In Prop Hunt, players take on the role of an animated, almost fetishistic, object.

Both Murray (1997, 100, 119) and Flanagan (2009, 57) link the paradoxical properties of gaming to fetishism and to what Winnicott (2005) terms 'transitional objects'. This term refers to 'the first things (pieces of bed linen, of cloth, or the like) that the child separates from external reality and appropriates' (Agamben 1993b, 59). Of these,

Winnicott asserts that it is imperative to attend not so much to 'the object used as the use of the object.

I am drawing attention to the *paradox* involved in the use by the infant of what I have called the transitional object. My contribution is to ask for a paradox to be accepted and tolerated and respected, and not for it to be resolved.' (2005, xvi)

Agamben takes up Winnicott's insight: the many examples of the 'fracture in presence' (see Chapter 3) make *Stanzas* something of a *wunderkammer* in its own right, a collection of paradoxical phenomena. The fetish and the toy are exemplary cases. The latter will be examined in more detail in Chapter 10's discussion of temporality; here, I will draw on the similarities between the discussion of the fetish in Chun and Agamben to provide a means of expanding the concept of infelicity.

Agamben notes that in discussing fetishism, Freud does not speak of the repression (*Verdrangung*) of an unconscious content, but rather of *Verleugnung*, or disavowal: 'Not only is there no substitution of one signifier for another in the *Verleugnung* of the fetishist – indeed the signifiers maintain themselves through a reciprocal negation – but neither can one properly speak of repression, because the psychic content is not simply pushed back into the unconscious, but is, in some way, affirmed to the same extent that it is denied' (which does not mean, however, that it is conscious) (1993b, 146). The fetish does not stand in for a repressed content that could be brought to consciousness by analysis, nor is it a material signifier of a mental signified (what it signifies does not, strictly speaking, exist). It both invokes and disavows the absence at the center of the castration complex. This oscillation and reciprocal exclusion delineate a *topos* presupposed by any process of signification.

Similarly, for all that they act as index, supplement, metacommunication or other point of convergence and control – explored in Chapter 5 as a tautegorical element presenting performative criteria of judgment – gaming's framing devices cannot rid themselves of their originary paradoxical import. Videogames and game artworks that display the aesthetics of infelicity show how gaming adopts the traits of *rhyparography*. The fragmented, stop-start makeup of the videogame facilitated by computer technologies simultaneously threatens the collapse of the process of assembly into failed performance, glitch or aporia. However this threat of collapse can be read not simply as a flawed attempt at actualization but *also* as 'signifying' the performative multiplicity that is explored in the aesthetics of infelicity.

Potentiality and Apparatus

Agamben has characterized phenomena such as the fetish in more recent work as examples of 'potentiality that is *capable*' (1999, 216). This potentiality is not exhausted in the actuality of any particular sequence or teleology. Nor is it a suite of unreal, latent possibilities waiting for a subject to come along and enact one of them. Far from being merely a subordinate version of the real, its mode is not 'abstract theory but real potentiality' (de la Durantaye 2009, 17). Potentiality in this sense stands as a figure for Agamben's understanding of Lévi-Strauss' theory of the constitutive excess of the signifier over the signified' (Agamben 1995, 78) and is ultimately derived from a gloss on Aristotle (Agamben 1995, 45–46). It is related to the theme of 'inoperativeness' found in several modernist writers such as Kojève, Bataille and Queneau: 'The only coherent way to understand inoperativeness is to think of it as a generic mode of potentiality that is not exhausted (like individual action or collective action understood as the sum of individual actions) in a transitus de potentia ad actum' (Agamben 1995, 62).

This notion of excess is not to imply 'the inexhaustibility – the infinite deferral – of signification' (Agamben 2009b, 78) due to the absence of a transcendental signifier, or the original nature of the trace, so much as it indicates what is presupposed (and not exhausted) in any given signification. In this way, the concept of potentiality recalls the exemplary status of the fetish in the realm of objects that Agamben studied in earlier work: 'the fetishist unfailingly tends to collect and multiply fetishes...the perverse subject will be equally satisfied (or, if you will, equally unsatisfied) by all the objects that present the same characteristics. Precisely because the fetish is a negation and the sign of an absence, it is not an unrepeatable unique object; on the contrary, it is something capable of infinite substitution, without any of its successive incarnations ever succeeding in exhausting the nullity of which it is the symbol' (Agamben 1993b, 33).

The concept of potentiality provides one way of thinking beyond Austin's analysis of particular performances as the actualization of a particular possibility: potentiality is not an individual action, nor the sum thereof. Just as the fetish is not simply the failure to achieve the object of desire, so too do the aesthetics of infelicity in gaming point to a deeper relation that precedes and conditions any particular performance. This resembles Chun's critique in which code is not conceived as an archive which is self-identical over time and from which performances could be unproblematically selected but as a 're-source' for new ways of 'going astray'. It is not a singular entity but a multiplicity.

Performances ramify themselves from this multiplicity at various levels and scales: a continuous or discontinuous movement, a discrete turn, a particular play session, a complete playthrough, multiple playthroughs pursuant to writing a FAQ (frequently asked questions) or gaining an achievement and so on. Similarly, the performances could arise as the actions of an individual player, a number of players, an apparatus, or any other actor – none are presupposed by the theory. Computational representation and simulation are so labile that the framing devices that structure these performances are greatly expanded compared to conventional film, video or television – they may be narrative, ludic, semiotic, tactile and so on – and therefore it is an important advantage that their precise nature in any given case is not presupposed by the theory. The central task for theorizing videogame performance then becomes giving an account of how, in the course of play, a particular performance arises out of the multiplicity of performances that *produces* the game.

Agamben's notion of 'apparatus' can be used to address this task. For Agamben, in a sweeping reappraisal of Foucault's term *dispositif*, an apparatus is 'literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control or secure the gestures and behaviors, opinions or discourses of living beings' (2009b, 14). Agamben accordingly proposes 'two great classes: living beings (or substances) and apparatuses' and 'between these two, as a third class, subjects. I call subject that which results from the relation... between living beings and apparatuses.

Naturally, the substances and the subjects, as in ancient metaphysics, seem to overlap, but not completely. In this sense, for example, the same individual, the same substance, can be the place of multiple processes of subjectification: the user of cellular phones, the web surfer, the writer of stories, the tango afficionado, the anti-globalisation activist, and so on and so forth.' (2009b, 14-15)

The gamer might represent a sort of vanguard specimen, a figure whose subjectivity is liable to be produced by a very large number of processes of subjectification at any one time, over the course of a game and across an entire engagement with the gaming situation. The gaming situation and game apparatuses can be conceived as a site characterized by 'multiple processes of subjectification'.

This is particularly evident in the ways that players speak about their performances, which often involve very complex terminologies that negotiate tense, voice and other grammatical categories in their effort to name a particular performative multiplicity. Burn and Schott (2004) report that Rachel, a *Final Fantasy VII* player, moved with considerable facility between spectatorial and vehicular modes of identification with the avatar-character Cloud Strife: 'The grammatical structure of Rachel's account suggests that the element of Actor in the transivity system of the game is divided. In parts of her account the Actor is, conventionally, Cloud, rendered in the third person (*'he* escapes'). Elsewhere, the pronoun representing the Actor changes to indicate the player (*'you'* have to go ...)' (Burn and Schott 2004, 215; see also Consalvo 2003b). Players clearly have no problem navigating various levels and types of meaning in their ludic activities: in describing her experience Rachel moves between the first, second and third person, as well as from narrative to ludic priorities.

Performative Multiplicity and the Aesthetics of Felicity: Aporia and 'Euporia'

Multiple 'transivity systems' are at issue in Aarseth's notion of aporia, which can here be expanded beyond its somewhat negative connotations. Often, 'open-ended' (Squire 2008) or 'sandbox' games – from *Minecraft* to *Grand Theft Auto V* to *TES V: Skyrim* – tailor their performative multiplicity to create a sense not of aporia but what could be called 'euporia'. This is the exhilarating sense of the ability to proceed in multiple directions, all of which are potentially felicitous. Here, potentiality appears in a similar fashion to the fog of war as a pure multiplicity, but its valency is very different: more akin to Caillois' notion of *ilinx* or vertigo play (1961) than the sense of being stuck.

The vertiginous euporic intuition of a massive and expansive world to explore, of the ability to strike off in any direction, is a clear design goal of many open-world videogames. However, euporetic moments do appear in more linear genres. *Half-Life 2*'s vistas, for example, are designed to give the effect of euporia (although it is illusory). *Final*

Fantasy VII begins in a claustrophobic industrial dystopia, the city of Midgar, with a relatively linear, narrative-heavy progression. After several hours of play, however, the game opens up to an expansive overworld which can be navigated in various directions, creating through this contrast a strong sense of euporia. As game apparatuses have become more computationally powerful, games have come to be marketed through their ability to simulate vast virtual spaces and thereby generate a sense of euporia. Particularly in games where anterior motives come thick and fast, a performative multiplicity can present itself as a sublime new magnitude or breadth.

However, euporia can also result from the voluntary suspension or setting aside of the tasks at hand. *The Darkness* (Starbreeze Studios 2007), while for the most part being a frenetic action game, allows the player character Jackie to simply sit with his partner and watch *To Kill a Mockingbird*. In *Life is Strange* (Dontnod Entertainment 2015), there are moments in which player character Max can simply sit and experience her world. The camera detaches from the usual third-person perspective and pans around the scene, highlighting the variety of its quotidian art design while a simple voice performance plays or musical motif swells. Players can arise and continue the game at any moment, but there is no rush: no nagging need for epiphany hurries them along.

From this point of view it is possible to reassess Austin's 'total speech act' with regard to the gaming situation. What might be termed the 'total ludic act' can be rigorously defined as the multiplicity of apparatuses that comprise a videogame. It is also possible to clarify just what kind of apparatus the videogame is. In *The Cabinet of Cornelis van der Geest*, the off-frame space of any one frame is comprised of other paintings, as well as being represented as the significant or focusing elements of each picture that 'stop the gaze' and enable movement between them. In Benjamin's Artwork essay and Flusser's account of photography, the off-frame space of a photograph of a work of art is the potentiality of multiple other views and other uses of the image: viewpoints and uses beyond those of cult value. In Metz's account of the cinema it is the possibility of 'more' cinematic space, along with the uncanny ability of figures to move in and out of the shot, to 'make use' of this space and thereby cause anxiety in the viewer.

In videogames, as the fog of war and the aesthetics of infelicity show, the 'off-frame space' is the possibility of *other performances*. The power of computers means that the number of such performances can be very large, and while all of these possibilities may not be realizable or actualizable at once, their magnitudes can still be *experienced* as aporia and euporia: a kind of performative sublime.

Describing videogame space and time as a performative multiplicity draws on both the tautegorical and allegorical readings of the framing device. For the former, the 'other performances' are well defined as in the garden of forking paths or labyrinth-style models of gameplay. As in Stoichita's reading of *The Cabinet of Cornelis van der Geest*, the *Vive Vesprit* emblem stands for the 'ricocheting' of the gaze in well-defined forms of movement across multiple frames, each of which constitutes a figure of reversal that gives criteria of performative judgment. Conversely, in the allegorical reading, the off-frame space is a multiplicity as such – to paraphrase Agamben's reading of Van Haecht's gallery scene, a 'performative magma'.

mative magma'. The key departure from Austin's model of performativity (and indeed game studies approaches that rely on a unit of analysis) is this expanded concept of infelicity which obviates the need to assume a discrete unit of performance. Aarseth's account of aporia and epiphany gives one example of how a particular framing device relates to the game design more generally, and also how particular felicitous performances arise from the multiplicity of the game. This allows a theoretical approach to both continuous and discrete as well as linear and non-linear forms of movement, and a sensitivity to the various types of contingency that may be involved in any particular game design: multiple choices by a particular player, multiple actions by multiple players or the apparatus, incomplete knowledge of the textual field, infelicitous attempts of various kinds, 'sequence breaking' by accessing parts of the game earlier than designed, cheating and so on. As noted throughout, the type of contingency involved in any given game cannot be assumed theoretically because videogames may make use of a wide variety of uncertainties (Costikyan 2013).

edge of the textual field, infelicitous attempts of various kinds, 'sequence breaking' by accessing parts of the game earlier than designed, cheating and so on. As noted throughout, the type of contingency involved in any given game cannot be assumed theoretically because videogames may make use of a wide variety of uncertainties (Costikyan 2013). This expanded allegorical discussion of infelicity once again shows the intense co-implication of the tautegorical and allegorical readings of the framing device. Agamben notes that this sense of paradox is also central to his notion of the apparatus, arguing that '... a desubjectifying moment is certainly implicit in any process of subjectification' and further that in the midst of contemporary apparatuses 'processes of subjectification and desubjectification seem to become reciprocally indifferent, and so they do not give rise to the recomposition of a new subject, except in larval or, as it were, spectral form' (Agamben 2009a, 21).

'A Restless Corpse': Apparatuses, Bodies and Worlds in *Planescape: Torment*

A highly influential videogame which explores its videogame avatar as a set of processes of subjectification and desubjectification is *Planescape: Torment* (Black Isle, 1999). The game uses figures of reversal and the aesthetics of infelicity to parody and diffuse the generic tendencies of gaming. Although *PS: T* broadly falls into the fantasy genre, it opens in a classic setting for the murder-mystery genre: a mortuary. The player character awakens on a mortuary slab, surrounded by alchemical and surgical apparatuses of obscure employ, and bodies that have been flayed or otherwise dissected and laid open in a grotesque mélange of anachronistic forensic, alchemical and scientific techniques. He remembers nothing, not even his own name, leading him to call himself 'The Nameless One'.

Further measure of the game's bizarre aesthetic is apparent in the first character that The Nameless One meets: a literal *memento mori*, a floating and talking skull named Morte. Morte tells The Nameless One that they must work together to escape the mortuary's guardians, while also reading a cryptic set of messages inscribed on the scarred flesh of The Nameless One's back. The player character is, so to speak, a closed book. This is the first of a series of reversals to which the game is particularly liable: typically, fantasy game characters are trying to break into some hoary old tomb, not break out of it.

As play proceeds, it becomes apparent that The Nameless One is an immortal who cannot truly die. Another reversal: typically, a whodunit involves trying to find who left a dead body, not who left a body unable to die. This is not to say that The Nameless One cannot suffer. If he is killed, his wounds heal (although they always leave scars). He awakens some time after each death in a random locale, perhaps even having to escape The Mortuary again. The messages inscribed on his body were left by his previous incarnations against the existential grain of this amnesia, but they are too numerous and fragmentary to provide any certain leads. The Nameless One also finds himself haunted by strangely familiar ghosts (called 'Shadows'), making it imperative that he discover the secret of his immortality.

Escaping The Mortuary, The Nameless One and Morte find themselves in no normal city. Sigil, The City of Doors, is built on the inside of a torus – people can see the city's far side arcing in the sky above them – that floats above an infinitely tall spire. The city is a literal cosmopolis that exists at the center of a multiverse of 'Planes': the heavens and hells that mortal souls travel to when they die. The setting's ambience is crystallized in the saturnine figure of the city's enigmatic ruler who is called, in an allusion to Swinburne's *Dolores*, The Lady of Pain.⁷ Sigil is riddled with portals that can lead potentially anywhere in the multiverse, although each such portal requires a specific apparatus (an object, a time, a specific action) in order to open. Due to the metaphysical constitution of these portals and the inexorable power of The Lady to sanction troublemakers by banishing them to sub-planes called 'mazes', Sigil is a place of commerce between celestial entities and alien creatures of every description, who may otherwise be mortally opposed to one another.

As is no doubt readily apparent *PS: T* departs markedly from the typical tropes of the fantasy genre. The design minimizes the incidence of knightly armor or magical swords. The Nameless One instead prefers to arm himself with axes, knives and cudgels – the improvised and versatile weapons of the peasant or the survivalist. The tendency to twist and parody the tropes of fantasy gaming, like *Adam Killer* or *Portal* in their own genres, draws attention to the repetitive and rote elements of its own genre. Subverting the stiffly affected pseudo-medieval dialogue common to fantasy games, the cosmopolitanism of Sigil's citizens is rendered through liberal borrowings from nineteenth-century Thieves' Cant. Hapless characters from conventional Tolkein-style fantasy worlds who somehow find their way to the Planes are called 'Clueless' or 'berks'; those wise to the ways of Sigil are 'cutters' or 'bloods'. Money is 'jink', knives are 'shivs', a bribe is 'garnish' and so on.

These tropes highlight, in a genre-bending way, how the setting of *PS: T* resonates with its gameplay to effect unique transformations in the relations between multiple performances, throwing into relief the contingency of the particular play session. The Planes through which The Nameless One's quest leads are the dwellings of the dead, a veritable landscape of completed performances. Each is a vision of how the tallied-up beliefs and deeds of an entire life (i.e., the clichés of fantasy) might be distilled into a fitting narrative or a conclusive gesture of reward or punishment: *PS: T* begins where fantasy gaming's conventional adventures end.

On the narrative level, each player's incarnation of The Nameless One is a pathetic remainder, the *victim* of all the previous personalities' attempts to solve the riddle of their existence. Several of the previous personalities, resenting the amnesia that would follow on their death as a threat to their sense of being, laid elaborate traps and red herrings for those incarnations that would come after them. Far from affirming the sovereignty of the player character and his or her choices, then, *PS: T* rather unsportingly places them at the mercy of what might be considered in another game the 'save game' states: failed quests and infelicitous performances.

A Lively Corpse

Through these traits *PS: T* scatters the problem of identity across ludic, narrative and aesthetic forms of movement, making The Nameless One's scarred and damaged body a site of numerous intense processes of subjectification and desubjectification. As the slum lord Pharod notes, The Nameless One is a 'lively corpse' – a ramshackle, anonymous, abject remainder which seems to outlive its own self-consciousness. The body of the avatar is presented not as the seat, ground and tangible proof of a stable subjectivity or personhood, something that could facilitate 'immersion'. Instead it is intensely vulnerable to (and an effect of) the trajectories and projects of all manner of weird apparatuses and figures of reversal, a shambling joke.

At one point, suspecting that a previous incarnation has hidden something in his (their?) body, The Nameless One can ask the butcher Mebbeth to carve out or split open his organs to recover the item. He can suffer the immolation of various body parts by the pyromaniacal wizard Ignus in order to pick up some new magic tricks (which are in fact old magic tricks – one of his previous incarnations taught them to Ignus in the first place). He can come across certain body parts cut off from previous incarnations and reinsert them or, in the case of a mummified arm left in a trap long ago, wield it as a grisly club. The Nameless One can even indulge in some conventional body modification and employ a tattooist to get a bit of ink done, commemorating his various adventures and adding to the semiotic bedlam on his skin.

Through these motifs, many of which include abject, fetishistic and uncanny elements (Carr 2003; Hoeger & Huber 2007), the game presents a constant challenge to locating The Nameless One's subjectivity in his corporeal body. By the same token, this body is the game's primary site of player identification – revealing and parodying the fetishistic, fragmented nature of such identification. As a plane-walking 'John Doe' – a corpse without a proper name who wanders many worlds – The Nameless One traverses the inversion from epistemological to ontological concerns that

McHale locates in the postmodern change of dominant. What is made clear in *PS: T* is that this transition does not simply entail a concern with multiple worlds but also has a correlate in that other great science-fiction trope: the transforming, volatile and reconfigurable body.

Due to the metaphysical nature of the Planes (worlds where beliefs become reality through exemplary figurations), many of the bodily transformations and returning memories suffered by The Nameless One are due to uncanny apparatuses of an inventiveness rarely equaled in gaming; reminiscent in their imaginative ambition and diversity of the Wunderkammer, of Grandville's illustrations of Fourier or indeed of Pynchon's Nefastis Machine. The game's multiple worlds are 'a freak show, a long story, a zoo, and a cabinet of talkative curiosities' (Carr 2003). Sigil's portals, with their idiosyncratic requirements for passage, are a running example. Other apparatuses have stylistic connotations ranging from the mystical (eldritch tomes and staves) to pseudoscientific (recording devices and automata, such as a dungeon with clockwork inhabitants designed to recombinantly test various configurations, but which infects one of its architects with a fragment of the aleatory planes of Chaos), religious (The Unbroken Circle of Zerthimon, a recursive sacred text confected by a previous incarnation to manipulate a companion), medical (surgical devices, prosthetics), linguistic-cryptographic (riddles, ciphers, a lost language), erotic (a Brothel for Slaking Intellectual Lusts), legal (a legacy left with an advocate by a previous incarnation's betrayed lover), among many others.

Many Answers with One Riddle

The most potent apparatus is, however, the one that resulted in The Nameless One's infelicitous immortality: a ritual performed by the ancient witch Ravel Puzzlewell, whose signature trope is rhizomatic, twisting black brambles. Ravel's oracular wisdom was sought by many, to all of whom she posed a Sphinx-like riddle: 'What can change the nature of a man?' The Nameless One alone gave an answer that met with her approval, albeit not due to any philosophical validity but, quite simply, because the witch had fallen in love with him.

As a result, when players finally locate Ravel and she once again poses her perilous question, any answer they give will do – the riddle's sole answer is, ultimately, the object of her love and the very ludic-narrative space it opens up: the precarious life and being of The Nameless One

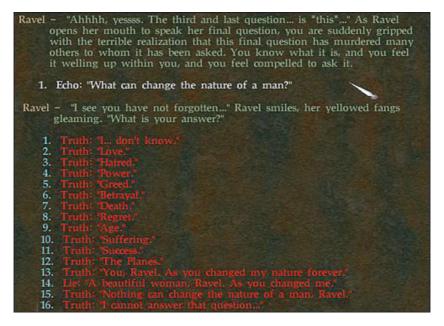


Fig. 6.3 Planescape: Torment

(Fig. 6.3). As such *all* the answers are true and felicitous in *every* playthrough of the game: the riddle conversation is a performative multiplicity even though it seems to be a neatly and clearly delimited series of choices.

There is thus no stable subjectivity, no speaking position, from which a satisfactory answer to the game's central enigma could be issued – merely the process of The Nameless One's torment that also constitutes the fabric of the game's time itself. This is why, long in the past, Ravel had agreed to The Nameless One's request for the removal of his mortality. The ritual was horribly flawed, however. Not only does The Nameless One lose his memory at each death, but each time he awakens from death another's life is lost in exchange, becoming one of the Shadows that haunt him. This doomed aura also makes him attractive to tormented souls, companions who he inevitably leads to a grim, infelicitous fate.

In order to break the cycle of death and forgetting The Nameless One locates Ravel in a maze to which she has been banished by The Lady of Pain. Ravel tells The Nameless One that his mortality was split off by her ritual, but that she cannot tell what became of it. Escaping the maze, the party chases the clues to the incompletely fallen angel Trias the Betrayer and the philanthropic devil Fjhull Forked-Tongue, who finally lead to the one being who may be able to locate the prodigal mortality: the Pillar of Skulls, an entity made up of the disembodied, chattering craniums of the viziers, sages, academicians and ministers who gave false counsel in life. Here it is possible for players to learn that Morte is in fact one of these skulls, extracted from the pillar by a previous incarnation of The Nameless One: a *memento mori* message literally pulled from a cacophony of noise.

The Pillar of Skulls says that the Nameless One's mortality has become a being in its own right and taken up residence in a vast 'Fortress of Regrets' located in the 'Negative Material Plane' – the metaphysical world that represents the concept of entropy. The portal to reach this fortress is located back at the *memento mori* where the game started: Sigil's Mortuary. Returning there after escaping the maze, The Nameless One finally travels to find his lost mortality, which he calls The Transcendent One. In the most felicitous ending to the game, The Nameless One encounters his three dominant previous incarnations in the depths of his own mind and convinces them to merge with him. In this process he learns his true name (which in any case is never communicated to players). This determined gestalt then confronts The Transcendent One.

The reasons that The Transcendent One gives for sending the Shadows to continually murder The Nameless One are pivotal: he wished to ensure that his former body (which he calls 'Broken One') would wander forever in a fog of amnesia, leaving The Fortress of Regrets in peace. Because the confrontation takes place on the plane that (according to the game's cosmology) represents the concept of entropy, the two characters can be seen as embodying distinct attitudes to change. The Nameless and Transcendent One each have their own answer to Ravel's riddle: the former feels he has been changed by his experiences, while the latter believes that nothing can change the nature of a man.⁸ The Fortress of Regrets is as much prison as sanctuary.

The Transcendent One therefore represents a system which wishes to be indifferent with regard to its anterior states, with zero entropy in both the thermodynamic and the informational senses – there is a contrast drawn between his indifferent, unchanging identity and the embodied torments of The Nameless One, for whom at each death entropy approaches one (so to speak). As it turns out, through a felicitous performance of the game's many quests, The Nameless One has become experienced enough to overcome his prodigal mortality. It is in this state that, called to account for all his deeds across many lives, he willingly faces his overdue judgment by a vengeful cosmic order.

The Nameless One's fate effects elements of an auto-critique of gaming itself both through parody of other fantasy games, and insofar as it presents a 'transcendent' personality (The Transcendent One) that is in fact the projection of an ultimately perishable relation between a shifting set of apparatuses and a pitiable living substance: a kaleidoscope pattern that has pretentions to permanence. The Transcendent One is merely the almost imperceptible difference between the subject produced by the multiplicity of apparatuses and the living being. PS: T achieves its memento mori theme by the performative interlacing of an extremely large set of framing devices: ludic RPG statistics management and elaborate visuals play a part, but most of the game's interactions occur through scripts and dialogue trees (over three million lines were written), making possible the many processes of dissembly and reconstitution The Nameless One suffers over the course of the game: a cipher of the construction of gaming bodies as performative multiplicities in their own right.

Notes

1. Aarseth's reading is selective here because Genette goes on to complicate the distinction between description and narration on the grounds that imitation must contain a flaw if it is to be recognized as such: 'One may certainly (indeed one must) challenge this distinction between the act of mental representation and the act of verbal representation, between *logos* and *lexis*, but it amounts to challenging the very theory of imitation . . . Literary representation, the *mimesis* of the ancients, is not, therefore, narrative plus 'speeches': it is narrative, and only narrative. Plato opposed mimesis to diegesis as a perfect imitation to an imperfect imitation; but (as Plato himself showed in the Cratylus) perfect imitation is no longer an imitation, it is the thing itself, and, in the end, the only imitation is an imperfect one. Mimesis is diegesis' (Genette 1982, 133). Genette locates the descriptive power of the direct quotation of Chryses or Socrates' various interlocutors within the movement of the text's discourse itself - the performative (insofar as it confers a 'being-narrated' upon both description and narration) 'constitutes this discourse' (131). Ludology was rightly accused with a neglect of posing the question of 'who' is performing a game (and how it might be possible to

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conceptualize their status) by belaboring a focus on rule structures (Klevjer 2006). Although I will not develop this problematic in detail at this juncture, the concept of mimesis will be dealt with substantively in Chapter 8 - albeit in the context of Benjamin's work rather than that of Genette.

- 2. For Aarseth, the experience of the aporia is simply due to the inaccessibility of a 'part' however, as argued in this book, this assumes knowledge ahead of time of what constitutes 'a part', and this cannot be assumed in video-games. Such a formulation thus limits the type of uncertainty to which the aporia refers by assuming that parts and wholes can be unproblematically distinguished in videogames. This mirrors the issue noted in the Introduction that the 'continuous' traversal function in *Cybertext* does not work well with the assumption that a game text is composed of discrete elements.
- 3. The notion of aporia also complicates Ndalianis' model of the intertextual labyrinth, as well as the concepts of polycentrism and virtuosity. Adopting for a moment the Deleuzian terms (2004) favored by Ndalianis, Aarseth's aporia can be seen as the performative intuited in terms of intensive rather than extensive qualities. That is, it is the set of a game's performances such that they cannot be subdivided without changing their nature (unlike the paths of a labyrinth which are already a pre-determined set of options which constitute a whole). Vertigo is for Deleuze (as for Barthes) a key experience, and it is one which exceeds the distinction between unicursal and multicursal labyrinths. The epiphany, then, is the way that a particular performance arises out of this multiplicity a sudden identification of the framing devices that govern felicitous performance.
- 4. The epithet 'hardcore' is often applied to games in which the difficulty is high enough to make felicitous performance extremely improbable without multiple retries even for seasoned gamers. *Demon's Souls* is an example, but this sentiment is often tied to a sense that games were more difficult in earlier eras. Platformers such as *I Wanna Be the Guy: The Movie: The Game* (O'Reilly, 2007) and *Super Meat Boy* (Team Meat, 2010) and 'bullet hell' games such as *Ikaruga* (Treasure 2001) feature extremely taxing level designs, that all but demand to be played over and over in search of a felicitous performance (see Chapter 10). *Super Meat Boy* consolidates the importance of multiple performances by allowing a simultaneous replay of all failed attempts when a level is finally completed.
- 5. 'Je sais bien, maisquand meme.' (Mannoni 1985).
- 6. As with Ndalianis' 'crisis of symptomatic interpretation', Žižek notes the proximity of the fetish to the symptom (or in the terms developed here, allegory to tautegory), although his take is more psychoanalytically-inclined when compared with Agamben's conceptual privileging of the former: 'Sometimes, the line between fetish and symptom is almost indiscernible.

An object can function as the symptom (of a repressed desire) and almost simultaneously as a fetish (embodying the belief which we officially renounce). A leftover of the dead person, a piece of his/her clothes, can function both as a fetish (insofar as the dead person magically continues to live in it) and as a symptom (functioning as the disturbing detail that brings to mind his/her death). Is this ambiguous tension not homologous to that between the phobic and the fetishist object? The structural role is in both cases the same: If this exceptional element is disturbed, the whole system collapses. Not only does the subject's false universe collapse if he is forced to confront the meaning of his symptom; the opposite also holds, insofar as the subject's 'rational' acceptance of the way things are dissolves when his fetish is taken away from him' (2001, online).

- 7. This setting was originally designed for tabletop gaming by David 'Zeb' Cook.
- 8. As The Nameless One points out, however, the incarnation followed by the game is unique he does not suffer amnesia when he dies. This capacity for memory, one not possessed by the previous incarnations, is central to the possibility of a felicitous performance of the game.

The Body Eclectic: Distortion, Distraction and Tactile Experience

Serial Aesthetics – Gaming's Metamorphic Bodies and Baudelaire's 'Argot Plastique'

GOD HAND AND GAMING'S SERIAL AESTHETICS

Bennett Foddy's QWOP(2008) is a marked departure from typical game design principles. The player character is a 100 meters sprint competitor at the Olympic Games called Qwop. His poor nation cannot afford expensive training, drugs or equipment. The game consists of controlling Qwop's ragdoll model as he attempts to move along the track – the QW keys cause thigh movements while OP moves the character's calves (Fig. 7.1).

This is an awkward control scheme indeed. Along with this strange locomotion, Qwop's virtual legs use physics modeling to tilt and shift his arms and unanimated upper body, which is prone to take on bizarre conformations and orientations. Controlling both the thighs and the calves of the character – using keys which have no clear mimetic relation to body parts which are constantly changing position relative to one another – is a confusing and frustrating experience.

By thematizing the hundred meters dash event and the Olympiad, often considered an apogee of athletic prowess and human movement, *QWOP* denatures the typical vehicular relation between player and avatar. Simple movement, usually the meanest of an avatar's powers in major game genres such as the FPS or RPG, becomes highlighted in its own right. Where the lower part of an avatar is usually relegated to providing a mobile platform for a ludic focus on proprioception and the hands (shooting, swinging a weapon and so on), *QWOP* focuses on parts of the body that games often taken for granted.

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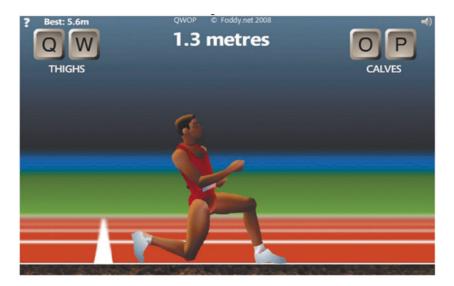


Fig. 7.1 QWOP

Compared to Qwop's difficulties with a straight flat track, the pro forma action game avatar's abilities to unfailingly find sound footing in all types of terrain or to run backward and to the sides (strafing) at the same speed as a forward sprint, or to combat roll up and down stairs, suddenly seem as ludicrous as they would be if attempted by a human. What is typically interpreted as a smooth movement across space is brought into relief against QWOP's counterintuitive difficulty and Qwop's incapacities. Avatar movement is shown to be an ensemble of player and machine performances. In Aarseth's term, QWOP is an aporia only not as a spatial phenomenon, as in the fog of war or a frustrating puzzle, but as a body and an avatar. QWOP's innumerable failures (attested by many online videos and even in QWOP cosplay, where inventive bodily contortion is just as important as costuming) show the aesthetics of infelicity encoded in a videogame avatar. This suggests videogame bodies can, as with phenomena such as the fog of war, also be conceived as performative multiplicities.

The ragdoll technique at the heart of QWOP is often used in other games when a character model is destroyed or killed: at the point of particularly pointed infelicity. The model, released from its usual

constraints, arcs and flops at the mercy of the physics engine and whatever it happens to bump into. In essence, the ragdoll is abandoned to its own potential forms of movement all at once – becoming an unruly performative multiplicity. Qwop's awkwardness is a limited ragdoll effect, performatively linked to the fact that his calves and thighs are each a distinct integral framing device. QWOP thus shows – in a very different way from the grotesque themes, topsy-turvy game mechanics and baroque narrative of PS: T's Nameless One – that integral framing devices not only involve the navigation of environments but also relations of surface, gesture and interior that produce gaming's metamorphic bodies. At the same time, as in the ragdoll effect, QWOP exhibits the framing device's uncanny threat of collapse as the dissolution of bodily integrity.

As McCrea argues, the bodies of enemies in many games display the aesthetics of infelicity in their designed receptivity to violent deformation: 'In the game development process, great care is taken to give bodies weight and depth, especially at the crucial point of violence. The body has to convincingly melt, drop and fall in ways that refer to the real but more importantly impart a sense of impact... for a virtual body to be hard-coded for death means that their entire bodily function centers around an inevitable expulsion of gibs and chunks. We navigate realms filled with living bombs' (McCrea 2007). Videogame characters (and particularly 3D models) are reminiscent of 'exploded view' drawings of mass produced products: sets of interchangeable components that can be taken apart and reconfigured with great facility. The points around which virtual bodies deform or explode also express their fundamental metamorphic character: here too, the framing device contains both the tautegorical aspect of control and the allegorical tendency toward ruin.

God Hand: Serial Aesthetics and the Metamorphic Body

If any game most brilliantly exhibits gaming's virtual bodies as performative multiplicities, it is *God Hand*. Helmed by *Resident Evil* and *Devil May Cry* eminence Shinji Mikami, it is a game which caricatures gaming as a whole. *God Hand*'s intense intertextuality makes every ludic, visual, sonic and narrative element fundamentally dubious – both a straight-up game structure and a knowing wink for canny players to pick up on. References fly at a rate that would make Tarantino blush, ranging from the broadband pugilism of *Hokuto no Ken* to the quotation of some of Mike Tyson's most ferocious lines ('You're not Alexander!'; 'My style is impetuous!'; 'My defences are impregnable!'); from the knotty-torsoed manhood overboard of *Cho Aniki* to diminutive Power Rangers. Level designs draw on a wide variety of motifs: dustbowl, Blaxploitation and Wild West strains of Americana; medievalism; speleology; post-industrial dystopia; a travelagency sales catalogue's notions of Venice and the Middle East. Lowbudget and primarily direct-to-video 'minor' martial arts cinema (Morris 2004) provides another touchstone aesthetic: the final level involves a tower ascent echoing Bruce Lee's in *Game of Death* (1978), a movie left unfinished because Lee died while working on the Hollywood spectacle *Enter the Dragon* (1973).

Gene, our typically cocksure Mikami action game protagonist, has replaced his severed arm with the eponymous God Hand, an artifact of immense power that was once used to seal away the demon Angra. He seems little fazed by the monsters, robots and demons he encounters – almost as if he is fully aware that he can just hit 'continue' if he dies. Acquiring power-ups and new items is accompanied by a deadpan 'Wow' or 'I love it'. At the end of the first level, confronted by the powerful daeva known as Elvis, Gene exclaims 'Finally! A boss fight.' In this respect, the only thing he really fears and the only thing that can really end his life is player boredom and frustration. This possibility is not so remote however: *God Hand* is unrepentantly difficult, pitting hapless players against enemies who can send them crashing to a Game Over screen in the wake of the slightest error, all the while flaunting gratuitously long and chewy life bars.

Bereft of the breakwater of a block maneuver, players must help Gene duck and weave desperately as squalls and flurries of enemy fighters are mashed up against the game's labyrinthine combo system like ripe fruit into a blender. The eclectic cast of enemies sport body modifications such as tattoos and piercings, and tend toward marked variance from the norm provided by Gene's wolfishly lean figure (they are too tall, too buff, too obese, too short). These variations are also in marked comparison to Gene's putative love interest, Olivia, whose normative design and heroic lineage indicate that she is immune to the metamorphoses of the God Hand. She may be threatened only in a 'tied-to-the-railway-tracks' sort of fashion by Gene's rival school opposite number – Azel the Devil Hand. Although Gene himself is certainly liable for a pummeling by his opponents, his rambunctious personality and ability to reload a saved game render him ultimately undeflatable. He may be sent to a Game Over screen but – apart from the necessary mutilation that allowed him to receive the God Hand – he is spared deformation. The game's colorful cast of antagonists, then, are caricatural variants on the stable figural theme provided by the protagonists. In this way they physiognomically signify their liability to be forcibly modified and remolded by the God Hand: smashed, guillotined, kicked in the groin, used as a dance floor, slugged for a home run, spanked, launched as pyrotechnics, blasted into orbit and so on. Where Gene and Olivia are the subjects of the narrative, the other characters are incidental and primarily ludic in function – a set of metamorphic bodies defined by the serial regimes of transformation encoded into their design.

God Hand thus highlights what Ndalianis (2004) terms 'seriality' and Surman (2004) has identified as gaming's propensity toward a 'serial aesthetic'. *God Hand* is a commentary on gaming's obsessions with proprioception and visualizing action. The repetition of key features across the enemies' series shows the importance of integral framing devices to videogame character design, drawing on the tradition of animation and caricature, helping players keep track of characters prone to dynamic movement and transformation:

The correspondent motifs or 'cues' of a particular caricature – the rabbit ears and tail of Bugs Bunny, for example – 'anchor' the character, and are integral to the cognition and plausibility of the character. (Surman 2004, 72)

Where Surman examines *Pokemon*'s evolving creatures and *Katamari Damacy*'s many cousin characters as variations on a theme, *God Hand* distinguishes these two aspects (even as it articulates them) within the figure of Gene. In Surman's terms the metamorphic bodies of the enemy combatants are comprised of 'cues' while Gene's fearlessness and adaptability are the 'anchor' that binds the set of transformations across a performative multiplicity. Like QWOP, character design elements act as integral framing devices in order to convey forms of movement and structures of performative judgment. In so doing, they help define the performative multiplicity that the avatar makes available to players.

Every enemy character design in *God Hand* fits into a series with similar body types and 'movesets' that define certain types of performative felicity. These series are each capped by a boss (one of the 'daevas') that synthesizes their aesthetic: the portly, cigar-chomping Elvis, the fey and domineering Shannon, the sleazy businessman Belze, the robotic Dr. Ion and the player character counterpart, Azel. Gene possesses the capacity to outmaneuver them all. *God Hand*'s camping up of videogames is not restricted to lampooning gauche storylines or garish characterizations: Gene's extreme number of potential animations – there are over 114 basic moves and many more special moves that can be acquired and assigned to the character – mark the God Hand out as a mobile figure of transformation, a kind of gaming avatar redux.

And in fact the most powerful abilities of the God Hand are acquired only after multiple playthroughs of the game. As such Gene has two aspects within any single performance: both the ability to deform the metamorphic bodies of his assailants and to manipulate (but not deform) his own body to occupy the space around their violent gestures. A retrograde relation is set up between the typical rhetorics of player-centric 'agency' (represented by the ultra-potent, transformative God Hand) and the training in serial aesthetics that players receive across multiple performances of the game (to occupy only those spaces where an enemy is not and will not be): by the time players acquire the ultimate powers of the God Hand, *they are unnecessary*.

This is exemplified by the game's 'Kick Me' sign. Early on in *God Hand*, Olivia sticks a 'Kick Me' sign to Gene's back, which flies off if Gene unleashes the God Hand. This sign has led to a 'Kick Me' challenge for particularly skillful players – completing a full playthrough performance of *God Hand* utilizing only the basic moves. This virtuoso performance of the game allows Gene to *receive* with optimal efficiency the violent performative multiplicities of the enemy combatants – a cheeky invitation to try to kick him – that describes a tightrope walk between executing and interrupting forms of movement. Conditioned by a multiplicity of performances, the real God Hand becomes the one holding the controller.

At *God Hand*'s most demanding level, 'identification' with the player character or 'immersion' in a believable game world are obviated in ways that the game's serial aesthetics anticipates and recoups into a focus on performativity. What arises is a highly distributed organization of perception, scattered among many figures, among many cued and interrupted animations, among many salient features and the 'off-frame space' of a radar that tracks enemy positions. These many framing devices demand a process of adaptation similar to what Benjamin refers to in another context as 'distracted habituation' (see Chapter 8).

As we play games, we become sensitive to the rhythms and cadence of the gameworld structure, particularly in games that emphasize action and repetition. Seriality creates this structure. In order to achieve a refreshing sense of differentiation, two aspects complicate seriality, the permanent and impermanent trait, which fold difference into the repetition and so create a sense of iterative progression. This is a conceptual formal consideration, remote from the player's conscious thought. (Surman 2008, online)

In the course of the development of these advanced felicitous performances, *God Hand* transforms itself from a (visual, narrative and audio) caricature of gaming to a laboratory of movement, of what Kirkpatrick calls 'frenzied and experimental manual activity' (Kirkpatrick 2010) where players test again and again how to create new performative ensembles.

God Hand's serial aesthetic creates its own version of the Half-Life 2 'visual dictionary', comprised of points of heightened detail: salient features where bodies are subject to or able to project force. In the language of Chapter 5, salient features are integral framing devices that are encoded in character designs. They have implications for felicitous performance. Just as the pictures gathered in Van Haecht's painting contain elements that structure forms of movement for the gaze or (for Flusser) the camera highlights points that signify a series of shots, in videogames certain salient features serve as foci that lend the virtual body consistency across multiplicities of performances and transformations by prompting players as to their potential forms of movement. Here, the 'off-frame space' that is signified is the specific set of performances of which the character model is capable.

CARICATURE – ARGOT PLASTIQUE

God Hand makes patent gaming's links between performativity and emphasized salient features through its difficulty and its serial aesthetic. Similar characteristics can already be discerned in another popular form that makes highly distinctive use of framing devices: caricature. Exploring the critical and cultural reception of caricature as a mass-cultural form – a reception which certainly had echoes of the discourses surrounding *rhyparography* – will help draw out some of the ways that salient features work to create the metamorphic bodies of gaming.

Caricature, writes Baudelaire in his seminal critique 'On The Essence of Laughter' (Baudelaire 2001), is 'a history of facts, an immense gallery of anecdote' which, 'like the flysheets of journalism' are 'swept out of sight by the same tireless breeze which supplies us with fresh ones' (Baudelaire 2001, 147). Aligned with the *feuilletons* that were bringing new

consciousness of current events to a wider nineteenth-century urban population, each individual caricature is both a punctual combination of two frames – the gesturally distorted figural image and the witty prose caption – and an index of the 'tireless breeze' which means that each particular caricature will soon be replaced by new ones. Audiences must adroitly grasp salient features to orient themselves amongst a constant barrage of implied and actual movement. Caricature thus precedes and anticipates gaming's use of dynamic and deformed figures, marked by salient features, to aid in navigation of multiple frames both within the individual caricature (text and image), and in caricature as a whole (the many images that lithographic techniques of reproduction made possible).

Critics such as Hannoosh (1992) and McLees (1989) have shown how caricatural effects are integral to Baudelaire's poetic response to urbanization. McLees reads 'Une charogne' as exemplary in this regard, with its movement from beautiful lover to a decaying corpse that dramatically collapses in upon itself. The poetic distortion, emphasis and deflation of figures and features create a 'cognitive process...similar to reading a graphic caricature's meaning through gesture and implied movement' (McLees 1989, 16), but he notes that there is also a performative element to 'Une charogne':

The carcass is the concrete form given to his poetry, but this point becomes clear only at the end of the process. In the intervening stanzas he traces the steps by which he arrived at his symbol. Moving backward through the image of the lascivious woman and artistic creation, he depicts the gradual distortion through which he developed it metaphorically... 'Une charogne' offers a compelling example of the adaptation of graphic caricature's aesthetics to poetic form. (25–26)

The self-critique implicit in comparing the poetic muse to a decaying corpse is also a reflection on poetic performance, and as such the figural imagery of corpse and muse acquire a type of reversibility across the series the poem describes. This figure of reversal shows that which is supposedly an eternal call to poetizing is, shockingly, all-too vulnerable to the effects of time.

Baudelaire describes his own poetic method as being very similar to that of a particular caricaturist: Charles Philipon (Baudelaire 2001, 19). Sometime earlier, Philipon had landed in hot water after publishing a picture in his journal *La Caricature* depicting the Citizen-King Louis Philippe as a mason, busily plastering over the slogans of the July Revolution. Defending his caricature in court, Philipon demonstrated that the resemblance of his caricatural mason to the king was no grounds for censure because he could, in fact, make the king look like most anything – even a pear. As Petrey has put it, the corollary of Philipon's argument is that if the courts were to convict him based on a resemblance between his caricature and the king, they 'are doomed to prosecute even those innocents who draw a picture of a harmless fruit' (Petrey 2005, 12). A court condemning him would in fact condemn itself to see caricatures of the king everywhere because caricature is not any one image but an artistic capacity for transformation and mutability.

Philipon proceeded to demonstrate this remarkable defense by drawing four pictures in which the king's physiognomy gradually became that of the fruit in question, which Baudelaire calls 'the Olympian and pyramidal *Pear* of litigious memory',

You will remember the time when Philipon (who was perpetually at crosspurposes with His Majesty's justice) wanted to prove to the tribunal that nothing was more innocent than that prickly pear, and how, in the very presence of the court, he drew a series of sketches of which the first exactly reproduced the royal physiognomy, and each successive one, drawing further and further away from the primary image, approached ever closer to the fatal goal – the *pear*!

... With this kind of plastic slang [*argot plastique*], it was possible to say, and to make the people understand, anything one wanted. (Baudelaire 2001, 172)

Baudelaire also notes that the import of Philipon's caricature wasn't to show a similarity between Louis Philippe's countenance and a pear: the relation is not, primarily, one of resemblance. It is rather, in McLees' phrase, 'gesture and implied movement'. Indeed, caricaturists 'were so unconcerned with physical features that they routinely shifted the part resembling a pear from the king's face to his torso and back again' (Petrey 2005, 18). Rather, Philipon demonstrates his own skills of transformation – using what Baudelaire calls *argot plastique*, he could as easily have made the link 'between the king and a brioche, or a pig bladder, or a whole chaotic range of objects' (12). Prior to Philipon's performance, nobody had made the association between Louis Philippe and a pear; after it, the association was both indissoluble and mercurial.

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Of course, the authorities did convict Philipon, and just as the caricaturist predicted were soon obliged to enact all manner of anti-pyriform measures. The shape became ubiquitous: 'Immediately after Philipon showed the way, drawing pears became a contagious mania throughout France, an ongoing derisive gesture that took the caricature away from its creator and made it public property, the proud possession of anyone with a piece of chalk and a wall to use it on' (5). Petrey argues that the political volatility of the time is reflected in an intense concern with performativity in both realist literature (Balzac, Stendhal, Zola) and caricature as an 'impossible dualism' (68); attempts to grasp a world in which something as paradoxical as a Citizen-King was possible.

Salient Feature and Philipon's Pear Formativity

Agamben also draws attention to a constitutive ambiguity in Philipon's performance and emphasizes the general inadequacy of a theory of resemblance to account for the full scope of caricature: the caricatural series' movement across multiple frames does not act only in one direction (such that the drawing of pears comes to signify Louis Philippe), but as a complex reciprocal attraction and repulsion across the series. Philipon's work, an 'emblazoning of the human figure' which 'represents King Louis Philippe as a pear (or vice versa), consists precisely in the fact that we find ourselves confronted neither with a pear nor with Louis Philippe, but with the emblematic tension that arises from their confusion-difference' (Agamben 1993b, 148). The salient features that define and structure the successive images in the caricatural series do not 'properly' belong to any one of those images – rather, they represent the potentials of moving between them.

For Agamben, this movement disturbs models of signification based in signifier-signified relations. This places caricature in a similar position – within the sphere of the depiction of the human body – to paradoxical 'transitional objects' (Winnicott 2005) such as toys and fetishes. Through their ambiguous nature, such objects point toward a more general critique of signification and metaphor (see Chapter 6). A similarity with fetishism is further indicated by the salient feature's basis in emphasis and distortion, as in Freud's 'shine on the nose' (Freud 1927, online) or the erotic fixation on parts of the body or attire connected to them.

Philipon's pear, between Baudelaire's *argot plastique* and Agamben's 'confusion-difference', plays up the performative elements of caricature.

In both the virtuoso *argot plastique* displayed by Philipon and Baudelaire's critique of poetic inspiration in 'Une charogne', the link between the terms or images in question does not precede the performance but is brought into being by it, and at the same time places new performative demands on its audience. Consonant with Baudelaire's accusation of hypocrisy in his readers in 'Au Lecteur', the preface to *Les Fleurs du Mal*, caricature was a media form that increasingly denied audiences a safe contemplative distance from which to observe its operation.

These processes extend even beyond the productive powers of the individual artistic genius: caricature's rise in Europe coincides with that of a burgeoning mass culture. Not only did lithography enable mass production of caricatural imagery, but as Petrey points out, Philipon's pear became liable to iteration by a mass public and completely exceeded the state's febrile and futile efforts at censure or the court's attempts to judge its subversive status.¹ In fact, the pear was so ubiquitous in France that 'it became a reliable geographical signpost. Tourists from other countries knew they had reached the French frontier whenever pears came into view' (Petrey 2005, 4). Overflowing the magic circles of the studio or the courthouse to appear on the walls of the city and country-side, the pear acquires a strange navigational felicity.

This ubiquity and energy fosters new forms of temporal experience. For Baudelaire, the multitude of caricatural images are difficult to contemplate individually. They are, like journalism, 'swept away' by the very processes inherent in their production and distribution. Each caricature is related to every other as part of an 'immense gallery of anecdote'. However, this inclusion is itself conditioned by a discontinuity: the intensely punctual quality of each caricature. An anecdote does not have the absorbing connotations of a story or poem as its presumptive addressee is more likely a distracted subject, a passer-by or fellow-traveler enmeshed in daily life. Baudelaire relates this punctuality to the sudden burst or shock of wit. In caricature, this manifests in the explosive combination of the figure distorted around its salient features and the witty caption.

The distortion elicited by caricature does not occur only on the page: laughter, as an involuntary response to a paradoxical presentation, effects a diabolical doubling in the subject. Pure souls – the wise Sage or Bernardin de Saint Pierre's character Virginie – do not laugh when confronted with caricature because to them such a picture appears as a diabolical doubling; they cannot 'grasp its ironic twist' (McLees 1989, 41). For such a paradisiacal figure joy does not consist in laughter because all created things are good, 'As no trouble afflicted him, man's countenance was simple and smooth, and the laughter which now shakes the nations never distorted the features of his face' (Baudelaire 2001, 150). Here, Baudelaire reveals the hints of a response to caricature that is both physiological and temporal: something like an immersive experience. The shock of wit, a sudden collapse of levels or frames, imbricates observers. This radically disqualifies the contemplative stance of the Sage or the innocence of Virginie, distorting their features into self-caricature.

However, for all that the burst of laughter is unreflective and involuntary, the phenomenon contains some countervailing tendencies. Philipon's original linking of king with pear was, after all, a virtuoso performance that was taken up by a mass public. Baudelaire attributes laughter to feelings of superiority toward the lack of coordination of another. These associations, along with the 'reversibility' that McLees notes in 'Une charogne' (in which the series of poetic images between lover and corpse can reflect back on itself), as well as the navigational significance that Petrey notes in the pear's ubiquity, suggest a certain notion of *control* – laughter may be a shock, but it is a shock that helps subjects navigate a complex urban environment in which such shocks are increasingly endemic. Caricature thus provides a model in which seriality offers points of control that affect the visual design of dynamic and transforming figures.

Sex, Gender, Race and Bodily Representation in Videogames

As God Hand shows in exemplary fashion, gaming uses its own versions of *argot plastique* – emphasized salient features that act as integral framing devices – to construct ludic bodies as the anchoring points for various types of performative multiplicities. Baudelaire used salient features to create a 'reversible' sentiment in 'Une charogne' that parodied poetry's appeals to beauty; Philipon's *argot plastique* used salient features to transform pear into king and back again. In gaming, metamorphic bodies communicate structures of performative judgment through integral framing devices that resemble the gestural visual language of caricature. The figures of reversibility and mastery displayed in caricature prefigure the ways that players use computer technology to grasp the metamorphic

possibilities encoded in visual and audio character design: salient features have performative ramifications that recall the 'to and fro' through which McDonald (2014) conceptualizes videogame play. Through the salient feature, the bounded reversibility that Sobchack (2000) observes in digital cinema's 'quick-change' metamorphoses becomes available for the performative aesthetics of videogaming.

However, the propensity toward serial aesthetics also influences gaming's many problematic depictions of ability, sex, gender and race. These issues are implicit in designs for which capability signifies on the surface of bodies. Because of the importance of salient features to performance, these depictions often go beyond representational issues to performative criteria of judgment and ludic structures: certain (sexed, raced, gendered) bodies have varying capabilities that are tied to certain salient features through game code and rule structures (Ash 2015; Fordyce et al., 2016; Galloway 2007; Young 2016). Signifiers of ability, gender, sexuality, class and race, once they govern the system of possible transformations available to a given body and become abstracted into terms in a serial aesthetic, are liable to promulgate regressive notions and imagery when bereft of *God Hand*'s caustic wit.

The complexities of such differences thus tend to be subordinated to the general similitude of the game system: tied to specific statistics and parameters. Furthermore, because integral framing devices (in this case, salient features) represent the body insofar as it is presented to the apparatus (see Chapter 5), when a signifier of sexual, gender, class or racial difference does appear in videogames, it often comes to distinctly recapitulate or resemble the simplified categorizations of disciplinary apparatuses (censuses, polls, police documents, gender-specific amenities) or the exploitative stock of imagery of mass media (fashion photography, action or exploitation cinema, advertising). Bodily differences tend to appear as a rigid set of binary oppositions (male/female, black/white). Mainstream game design has an arid notion of difference; the very advantages that serial aesthetics offer for designing metamorphic bodies, that are highly oriented toward performativity and tracking dynamic movement through space, are also liable to carry with them unexamined essentialist assumptions. While there are important calls to address the issue of diversity in gaming, the aesthetic techniques of exaggeration, simplification and emphasis have had distinctive effects on the way that bodies tend to be depicted and modeled in videogames.

Sexuality and Gender as Salient Features

For example, character design in mainstream action games tends to draw on visual codes oriented to a presumptively male player (Burrill 2008). Characters often exhibit pronounced sexual dimorphism through exaggerating certain salient features that are culturally associated with gendered bodies – male characters tend to be hypermasculine with exaggerated musculature (Sloan 2015; Young 2016), while females are slender. Many games that use advanced graphics engines with otherwise admirable attention to detail, such as *Deux Ex: Human Revolution* (Ion Storm Games 2011) feature incidental characters who vary only in facial features, resulting in an eerily uniform population of 20-something mesomorphs.

Sexuality is typically also presented as a binary in games, with the performance of queer relationships or attractions typically being flatly unavailable or proscribed (Fantone 2009; Shaw 2015). In games with realist graphical ambitions, player character models that differ from the ideals promulgated by consumer culture (young, fit, able, heterosexual, cis, white) remain comparatively rare (Westecott 2009) – the occasional *Karnov* (Data East 1987) notwithstanding. This further emphasizes the link between fetishism and framing devices, as the emphasis and distortion of salient features is a common element in fetishistic behavior.

Even when a countercultural queer reading develops around a particular practice or character (including Nintendo's Birdie or Capcom's Poison), the commercial concerns involved have acted to neutralize such potentials – such as when Blizzard Entertainment attempted to shut down a queer-oriented *WoW* player guild on the grounds that it would 'invite harassment from homophobic players and create a negative game environment' (Shaw 2012, 69). When queer performances are possible in a mainstream game they may appear in caricatural form, such as the exploitation-style *Saints Row: The Third* (Deep Silver, 2011). Although advocacy is challenging this situation, it is often left to independent designers such as Anna Anthropy (*dys4ia, Lesbian Spider Queens of Mars, Mighty Jill-Off*), Robert Yang (*Radiator, Rinse and Repeat*) and Merritt Kopas (*TERF War, Lim*) to make games that more creatively explore queer and transgender themes and experiences.

Male characters are over-represented as marquee action videogame protagonists (although it is important to note that the situation differs in other genres, and many games allow players to construct their own

characters). It is common for game worlds, such as those of many of the popular military shooters, simply not to contain women or children characters at all: 'if one looked solely at videogames, one would think the whole of human experience is shooting men and taking their dinner orders' (Anthropy 2012, 3). As in mainstream cinema, starring roles for female characters are relatively rare (although notable counter-examples such as Lara Croft, Faith in Mirror's Edge and Jade from Beyond Good and Evil (Ubisoft Montpellier and Milan, 2003) do exist): 'women are often presented in background roles supporting a man's heroic quest. In many games women are objects existing for men's pleasure, serving as enemies, or are simply invisible' (Salter and Blodgett 2012). Sexualized salient features are particularly problematic and common in female character designs: 'Many of the games which are popular today continue to represent female characters in sexualized and stereotypical ways, as objects of voyeuristic spectacle or as narrative devices whose role continues to be a reward or object to be rescued (as in the cases of Dead or Alive: Xtreme Beach Volleyball, Project Rub or Fable)' (Bryce et al., 2006).

Salient features have been used as markers of a subordinated femininity insofar as they depart from a normative male model: 'Simple elements marking female characters - the female pink ribbon, the silky miniskirt' (Fantone 2009, 216). Adding a bow and lipstick to the iconic yellow circle was sufficient to result in a 'Ms.' Pac Man, and sometimes a simple palette swap to more pinkish shades is all that is felt necessary. Videogames that deal with domestic settings tend to recapitulate wider cultural trends in the way that they encode femininity: '...life simulation games are at the cutting edge of a re-centering of gender difference, creating a social subject capable of giving value to digital social life...social reproduction and everyday life are recurrent dimensions in many games targeting women' (Fantone 2009, 217). For Fantone, this is particularly true in the case of 'lifestyle games', such as The Sims, that are marketed toward girls and women. Games and hardware primarily marketed toward female players thus tend to work along familiar lines – featuring pink and pastel colors, revolving around domesticity or consumption, reinforcing norms of gender essentialism.

Race as a Salient Feature

The depiction of race in videogames has also been highly problematic in many cases due to the linking of certain traits or features such as skin color or mannerism with, on the one hand, a reductive notion of race, and on the other, performative capability (Everett 2005; Chan 2005; Monson 2012; Poor 2012): 'video and computer games rely heavily on racial and ethnic stereotyping of the most blatant kind' (Higgin 2009), or represent a more complex approach such as 'gamic orientalism' (Goto-Jones 2015) in which a cluster of salient features (such as the dojo complex in martial arts cinema) serves as a metonym for entire cultures.

Although character creation systems have made great strides with regard to skin tone, other aspects of non-white bodies such as curly, frizzy or thick hair tend to be less representative. White males are highly over-represented as lead characters, whereas characters of other ethnicities are liable to appear as villains or in a supporting role. In such cases, where the full scope of performativity is accorded to white avatars (the most notorious redux of this aesthetic being the ill-fated Duke Nukem Forever (Piranha Games 2011)), ethnic diversity tends to suffer the more dehumanizing potentials of the serial aesthetic. In Grand Theft Auto games the American urban environment is populated with a broad range of ethnic stereotypes, with African-American, Eastern European and Latino characters often being members of street gangs and associated with aggression and criminality (Ash 2015).² In fantasy worlds such as World of Warcraft or The Elder Scrolls V: Skyrim (Bethesda Softworks, 2011), what might more accurately be termed 'species' humans, elves, dwarves and so on - are often described following fantasy fiction as 'races', each of which has certain statistical and performative advantages or disadvantages.

In *Skyrim*, the duskier-skinned races are associated with aggression and strength, whereas lighter-skinned ones are associated with social or intellectual virtues (Fig. 7.2).

Cultural elements appropriated from various nations and groups are also often used in fantasy games as a way of signifying otherness from the norms of Western civilization: the logic of innate individual racial propensities is also played out at the levels of culture, architecture and craft. A typical example is the 'troll' race and culture in *World of Warcraft*, an 'amalgamation of Rastafarian/Jamaican/African ethnic traditions...Such characterizations could well have been ripped directly from the pages of Western colonial history' (Higgin 2009, 62). Cultural signifiers and stereotypes are often appropriated as salient features, providing the design with a ready-made serial aesthetic – attires or behaviors that exploit certain received ideas about racial and cultural difference.

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Fig. 7.2 The Elder Scrolls V: Skyrim

Again, it should be emphasized that these observations refer to broad tendencies in mainstream game design and are not completely determining of the whole field of videogame production: *80 Days* (inkle 2014) and *Mirror's Edge* (EA Digital Illusions CE 2008) are example of games that shirk or subvert many of the conventions of race in videogames. The inertia

of mainstream industry and culture on these issues can be gleaned from the pushback that diverse designs have received in game culture (Golding and Van Deventer 2016), and the key point in the current context is that the centrality of salient features to videogame character design feeds into these ideological tendencies. Through the ways that biological and cultural determinist tropes affect game mechanics, the salient features by which mainstream videogames encode race and sex can take on ramifications for the ways that performative felicity is read politically. Normative social values can acquire an almost ontological stature when encoded as the 'rules of the game' or as a salient feature in a character design. In videogames as elsewhere, the performative is political.

Abilities, Classes and Equipment

Salient features thus have significant political resonances in videogame character design; the fact that these issues are so common in gaming speaks to the importance of salient features in terms of their advantages for a performative medium. There are many and varied ways in which salient features affect performative play and disseminate criteria of felicity. In RPGs, a character's capabilities are often represented as a set of statistical values, displayed in hypermediate framing devices. These are often based on or reminiscent of the tabletop gaming. These statistical measures quantify the chances that a character has of successfully performing a given action. Ability scores of this type are literal salient features – they are effectively everything about a character that is salient from the point of view of the game system. Statistical mechanics of this sort are caricatured in *Disgaea: Hour of Darkness* (Nippon Ichi 2003), which is to RPGs what *God Hand* is to brawlers, as characters have statistics that range from single digits into the hundreds of thousands.

Representing capabilities through a small number of statistics is obviously a considerable simplification (in many ways, a caricature): after all it is no more adequate to reduce the talents of a marathon runner, a weight-lifter and a rower to 'Strength' than it is a fighter pilot, a gymnast and a sprinter to 'Dexterity'. However, in the classic RPG context ability scores represent a perfect fusion of the salient feature and performativity: the full set of such scores and the rules for their application govern the types of action that can be taken in a given game and provides a comparative basis for all the entities that exist in the game world. They are serial insofar as they ground a certain kind of baseline comparability across the inhabitants within a particular game world.

Another serial aesthetic that originated in fantasy tabletop gaming (and has had a pervasive influence over videogames) is 'class'. This mechanic breaks down characters into certain functional occupations such as the fighter, rogue or 'magic user'. Each class has its own standardized characteristics that determine a certain developmental trajectory. Advancement is typically achieved by acquisition of 'experience points' which improve the character's abilities when they reach a predetermined level. In these models, experience is cumulative and always shaped in particular ways.

Gesture and Equipment as Salient Feature

The gestures of game characters can often act as salient features. Characters in the Dynasty Warriors (Koei) series swing weapons in breezy arcs that cut through multiple bodies which seemingly offer little to no resistance. The precise physics of contact between bodies is very complex to model, and hence even game animations done in a realist graphical style can have a mannerist appearance from the point of view of gesture (Jayemanne 2007). However this is not solely due to technical limitations: it also reflects the importance of conveying performative criteria through character design and animation. As exemplified by God Hand, in many games felicitous play demands that players must read the gestures of bodies in space and take on their forms of movement and rhythms (McDonald 2014). Powerful auras and trails of light as well as the distinctive models and existential changes of state made possible by monsters and aliens make science fiction and fantasy highly appealing genres for game design that must make movement and position as intelligible as possible in complex situations. This performative element to gesture - gesture as a kind of salient feature - contributes to the caricature-like elements of character design in games.

Closely related to gesture is equipment, which can also work as a type of salient feature that supplements particular bodies and modifies the performative multiplicity they represent. Solid Snake, the player character of *Metal Gear Solid 4: Guns of the Patriots* (Konami 2008), can carry around an immense arsenal of firearms, missile launchers, ammunition, cardboard boxes, a small robot, shotgun microphones, rations, cigarettes, adult magazines and other miscellaneous equipment, although none of this

slows his movement or hinders his stealthy approach to espionage. Readying one of these items requires players to tap a shoulder button and scroll through a list to select it, at which point Snake simply makes his current item disappear in favor of the new one with an enigmatic, magical shrug.

These objects are therefore not simply faithful iconic or realist representations of their real-world counterparts – otherwise their mass and the difficulty of storing them on Snake's person would be simulated along with their ballistic or other operational properties. Instead, the items are integral framing devices with specific salient features that modify Snake's model visually. They thereby convey the set of his capabilities at any given moment: a firearm with a specific rate of fire, caliber, scope and clip size; a rocket-propelled grenade launcher or guided missile with armor-piercing capabilities; a shotgun microphone that facilitates listening in on distant conversations, and so on. Equipment determines and denotes the performative multiplicity possible at a particular gameplay point by supplementing Snake's body. Snake's ability to carry impressive arrays of equipment (particularly firearms) without any discernible means to do so is common to many action games. In such cases, what is most important is the type and quality – the forms of movement – of the military hardware being used, not the specific logistics of outfitting an infantryman of Snake's build, training and fitness.

Equipment-as-salient feature can also take on an important performative role in certain player-versus-player contexts, where the items that a character possesses visually designate their abilities and tendencies. Apprehending and interpreting the equipage of an opponent in multiplayer *Dark Souls*, for example, is crucial to a felicitous engagement, as each weapon and magical ability has distinctive animations, encumbrances and types of effects – the visual design indicates a certain 'build' or set of felicitous styles of play. This process of intuiting a style of play through the game's equipment design resembles the way that *Starcraft 2* players discern their opponent's performative multiplicity within the 'fog of war' from limited information. *Diablo 3* makes use of randomized salient features called 'affixes' that give particular items effects on a case-by-case basis (Fig. 7.3). In team play or PvP (player versus player) it is important to be able rapidly to infer the capabilities of a particular character by recognizing their equipment and overall look.

Such features (such as the 'Reptilian' descriptor indicating regenerative ability associated with the bracers in Fig. 7.3) may make them more or less



Fig. 7.3 Diablo III

effective for various characters. Finding an item with the perfect set of salient features for a particular class is a major goal of the game and involves many hours of 'grinding' – repetitively playing a level in the hopes that a particular item will 'drop' from a defeated enemy.

Nonperformative and Performative Bodies: Toward Tactility

Another important kind of 'body' that players quickly acclimatize to in a given game are not characters so much as objects. Many videogame objects (most commonly, walls) are non-interactive, acting mainly to limit movement. Surprisingly flimsy-looking walls in videogames are liable to be completely impervious to explosives or bullets or plasma balls or what have you. In this example from *Destiny*, the enemy boss Sepiks Prime cannot fire its devastatingly powerful ordinance through a simple safety rail as its large projectiles impact on the slender metal lengths. By contrast, the player's small arms fire can freely pass through the gap. This makes no sense whatsoever from a realistic point of view, but can be quite felicitous for players (Fig. 7.4).



Fig. 7.4 Destiny

Conversely, clipping and collision errors can make 'solid' matter seem ghostly. Felicitous play thus demands that players learn those properties which are and are not simulated in the case of realist graphical styles.

Games of the cover-based shooter or stealth genres, which includes *Gears of War* and *Deus Ex: Human Revolution*, are strewn with suspiciously uniform waist-high objects as *mise-en-scene*, and in the early *Resident Evil* simply walking through a door into another area is sufficient to throw off the most dogged pursuit. Games in which environments are 'destructible', such as *XCOM: Enemy Unknown*, tend to advertise this as an important gameplay feature, thereby indicating a performativity of bodies that are not normally assumed to be imbued with such capabilities. Another example is *Deus Ex: Human Revolution*, which indicates destructible walls through a particular crack pattern (Fig. 7.5). If the character has the necessary cybernetic enhancements, it is possible to break down these walls.

This wall is a body defined by this game's equivalent of *Half-Life 2*'s 'visual dictionary'. In such cases, the salient feature or integral framing device – here, the distinctively shaped crack – may represent a weak point or flaw that reveals a form of movement through an object that would normally signify as a simple 'out of bounds' marker. Salient features, then, do not only constitute the capabilities of bodies to affect the external



Fig. 7.5 Deus Ex: Human revolution

world but also establish relations of bodily surface and depth, exteriority and interiority.

Perhaps the most spectacular examples of this sort of use of salient features to constitute metamorphic performative bodies are the 'bosses' that form ferocious gameplay milestones and speed bumps in many games. These characters often have monumental forms. Felicitous engagement demands that players discern and exploit certain weak points – that is, certain salient features. The iconic Dobkeratops boss in R-Type (Irem 1987), for example, is a museum centerpiece dinosaur skeleton by way of H.R. Geiger. The creature possesses a lashing tail that protects a periodically emerging secondary head in its chest – the only point on its body that it is susceptible to damage. Successful play involves both avoiding the tail and taking advantage of opportunities to strike the vulnerable part of the boss: plucking the two most salient features from the overall creature design.

Gesture, Salient Features and Metal Gear Solid

In other cases the boss might possess a signature salient feature, a trope that directly governs their performative qualities. *Metal Gear Solid* (Konami 1998) features a cast of bosses from a renegade elite unit of the

US Military called FOXHOUND. Bosses in the *Metal Gear* series, with distinctive designs by artist Yoji Shinkawa, pastiche the liveries, cultures and quasi-totemic (Lévi-Strauss 1971, 7) folklores of Special Forces units (just as the series as a whole pastiches militarist themes in action cinema, popular fiction and television).

FOXHOUND members are designated by codenames such as Sniper Wolf, Vulcan Raven and Psycho Mantis. These caricature-like names serve as important clues to the nature of the boss and the forms of movement required in order to overcome them. The salient features that define each boss' character model also often extend to inform the design of the levels in which Snake encounters them. The second battle against Sniper Wolf, a Kurdish sharpshooter, takes place in open space, but natural cover and flurries of snow obscure vision. It is impossible to close the distance to Sniper Wolf's position due to the superior range offered by her rifle and sharpshooter's training. Felicitous play requires long-range weapons that allow engagement beyond the limits of the game's default top-down screen by introducing a FPS point of view. Scopes and the anti-anxiety drug diazepam (which negates muscle and temperature-related tremors) are also indicated. Players can locate Sniper Wolf when she is in cover by observing her breath frosting in the cold air: apprehending and acting on these salient features amidst a complex environment is critical.

The boss battle consists of a particular performative multiplicity involving actions both by players controlling Snake (moving, acquiring the enemy, placing a shot, taking cover or otherwise avoiding return fire) and the apparatus (Sniper Wolf's breathing and patterns of behavior; the trembling of the screen that can be suppressed with diazepam). Compared to the super-powered threats he faces, Solid Snake may well seem an unlikely trump card for the most powerful government in the world. Like Gene in *God Hand*, however, Snake's superiority as the ultimate special operations operative ultimately lies not so much in the indestructibility of the cinematic action hero as in a relatively understated adaptability. Snake has the ability to take on potentially any form of movement from his overly specialized enemies: to adopt their salient features as his own.

Because Snake must be sent in 'naked' on every mission – that is, carrying no equipment that may serve to identify the government he works for – all the objects he does collect constitute an adaptation to the tactics and equipage of his enemies. Snake's transformation as a performative being across his progress through each game thus makes him

representative of gaming's metamorphic, eclectic bodies. He is a Proteus of the battlefield, able to metaphorically shed his skin, and acquire new ways of fighting. Snake's lack of overt performative salient features (aside from his status as a 'grizzled veteran' pulled from action cinema) contrast markedly with the committed techniques and doctrines by which his enemies make war. For Guimarães (2015), drawing on Kierkegaard, Snake shares an apocalyptic character with his foes: but where the game's bosses are 'knights of faith' wedded to one ethos, Snake is a 'knight of infinite resignation' capable of multifarious ways of making war.

This emphasis on salient features through unswerving ethical comportments and ultra-specialized fighting styles continues throughout the series: in Metal Gear Solid 2: Sons of Liberty, the Dead Cell group is recruited by a shadowy cabal precisely because 'they are the biggest collection of freaks outside FOXHOUND': each one a uniquely themed individual soldier with highly distinctive salient features. Each boss character applies a very 'special' type of force. The prequel Metal Gear Solid 3: Snake Eater features the Cobra Unit, the prototype special forces group, each member of which is themed after an emotion (The Fear, The Fury, The Sorrow and so on). In Metal Gear Solid 4 the serial aesthetic is taken to its logical conclusion, as the bosses of The Beauty and the Beast Squad - each a woman who has suffered a horrific battlefield trauma - combine the salient features of FOXHOUND, Dead Cell and Cobra Unit bosses from previous games in the series. With callsigns such as Crying Wolf, Raging Raven and Laughing Mantis, these characters echo the boss encounters as they have appeared across the Metal Gear Solid series, utilizing similarly key salient features to signify the performative criteria of judgment necessary for felicitous engagement.

Among the most famous *Metal Gear Solid* confrontations is the encounter with Psycho Mantis. Mantis is a psychic weapon, trained and traumatized by the KGB's Project Rasputin, who can read minds and manipulate objects telekinetically. Psycho Mantis demonstrates his powers by reading the game apparatus' memory and commenting on players' extradiegetic achievements and actions ('You have saved the game x times!'). Psycho Mantis reports players' salient features from the point of view of the apparatus itself: the degree to which their performances have been felicitous.

In order to defeat an opponent who can evade attacks by reading the mind of their opponents, players must switch the port that the controller is connected to - outfoxing the mind-reader by modifying the game

apparatus itself. The Snake-player-apparatus hybrid thus short circuits the figure of reversal that is Psycho Mantis' otherwise *instantaneous* reaction to players' inputs, thereby re-introducing lag and entropy into gaming's fantasies of an instantaneous feedback loop: much like the opposition between The Nameless One and The Transcendent One in *Planescape: Torment*, Psycho Mantis is a *reductio ad absurdum* of tautegory whereas Snake is a shape-shifting multiple – a performative allegoresis.³

In displaying access to real-world hardware and software, The Psycho Mantis boss fight thus aligns the unconscious (as Mantis' domain) and the videogame-as-apparatus. This breaking of the 'fourth wall' (Conway 2010) is self-referential shock somewhat similar to the end of CL49. When read alongside the Metal Gear series' complex attitudes to the body, Mantis' manipulation of the controller and ability to predictively react to player inputs points toward the ways in which gaming's serial aesthetics work beyond what Benjamin would term the 'optical-contemplative' sphere and come to take on a tactile quality that precedes conscious awareness or experience.⁴ Where most of the examples of serial aesthetics discussed thus far rely on semiotic, iconographic, textual, statistical or other processes, here what is indicated is a more embodied mode of experience in which human physiological processes and computational processes are muddled. These salient features do not just 'stop the gaze' but provide the basis for a wide range of feedback loops that imbricate players' physiological as well as cognitive capabilities.

One example of this is 'hitboxes' – the areas that define whether a game will register a collision with another body or entity. As noted above in regard to the gestures of videogame characters in the most fluidly animated games, there may be instances in which the animated movement of bodies and the hitboxes that govern interactions between them are askew: in such cases, felicitous play involves actively ignoring the visual representation and cues in favor of a 'tactile' form of engagement. Another example is 'lag' - a slowdown or desynchronization, possibly due to the distance over which components are communicating - which can cause the displayed state of the game to trail its computational state. In both of these cases, audio-visual apprehension of the forms of movement at work in the game can lead to infelicity. Although beginners tend to rely on the audio-visual information presented by the apparatus, an advanced player who orients their movements according to hitboxes rather than animations or who adjusts their play to account for lag is relying more on a tactile than an optical mode of apperception. This aspect of performativity in games must be addressed, as it means that the criteria of felicitous performance are not being disseminated semiotically but in a way that engages the body at an intimate, even unconscious, level.

More recent games also use force feedback controllers, touchscreens and technology such as the Kinect and Move to engage players in 'post-digital' (Jayemanne et al., 2016) performative ensembles with a more immediately evident tactile basis. However, intensive tactile engagement can be observed in more conventional videogames. Swalwell describes this tactile element in an ethnographic study:

At the start of *Grand Prix Legends*, John insisted I put his headphones on. Featuring classic vehicles from 1967, the sound of twelve Ferrari engines warming up (actually screaming is more accurate) on the grid was exhilarating and intensely visceral. I thought that I was beginning to appreciate some of the aesthetic pleasures of gaming. Then the race began and I found my body starting to move involuntarily in response to the fuel-rich sounds of 'my' car's engine, anticipating and responding to its gear changes. This was a surprise to me; I hadn't meant to do anything. (Swalwell 2008, 73)

Swalwell's primary response to many of the game's elements is physiological. In describing some of the pleasures of engaging as an observer of another's play, Swalwell also writes about her own visceral, embodied experience. This bodily, physiological type of mimesis is elicited by the intensity with which multiplicities of performances press themselves on players' attention. At the same time, certain embodied potentials are activated more than others as captured in the term 'hand-eye coordination'. Where the metamorphic bodies of *QWOP* and *God Hand* truly come into their own is in the transferal of caricatural contortion onto the ergonomic heresies of videogame play. Players are themselves made caricatural: segmented and distorted by integral salient features, modding their unconscious around split-second reactions, becoming themselves metamorphic.

Notes

 The difficulty of definitively judging the effects of caricature have affinities with Baudelaire's life and work, which both seem prone to associations of contradictoriness, ambiguity and a kind of 'seeing double' (Meltzer 2011). This has been explored by Susan Blood (1997) in relation to Sartre's ambiguous characterization of the poet's 'failure' and 'bad faith' (1950) and Bataille's response to Sartre (2012).

- 2. The situation of *Grand Theft Auto* with regard to race is however more complex than can be dealt with here for a range of critical responses, see Garrelts (ed). (2006).
- 3. As The Colonel, a simulation of military command structures in *Metal Gear Solid 2: Sons of Liberty* says apropos Snake: 'Forget about him! He was never part of the simulation!'
- 4. In later versions of *Metal Gear Solid*, released when force-feedback controllers were available, this connection with tactility is made explicit. Psycho Mantis tells players to place their motion-feedback-enabled controllers on the floor so that he can move it about with his 'telekinetic powers'.

Physical Wit: Games and the 'Tactile Unconscious'

SHOCK AND TACTILITY

The most viewed YouTuber in 2016, the garrulous Swede Felix Kjellberg or 'PewDiePie', is a gamer. Kjellberg's wild popularity can be confusing to many – a *Variety* writer called him the 'gibberish-spouting clown who's bringing Western civilization to a screeching halt' (Wallenstein 2013). Kjellberg's Let's Play videos have their own grammars and sources of pleasure that are quite distinct from those typically associated with videogames. Where e-sports and other forms of game streaming involve following the most felicitous instances of virtuoso play (Taylor 2009), in Kjellberg's case there seems to be considerable pleasure to be had in watching him fail. Kjellberg's initial burst of followers responded to his Let's Plays of horror games such as *Amnesia: The Dark Descent* in which he dies repeatedly, screaming in fear. As such, his videos often display a kind of aesthetics of infelicity.

Horror games have also been a key component in the videos of other popular YouTubers such as Markiplier (Mark Fischbach). In these videos, a window showing the YouTuber is embedded in the stream of their gameplay. Sudden 'jump-scares' (reminiscent of the jump cut in cinema) typical of such games cause the streamer to assume an almost caricatural state of shock. Simultaneously, the audience twist in their chairs, scream and jump in fright at the game's horrors – a deeply embodied reaction that is at once highly individual and distributed across vast geographical distances and complex temporal regimes.

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YouTube itself, seeking to consolidate and synthesize this new kind of celebrity, has produced a show simply called 'Scare PewDiePie' (YouTube Red 2016).¹ The show physically recreates the *mise-en-scene* of some of the most popular horror games that Kjellberg has streamed, sending him through a nightmarish set designed purely to terrify him. Furthermore, the YouTube Rewind year-end celebratory video for 2015 prominently featured popular streamers, such as 'Markiplier' and 'The Game Theorists', interacting with the Freddy Fazbear character from the jump-scare-based game *Five Night at Freddy's* (2015). With gaming, the moment of shock endemic to horror cinema has itself undergone a figure of reversal to become a spectacle in its own right.

The remarkable popular success of horror game streamers beyond typical videogame audiences shows that the uncanny force with which games operate is not confined to bodies 'on the screen' – videogames are often ascribed powerful capacities for generating embodied responses in players: increased heart rates, bodily contortions, fine motor responses, and a sense of identification with avatars and other virtual bodies. The jump-scare is a framing device that exhibits a powerful physiological effect not only on the bodies of individual players, but also on widely distributed observers.

As MacKenzie puts it, videogames' most impressive organizations of indeterminacy are 'precisely in the domain of the linkages between images and bodies... Cinema and television rely on a coincidence between the succession of images synthesized by the apparatus and the flux of perceptions experienced by the spectator. However, real-time computation seeks to interleave gesture within the circuit' (2006, 161). The feedback loops traced by gaming's framing devices activate the human body's capabilities (sensory, gestural and tactile) in new ways, constituting what MacKenzie, drawing on Agamben's concept of 'whatever-being' (1993), calls a new *physis* or 'whatever-body'. However, while granting MacKenzie the *expansion* of these tactile potentials in gaming, this chapter will explore another line of thinking that draws on Benjamin's critique of mass culture.

In the Artwork essay, Benjamin draws a connection between the cinematic technique of montage – as a type of framing device – and embodied response in the film audience. Rather than conceptualizing the process as an 'interleaving', which implies a distinct set of phenomena that are successively sorted with regard to one another while retaining autonomy, in this chapter I explore Benjamin's term 'innervation'. From this viewpoint, players' bodies are refocused and redeployed in videogaming, becoming new metamorphic bodies in their own right. The bodies of gamers are subject to 'framing devices' through interactions with the apparatus, as hinted in common gaming terms such as 'twitch reflexes', 'actions per minute' and 'hand-eye coordination'. In Benjamin's usage, the term 'innervation' implies a field from which the potentials of a multiplicity of bodies can be activated to create dynamic recompositions of spatial and temporal relations – a vast new '*Spielraum*' or 'room for play' operative at both individual and collective levels. The intensity with which performances and framing devices are interrelated in videogames engenders a qualitative shift in the nature of engagement. Framing devices no longer just stop the gaze, they also activate the hand (and, in many games, other potentials of the body). In gaming *trompe l'oeil* leads to *legerdemain; argot plastique* leads to *argot physique*: physical wit.

Where Aarseth's term 'aporia' implies something of a languid relation in which players can contemplatively wonder about how to proceed past a difficult point, the term 'epiphany' describes an experience that is punctual, arresting and immediate: a kind of shock. As is most evident in action and horror games, felicitous play often demands quick responses to rapidly evolving situations. In practice, the framing device often does not emerge from the game's performative multiplicity through a player's cognitive realization, but as an immediate demand for tactile response – as a sudden, punctual shock. The heterogeneity of videogame framing devices underwrites their engagement with the body. It is worth pointing out how different this line of thinking is to rhetorics of 'immersion': rather than projecting a sovereign consciousness into a passive virtual space, in distraction and shock capture and reorient the processes of subjectivation (Ambigore 1998). This provides the opportunity to historicize the tactile element of gaming. Where many incisive accounts of haptics and tactility draw on phenomenology (Keogh, forthcoming), these discussions tend to remain at the level of individual experience. Through the concept of shock and distraction, it is possible to develop a notion of videogame embodiment that acts at scale from individual to collective. The phenomenon of horror streaming can be interpreted as a *collective* process of innervation.

Modernity and Experience

As noted in Chapter 7, Baudelaire's appreciation of Philipon's *argot plastique* was related to the nineteenth-century cult of wit – the adroit seizure of a fleeting moment of arrest in the 'tireless breeze' of nineteenth-century caricature. Readers of caricature must develop the capacities necessary to interrelate two framing devices: the intelligible caption and the sensuous, distorted image. They must also recognize salient features (say, Napoleon's supposed diminutive stature and distinctive attire) in order to place each caricature in the appropriate series. This is a time-critical operation, as the new caricature replaces its antecedents only to be 'swept away' by its successors. The caricatural framing device thus works in two ways – as a link between two modes of signification and as a focusing element or salient feature within the stylistics and structure of the image itself.

Wit is often seen in a Wildean sense as the very model of superlative composure and self-control in dynamic and high stakes social situations. However, Baudelaire emphasizes another aspect to laughter, characterizing it as an involuntary response prompted by the fleeting charge of wit. This charge is a physiological shock which satanically distorts the features of the reader or audience – to the point of turning them in to a selfcaricature. The uncanny doubling effect is inconceivable from the unified and contemplative standpoint of either the wise Sage or the innocent Virginie, but an indispensable mechanism for a member of the crowd that is distracted and immersed in the news. Already in Baudelaire there is a model in which an immediate response, characterized primarily as physiological, is elicited by the relation between a fragmented or distorted metamorphic body and a text-based caption.

For Benjamin, technically reproducible media maximize potentials that were only latent in the tactile response to caricature. The cinematic apparatus records bodies as fragmented images and redeploys them in new conformations. Film and animation which focus on manner and gesture – such as in Chaplin and early Disney prior to his move towards naturalism (Leslie 2004) – resembles Baudelaire's *argot plastique*, while the collective laughter elicited is conceived as a response to shocks (Buck-Morss 1983, 1992; Newmark 1995). These phenomena were symptomatic of processes (such as urbanization, industrialization and mechanization) that in the nineteenth century had made the climate hostile for the reception of lyric poetry.

Such transformations had occasioned Baudelaire, as 'a traumatophile type', to produce poetry for a public whose daily tasks had rendered them 'sterilized' against poetic expression: 'Baudelaire made it his business to parry the shocks, no matter what their source, with his spiritual and physical self' (Benjamin 2006, 319). However this tactile element – the possibilities for artistic renderings of the shock experience to turn the observer into a kind of metamorphic body – was still somewhat submerged

in Baudelaire. In 'Central Park' Benjamin wonders 'How well can the image of the big city turn out when the inventory of its physical dangers are as incomplete as it is in Baudelaire?' (174). The tactile potentials latent in Baudelaire's accounts of wit, shock and caricature are truly freed only in the twentieth century. Two phenomena exemplify this development: Dada and the cinema.

Dada artists sought 'a ruthless annihilation of the aura of every object they produced' (119). Their techniques sought to aggressively minimize the distance necessary for gallery-goers to adopt a contemplative stance toward the artwork – that is, to produce a shock. This recalls Baudelaire's discussion of the bewilderment of an innocent soul before a caricature, and other currents in artistic production: 'Before a painting by Arp or a poem by August Stramm, it is impossible to take time for concentration and evaluation, as one can before a painting by Derain or a poem by Rilke' (119). By the early twentieth century a contemplative attitude to art could be construed as the hallmark of a degenerate bourgeoisie, in response to which 'Dadaist manifestations actually guaranteed a quite vehement distraction by making artworks the center of scandal ... turning the artwork into a missile. It jolted the viewer, taking on a tactile [taktisch] quality' (119). In this, Dada has a correlate in film, 'since the distracting element in film is also primarily tactile', having 'a percussive effect on the spectator. Film has freed the physical shock effect - which Dadaism had kept wrapped, as it were, inside the moral shock effect - from this wrapping' (119, original emphasis).

Benjamin's notion of the shock experience is drawn from a singular reading of Freud's Beyond the Pleasure Principle (2011). This reading is primarily developed in 'On Some Motifs in Baudelaire', although many of the observations made here were also explored in writings such as 'Central Park', 'A Little History of Photography' and 'Mickey Maus'. Buck-Morss elaborates Benjamin's concept of shock in the context of the history of medicine: mass industrialization and warfare exacted a horrific toll on the bodies of workers and soldiers of the nineteenth century, necessitating a project of anesthetics which was, in terms of the constitution of subjectivity, the equal and opposite reaction to that of aesthetics. Numbing the body to shocks, incisions, amputations, prostheses and so on was a correlate of the expansion of sensory modes and capacities occasioned by mass media, industry and culture. Consciousness had its own role to play: 'Walter Benjamin's understanding of modern experience is neurological. It centers on shock. Here, as seldom elsewhere, Benjamin relies on a specific Freudian insight ... that consciousness parries shock by preventing

it from penetrating deep enough to leave a permanent trace on memory' (Buck-Morss 1992, 16).

Benjamin seizes on Freud's distributed model of consciousness: 'If the 'center' of this system is not the brain, but on the body's surface, then subjectivity, far from bounded within the biological body, plays the role of mediator between inner and outer sensations, the images of perception and those of memory. For this reason, Freud situated consciousness on the surface of the body, decentered from the brain (which he was willing to view as nothing more than a large and evolved nerve ganglia)' (Buck-Morss 1992, 13). Where in previous work Freud had mainly discussed nervous 'energy' and its circulation within the organism, *Beyond the Pleasure Principle* extends its speculation to 'the protective shield against stimuli, the precarious boundary or rind of the bodily ego, a bit less of a carapace or armor and a bit more of a matrix or medium – a porous interface between the organism and the world that would allow for a great mobility and circulation of psychic energies' (Richter 2002).

In taking up Freud's discussion of shock, Benjamin retains the distorting effect of Baudelairean laughter, but the metamorphic effects on the subject are far more volatile such that they take on a properly physiological character. Shocks, with increased intensity and frequency, become endemic to the experience of modernity. In such an environment, consciousness and shock become integrally related. For Freud, consciousness acts as a shield that prevents potentially traumatizing stimuli from being inscribed as enduring memory traces (reminiscence or recollection, exemplified in literature by Proust's 'involuntary memory'). According to Benjamin, Freud's fundamental thought

is the assumption that 'emerging consciousness takes the place of the memory trace'...vestiges of memory are 'often most powerful and most enduring when the incident which left them behind was one that never entered consciousness.' Put in Proustian terms, this means that only what has not been experienced explicitly and consciously, what has not happened to the subject as an isolated experience [*Erlebnis*], can become a component of *mémoire involontaire*. (Benjamin 2006, 317)

Freud derived this idea from examining cases arising after 'severe mechanical accidents, railway crashes, and other life-threatening incidents' (Freud 2011, 55). 'The terrible war' (World War One) of recent memory had produced many traumatized soldiers whose valiant exploits on the battlefield manifested in physically and psychologically debilitating forms in peacetime. These repetitions (symptomatic of a traumatic event that had failed to enter full consciousness) could not, Freud argued, be attributed either to physiological wounds or to the repetitions characteristic of the pleasure principle.

In 'The Storyteller', Benjamin links consciousness' new task of parrying shock, forged against the horrors of imperialist warfare, to the decline of traditional experience: 'Wasn't it noticeable at the end of the war that men who returned from the battlefield had grown silent – not richer but poorer in communicable experience?' (Benjamin 2002, 143–144).² For Freud, traumatic neurosis occurred when the shield of consciousness failed in the face of overwhelming stimuli, leaving the shattering experience as a memory trace that the subject returned to again and again in spite of its traumatic character: a violation of the pleasure principle.³ Benjamin, characteristically, hijacks this already highly speculative Freudian idea for his own purposes.

On the one hand, Benjamin out-speculates Freud. The experience of shock becomes a diagnosis of modernity itself, insofar as it 'names the moment when the thinking subject can no longer be said to be completely in control or conscious of the actual events that necessarily comprise "his" own past' (Newmark 1995, 238). Benjamin insists that entropy be an integral consideration in the writing of history and the functions of memory. Modernity is not a period that might be neatly delimitable within a linear chronological history and instead is understood as event, as accident and catastrophe: a transformation, which never ceases to happen, in the structure of memory and the possibilities of historical experience. The faculty of memory itself becomes the locus of this event⁴ insofar as in the modern environment the task of parrying shock falls so heavily on 'the wakeful consciousness' that it can no longer reconcile itself with memory or communicable experience (*Erfahrung*) at either the personal level of reminiscence nor the collective level of tradition.

This incapacity lies in the 'time of hell', the root of modernity's obsessive generation of reconfigurable forms of temporal experience that are at best bespoke mixes of ceaseless novelty and repetition: fashion, advertising, media (Adorno 1991; Stallabrass 1996). The problem is not only deprivation but also overstimulation (or aesthetics and anesthetics as Buck-Morss argues): 'The reception of shocks is facilitated by training in coping with stimuli... this training devolves upon the wakeful consciousness, located in a part of the cortex which is 'so fraved by the effect of the stimulus' that it offers the most favorable

situation for the reception of stimuli' (Benjamin 2002, 318). Benjamin writes:

The greater the shock factor in particular impressions, the more vigilant consciousness has to be in screening stimuli; the more efficiently it does so, the less these impressions enter long experience [*Erfahrung*] and the more they correspond to the concept of isolated experience [*Erlebnis*]. Perhaps the special achievement of the shock defense is the way it assigns an incident a precise point in time in consciousness, at the cost of the integrity of the incident's contents. This would be a peak achievement of the intellect; it would turn the incident into an isolated experience. (Benjamin 2002, 319)

Consciousness assumes the task of punctually distinguishing events within increasingly intensive fluxes of experience. While this is to the detriment of *Erfahrung* or reminiscence, the conscious shock defense underwrites increasingly important capacities for locating events with precision in space and time: a capacity that is both engendered by and seized on by the technologies of reproducibility.

MASS AFFECT - HISTORICIZING MIMESIS AS PLAY

Benjamin does not, therefore, turn to psychoanalysis solely to present a narrative of decline. Conjoined with his *détournement* of Freud's clinically derived notion of shock, Benjamin asserts an apotropaic dimension of play. Play has the capacity to counter the damaging effects of shock because it is linked with a soteriological theory of repetition: 'the great law that presides over the rules and rhythms of the entire world of play' (Benjamin 2005, 120).

In *Beyond the Pleasure Principle* Freud (2011) famously construed his grandson's game of *Fort/da* – throwing away and then reeling in a toy – as an attempt to overcome the lack of control the child had over the comings and goings of his mother (and, in a later version of the game, the involvement of his father in the war as proxy for access to maternal attention). Freud locates play in a particular developmental stage, framing it as a behavior that is regressive when engaged in adult life. As Virno (Joseph 2005) and Hansen have elaborated, Benjamin's theory of play is a determined departure from this position:

repetition... is not only an effort to domesticate trauma, 'it is also a means of enjoying one's victories and triumphs over and over again, with total

intensity'. Freud dismisses repetition...as infantile whereas Benjamin 'retains the linkage of repetition and trauma – play as 'the transformation of a shattering experience into habit'' only to reconfigure it 'in terms of a utopian notion of repetition as difference.' (Hansen 2004, 27)

In Benjamin's account, the endemic shocks of modernity are thus in some sense countered or conditioned by the non-pejorative concept of play. This concept is non-pejorative because it is non-thermodynamic, and has the potential for repetition without some loss of 'energy'. This constitutes what Hansen terms a 'gamble with cinema'. Technical media are like play insofar as they aid in an analogous 'domestication of trauma' by deploying the resources of consciousness and repetition in new ways. But while repetition may be salutary at an individual level, what credentials play as a viable defense against industrial-scale trauma? And in what way is this linked to the concept of *Spielraum*, 'room-for-play,' that the Artwork essay claims is opened by mass media such as film and photography?

Hansen argues that what is at stake in Benjamin's argument becomes apparent in a synoptic view of the Artwork essay's development – the 'Ur-text', read across its several versions. This reveals Benjamin's search for a 'reinvention of experience – experience under erasure' (Hansen, 9): a new barbarism that would be adequate to the destructive tendencies of modernity. Where many readers have emphasized the dichotomy Benjamin establishes between aura and play in order to focus on the movement from the singular and unique to the multiple modalities of technical reproducibility, Hansen demonstrates that the seeming binary opposition between singular auratic artwork and multiplicity of technical images becomes more complicated when all versions of the Artwork essay are taken into account. In previous iterations of the text, the relation is historicized by the key terms 'innervation', 'mimesis' and 'optical unconscious'.

As with the concept of shock, for a full appreciation of these terms it is fruitful to range beyond the Artwork essay. Benjamin's writing about play is not limited to technical media, and he was fascinated by children's play, toys and gambling. He describes the physical disposition of gamblers in a deeply tactile manner. The key term is 'innervation', which refers to 'a non-destructive, mimetic incorporation of the world' (Hansen, 9). This total response to the heightened moment of risk, reflected in the gambler's compression of time – the tendency to place their bets at the very last moment – resembles ancient practices of divination and playing with chance. 'The moment of accelerated danger... is defined in the realm of

roulette by a specific temporality...the danger is not so much one of *losing* as of '*not winning*' (Hansen, 10). The individual felicities and exigencies of each play diminish before the more complex goals of staying in the game and, therefore, of cultivating the readiness to make a leap at the critical moment: that is, to comport oneself towards a performative multiplicity. Benjamin links 'the game of chance to the gambler's ability to seize the current of fate' and the ability to 'turn the threatening future into the fulfilled now' (10-11).

Innervation takes place in relation to what Benjamin terms the 'mimetic faculty'. Where in the final version of the Artwork essay, play and mass reproduction are formally distinct from aura, semblance and individual contemplation, in other texts Benjamin adumbrates a common origin: mimesis. 'The category of Spiel figures ... as an aesthetic alternative to Schein or semblance, in particular the concept of "beautiful semblance" (Hansen, 15), a concept which finds its fullest elaboration in Hegel and German Idealism.⁵ In the fragment "The Significance of Beautiful Semblance' Benjamin writes that, in this view, 'beauty is semblance - the sensuous appearance [Erscheinung] of an idea or the sensuous appearance of the true' (Benjamin 2002, 137). Referring to his study on *Elective* Affinities, he alleges that this conceptualization 'not only coarsened the original teaching of antiquity but relinquished its basis in experience', that ultimately 'resides in the aura'.⁶ Lacking this experiential basis, contemporary versions of auratic experience (the 'dead-end aestheticism' (Hansen, 15) of phantasmagoria and the cinematic star system) were ersatz remnants of a once glorious thought - but no less dangerous politically for that.

What was obscured in the focus on semblance, but 'is now brought clearly into the light', is 'the concept of play'. 'Semblance and play form an aesthetic polarity... This polarity must have a place in any definition of art... art is a perfecting mimesis. In mimesis, tightly interfolded like cotyledons, slumber the two aspects of art: semblance and play' (Benjamin 2002, 137). Mimesis for Benjamin⁷ is neither a slavish reproduction of an object of sense nor the sensuous appearance of an idea because it involves a performative transformation, '... the oldest form of imitation had only a single material to work with: the body of the mime himself. Dance and language, gestures of body and lips, are the earliest manifestations of mimesis' (127).

The mime not only invokes something that is absent (as in conventional models of signification) but also 'plays his subject'. This playful mimetic

relation is particularly evident in the case of toys, which are intensely polysemic (Agamben 1993a; Baudelaire 2001; Gombrich 1994) both as objects and in their effect on players:

Today we may perhaps hope that it will be possible to overcome the basic error – namely, the assumption that the imaginative content of a child's toys is what determines his playing; whereas in reality the opposite is true. A child wants to pull something, and so he becomes a horse; he wants to play with sand, and so he turns into a baker; he wants to hide, and so he turns into a robber or a policeman. (Benjamin 2005, 115)

Playful innervation is strongly performative, insofar as the signifying process is not limited to the interpretive efforts of a distal observer. It is an integral and integrating bond in which both players and objects become proximal and take on new characteristics through the mimetic faculty.

The Gamble with Cinema: From First to Second Technologies

Benjamin historicizes this mimetic constellation of play and semblance⁸ by distinguishing between the 'first technology' and the 'second technology'. The first technology was auratic: it sought ritualistically to control an overwhelmingly powerful natural world by 'making the maximum possible use of human beings', and is exemplified by human sacrifice. The second technology 'involves the human being as little as possible', and culminates in 'the remote-controlled aircraft which needs no human crew'. Hansen writes that 'where a contemporary reader might associate the [second technology] with the latest in American-style electronic warfare (drones, cruise missiles), Benjamin makes an amazing turn' (Hansen, 17) – a turn toward something like what I have here called 'performative multiplicities':

The results of the first technology are valid once and for all (it deals with irreparable lapse or sacrificial death, which holds good for eternity). The results of the second are wholly provisional (it operates by means of experiments and endlessly varied test procedures). The origin of the second technology lies at the point where, by an unconscious ruse, human beings first began to separate themselves from nature. It lies, in other words, in play. (Benjamin 2002, 107)

The multiple, playful, 'wholly provisional' procedures of the second technology which historically condition the Artwork essay's account of exhibition value also entail a shift in *telos*: 'The first technology really sought to master nature, whereas the second aims rather at an interplay between nature and humanity'.

The historical appearance of the vastly expanded technological *Spielraum* is thus the cipher and correlate of an unconscious ruse that effects a progressive abandonment of the enchantments of ritual and semblance: the belief that a single, decisive performance or apparatus can secure a total mastery of nature.⁹ This 'unconscious ruse' facilitates the advent of new forms of contingency that were structurally disavowed in the magical gestures of the first technology: new possibilities of performative failure, of 'going astray' (Chun 2011), new powers that are seized upon and fostered by the apparatuses of media – including, now, video-games. In this respect, the historical shift between first and second technologies corresponds to the account of the aura's decay in the Artwork essay: here too, a singular relation (the 'unique duration' encoded in the work's history) gives way to a plenitude of technically producible operations and perspectives.

Benjamin's gamble with cinema, then, is to historicize the concept of mimesis. His wager is that if the mimetic faculty is to remain capable of innervation (of a 'non-destructive...incorporation of the world') in so destructive and fragmenting an environment as the modern city, its playful aspect would necessarily eclipse that of semblance and find its basis in the second technology's playful 'once is as good as never' rather than the ritualistic 'once and for all' of the first.

In this light, film's importance is not to 'record' nature but to take up this interplay between humanity and nature and represent it, thus making the self-alienation of shock 'highly productive'. The 'prismatic work of film involves a *double* structure of technological mediation: it refracts a world that is already shaped by heteronomous structures that have become second nature to us' (Hansen, 22) as 'body- and imagespace collapse into one another' (Weigel, 1996). In this process, cinema is preceded by forms such as caricature, the phantasmagorias of Grandville and the ubiquity of graphics in advertising: 'In order to capture the masses' attention in a single glance, a work of art needs to produce sensational images, which consequently shocks the reader and the audience' (Kang 2009). The processes that generate 'heteronomous structures' and innervate them through playful mimesis occur at heterogeneous levels – from fragmented individual to dispersed collective.

It is thus the transformations he adduces in the mimetic faculty that underwrite Benjamin's analysis of mass media at the levels of society and species. Given the

dangerous tensions which technology and its consequences have engendered in the masses at large', cinema provides the possibility of 'collective laughter' as a 'preemptive and healing outbreak of mass psychosis'. The countless grotesque events consumed in films are a graphic indication of the dangers threatening mankind from the repressions implicit in civilization. American slapstick comedies and Disney films trigger a therapeutic release of unconscious energies. (Benjamin 2002, 118)

Slapstick comedy and animation provide metamorphic figures who, through eccentric comportment and mannerism in the former or radical figural plasticity – *argot plastique* – in the latter, take up caricature-like aesthetics to redeploy them at new scales and temporalities, effecting 'a cosmos of detonated physics'. The 'grim and mimetic humor' (Leslie 2004, 111) of Chaplin and Mickey Mouse arrives to help innervate the heteronomous structures (the new intensities of which are exemplified by the experience of shock) as an *optical unconscious*, at once embodying modernity's uneven developments and radically challenging 'anthropocentric hierarchies'.

The point here is not to adjudicate whether Benjamin's gamble with play and cinema in the Artwork essay 'came off' (especially in light of his own comments on gambling). Freud's view of play as infantilizing and ineffectual or Adorno's characterization of laughter in the cinema as 'mere petit-bourgeois sadism'¹⁰ certainly offer important countervailing perspectives. However, Benjamin himself elaborated similar concerns in essays such as 'The Storyteller' about the 'bungled reception of technology', and shared with other intellectuals a disappointment in Disney's gradual move towards naturalism and psychologism (Leslie 2004, 112). Certainly the playful games of the cinema did not prevent hyperinflation, virulent nationalism, colonialist repression and other factors leading to the political crises of Benjamin's own time.

By the same token, gaming has significant regressive political cultures and aesthetics (Jenson and de Castell 2013; Golding and Van Deventer 2016; Shaw 2015). However, if Hansen is right in her reconstruction of

the *Ur*-text of the Artwork essay, Benjamin's overall concern is not to valorize an aesthetics of play over that of semblance, but to historicize the dynamic valencies of the mimetic faculty. This involves thinking about the ways in which technological innervations occur at collective and political as well as individual scales. Play is not a royal road to answering the demands that art makes of the present, but an ongoing process of opening a future. A gamble implies the chance of failure, but for Benjamin this moment of accelerated danger and the catastrophic inadequacy of the attempts to realize the utopian potentialities of technology highlight the importance of play: as Hansen puts it brilliantly, 'the child reaching for the moon falls short, but nevertheless learns how to grasp'.

STRANGE DISTRACTORS: DISTRACTED HABITUATION AND THE OPTICAL UNCONSCIOUS

Shock is an extreme figure that expresses the fragmentation of experiential fields at all levels in modernity – social, sensual, psychic and most importantly here, tactile. Benjamin connects this to the power of montage in film, which is capable of both representing and instantiating an already-shattered world of heteronomous structures because it is itself organized by the shock-cut of montage. Film is thereby capable of innervating subjects and objects in a context in which they are already multiplicities. As such it is a critical locus for transformations between cult value and exhibition value, aura and masses, first technology and second technology, unique work and multiplicity – in short, between aura and play – that are the necessary preconditions for any possible processes of mimetic innervation in modernity.

This discussion can be linked to videogames by characterizing cinematic montage as a type of framing device. Each cut is a small shock – but one which is also a small training in the playful element of the mimetic faculty that modernity emphasizes over that of semblance. Videogames utilize computers to create many framing devices, thereby presenting players with multiple processes of innervation and maximizing the movement of the mimetic faculty towards play. However, videogame players are not 'shocked' by framing devices in action games such that they pause their engagement with the text in question – instead, they exhibit highly integrated responses to the game state.

Along with the transformations from unique aura to reproducible image and first to second technologies, there is a shift in emphasis from optical-contemplative to distracted-habitual modes of engagement. Cinema makes mimetic innervation possible at a mass level, leading to the formation of an 'optical unconscious'. But this notion of the unconscious is clearly different from the metaphysical unconscious of Romanticism or the psychologizing unconscious of Freud. What precise form does it take? To complete the connection between the concepts of play and the framing device, then, it is necessary to examine the specific form which Benjamin argues that mimetic innervation takes in response to the shock-cut of montage: distracted habituation.

In the Artwork essay Benjamin argues that with mass reproduction, 'The greatly increased mass of participants has produced a change in the mode of participation'. The tendency to decry this change is:

Clearly... the same ancient lament that the masses seek distraction whereas art demands concentration from the spectator... Distraction and concentration form polar opposites which may be stated as follows: A man who concentrates before a work of art is absorbed by it. He enters into this work of art the way legend tells of the Chinese painter when he viewed his finished painting. In contrast, the distracted mass absorbs the work of art. This is most obvious with regards to buildings. Architecture has always represented the work of art the reception of which is consummated by a collectivity in a state of distraction. (Benjamin 2002, 119)

This is not the attitude of a tourist before some great monument: a clear case of absorbed concentration. Rather, distraction is apparent in the ways that a public building such as a major train station is appropriated by the mass of people that move through it, who 'absorb' it in a tactile sense through distracted habituation and not attentiveness.

This sets up a dialectic between concentration (distal, optical reception) and distraction (proximal, tactile appropriation):

Buildings are appropriated in a twofold manner: by use and by perception—or rather, by touch and by sight...On the tactile side there is no counterpart to contemplation on the optical side. Tactile appropriation is accomplished not so much by attention as by habit. As regards architecture, habit determines to a large extent even optical reception. (Benjamin 2002, 120)

Audiences do not physically move through a film space as they might a train station. However, the way that film creates spatial and temporal

relations through montage engages a similar process of habituation, thereby activating audiences' playful mimetic capacities.

Volatilization and Recomposition

Bogard (2000) expands on Benjamin's work to think about contemporary media forms as 'The adjustment of conditions of perception and the formation of habits' or virtual 'architectures of the senses' (Ndalianis 2004). Videogames are exemplary in that they actively condition audiences into the mode of their reception in much the same way that a strange building becomes familiar, in a tactile way, over time.

In an important sense, tactile appropriation is not just another mode of reception on par with visual or optical appropriation. Rather, Benjamin argues, it constitutes the conditions of possibility for the latter, in the sense that habitualized behaviors which develop around the use of dwelling spaces, as routinized practices, *organize perception*. Architectural arrangements, in the social as much as the physical sense, determine what can and cannot be seen. (Bogard 2000, online, original emphasis)

Much as technical reproducibility frees the art object from a unique cult value to take on multiple exhibition values, so too the shift in emphasis from optical to tactile apperception entails fragmentation and repetition: 'a new mode of perception and, one would have to say, a new set of habits. Henceforth, everything is subjected to the test. Testing, that is, measuring, dividing out, selecting, ranking, sorting – becomes the order of the day, and this is manifest in a specific way of manipulating the image, of producing it in each and all of its multiple perspectives' (Bogard, online).

Cinema's capacity to engender distracted habituation leads Benjamin to locate cinema's social importance in the establishment of an 'equilibrium between human beings and the apparatus', adding historical specificity to the general claims made under the rubric of the mimetic faculty and its shift towards play. Film achieves this by revealing new modes of perception:

On the one hand, film furthers insight into the necessities governing our lives by its use of close-ups, by its accentuation of hidden details in familiar objects, and by its exploration of commonplace milieux through the ingenious guidance of the camera; on the other hand, it manages to assure us of a vast and unsuspected field of action [*Spielraum*]. (Benjamin 2002, 117)

This point about a space-for-play is immediately linked to the dynamic, shattering potentialities of montage that transform perception such that it is adequate to the emerging structures of the urban environment.

Composed as it is of discontinuities, heteronomies and montagist effects, the cinematic *Spielraum* is anything but a simple and homogeneous 'space'. Urbanization seemed a one-way street, but 'Then came film and exploded this prison-world with the dynamite of the split second so that now we can set off calmly on journeys of adventure among its farflung debris': Hansen's 'heteronomous structures'. The transformations of the camera effect epochal changes in apperception and action.

With the close-up, space expands; with slow motion, movement is extended. And just as enlargement not merely clarifies what we see indistinctly 'in any case', but brings to light entirely new structures of matter, slow motion not only reveals familiar aspects of movements, but discloses quite unknown aspects within them...Clearly it is another nature which speaks to the camera as opposed to the eye. 'Other' above all in the sense that a space informed by human consciousness gives way to a space informed by the unconscious. (117).

The unconscious *Spielraum*, as construed by Benjamin, is dialectical, involving both a piecing-together of the fragmented urban environment and a caricature-like focusing, distorting and emphasizing effect on the gestures and articulations of human bodies and perceptions (Miezkowski 2004). The metamorphic bodies on the screen have correlates in the responses, perceptions and habits of those brought in various ways to interact with the cinematic apparatus.

Benjamin illustrates this point through the testimony of the stage actor Pirandello, who felt as though he was fragmented, volatilized, by the cinematic apparatus – his exhibition value, so to speak, was maximized. In the course of numerous mechanized tests, he was potentially visible from any angle and at any scale. As Hansen writes:

The morcelization and recomposition of the actor's being, the welding of his body into image-space, requires on his part a total bodily presence of mind (not unlike that of the successful gambler). For the screen actor faces an unique kind of mechanized test, similar to the aptitude tests to which the capitalist labor process subjects individuals daily and without public accountability. (Hansen 2004, 24)

This 'volatilization' innervates the body of the actor at a fundamental level, shattering their performance across multiple takes so that it may be recombined at remote times and places. Benjamin compares the first technology's magical 'laying on of hands' to the penetration and rearrangement of the surgeon.

The animated, metamorphic figures of the early Disney (Leslie 2004) and the films of Chaplin are also exemplary. In 'The Formula In Which the Dialectical Structure of Film Finds Its Expression', Benjamin explicitly extends questions of continuity and difference prompted by mass media to the human body itself: 'The innovation of Chaplin's gestures is that he dissects the expressive movements of human beings into a series of minute innervations' (Benjamin 2002, 95). These metamorphic bodies represent processes rooted in the playful 'second technology' that, on the one hand, turn the actor's performance into a performative multiplicity, while on the other, allow the mass audience to experience the shock of cinematic montage and thereby train themselves in the newly necessary mimetic form of distracted habituation.

Through the photographic apparatus, habitual movements as simple as picking up a spoon or walking, as in the photographs of Marey and Muybridge, reveal to consciousness their points of articulation and their instantaneous physiognomic particularities – their salient features.

This is where the camera comes into play, with all its resources for swooping and rising, disrupting and isolating, stretching or compressing a sequence, enlarging or reducing an object. It is through the camera that we first discover the optical unconscious, just as we discover the instinctual unconscious through psychoanalysis. (Benjamin 2002, 117)

This optical unconscious brings to light integral movements of the body in a similar fashion to the way that psychoanalysis reads nervous tics and habitual repetitions as symptoms. Thus, the heteronomous structures of film do not simply construct spatiality in a narrowly-conceived 'architectural' sense – they also *produce* both individual and collective bodies as mimetic fields of innervation in their own right.

The shift towards playful rather than auratic mimesis reflects the multiple performances required by the ever-multiplying apparatuses of modern life. This is exemplified in media by the cinema of Benjamin's time and, arguably, by the videogame in ours. Only in games, the 'resources for swooping and rising, disrupting and isolating, stretching or compressing' are not staggered between actor and receptive audience but innervated in the far more labile temporal schemes afforded by the metamorphic bodies of players and the data manipulation and visualization capacities of computers. As in Benjamin's metaphor of the surgeon, players' bodies are integrally traversed and activated through their own salient features: where Pirandello's performances were reassembled before cinematic audiences, action videogame players are volatilized and recomposed across a more immediate set of apparatuses, frenetic framing devices and tighter feedback loops.

The Body Eclectic – Oryx and Crake and Gaming's Tactile Unconscious

Just as Benjamin saw potentials that were latent in Baudelaire's poetry, however, there is a need to advance on ideas that remain latent in Benjamin's cinema-focused discussion. This is hinted at in the term 'optical unconscious' and the way that Benjamin reads 'the globe-trotting Mickey Mouse' as 'a figure of collective dream'. The references to visual regimes and dreaming suggest that Benjamin did not introduce his insights concerning the tactile aspect of shock-distraction directly into his speculations on the collective forms of habituation. However, in accordance with Agamben's assertion that the uncanny 'invades daily life with increasing force' (which I have here read through the specific case of the framing device), the shock experience described by Benjamin has become far more commonplace. In gaming, the 'shock' that facilitates habituation to tactility and precision in time and space – the integral framing device – is far from shocking in the sense that Dada or Surrealist art was for early twentieth-century audiences.

If cinema 'freed' the tactile aspect of montagist arrangements of multiple frames that were only latent in Baudelaire's poetry of the city, then, the integral framing devices and force-feedback mechanisms of contemporary gaming effect a further intensification of distracted habituation. The mimetic alignment of perceptual-physiological impulses with the performances of the apparatus accelerates such that even the distance implied by the term 'optical unconscious' undergoes a process of biopolitical minimization (MacKenzie 2006; Apperley and Clemens 2015). The quantitative increase in the number and intensity of processes that videogames utilize when compared to the cinema or photography of the early twentieth century is such that it is necessary to introduce a qualitative distinction into Benjamin's concept of the *Spielraum*. The gestural interfaces, languages and integral framing devices that facilitate the generation and dissolution of collective bodies – the gamer's *argot physique* – indicate that gaming is symptomatic of the development of a *tactile unconscious*.

This has important ramifications for thinking through how Benjamin's ideas about the tactility of cinematic montage can be expanded into a videogame context. This point will be explored through a reading of Margaret Atwood's novel *Oryx and Crake* (2003). This novel directly implicates gaming in transformations of tactile experience by situating a videogame called 'Extinctathon' as a *mise-en-abyme* within the text. The novel's structure also traces a figure of reversal that focuses on a moment of shock. This *mise-en-abyme* works within the text continues the gallery scene arc that included *The Cabinet of Cornelis van der Geest, The Unknown Masterpiece* and *CL49*: only here, the 'gallery' in question is actually a videogame.

Oryx and Crake presents the story of two near-future gamers called Jimmy and Glenn (the latter known mostly by his gaming handle, Crake – an Australian bird that has become extinct by the futuristic time of the narrative). The Dadaist intent to shock bourgeois sensibilities would be completely lost on these two: in between gaming sessions they casually surf websites ranging from live feeds of executions to child pornography. The novel has a Pynchon-esque recursive structure, oscillating around an apocalyptic event designed by Crake that destroyed human civilization. Jimmy alone survived this event due to a tacit vaccination by Crake, although he was reduced to a precarious remnant who refers to himself as Snowman. His task is to shepherd the genetically engineered beings Crake created to survive humanity, as they inherit the world.

The narrative has two threads. The first relates Snowman's efforts to survive the post-apocalyptic world and his relationship with the genetically engineered 'Children of Crake', told in present tense. The second relates Snowman's tattered memories as Jimmy in the time leading up to the apocalypse, told in past tense. As the novel progresses Snowman seeks to return to Paradice, the institute where the apocalyptic event was concocted, told in tandem with the tale of Jimmy's life which inexorably leads towards the same (geographical) point – the institute where Crake developed the apocalypse. Thus, although the two narrative threads are displaced temporally, they resonate and intertwine with each other across the progression of the text. As both Jimmy and Snowman reach the same point in space, the story ends like *CL49* in a moment of suspended decision: 'Zero hour, Snowman thinks. Time to go'.

The society in which Jimmy and Crake grow up is stratified between elite corporate knowledge workers who live in gated communities (such as the HealthWyzer compound where both Jimmy and Crake are the sons of biological researchers) and *pleebland* where consumers live. An asphyxiated biosphere is no longer able to support the population, and so artificial lifeforms – 'rakunks', 'pigoons', 'ChickieNobs' – have been created to feed the masses, who also rely on biochemical products of various kinds.

Jimmy has a knack for history and literature, whereas Crake exhibits an early genius for science (and thinks of art in purely utilitarian terms, as a sexual display to attract potential mates (OC, 168)). The games they play and the channels they surf – collectively referred to as 'brainfrizz' (OC, 77) – emblematize the retreat of Jimmy's ethos and the waxing of Crake's, thereby mediating the shift from first to second technologies. One game, Blood and Roses, involves trading human achievements (the theory of relativity, *Crime and Punishment, Madam Bovary*) for atrocities (The Hundred Years War, The Trail of Tears).

The exchange rates – one *Mona Lisa* equaled Bergen-Belsen, one Armenian genocide equaled the *Ninth Symphony* plus three Great Pyramids – were suggested, but there was room for haggling. To do this you needed to know the numbers – the total number of corpses for the atrocities, the latest open-market price for the artworks; or, if the artworks had been stolen, the amount paid out by the insurance policy. It was a wicked game. (*OC*, 79)

Through Blood and Roses, videogaming is associated both with a wholesale retreat of cultural value and with a dulling of the shock effect, both of which have receded into a vertiginous miasma of exchange values. This is a familiar narrative of cultural decline, with gaming exemplifying the wider processes of reification and commodification that characterize the near-future society in which Jimmy and Crake live. The most important game the two play, however, is introduced by Crake: 'Extinctathon, an interactive biofreak masterlore game he'd found on the Web. *EXTINCTATHON, Monitored*

by MaddAddam. Adam named the living animals, MaddAddam names the dead ones. Do you want to play? That was what came up when you logged in' (OC, 80).

Extinctathon involved identifying a vanished species chosen by a challenger in as few steps as possible. The species 'would be some bioform that had kakked out within the past fifty years – no T-Rex, no roc, no dodo, and points off for getting the time frame wrong. Then you'd narrow it down...when last seen, and what had snuffed it. (Pollution, habitat destruction, credulous morons who thought that eating its horn would give them a boner)' (OC, 80–81). Like the *mise-en-abyme* of *The Courier's Tragedy* within the parodic detective narrative of *CL49*, the setting-in-place of this game within Oryx and Crake traces a temporal margin. Where *The Courier's Tragedy* links to past tragic genres (classical and early modern), Extinctathon draws together the time of the reader with a future in which currently endangered animals have died out.

The chronological margin traced by the Extinctathon videogame *mise-en-abyme* is located squarely within the difference between our current situation and the near-future posited in the novel: its metric for felicitous play is measured in the species that are endangered or eliminated in this interval. The usernames chosen by various challengers – 'Komodo, Rhino, Manatee, Hippocampus Ramulosus' – are as of this writing threatened but still extant, so the suggestion is that they have been wiped out by the time of the novel due to industrial processes and by simple consumption by 'morons' for no good reason whatsoever. None of these processes require science-fiction; they are ingrained in our own contemporary mode of destruction. In *Oryx and Crake* the apocalypse is not just uncomfortably close: the most talented and valued members of society, represented by Crake, are actively racing towards it.

The game was particularly difficult, even if one had 'the MaddAddam printout of every extinct species', simply because of the sheer number of possible answers. The list was 'a couple of hundred pages of fine print and filled with obscure bugs, weeds, and frogs nobody had ever heard of.

Nobody except, it seemed, the Extinctathon Grandmasters, who had brains like search engines.

You always knew when you were playing one of those because a little Coelacanth symbol would come up on the screen. *Coelacanth. Prehistoric*

deep-sea fish, long supposed extinct until specimens found in mid-twentieth. Present status unknown. Extinctathon was nothing if not informative. (81)

Average players are very different from the Grandmasters. Even though plant and fungal species are included in the game, the 'codenames' selected by normal players are dominated by 'charismatic megafauna' (Entwistle and Dunstone 2000; Skibins et al. 2013): species that appeal to the public and attract disproportionate conservation resources. That is, the extinction of these species is viewed as shocking in a way that the general 'Anthropocene'¹¹ (Povinelli 2013) rate of extinction is not.

By contrast, the MaddAddam Extinctathon Grandmasters – to which title Jimmy suspects that Crake aspires 'not because it meant anything but just because it was there' – are represented by the Coelacanth, an animal whose brief appearance to science was a sign of alternate potentials, of things that may have been. Where the efforts of the public players are directed towards staving off potentially traumatic losses that tacitly legitimize the general rate of extinction, the Grandmasters face the shock of extinction squarely: they traverse the many extinct life-forms 'like search engines'. Both teens are highly involved in the game for a time, even referring to each other by their codenames in everyday life (Jimmy is another Australian bird, 'Thickney'). Jimmy eventually tires of the game – Crake, however, continues to go by his Extinctathon codename.

Jimmy and Crake are like Extinctathon Grandmasters with regard to the brainfrizz culture, distractedly surfing the parts of the media landscape that would outrage most other people, 'So they'd roll a few joints and smoke them while watching the executions and the porn – the body parts moving around the screen in slow motion...If you switched back and forth fast, it all came to seem like the same event' (86). As they take in this performative montage of metamorphic bodies, however, there arises one image that shocks them, arresting their flow. While surfing the HottTotts website, which 'claimed to show real sex tourists, filmed while doing things they'd be put in jail for in their home countries' (89), the two are struck by the image of a particular little girl: 'This was how the two of them first saw Oryx...

Oryx paused in her activities. She smiled a hard little smile that made her appear much older, and wiped the whipped cream from her mouth. Then she looked over her shoulder and right into the eyes of the viewer – right

into Jimmy's eyes, into the secret person inside him. *I see you*, that look said. *I see you watching. I know you. I know what you want.*

Crake pushed the reverse, then the freeze, then the download...he saved that one moment, the moment Oryx looked. (90-91)

In the face of this heteronomous structure, Jimmy demonstrates a perhaps surprising capacity for shock: Oryx's returned gaze looks into 'the secret person inside him'. On the other hand, Crake exhibits a control over the reversibility of this critical image which foreshadows his genius for bioengineering – the capacity to transform and modify bodies at an integral level. In a situation which may be considered uniformly shocking sin against video time – two characters viewing paedophilia – it is possible to draw a distinction based in their reaction to a figure of reversal. Where Jimmy is shocked by the returned gaze, Crake remains in control through a greater capacity for distraction.

After graduating from high school Jimmy attends a decrepit liberal arts college. Crake is a student at the prestigious Watson-Crick Institute. Crake invites his old friend to visit the luxurious and high-tech campus. Here Crake informs Jimmy that the biotechnology companies such as HealthWyzer have been seeding their treatments with new pathogens in order to create demand in a world where most major medical problems have long been solved. He suspects that his father discovered this and was murdered by the company before he could blow the whistle.

Crake never stopped playing Extinctathon, and in fact had ended up as a Grandmaster. At this level, it is revealed that MaddAddam are something more than diehard gamers. Their true motto is: *Adam named the animals. MaddAddam customizes them.* MaddAddam are in fact bioterrorists who have been responsible for mutating proprietary bioforms to create anarchistic effects. Crake explains, anodyne: 'I thought at first they were just another crazy Animal Liberation org. But there's more to it than that. I think they're after the machinery. They're after the whole system, they want to shut it down' (217). Jimmy warns Crake to leave the game, but the latter is both curious about the group and confident in his ability to avoid detection by the corporations he works for.

Years later Jimmy ends up as an unhappy advertising sloganeer. He learns that his mother, who had fled HealthWyzer as a dissident when he was a child, has been located and executed. Both Jimmy and Crake have had their family trees summarily truncated by corporate imperatives. Crake, who has become a leading researcher at the fabulously wealthy and powerful RejoovenEsense company, visits him. As a kind of wake he takes Jimmy out to the pleeblands. For the dwellers in the sheltered compounds, the term 'masses' takes on a newly literal meaning:

Crake had stuck a needle in Jimmy's arm – an all-purpose, short-term vaccine he'd cooked himself. The pleeblands, he said, were a giant Petri dish: a lot of guck and contagious plasm got spread around there. If you grew up surrounded by it you were more or less immune, unless a new bioform came raging through; but if you were from the compounds and you set foot in the pleebs, you were a feast. It was like having a big sign on your forehead that said, Eat Me'. (OC, 287)

The processes of exchange between bodies on the open market have acquired Carollian connotations. This is consumer culture in a tailspin, where the producer risks becoming the consumed. It is in the pleeblands, Crake says, that 'our stuff turns to gold...

People come here from all over the world – they shop around. Gender, sexual orientation, height, color of skin and eyes – it's all on order, it can all be done or redone. You have no idea how much money changes hands on this one street alone. (OC, 288-289)

Crake offers Jimmy a job at Rejoov running the advertising campaign for a new wonder pill called BlyssPluss. The pill was the ultimate lifestyle commodity which would immunize against all known STIs (sexually transmitted infection) while acting as a potent aphrodisiac and a prophylactic. Energy without entropy: the ultimate technophilia.

Arriving at Paradice, the secluded research institute that Crake heads, Jimmy suddenly realizes where all the workers come from:

Each of the staff had a name tag with block lettering – one or two words only. BLACK RHINO. WHITE SEDGE. IVORY-BILLED WOODPECKER. POLAR BEAR. INDIAN TIGER. LOTIS BLUE. SWIFT FOX.

'The names,' he said to Crake. 'You raided Extinctathon!'

'It's more than the names,' said Crake. 'These people *are* Extinctathon. They're all Grandmasters. What you're looking at is MaddAddam, the cream of the crop'. (*OC*, 298)

Crake has gathered the brilliant bioterrorist gamers from under the noses of the corporations to staff his Paradice project. This both saved them from liquidation by vengeful corporations and ensured the autonomy of his research from the prying eyes of its investors.

Crake takes Jimmy to the heart of the Paradice compound, where there is a large terrarium containing the real fruits of the project.

This was his first view of the Crakers. They were naked but not like the Noodie News: there was no self-consciousness, none at all. At first he couldn't believe them, they were so beautiful. Black, yellow, white, brown, all available skin colours. Each individual was exquisite. 'Are they robots or what?' he said.

'You know how they've got floor models, in furniture stores?' said Crake. 'Yeah?

'These are the floor models'. (OC, 302)

The BlyssPluss pill was merely the precursor to the Paradice project, represented by the 'Crakers', who 'look like retouched fashion photos, or ads for a high-priced workout program'. Where prevailing genetic manipulation methods were slapdash and involved many potential side-effects, 'with the Paradice method, there would be ninety-nine percent accuracy. Whole populations could be created that would have preselected characteristics' (*OC*, 304). The most powerful clients, world and business leaders, could have constituencies built to order as if they were playing a vast strategy game.

Jimmy notes uneasily that the Crakers are unlikely best sellers as a model population. The sample had 'UV-resistant skin, a built-in insect repellent, an unprecedented ability to digest unrefined plant material. As for immunity from microbes, what had until now been done with drugs would soon be innate' (OC, 304). They did not make racial distinctions on the basis of skin tone, 'their sexuality was not a constant torment to them, not a cloud of turbulent hormones', they did not compete for territory and were perfectly adapted for their lush terrarium habitat: 'They would have no need to invent any harmful symbolisms, such as kingdoms, icons, gods, or money'. Crake explains that, as floor models, 'They represent the art of the possible' (305).

What really arrests Jimmy, though, is the same thing that shocked him into self-consciousness when he and Crake were teenagers: the girl from the HottTotts website. Astonishingly, this very same person, now a grown woman, had been sent along by 'Student Services' when Crake had given them a list of traits he wanted in a 'sexual companion'. Crake had hired her as a liaison with pleeblands sex workers for trials of BlyssPluss. Her MaddAddam codename was Oryx, and her role is teaching the Crakers how to identify and deal with various plants and animals, 'Simple concepts, no metaphysics'.

When BlyssPluss is released, it turns out to be MaddAddam's super weapon: it wipes out the human race and transforms the environment into a 'hot bioform' (a phrase that could have come out of *Minecraft*), to which the Crakers are perfectly adapted. Jimmy confronts Crake, who is with Oryx. Crake informs Jimmy that the shot he was given on the trip to the pleeblands was, in fact, the only vaccine to the BlyssPluss virus. Crake then kills Oryx, saying 'I'm counting on you.' Jimmy shoots Crake dead, leaving him with only with his last promise to Oryx – to shepherd the Children of Crake during their first steps into a world made for them. As he remembers these events, Snowman and the Crakers under his care arrive back at the ruins of Paradice. Snowman sees smoke and, investigating, finds three surviving humans. The novel ends with him weighing up if they are friend or foe, and moving toward action – although what kind of action remains indeterminate.

From Brainfrizz to Para-dice

Considered as a linear story, *Oryx and Crake* could well be seen as a mad scientist tale. Several factors complicate such a reading. Crake's characterization, for example, is not that of a pulp villain. Given that the capitalist mode of production was well on the way to total ecological collapse (295) as well as the revelations about corporate conspiracies (designer epidemics, mass sterilization, murder) throughout the book, Crake catalyzed a death drive that was well underway regardless. As such, the problem he faces squarely is (as Hansen says of Benjamin's gamblers) not so much 'not winning as *not losing*'. More important here than any moralizing condemnation of Crake as a character, then, is the way that the trope of gaming weaves together the narrative threads, themes and temporal schemes of the novel: unlike Oedipa Maas, Crake does not hesitate to project a world. If Jimmy is like Oedipa, Crake is like Roland Driblette – or Frenhofer. And Extinctathon is like *The Courier's Tragedy* or *La Noiseuse*.

As noted, Extinctathon deals with species that are presently endangered and are extinct by the time of the narrative. The game thus acts as a *mise*- *en-abyme*, a temporal index closely intertwining the time of the story with that of the reader. This relation is brought into focus by the indeterminacy of the book's ending. Extinctathon draws a distinction between the majority of its players, who are named for vanished 'charismatic species' (the favorite *memento mori* of the eco-conscious), and the MaddAddam Grandmasters whose brilliance at the game is the cipher of their recognition of the true horror of the Anthropocene era. The Grandmasters are represented by the coelacanth, an animal that, like the Trystero in *CL49*, signifies a very precarious and paradoxical mode of existence. Both titular characters, Oryx and Crake, derive their names from Extinctathon. Both Jimmy and Snowman move towards Paradice, a locus in space and time which is only possible because of the MaddAddam Grandmasters' years of play, and whose name combines the end of history, the prefix 'para-', and the aleatory cast of the dice: many gambles, all existing in parallel.

The tropes of multiple worlds and bodily metamorphosis can be related as 'double refractions' of the heteronomous structures Hansen reads, via Benjamin's gamble with cinema, into contemporary culture – only now, the mediating term is not cinema but *gaming*. Oryx and Crake's use of the videogame Extinctathon as a *mise-en-abyme*, and the MaddAddam gamers' centrality to the metamorphic bodies of the Crakers, indicates the need to further historicize Benjamin's optical unconscious as a *tactile unconscious*.

Jimmy and Crake's beginnings as gamers take place in the separated compounds, with their access to the outside pleeblands restricted to an omnivorous, distracted consumption of all sorts of media. Both Blood and Roses and Extinctathon would seem to be based around hypermediate framing devices and optical-contemplative modes of experience - bigpicture strategy rather than immersive action games. The Paradice project is also an environment protected against the outside world, this time by a biologically derived membrane which repairs itself as soon as it is damaged. Oryx, first as prepubescent image and then in person as adult, has an effect on Jimmy much like that of the passing widow on Baudelaire - a returned gaze occasioning an erotic shock that cuts through accumulated layers of defensive habituation to audio-visual mass culture. She has the same effect on Crake, whose immunity to any notion of romantic love or sentiment of any kind seems otherwise absolute. Crake is able, however, to retain a minimal kind of control. Furthermore, the military-industrial complex for which he eventually comes to work is able to conjure Oryx up from the simple list of salient features he provides.

Crucially, Oryx has precisely the opposite effect on the Children of Crake, who are calmly able to assimilate her teachings on how to survive in the 'hot bioform' by dealing with the genetically engineered animals called 'Children of Oryx'. The Crakers are the beings who most successfully survive the apocalyptic event which shocks the entire planetary system. This event violently splits Snowman from Jimmy but also mediates their re-convergence in Paradice across the text's overall asynchronous structure and trajectory. The figure of Oryx, then, mediates the melange of bodies and scenes of Jimmy's distracted Brainfrizz and the tactile post-apocalyptic potentials explored by Snowman and the Crakers.

The quotidian apocalypse that finally comes to term in *Oryx and Crake* thus effects a distinction between two mimetic and mnemo-technic systems. The first is Jimmy himself, who as Snowman represents a system in terminal decay. Jimmy is a student of a degraded humanist tradition who becomes a purveyor of traduced and mortified language: an advertiser. Snowman, abominable, 'existing and not existing, flickering at the edge of blizzards' (8) is a remnant whose name can only indicate something of a rapidly diminishing lifespan in a hot bioform. Snowman chants obscure words (although after humanity, all words are obscure) and clings to memories of Oryx to keep himself sane.

The second mnemo-technical system is the Children of Crake. They 'represent the art of the possible' who could in theory possess any somatic salient feature conceivable by a given customer: however these are floor models that survive *as potential* the specific consumer desires to which they supposedly appeal. The result of the many gaming sessions and revolutionary toils of the MaddAddam Extinctathon Grandmasters, they are able to dwell in the present of the hot bioform through the gifts of the novel's titular figures. Snowman's superannuated shock response is contrasted with the new making-labile of mimetic and physiological capacities represented by the Crakers.

This opens up an alternate, Benjaminian reading of Crake's apocalypsepolitics to that proposed by strongly moralizing critics such as DiMarco (2005) who advance Jimmy as a protagonist with glowing environmentalist credentials. What such readings gloss over is Jimmy's utter abjection as a political actor. His approach to politics is exhausted past a very occasional voluntarism, a general lassitude punctuated by useless bursts of anger. When he expresses a desire to kill the man responsible for her childhood exploitation, for example, Oryx merely laughs contemptuously 'Oh Jimmy, you would like it better maybe if we all starved to death?' (119). Crake's actions *interrupt* the ongoing catastrophe that is the 'current state of affairs'. Adam, the namer of all things, becomes MaddAddam when the Extinctathon game tasks him with naming all the species which no longer exist. Stack overflow; very deep recursion. Displacing Jimmy or Snowman as observer-narrators opens up a less literalist reading that sees Crake not primarily as environmental criminal (DiMarco's malevolent *homo faber*) but as a *gamer* (*homo ludens*). The text itself, after all, prefers his gamer handle to his real name. The temporal range of the Extinctathon game's *mise-en-abyme* (the game's rules center on extinction events currently underway) sutures the time of the novel with that of the reader: the novel's climactic Paradice event is already happening, the Extinctathon has already begun in earnest and the aesthetics of infelicity run the show. This resonates with the structural movement of both Jimmy and Snowman towards Paradice and the Pynchon-esque recursive ending.

Paradice, perhaps referring to multiple throws of the dice occurring in parallel – writ large, *gaming* – mediates between Jimmy/Snowman and the Children of Crake, serving as a mutual origin and destination. It thus stands between two regimes of shock and the mimetic faculty; two reactions to Oryx as *A une passante*; two ways of innervating the potentially shocking heteronomous structures of the environment based on 'second nature'. This second nature, Paradice, is comprised of the work – the multiplicity of performances – of the Extinctathon Grandmasters. Jimmy (whose defense against shock is voyeuristic and narcissistic intertextuality) exhibits the progressive retreat or weakening of Benjamin's notion of distracted habituation and its attendant cinematic optical unconscious. The Crakers (lacking 'metaphysics', adapted at a bodily level to the ultimate ramifications of the Extinctathon game) emblematize the art of the possible, a newly intensive field of mimetic innervation – a literary figuration of videogaming's tactile unconscious.

The text thus allegorizes the transitions from the 'universe of detonated physics' that is the preserve of the 'globe-spanning Micky Maus' to the integral and hypermediate framing devices of gaming which generalize Pirandello's experience of volatilization by the apparatus across entire populations. *Oryx and Crake* is a parable of the apotropaic potentialities of gaming in the face of contemporary biopolitics and hyper-exploitation. This tactile unconscious that represents a new Benjaminian gamble, and another 'vastly expanded' *Spielraum*. If Crake is assessed a villain, then, it is important to heed Pynchon's warning and wonder whether 'sins against videogame time' will need to be radically redefined.

The Body Eclectic: From Individual Player to Collective-as-Body

This process of habituation is akin to the 'appropriation' of a building such as a train station, by a mass public over time in an increasingly unconscious manner: it accounts for both individual and collective bodies that form what could be termed 'bodies eclectic'. Where players typically approach a new action game in a more optical-contemplative mode, as they become more habituated to the forms of movement afforded by a particular design their performances become increasingly unconscious – players 'inhabit' the space and (if there is one) the virtual body of the avatar in an increasingly distracted mode. The relation between the press of a button and a leaping Mario certainly constitutes a set of 'heteronomous structures' that grant the minute innervations discovered by the cinema's testing gaze additional regimes of expressivity. Both virtual and actual bodies come into new constellations insofar as they are prone to a similar kind of 'volatilization' to that reported by Pirandello before the film apparatus.

Certain parts of the body and gestural forms (as is implicit, for example, in the term 'hand-eye-coordination', but are becoming increasingly complex with the wider dissemination of gestural and touchscreen technologies) become focal points for the articulation of each game's performative multiplicity, almost as if the bodies of players are themselves composed of caricature-like salient features. These processes compose what Grossberg (1997) termed the videogame 'rhythmic body' and generate the 'kinaes-thetic pleasure' noted by Swalwell: they tend to maximize consciousness' capacities for the precise placement of objects in space and time at the expense of their value for reminiscence.

This view is neither formalist nor player-centric because the process of innervation cuts across such binaries. For a distracted mode of apperception, the realist and anti-realist elements that structure many games (in the terms developed in Chapter 5, integral and hypermediate framing devices) can be theorized as different heteronomous structures in a given game's process of innervation. There is no hard-and-fast contradiction between immersive virtual reality and anomalous rates of movement, interface elements, glitches, level breaks, lag, impossible equipment loads and other non-realistic elements that together comprise spatial and temporal experience in games. Instead, it is the muddle of heteronomous structures that sets the scene for players' mimetic innervation, and it is this process of innervation that accounts for the various types of embodied experience that videogames have to offer: optical or tactile, 2D or 3D (or dimensions beyond), diegetic or non-diegetic, play or narrative. Mimesis in gaming is not simply the re-presentation of objects of experience through graphical 'realism', but a process by which players adapt to heteronomous structures through play.

Rapid movement from framing device to framing device, each of which constitutes a kind of 'shock', demands innervation in a distracted mode. Integral framing devices, salient features and anterior motives maximize the tactile potentials of distraction, and their prevalence in action games display a preoccupation with shock: from the explosive figures of *Dead Space* or *Mortal Kombat* (Midway 1992) to the percussive sound design and obsession with firearms of the military FPS.¹² The most influential of these is of course *Doom*, which relished in the imagery of infernal punishment to link FPS gameplay with the trope of the dismembered, inside-out body (Jayemanne 2007). Unlike the optical unconscious, constituted by an Eisensteinian-style montage in which each cut had the effect of a shock and an arrest between powerful images, gaming innervates a tactile unconscious which rapidly moves among framing devices as they emerge from the game's welter of detail, picking out and reacting to those that are critical to felicitous play.¹³

Mimesis, in the historicized form developed by Benjamin, offers important advantages over notions such as 'immersion' or 'flow' that are commonly used in discussing how videogames engender tactile experience. Thinking in terms of distracted habituation makes no assumption that players are somehow 'projecting' themselves from phenomenal space into the game world through the agency of the avatar; nor does it inscribe 'intrinsic motivations' to any kind of play behavior. As Giddings (2009) has pointed out, in Super Monkey Ball players do not identify with the titular monkey so much as the platform that they tilt in order to guide the ball - and yet, this is a highly tactile game in which players' bodies tend to twist and turn as they habituate themselves to the game's forms of movement. Most importantly, concepts such as flow or immersion tend to involve blanket assumptions about human physiological responses: Benjamin's account of a mimetic faculty shifting towards the pole of play allows the historicized approach to the rise of videogaming that can make significant distinctions between media forms.

Innervation provides a way of conceptualizing the non-human powers of videogame avatars, which Won et al. (2015) describe as 'homuncular flexibility'. This research showed that people are capable of adjusting to markedly different corporeal and virtual setups from normal experience, such as the existence of a third virtual 'arm'. Whether there is an avatar or not, and whether or not it corresponds to or departs from a 'human' body, it is possible to conceptualize gaming's tactile engagements as specific heteronomous structures which provide particular challenges for mimetic habituation.¹⁴ This is particularly important in accounting for how players are able to react to discrepancies in the display state of a game such as lag or a glitch. These are clearly not cases of optical engagement, as the display may be actively infelicitous. Instead, the lagging system can be conceived as a heteronomous structure, and the felicitous play that makes use of it as a process of innervation.

Just as importantly, the account works at scale. If, as Benjamin argues, 'the collective is a body too', then mimetic innervation can be said to occur across populations – the entire audience of a particular game is involved in a collective appropriation of certain gestures. This is particularly important in multiplayer scenarios where such coordination is necessary – players in MMORPG (Massively multiplayer online role playing game) raids, for example, must be well versed in the basic gestural commands of the game so that they can synchronize (see Chapter 10) their activities effectively. In this way, they form a 'body' as a kind of mimetic field of *collective* innervation: massively multiplayer mimesis.

The importance of accounting for this collective form of innervation is acutely evident in the emerging exotic videogame performances made possible by streaming technologies and networked publics: PewDiePie's followers and their collective aesthetics of infelicity and shock can now be registered as engaging in a collective process of innervation. 'Scare PewDiePie' and its aesthetics of infelicity show that even those who do not respond to the specific apparatuses of the videogame nevertheless respond to the spectacle of shock in its current forms. The show and the popularity of horror game streaming indicates that the gaming ethos is no longer solely the preserve of 'gamers'. As spectacle, it is also a resource similar to Mickey Maus and Chaplin cinema of Benjamin's day in which people recognize and mimetically respond to contemporary demands to undertake mechanized tests with little public accountability, and thereby make their own self-alienation 'highly productive'.¹⁵ Yet stranger forms of collective innervation are emerging in gaming culture. The most striking examples are 'crowdsourced' performances, such as 'Twitch Plays *Pokémon*'. Billed as a 'social experiment', Twitch Plays *Pokémon* was a script which turned the chat function of a *Pokémon* stream into a way to input commands into the game session as it was being streamed: potentially, as many players could be contributing to the performance as the chat log could handle. Lindsey (2015) has tracked the formation of unique forms of playful culture and interaction that resulted from this collective performance. The anonymous Australian developer of the script cited *Pokémon*'s turn-based structure, as well as the difficulty of *not* making progress in the game (i.e., the game's design generally moved forward through simple anterior motives, even in the face of infelicitous performances) as key reasons the experiment could work. However, the presence of trolls as well as the sheer chaos of the Twitch.tv chat meant that advancement was slow compared to the performance of a single player. Nevertheless, Twitch completed the game with the total participation of over a million accounts.

'Twitch Plays *Dark Souls*', by contrast, was quite a different proposition even though it utilized a very similar script and streaming technology. In many ways, it showed the acumen of the original designer in choosing a turn-based game to debut this system of performance. *Dark Souls*' fearsome reputation – a world filled with deadly enemies and tramps – suggested that the game was a tough challenge for any sort of player, let alone a massively distributed one such as a Twitch chat stream. However, the most significant infelicity that the collective body of the 'Twitch Plays *Dark Souls*' encountered was, quite simply, continuous movement. Where the turn-based structure of *Pokémon* made it possible for the collective body to navigate the game's performative multiplicity, the analog aspects of *Dark Souls* meant that the game was unplayable given the large and conflicting number of inputs occurring in the chat: the end result was the player character rolling continuously into a corner, occasionally futilely swinging their weapon. It was the performative equivalent of a DDoS attack.

While eventually a voting system was instituted that paused the game and aggregated the inputs into a felicitous performance, something of the exuberance of the original concept was lost: the continuous had become discrete, and the fearsome *Dark Souls* had become more like the genial *Pokémon*. This was one case in which the power of technology, as represented by the game's performative multiplicity, seemed small compared to a sheerly 'human' sub-lime: the aporia resulted from a weird place between the game's inability and the mass of players' overwhelming performance. What is clear from this

example, however, is that the 'volatilization' that Pirandello describes before the cinematic apparatus has become hugely generalized, even if the 'recomposition' remains extremely problematic. Benjamin's theory of collective mimesis adds a powerful means of understanding such performances and, in the shift from semblance to play, historicizing gaming as a whole.

Notes

- 1. This show was itself cancelled when Kjellberg went too far in his attempts to shock and attracted charges of anti-semitism in 2017 (Spangler 2017).
- 2. Benjamin (2002, 144) writes that 'What poured out in the flood of war books ten years later was anything but experience that can be shared orally. And there was nothing remarkable about that. For never has experience been more thoroughly belied than strategic experience was belied by tactical warfare, economic experience by inflation, bodily experience by mechanical warfare, moral experience by those in power. A generation that had gone to school on horse-drawn streetcars now stood under the open sky in a land-scape where nothing remained unchanged but the clouds and, beneath those clouds, in a force field of destructive torrents and explosions, the tiny, fragile human body'.
- 3. Freud (2011, 92) speculated that this compulsion to repeat was linked to a 'death drive': a tendency towards homeostasis not through various stages of development, but in the possibility of a single catastrophic stroke. He argued that the death drive was more primal than the pleasure principle's exchanges of stimulus and response, growth and reconstitution. The death drive sees all life's vicissitudes from the point of view of their inevitable dissolution: 'in fact, Eros *emerges* from Thanatos' (Faulkner 2005).
- 4. 'Memory is not an instrument for surveying the past but its theater. It is the medium of past experience, just as the earth is the medium in which dead cities lie buried. He who seeks to approach his own buried past must conduct himself like a man digging' (Benjamin 2004, 576).
- 5. Interestingly, Agamben (1993b, 135) note Hegel's uneasy sense of a polarity animating the apparent unity of the intelligible and the sensuous in his account of the symbol, linked to his distrust of early Romantic irony.
- 6. This would also be a pejorative comparison to the authentic (*qua* classical antiquity) beauty of Goethe's feminine figures such as Ottilie, Mignon and Helena (Benjamin 2004, 352).
- Benjamin's correspondence with Auerbach—as well as the latter's book on Dante (Auerbach 2007)—may well have influenced his development of the concept of mimesis in the 1930s (Barck 1992).
- 8. Hansen links this line of thinking to the 'anthropological materialism' that was particularly unpalatable to Horkheimer and downplayed in the Artwork

essay's most familiar version, vetted extensively as it was by the Frankfurt School. This is an element that her reading seeks to recover and valorize.

- 9. This was a vision to which fascism clung insofar as it tried to tie blood-andsoil ideology with technical progress; deploying the 'spiral of aesthetics and anaesthetics' and the autotelic images of the 'self-made man' and the 'armored, mechanized body' (Buck-Morss, 38).
- 10. See also Adorno's remarks in his essay 'On the Fetish Character in Music and the Regression of Listening', often read as a rejoinder to Benjamin's approach to mass culture: 'Regressive listeners behave like children' (Adorno 1991, 51).
- 11. "One of the most worrying features of the Great Acceleration is biodiversity loss,' Professor Steffen said. 'Species extinction is currently running 100 to 1000 times faster than background levels, and will increase further this century...When humans look back...the Anthropocene will probably represent one of the six biggest extinctions in our planet's history.' This would put the Anthropocene on a par with the event that wiped out the dinosaurs (Falcon-Lang 2011).
- 12. 'Humankind, which once, in Homer, was an object of contemplation for the Olympian gods, has now become one for itself. Its self-alienation has reached the point where it can experience its own annihilation as a supreme aesthetic pleasure' (Benjamin 2002, 122). These potentials are not always annexed to violent imagery however: driving games, rhythm action games and dancing games all use heteronomous structures which enter into intense relations with human gesture.
- 13. Auratic forms of mimesis do however persist in gaming culture: more contemplative genres such as the RPG and phenomena such as fan fiction and cosplay exhibit the enduring importance of semblance.
- 14. The term 'avatar' is quite flattering, but 'homunculus' may be more fitting. Gaming's heteronomous structures scatter machinic and human components in emergent conformations, and it would be interesting to visualize a 'performative homunculus' that is something like the 'cortical' or 'somatosensory' homunculus by which neuroscientists display the distribution of bodily inputs within the brain.
- 15. The somewhat unimaginative nature of the professionally produced 'Scare PewDiePie', as well as the exasperation of figures of Kjellberg and Fischbach to demands that they continue to play horror games indicates that processes of both individual and collective innervation have taken place: on the one hand, the streamers have become habituated to the typical tactics of horror games such as the jump-scare and are no longer susceptible to them, while on the other hand their audiences have begun to look for other pleasures and sources of engagement.

Performative Multiplicities: A Method For Analysing Videogame Performances

The Nip and the Byte: Analog and Digital Performances in Videogames

A Performative Theory of Gaming

The critique, in the opening chapter of this book, of Austin's approach to parasitic utterances has led to a lengthy discussion that doubtless confirms the wisdom of his decision to put the entire question to one side. Two major issues were identified in terms of adapting Austin's work to videogames: his exclusion of parasitic acts, and the assumption that speech acts occur in discrete units. Previous chapters explored the ways in which 'expanding' the concept of infelicity can bring new light to these issues, yielding a concept of the performative multiplicity. It is now time to take a fresh look at How to Do Things With Words from the point of view developed in the preceding chapters: essentially, modding Austin's work with media and literary theory. Drawing together the key threads discussed so far, such as the performative multiplicity, the framing device and tactile habituation, this chapter will outline a theory of videogame performativity. This theory is not typological but generative and comparative: rather than placing performances into pre-defined categories, it facilitates the analysis of how performances arise from the multiplicity of the play situation - thereby helping scholarly and critical processes of category-formation.

In fact, Austin's later lectures offer considerable resources for complicating the concept of performative felicity. Austin's pragmatism is not just for show: he is level-headed enough to suspend the terms that anchor his discussion once they lead to impasse: '... we were not always going to find

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it easy to distinguish performative utterances from constative, and it therefore seemed expedient to go farther back for a while to fundamentals – to consider from the ground up how many senses there are in which to say something *is* to do something, or *in* saying something we do something, and even *by* saying something we do something' (Austin, 94). Rather than assuming there are only two distinct ways in which we formulate and judge utterances (as veridical or performative) or trying to examine what such statements are, Austin proposes a broad and nuanced spectrum of performative utterances, of which the intent to describe is one particular variety.

It is fair to say, however, that the resulting typology – which includes unwieldy terms such as 'verdictives' and 'behabitives' – lacks the invigorating brio of the earlier lectures. These classes of action certainly seem remote from or at best tangential to the matter of videogame performances. Of greater interest is Austin's shift of attention from what we do with words to precisely *how* we go about doing those things (94–105). He nominates three classes: locutionary acts (in which to say something *is* to do something), illocutionary acts (where *in* saying something we do something) and perlocutionary acts (achieved *by* saying something).

To perform a locutionary act is to produce intelligible sounds: they are the basis of all speech acts. Illocutionary acts are locutions that carry a certain force *in* themselves because they structurally conform to a convention accepted by a particular speech community. Illocutions are the major class of utterance that Austin is interested in. A third variety, perlocutionary acts, may achieve some given aim *by* the performance of various locutions and illocutions.

Warning someone, for example, may be either an illocution or a perlocution. A warning can be carried out *in* the act of uttering a mutually recognized formula: saying 'I warn you...' or 'You are on notice...' would thus be an illocutionary act. A warning could however also be issued by relating a parable or set of arguments, a horrified expression, or simply by shouting 'Look out!' None of these latter actions are formal warnings which make use of a given structure, but the act of warning someone is still carried out *by* their performance – they are perlocutionary acts. What is particularly promising here is that, in leaving aside what is being done (i.e., presupposing that uptake is unproblematic and that it is a simple given which discrete action is being performed) and considering instead *how* the action is achieved, Austin also implicitly moves past his assumptions that only one action

occurs at a time – perlocutionary acts, by definition, may be composed of any number of 'particular' or 'discrete' performances.

Performing with Denotative and Connotative Signs

No doubt the supposed discreteness of illocutionary acts is a major reason why Austin directed the bulk of his efforts to analyzing this type of performative utterance: illocutionary acts work precisely because form and performance are very closely aligned, forming a distinctive unit of performance. In a videogame context, it is possible to use the concept of both illocutionary and perlocutionary acts in a new way by mapping it onto framing devices and semicirc theory.

Myers (2003) argues that there are, from a semiotic point of view, two major videogame genres: action and adventure. Action games present a field populated with visual icons and usually proceed with the gestural manipulation of controllers in real time. Adventure games, at least in their earliest form, are textual and wait for the player's own textual input, usually via a keyboard. 'The *action* genre is characterized by its use of first-order, denotative signs and the signification process that gives denotative signs values and meanings... The *adventure* genre is characterized by the use of second-order, connotative signs' (Myers 2003, 28). The semiotics of videogames has parallels with the two kinds of speech act nominated by Austin. Players make Mario jump (a first-order, denotative sign) *in* the press of a button; whereas equipping a new weapon in *Final Fantasy VII* involves selecting the item from a menu (a list of second-order, connotative signs).

According to Myers, the adventure game was eventually the generic basis for more complex roleplaying games: 'Other common game genres – simulation, war game, strategy – have histories long predating the history of electronic games, yet are, among electronic games, semiotically derivative of the action and role-playing genres.' In this scheme, videogame genres are designated by their tendency to use signs that either denote objects to be manipulated (action) or connote their context as functions within the game's own logic (adventure). Myers illustrates his conception of genre with reference to two foundational games: *Spacewar* and *ADVENT*.

In *Spacewar*, the schematic triangles, dots and circle *denote* spaceships, stars and a planet, respectively. This *denotation* is audio-graphical, first order and continuously valid wherever they may appear in the game space:

integral framing devices would be a special case of these denotative signs in games. In text adventures, conversely, signs are conveyed through prose and objects are valued differently according to where players happen to be in the game – a key may unlock a particular door, for example, or a rope allow a chasm to be crossed. The forms of movement are far more specific: the performative felicity of such signs is *connoted* by the discursive context of the particular play situation, and they tend to work through hypermediate framing devices (pop-up menus, overlays, HUDs and so on).

First-order or denotative signs such as *Spacewar*'s Needle and Wedge 'are', audio-visually and ludically speaking, what they signify. Secondorder or connotative signifiers play off one another contextually within the game's own logical structures: in *Colossal Cave Adventure* entering the 'magic word' Xyzzy typically results in the response 'Nothing happens', but in the right circumstances can teleport the player between two rooms. Similarly, where in *Spacewar* a player could move in any direction or fire a weapon regardless of their position (although this may end the game), the contextual actions of *ADVENT* and its ilk are determined by the situation at hand – a set of options for further movement will be offered as compass points, and any attempted movement in another direction results in the phrase 'You can't go that way.' Objects and relations tend to be designated by words rather than images, and their functions vary by specific location.

Illudic and Perludic Acts: Linking Semiosis and Performativity

Austin's typology of speech acts and Myers' discussion of videogame semiotics can be linked to integral and hypermediate framing devices (Chapter 5) to form a preliminary theory of videogame performances. All performances – whether enacted by a human or a computer – in a game consist at the most basic level of *ludic acts*, for which to do something *is* to interact with a game apparatus. Ludic acts, like Austin's locutions, are the building blocks of the other classes in the theory. There is no direct analogy for this type of performance in Myers' semiotic account, but rather than dealing with denoted or connoted existents or relations within the game world, ludic acts are associated with the tactile unconscious of gesture and the play situation itself – the rhythms, mess, mangle, muddle or multiplicity of play that conditions any particular performance.

Illudic acts are performances *in* which something playful is done. They are associated with denotative semiosis. These performances tend towards tactility and an identification of audio-visual experience with the field of action, the FPS probably being the most representative genre. They possess high levels of isomorphy or responsivity between animation and gesture – ranging from the 2D plane of *Super Mario Brothers* to the real-time 3D environment of a contemporary shooter. They tend to utilize integral framing devices to convey structures of performative judgment, and distracted habituation to these framing devices is crucial to felicitous play.

Perludic acts are performances by which something playful is done. They are primarily associated with connotative semiotic processes and hypermediate framing devices. Perludic acts tend to be informed more by optical-contemplative than tactile-distracted experience as they require the gauging of systems of logic, abstraction or connotation: networks of signs that may not be reliant on graphical representation at all (as is the case in text adventure games). Players may perform the ludic act of selecting an icon or make a menu selection, which will trigger a set of performances within the game world. This perludic act may be composed of an ensemble of ludic and illudic acts: instructing a Sim to tidy their room or make a meal results in the performance of a set of interlinked domestic activities. Perludic acts can occur at any scale: defending an objective by chasing off all opponents may be one perludic act, but a whole performance of a game is also a kind of perludic act. Perludic acts may be encoded by the game apparatus as structures of felicity (beating a level), by players themselves (a Kick Me run in God Hand), or by researchers interested in player behavior (how many players make a certain decision in a given playthrough).

This is not to imply that perludic acts are necessarily performed at a slower tempo than illudic acts (although they tend to be). Professional players of games such as *Starcraft* are liable to perform hundreds of actions per minute (apm), each of which is a perludic act issued to control a unit or group of units, across multiple hypermediate frames, through on-screen icons, mouse gestures and hotkeys. Felicitous play demands a very high number of perludic acts within any given span of game time. This is a level of interaction at least as frenetic as in an action 'twitch game', and indicates the provisional associations between types of framing device and modes of engagement: it is possible to become habituated to any apparatus, but broad tendencies can nevertheless be identified.

Performative utterance	Semiosis	Videogame performance	Primary generic association
Locution	Unconscious	Ludic Act	The Gaming Situation
Illocution	Iconic-	Illudic Act	Action/FPS
	Denotative		
Perlocution	Connotative	Perludic Act	Adventure/RPG

 Table 9.1
 Performance in speech and videogames – a typology

The typology of performances is based on the following correspondences (Table 9.1):

As noted, the association of framing devices with videogame genres, like semiotic processes, are only weakly correlative. As gaming has become more complex and techniques have been adopted as part of increasingly diverse design lexicons and sensibilities various semiotic and tactile processes have become more liberally distributed across genres. Games are, as has been argued throughout this book, highly heterogeneous. An early example is the role of keys in *Doom*: where the majority of players' activity is illudic gunplay and movement, the use of colored keys to access various parts of the level is connotative and perludic. The performative approach is valuable here because it is capable of making fine distinctions across many game designs.

An example of this complex mixture of performances is *Deus Ex: Mankind Divided*, wherein the camera is for the most part mapped onto the viewpoint of the player character in a classic FPS viewpoint. The majority of performances in this state are illudic acts: moving the avatar about and aiming the character's currently equipped weapon using a mouse or controller analog stick, and discharging that weapon with a mouse click or a trigger pull. However, when the character approaches a wall or low partition, a hypermediate sign pops up indicating a new form of performance – the perludic act of taking cover (Fig. 9.1). As shown in the figure, it is possible for the PC to dash from cover to cover by pressing X. This is a perludic act which digitalizes the space, but it is possible for players to return to illudic movement at any time during this dash by pressing a direction with the left thumb stick:

Where the space is thus for the most part continuous in the standard FPS style, stealth gameplay is facilitated by several discontinuous either/or positions involving various types of cover. Taking advantage of this, players can be sure that their character is in cover or out of sight to enemies approaching from a certain angle. The typical continuous regime



Fig. 9.1 Deus Ex: Mankind divided

of illudic performance, then, is interspersed with perludic acts and framing devices crucial to felicitous play.

The 'same' act takes different forms in different games: jumping is illudic in *Super Mario Brothers 3* (Nintendo, 1985) as Mario leaps in response to the player pressing the appropriate button, whereas in *Resident Evil 4* the jump is a vault to clear a low wall, the button for which is indicated by a context-sensitive (connotative) icon on the screen. Illudic performances can flow into the achievement of a longer-term perludic act, such as in the hacking minigames of *System Shock 2* (Looking Glass Studios and Irrational Games, 1999) and *Deus Ex: Mankind Divided*. By manipulating nodes in a series of illudic acts, players can achieve the perludic act of hacking a computer.

Even within a single game, an act can vary between illudic and perludic forms of performative judgment: in *Fallout 4* (Bethesda Game Studios, 2015) players can either use their weapons 'denotatively', in the style of an action FPS where they must aim manually, or activate a RPG-type system in which potential targets are designated connotatively and the chances of success are represented statistically. In *Borderlands 2* or *Dark Souls*, players perform an illudic act to hit a target, but the amount of damage done is also partially perludic: calculated according to a set of RPG-style statistics depending on the respective character's class, equipment, level and other factors such as weak points on the target's body. Analyzing games in terms of illudic and perludic acts thus enables a variegated and nuanced account of forms of movement that constitute the experiences of videogame spaces and times. This typology of performance finds a critical method for discerning how structures of felicity guide the process of play in videogames.

The Gordian Not: Analog and Digital Communication

However, Austin's criteria of *in* and *by* are not the most rigorous one might hope for. To add precision to this theory, it is possible to turn to a field in which the concept of play has been of central importance: non-mechanistic cybernetics. In cybernetics, a system and its environment are mutually defined by constant exchange, a succession of states which describes a constitutively temporal movement. Cybernetic theory has been elaborated by Gregory Bateson and Anthony Wilden in a particularly pertinent manner for humanistic inquiry. This thinking can help in clarifying the performative acts discussed above by giving a precise language for identifying how particular illudic and perludic performances emerge from the performative multiplicity of a game.

Bateson describes a visit to the zoo during which he devised a theory of play and fantasy while observing young animals at play. Rather than biting, the animal nips its playmate. Bateson reasoned that the relationship between the nip and the bite was of particular significance: the nip resembled the bite only with the added message 'this is play':

It was evident, even to the human observer, that the sequence as a whole was not combat...Now, this phenomenon, play, could only occur if the participant organisms were capable to some degree of meta-communication, *i.e.*, of exchanging signals which would carry the message 'this is play'.

The nip thus *denotes* the bite through a relation of resemblance, albeit with an additional meaning of non-earnestness. Bateson summarizes the overall message of the nip: 'These actions in which we now engage do not denote what those actions *for which they stand* would denote'.

For Bateson, a metacommunication is an action, statement or proposition, implicit or explicit, which refers to another communication to which it bears a structural similarity – just as in animal play there are two levels of communication occurring in the one action of the nip. 'The nip is both a nip and a bite, but a nip-bite rather than a bite-bite' (Clarke 2008). The metacommunication 'This is play' is thus a message about a message: it frames the content of another communication. Bateson goes on to assert that the relation he has identified in play is intimately connected to other behavioral categories including threat, deception, fantasy and hysteria:

Very brief analysis of childhood behavior shows that such combinations as histrionic play, bluff, playful threat, teasing play in response to threat, histrionic threat and so on form together a single total complex of phenomena. And such adult phenomena as gambling and playing with risk have their roots in the combination of threat and play. It is evident also that not only threat but the reciprocal of threat – the behavior of the threatened individual – are a part of this complex. It is probable that not only histrionics but also spectatorship should be included within this field. (Bateson, 181)

Bateson thus stakes out a very audacious field for this theory. Play is an intermediate phase fostering the emergence of a secondary type of communication (the nip) out of an act that bears an isomorphic similarity to a primary one (the bite), and is thus integral to the emergence of all sign-exchange in culture.

Wilden has developed Bateson's theory through the terms analog and digital. The digital is defined by the introduction of distinctions into an analog continuum. Digitalization of an analog continuum occurs in such varied circumstances as when an ovum divides along an axis of symmetry that is undefined until a point of contact is made by a spermatozoon; when continuous speech sounds are sorted into phonemes; or when we count in integers without traversing the infinite numbers between them. The digital delineates 'discrete elements with well-defined boundaries' and takes the form either/or, while the analog is both/and. A transistor regulates a continuous current into either on or off and thus represents the digital binary of 0 and 1 that form the basis of semiconductor chip computing. Digitalization requires a rule about what distinctions constitute an element of the series, and a practical agent to instantiate such distinctions. Analog differences subject to positive feedback (in which the difference is reintroduced to a system as a subsequent input) can become digital oppositions and identities, while those subject to negative feedback can be compensated for by the system, possibly resulting in metastasis or some other equilibrium state.

The nip is, structurally speaking, isomorphic with the bite. It is an interpretive frame that does not separate two spaces, but paradoxically maps one form of movement onto another in a single gesture. Insofar as both metacommunication and parasitism signify the message 'This is play', Bateson opens the same ludic field that Austin hedges out of his discussion. Wilden's parsing of this field in terms of primary and secondary digitalization, then, allows us to explicate the 'peculiar way' in which videogame framing devices are *productively* 'hollow and void'.

The nip introduces a digital *distinction* to the analog message of the bite. Wilden identifies two levels of digitalization in Bateson's description of play. The first, observed in the nip, folds both metacommunication and communication into one action or sign. The second case involves negation proper as it depends upon the setting of distinct boundaries: 'The introduction of the second-level sign into a world of first-level signs and signals detaches communication from existence as such and paves the way for the arbitrary combination of the discrete element in the syntagm' (Wilden 1972, 173). The second level of the digital presupposes an ability to say 'not', to negate: in order to isolate discrete elements it must be possible to separate 'A' from 'non-A'. As this involves the assembly of elements to form communicative messages, it is possible to describe the digital in terms of syntax.

The inclusion of multiple levels within the same digital message involves an analytic paradox – a class of problems that in general can be termed paradoxes of self-reference. Such problems arise when, for example, the poet Epimenides asserts that 'All Cretans are liars' when he himself is from Crete; when Kierkegaard confesses that he wants to be like Abraham even though he knows this to be perfectly unachievable; and in Bertrand Russell's famed meditation on whether the class of all classes that are not members of themselves is a member of itself. The indeterminacies of *The Unknown Masterpiece, CL49* and *rhyparography* are also examples of these paradoxes. All of these problems are to a degree double-bound and must oscillate between either and or, yes and no, affirmative and negative.

The primary source of such paradoxes is self-referentiality: the inclusion of a rule about communication within the message it communicates about. A paradox arises because when he refers to Cretans, Epimenides also refers to himself. An observer attempting to analyze the statement cannot decide between the two possibilities, is double-bound like Buridan's ass by the impossibility of choosing between them. However, it should be remembered that we refer to ourselves constantly in everyday life – some more than others, of course – and people don't (always) collapse into fear and trembling when faced with this paradox.

Levels of Communication

To summarize, Wilden outlines three levels or modes of communication. First, the analog level in which an act is directly mapped onto its signification, such as the bite. Second, a level in which a relation of isomorphy constitutes a *primary digitalization*. The nip resembles the bite, but also conveys the metacommunication 'This is play'. At this level play is one of the first instances (in both Bateson's account of the animal and the psychoanalytic account of the child) of communicating about communication. Third, a *secondary digitalization* in which discrete elements or signs are defined through negation. These discrete elements can be selected and combined in complex ways. Both primary and secondary digital modes involve paradoxes of self-reference, but each is maintained at a different level.

To clarify the distinction between primary and secondary digitalization, Wilden has recourse to Beyond the Pleasure Principle. As noted in Chapter 8, Freud writes about his grandson alternately throwing away and then pulling back a toy on a string. Each throw was accompanied by an 'o-o-o', while each act of reeling back was 'a'. Freud identified these utterances with the German *Fort*! (gone) and *da*! (here). Wilden is careful to point out here that 'the phonemes uttered by Freud's grandson do not even involve a phonemic opposition in the proper phonological sense, for they are in fact 'holophrastic messages', not simple sounds... the holophrastic messages of the 'o' and 'a' can be said to represent an appeal and a refusal - but not as yet anything like a negation.' These 'holophrastic messages' are later compared by Wilden with Malinowski's 'phatic communion' (Richards and Ogden 1989) in which a sign refers not to the content of a communicative act but to the system of communication itself. This is a characteristic it shares with the nip, which metacommunicates that the exchange is to be taken as part of the system of play rather than as an earnest bite.

Advancing on this homology with Bateson's theory, Wilden draws another parallel between the primary and secondary processes in Freud.

the primary process seeks to establish...an identity of PERCEPTION, and the secondary process, an identity of THOUGHT...'normal' and 'neurotic'

language both maintain the distinction between the (iconic) thing-presentations of the unconscious and the (digital) word-presentations of language. The same is not true for the language of 'schizophrenia', nor is it true of fetishism. Here there operates a refusal of an (iconic) identity of perception, whereas the denegation which negates an identity of thought (ie. discourse) involves digital processes. (153)

Freud identifies two distinct kinds of situations in which contradictions are entertained within the psychic system. For iconic, fetishistic or perceptual presentations – of which children's play is exemplary – there may be *disavowal* of the constitutive paradox. Disavowal is implicit rejection, not a conscious operation: 'It is not as if the subject says to himself 'I did not see what I saw', but rather that he simply does not perceive what he sees, except in terms of projection, which is a form of repression' (153). Neither negation nor the subject proper can be spoken of at this level, as the negation in question is of (unconscious) perception, not thought. Conversely, for thought-presentations, the syllogisms of analytic logic allow negation proper – and with it, repression, subjectivity and the shifters of language.

It is important to note that a simple genetic model tracing a progression from analog to primary and then secondary digitalization is clearly inadequate: rather, multiple processes may be operative in a given experiential context. As Wilden points out, '... the 'psychotic' who says 'No' may be primarily refusing, for digital elements can be used analogically. (We are all familiar with the anecdote about the patient who when asked to say 'No', replied 'No, I can't say it'.)' (153).¹ It is this complex interrelation of levels that makes the theory useful for sorting out the muddle or multiplicity of videogame play. As Aarseth's example of the aporia shows, all levels of communication may be operative in any given play situation, and the theory gives a rigorous method for analyzing performances as they shift across analog and digital modes: the 'message-in-circuit' precedes and conditions the parsing of entities such as 'player' or 'game'.

The cybernetic account of play as disavowal thus locates it – like the fetish (Agamben 1993b) – as an intermediate form through which difference and identity arise: in any one instance, several levels of play may be involved, as well as implicit and explicit forms of communication. The trash-can icon on a computer desktop is not a real trash can (nor is the desktop a real desktop). It is not interacted with as one would with a trash can – but neither is it interacted with as one would with the absence of a

trash can. At one level, the 'drag and drop' relation to the trash-can icon is a holophrastic or iconic message in which the digital fact that the icon is not a trash can is disavowed. The icon is to the trash can as the nip is to the bite. As explored in Chapter 5 and its discussion of *Half-Life 2*'s 'visual dictionary', the virtual spaces of the videogame (not just the overt 'interface') could be described as a holophrastic dictionary, a repertoire of performances that aggregate integral and hypermediate framing devices at various levels: a performative multiplicity.²

This discussion can be formally linked with performativity because Austin's 'parasitism' is analogous to the metacommunicative message 'this is play' drawn from Bateson and Wilden. The nip-bite relation is similar to the way that frames separate 'marked from unmarked space' (Frow 1982, 25) and how 'off-frame space' is generated, as explored in previous chapters. A cybernetic approach provides a rigorous method for accounting for how particular performances arise - as illudic or perludic acts - from the multiplicity of the game. For Wilden, the analog is the realm of the message-in-circuit, and thus precedes any parsing of systemecosystem distinctions (i.e., what constitutes an 'entity' or a pole of the message-in-circuit).³ This approach has two critical advantages: first, it solves the problem of a unit of performance and instead allows the analysis of how such units arise from a continuum. Secondly, the theory is neither player centric nor formalist: the message-in-circuit is the primary phenomenon and, qua game performativity, precedes the figure of both player and apparatus.

In this context, the analog corresponds to the 'muddle' of the play situation, and primary digitalization to Benjamin's account of innervation and distracted, quasi-conscious tactile habituation (Chapter 8). The theory of tactile habituation, by which consciousness learns to parry shock through exposure to a multiplicity of framing devices, is a critical example of digital elements – such as the rate of movement of the FPS avatar – finding an analog value in the 'digital' gaming situation.

Distinguishing between analog and digital communication enables analysis of both continuous and discrete processes and performances in games. For example, Aarseth, Smedstad and Sunnanå's early attempt to characterize spatiality in FPS action games with the somewhat awkward phrase 'millions of alternative positions' (Aarseth, *et al.* 2003, 50), could be efficiently and rigorously replaced with the term 'analog'. To be more precise, it is a primary digitalization in which the computer refreshes its representation of the space such that for a human player it appears analog. This continuous articulation of the avatar as a framing device produces what Chapter 5 termed a 'rate of movement'. Through habituating to this regime of movement, players enter into a relation of disavowal (and not negation) with their on-screen representative, mimetically exchanging certain embodied characteristics.

Through this method, then, any performance in a videogame – whether the performer is human or machine – can be characterized in terms of the modes of communication involved (analog, primary or secondary digitalization), the associated framing devices of which it makes use (integral or hypermediate) and whether it is successful (felicitous or infelicitous). In accounting for how digital elements emerge from analog continua, then, it is also possible to describe how particular performances arise out of the performative multiplicity of a particular game.⁴

DEFINING VIDEOGAME PERFORMANCES: LUDIC, ILLUDIC AND PERLUDIC ACTS

The cybernetic approach can help parse the muddle of play by providing precise definitions of ludic, illudic and perludic acts in terms of the way that they emerge from the performative multiplicity of a given game. This provides a rigorous comparative scheme for identifying performances that may be of interest to a given research project, and can draw together key discussions from previous chapters concerning performance, framing and embodiment.

Ludic acts represent the process of mimetic innervation – by individuals and collectives – at an integral level. In Wilden's cybernetic terms, this is the analog level of communication which precedes any parsing of entities – or, in the terms developed here, the performative multiplicity 'before' it is ramified in any particular performance. This is admittedly a very broad concept, including anything that brings players and games together: social, cultural, technological, economic, ludic, narrative, psychological and other factors that are amenable to investigation by many different disciplines. However, from the point of view of a given game, these acts refer to the specific situations of rhythmic bodies at play (Grossberg 1997; Giddings 2007; Apperley 2010) as well as other contextual factors – the type of machine the game is run on, the settings chosen by players, the type of controller used, what mods are installed, the presence of other players or previous experience with the game – are all aspects of the analog as a fundamentally ecosystemic perspective.

Ludic acts configure the overall multiplicity from which particular performances arise (a point that will be expanded in Chapter 10). At this level, players habituate themselves to the analog message-in-circuit as a mimetic field in its own right: different parts and potentials of the individual body are activated by different apparatuses (and vice versa).

Illudic acts are those *in* which something playful is done. They involve the introduction or enactment of primary digital differences into the game's performative multiplicity. These are digital elements but – like the nip that emulates the bite – in terms of performative felicity they must be innervated as continuous processes. Thus the microgesture of moving a mouse in order to aim a weapon's targeting reticule on the game screen, a typical regime of control in action-FPS games, is an illudic act. The relation of disavowal, an implicit denegation that seeks to establish an iconic identity of perception, is maintained with regard to a given game's first-order signs: in a FPS, moving the mouse tracks the motion of the equipped weapon; clicking the mouse button is an analog of pulling a trigger. Just as the nip bears an iconic relation to the bite (based on disavowal rather than negation proper), so does a firearm in an action videogame bear an iconic-denotative relation to a real gun.

Experientially, illudic acts are associated with tactility – an element capitalized on in action games, which tend to use high numbers of integral framing devices such that felicitous play requires distracted habituation or 'physical wit'. Benjamin characterizes this experience in the Artwork essay as distraction, or the ability to habituate to a primarily tactile rather than optical mode. In its extreme form or limit, this takes the form of the threat of collapse of the visual field: shock. Thus illudic acts tend to rupture and distort established frames and manipulate or destroy virtual bodies – effecting forms of movement based around the salient features of a character design. However this also gives such games great potential for creating highly 'immersive' effects when illudic acts are tightly integrated and can emerge from the off-frame space in real time. This encourages the habituation to the small shocks of a multiplicity of integral framing devices, maximizing the tactile potentials of distracted innervation and generating what was identified in Chapter 8 as a 'tactile unconscious'.

Galloway argues that FPS games are 'fully rendered, actionable space' (2006, 63) - now, we can propose that their spatial logic is at base that of

the illudic act – an analog of a rate of movement through space. Although illudic acts may seem quite straightforward, advancements in real-time physics modeling and procedural techniques have added increasing complexity to this type of performance. Where in early games such as *Pac-Man* illudic performance was limited to movement in one of the four compass directions, in contemporary games utilizing advanced physics engines and procedural techniques there is a *vastly* expanded repertoire of potential emergent forms of continuous movement through space – including collision and other types of interaction between bodies. Many of gaming's most intricate relations of human capabilities and machine processes occur in illudic acts, and virtuoso play often demands intense mimetic habituation from players.

It is the primacy of illudic acts and integral framing devices that leads the FPS genre to be associated with the penetration of objective, continuous, realist space – albeit one that is punctuated by discontinuities that require perludic acts to pass (doors, ladders, level breaks, quicksaves, etc.). The experience tends to move from peak to peak, distributed among a large number of integral framing devices, in line with Benjamin's characterization of distraction. The logic of this insertion, which underscores the analog effect of continuous space, also causes temporal discontinuity. The play situation is contingent on tactile habituation that for most players requires multiple performances to achieve. Death is always just around the corner, typically disavowed by a back and forth between quicksave and quickload keys. FPS games lavish much attention on the rupture of bodies, the bark of machine guns, the threat of overwhelming of the senses with forms of movement and incessantly demanding anterior motives.

Perludic acts are those *by* which something playful is done. They introduce secondary digital distinctions into the system by acting on primary differences and generally work through hypermediate frames and generic series. These acts tend to take prominence in RPG-style systems or games, but are present in all performances which digitalize the game system in some way. Perludic acts may also be combined so as to produce more complex or recursive perludic acts and polyvalent temporalities such as positive and negative feedback relations or forking paths. Chains of perludic performances can thus give rise to increasingly complex levels of abstraction and logical structures.

As argued in Chapter 5, the space of gaming is a *distributed* 'interface' of framing devices. This forms an intention span that can be parsed as

illudic or perludic depending on its activation of primary or secondary digitalization.

Aiming and discharging a weapon (in pulling the trigger I fired the gun) in a FPS is an illudic act, but the perludic act of shooting an enemy is only achieved if the player acquires the target and aims the weapon correctly ('by firing the weapon I destroyed the enemy'), thus digitalizing the performance in a certain way. This simple scenario becomes more complicated in games which use the venerable concept of 'hit points' – a quantitative measure of health that videogames borrowed from tabletop gaming.⁵ This sort of mechanic is used in a game such as *Half-Life 2*, where the perludic act of killing the enemy may require several attacks (*by* firing the weapon felicitously multiple times and thereby bringing their hit points to zero, I killed the enemy). Felicitous gunplay is often dependent on certain salient features – a weak spot, or increased damage with the common 'headshot' mechanic.

common 'headshot' mechanic. The amount of damage inflicted may also depend on other perludic performances that precede the current scenario. In action-RPG hybrids such as *Monster Hunter* or *Destiny*, each weapon has a range of RPG-style stats and options which affect how it performs and handles. The perludic act of selecting a weapon and its qualities thus affects the subsequent performances during action sequences, including the illudic acts of acquir-ing and shooting at certain targets, and the overall perludic act of defeat-ing those targets. The cybernetic method is thus oriented towards making nuanced distinctions, and can analyze performative multiplicities of differ-ent 'scales' or regimes of complexity by noting when and how digital distinctions are introduced into the game. To take a somewhat less violent example, an early section in *Half-Life 2*

To take a somewhat less violent example, an early section in *Half-Life 2* showcases the game's physics engine and water effects by requiring the player to place a sufficient number of buoyant barrels beneath a sub-

merged ramp (Fig. 9.2). The floating barrels raise the previously submerged plank when players put them in the correct position. This enables a vehicular jump to access an put them in the correct position. This enables a vehicular jump to access an otherwise unreachable area. A series of illudic acts (moving individual barrels through an analog of continuous space) results in the perludic act of raising the ramp (in turn enabling the illudic vehicle jump). This introduces a digital (either/or) distinction into the space that enables play to continue past the puzzle area. Because they can be constituted by a varying number of acts (illudic and perludic), as we can see in these examples, perludic acts may have many



Fig. 9.2 Half-Life 2

levels of operation, temporal schemes, logical types and regimes of complexity. The perludic acts in the FPS may be encoded in the game's rule structure, such as the use of colored keys to open corresponding doors in *Doom.* Or, they may be emergent or behavioral, such as holding a position by 'camping' (exploiting an advantageous position for sniping or the like). In games such as RPGs which focus on perludic acts, the screen space is split between different frames and interface elements much more frequently than the illusionistic FPS (although even the latter tends to feature some sort of HUD). In RTS games, macro control generally consists of perludic acts (queuing up production, marshaling forces), while micro is largely the preserve of illudic acts (fine control over exact unit positioning and activity).

The table of correspondences can be elaborated (although it should be kept in mind that 'primary generic association' is a rough guide at best as game designs have become more complicated) (Table 9.2):

Performance Semiosis	Semiosis	Mode of communication	Primary generic association	Primary generic Spatial/temporal form association	Experience
Ludic	Mimesis	Analog	Gaming Situation	Performative Multiplicities	Message-in-Circuit
lludic	Denotative	Primary	Action/FPS	Disavowal/Fetish/Play/Integral	Shock/Disavowal/
		Digitalization		Framing Device	Tactile Distraction
Perludic	Connotative	Secondary	Adventure/RPG	Denegation/Narrative/	Spectacle/Optical
		Digitalization		Hypermediate Framing Device	Concentration

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ILLUDIC AND PERLUDIC ACTS: TEST CASES

The cybernetic method outlined here facilitates the fine-grained analysis of videogame performances through characterizing how they work with primary or secondary digital distinctions. Among these, the most important are those 'differences that make a difference': the framing devices that constitute felicitous play from the point of view of the game as a message-in-circuit. However, this does not prevent the acknowledgement of many other kinds of difference that may affect the experience of play, even though they may be neutral with regard to performative felicity. The key advantage is the versatility of the terminology, which is competent to any gaming situation and any performative multiplicity: rather than pre-defining units of play, the method allows researchers to define the units of play that are of interest to a given analysis.

The rest of this chapter will explore performances in a wide variety of games from across the history of the medium in order to demonstrate the versatility of the cybernetic approach. In each case, very specific performances will be analyzed, giving a sense of how thinking in terms of illudic and perludic acts can help identify how they arise from the performative multiplicity of the game as a whole.

Dark Souls' Parry

Although Dark Souls has a reputation for being a taxing player versus environment (PvE) game, it has also given rise to a robust player versus player (PvP) community. This is in part because the wide range of illudic acts available to individual player characters is reminiscent of a fighting game - very dynamic interactions are possible. Some examples are the 'parry' and 'backstab' mechanics. Players carrying shields or an appropriate weapon can use an illudic block maneuver in order to reduce incoming damage. However, there is a high-risk shield performance called a parry. If this is executed at the right point of an enemy's own illudic attack animation, the parry will knock the blow aside instead of merely blocking it - this leaves the opponent open for a powerful riposte. Although the parry animation itself is illudic (it can be executed at any moment) it is only by also combining with the enemy's illudic attack action, and finding the precise moment in the analog animation of that action, that the perludic act of a parry is felicitous. Similarly, a normal illudic attack becomes a perludic backstab when the character is positioned correctly behind an

enemy. Correctly executed, the illudic timing, positioning and button press give rise to a perludic digital distinction: a parry or a backstab. The *Dark Souls* parry and the backstab thus present criteria of felicity

The *Dark Souls* parry and the backstab thus present criteria of felicity for turning an illudic act into a perludic one. Furthermore, both of these perludic acts introduce the digital distinction that they cannot be interrupted by enemy illudic acts, which will simply be ignored by the game (making both useful in 'crowd control' situations). It should be noted that due to lag that may be present in online play, the animation of either the parry or the position of the enemy character may not be displayed correctly. This does not mean that players cannot execute these perludic acts felicitously – but in order to do so reliably requires tactile habituation to the lag between computation, gesture and display. As with other complex games, *Dark Souls* has inspired experimentation – such as '*Dark Souls* science' videos (see, e.g., Emarrel 2012) – in order to investigate its systems. Each of these experiments could be characterized as sorting out particular relations between illudic and perludic acts: how the game digitalizes its performative multiplicity, and which combinations of performances are the most felicitous.

Apparatus and Player Performances: Alien: Isolation

An example in which the performances of the apparatus are particularly highlighted is when they are identified directly with a character. In *Alien: Isolation*, player character Amanda Ripley is hunted through a dilapidated space station by an indestructible xenomorph alien. Figure 9.3 shows her crouched behind a table as the creature stalks in search of her.

The computer-controlled xenomorph is trying to complete the perludic act of finding Ripley, who is just as earnestly trying to evade it. This gives rise to an intensely entangled set of illudic and perludic performances by both player and apparatus. In the figure, the alien is using a 'stalking' set of behaviors – should it detect Ripley, its set of behaviors is digitalized into attack state. Ripley is crouched behind an air hockey table, and can see the xenomorph even though it can't see her (this doesn't strictly make sense in terms of realism).

The table thus digitalizes the performances available to the xenomorph as it illudically moves through the space – a movement which must be carefully managed by players by creeping about and actively managing the apparatus' performance. The xenomorph can reposition itself rapidly through the perludic act of jumping into a vent. Players, for their part,



Fig. 9.3 Alien: Isolation

can use items such as the 'noisemaker' to re-orient where the xenomorph is stalking, temporarily reorienting its illudic movement. This example shows how the cybernetic method can be used to pick apart how performances arise even from a highly entangled performative multiplicity.

Bloodborne: Lock On and Bivalent Character/Camera Orientation

One key performance of the apparatus is often the maintenance of camera angles as discussed in Chapter 2. In *Bloodborne*, as in its spiritual predecessors in the *Souls* series, the act of 'locking on' orients both the player character and the game camera to a particular enemy, as can be seen below highlighted by a small white dot. In the non-locked on instance, the player character's orientation is determined by the push of the analog sticks; when locked on, the player character will maintain facing towards the locked-on character, strafing around rather than running straight past. As can be seen Fig. 9.4, the character's weapons and viewpoint will also be oriented to a locked-on target.

Locking on is a perludic act that integrally changes the continuous illudic act of movement in both the player character and the game camera. It introduces a digital distinction that modifies the performative multiplicity available to the player character, linking the movement of



(a)



(b)

Fig. 9.4 Bloodborne. (a) No lock-on, (b) locked-on

both the player character and the in-game camera to the performances of the apparatus-controlled character that has been 'locked on'. While the PC's movements and attacks are still largely analog, they will all be oriented towards the locked-on character model.

Far Cry 2: Monocular Reconnaissance and Player Digitalization of Space

Far Cry 2 (Ubisoft Montreal 2008) is an open-world FPS. The game attempts to create a much broader scope for exploration and problem solving than the highly linear level designs common to the FPS genre. Rather than warping from flashpoint scenario to flashpoint scenario with travel times being represented by a level break or cutscene, in *Far Cry 2* players must move through the game world and choose which direction they wish to approach a given situation in response to the specific environment. Given that, unlike many conventional shooters, it is not immediately certain from which direction opposition will come, it is often advantageous to gain a sense of the lay of the land and the disposition of any enemies. A monocular allows reconnaissance from a remote vantage prior to commencing an engagement (Fig. 9.5).

Given the amount of detail present in the environment – different enemies, lighting conditions, elevations, building types, foliage, smoke, weather effects and so on – this is liable to be quite an aporetic experience. However the game apparatus helps out here, turning the monocular's reticule green when it passes over an entity or location of importance from the point of view of the game design: a weapons cache, enemy position, vehicles and so on. These positions are then marked on the player's map. Using the monocular to observe the area is an illudic act; identifying the various key points via the green reticule is a perludic act which digitalizes the space. This helps players plan their movement through the space in the overall perludic act of clearing the checkpoint, but does so through a specific subsystem rather than a more common technique such as non-diegetic, hypermediate heads-up display elements.

Minecraft: Crafting

Minecraft, perhaps the most remarkable independent gaming success of the last few years, presents player with a world that consists (largely) of blocks of various materials. Each block type has certain illudic acts and

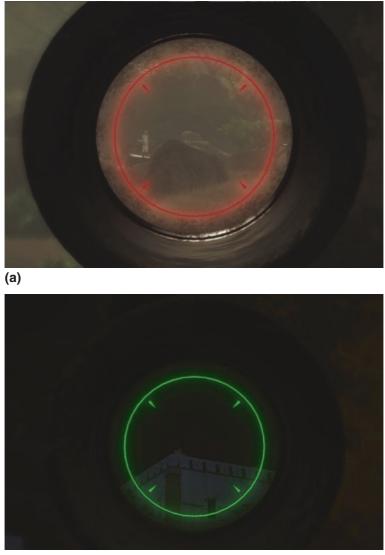




Fig. 9.5 Far cry 2

forms of movement inherent to it: for example, some fall when blocks beneath them are removed (such as dirt or sand) whereas others (wood or stone) are not affected by gravity, floating in place even when undermined. The properties of the various material blocks (and the substances such as water which flow between them) form the basic grammar of the game, but are supplemented by 'crafting': perludic acts by which players can transform blocks into other types, or into specific objects (Fig. 9.6).

An example of this perludic act is shown in Fig. 9.3, in which a set of wooden planks placed in a rectangular pattern can be crafted into a wooden door. The performative multiplicity of *Minecraft* provides a massive scope for creating their own kinds of felicity by discovering and executing new perludic acts: both in terms of crafting new materials, and putting the various materials into configurations. A *Minecraft* construct can be considered as a particular perludic act.

Maniac Mansion: Day of the Tentacle: Between Text and Image

In *Maniac Mansion: Day of the Tentacle* (LucasArts, 1993), a comic or cartoon-styled world occupies the upper portion of the screen, while textual commands are listed below. Characters and objects are delineated by thick, distinct borders and their features are distorted to present a world as evanescent as a Carl Barks *milieu*. The setting



Fig. 9.6 Minecraft

coheres around a cartoon sensibility of universal transformability and plasticity, as every shape is already stretched and warped with seething inner potential. To interact, the player constructs 'sentences' by selecting a command (typically a verb) in a hypermediate frame and then relating it to an object or space in the game world with another click. Players progress by forming felicitous relations between two distinct frames, composed of denotative and connotative signs, respectively. Beyond some basic movement of the characters, most of the actions performed are perludic, relying upon connotative signs and secondary digitalization. While this opens up a huge variety of possible interactions, each form of movement is predetermined: the felicitous combinations of words and objects will remain the same across all playthroughs of the game.

Thomas Was Alone: Distributed Performativity

The puzzle platformer *Thomas Was Alone* (Bithell 2010) begins with a red rectangle called Thomas, alone in a minimalist, slightly askew 2D environment. A narrator states, 'Thomas was alone. Wow. A weird first thought to have'. Players guide the rectangle Thomas through the level using typical repertoire of platform gaming illudic acts and forms of movement (moving left or right, jumping). However, rather than this repertoire being available from the beginning (or collected via power-ups) as in *Super Mario Brothers*, the lonely red rectangle must build his performative grammar from what has gone before. Jumping, for example, is parsed by Thomas as 'falling upwards'. Thomas soon meets other colored quadrilaterals such as the short, relatively otiose orange square Chris, the tall and sprightly yellow rectangle John and the pale blue, floating Claire.

Rather than presenting players with an avatar capable of various forms of movement, *Thomas Was Alone* personifies each of its various illudic forms of movement (rates of movement, jumping capability and so on) as a separate character.

This separation of the overall performative repertoire of the game 'across' an ensemble cast is similar to the effect of a prism on white light or a fractioning column on liquids of various volatilities. Each character is one polygon and one performance: quite a departure from a general gaming situation that is obsessed with characters composed of millions of polygons and many types of performance.



Fig. 9.7 Thomas was alone

The characters can only proceed through the environment by working together – combining their individual illudic acts to produce collective perludic acts. In Fig. 9.7, Chris requires the help of Thomas and John to summit a cliff by boosting him on top of them. Thomas and John's illudic acts combine to achieve a digitalization of the group's overall capacity for navigating the level – the perludic act of elevating Chris to a higher level than he can jump. However, when faced with narrow crannies it is Chris' short stature that becomes felicitous. *Thomas Was Alone* effectively dramatizes the processes of habituation endemic to videogames by constructing new level designs in which Thomas, a personification of a certain form of movement, *cannot* be, as he once was, alone: in order to achieve the necessary perludic acts, players must combine his illudic repertoire with those of the other characters.

Cart Life: Real Time as Framing Device

Cart Life (Hofmeier 2012) simulates the lives of characters who, for one reason or another, have begun a new small business as a streetside vendor (such as a coffee stall or newspaper stand). The game's systems tie



Fig. 9.8 Cart life

felicitous performance to various mimetic structures expressed through the PC apparatus: folding a stack of newspapers, for example, requires typing various phrases within a time limit representing a given customer's patience, with typos resulting in a damaged paper. Preparing espresso involves several stages of pressing the directional keys to mimic actions such as grinding, filling, tamping and locking in a measure of coffee (Fig. 9.8).

An ensemble of illudic key presses, if felicitous, result in the perludic act of making a satisfactory coffee for the customer (several further illudic acts complete the perludic act of closing the sale). *Cart Life*'s use of illudic acts thus emulates the variety of daily tasks that face people in precarious labor in a way that simple selection from a menu (a perludic act) would not.

However while players are attending to these tasks the apparatus is executing an illudic act of its own: running down a clock that tracks time of day. This clock continues to tick whether players are busy in menus, serving customers, or merely pondering what to do next. As such, the clock forms the 'off-frame space' (or perhaps more accurately, the 'off-frame tempo') of all the illudic and perludic acts that comprise *Cart Life*. The diurnal cycle progresses very quickly: something as simple as forgetting to buy a watch can lead to trouble as the minutiae of running the point-of-sale and stock performances lead to players forgetting important tasks and responsibilities in the wider world: Melanie needs to pick

her daughter up from school at 4 p.m. each school day, while Andrus has to remember to feed his cat. The diurnal clock thus acts as a 'setting' for the performative multiplicity of the game. By adding a time-critical context to each particular performance, the clock enacts the game's signature anterior motive: 'Work harder, hard worker'.

Notes

- 1. This is not to argue that videogaming constitutes a pandemic of subclinical fetishistic or schizoid behaviors, although many of the patterns (such as investing inanimate objects with lifelike powers, taking parts for wholes and so on) might seem familiar. However, the uncanny force of the framing device, as used in videogames, does seem to exploit, activate or play on similar processes and certainly there is a considerable media effects literature that comes close to medicalizing gaming.
- 2. In another commentary on Freud this time in the context of the dreamwork Wilden writes, 'It is through intentionalization (cathexis) that there is a translation from the digital/analog secondary process to the analog primary process, and back again (as in the dream)... Cathexis is thus a form of the digitalization of the analog, just as hypercathexis (attention) is singling out of one analog difference or set of differences as different from all others (distinction between figure and ground). But the boundary is always ascribed by the subject to the figure, and not to the ground' (Wilden 1972, 447). Although the play situation is very different from that of dreams the account of a movement between levels is suggestive. His gloss of the term 'cathexis' as 'intentionalization', puts the serial aesthetic noted in gaming's figures in an interesting light: the caricatural tendencies of game characters reflect the paradoxes of mediating various levels of play.
- 3. 'Analog communication precisely maps Lévi-Strauss' nature, Bateson's animal combat, Saussure's 'sound', Marx's 'primitive society with property in common' and the Freudian primary process. The digital, as the domain of the discrete element, precisely maps the notions of distinction, identity, and opposition all dependent on a form of negation in culture, in psychoanalysis, in exchange, in language, and in epistemology' (Wilden, 272).
- 4. The cybernetic position adds nuance to the 'magic circle' circle thesis (Salen and Zimmerman 2003) commonly invoked in game studies to define the play situation as a time apart from everyday life, fenced off in an 'enchanted' space. This idea concept has been roundly criticized in game scholarship as a naïve formulation that does not capture the observed complexities of playful behavior who often juggle real-world activities while they play (Copier 2005; Taylor 2007; Pargman and Jakobsson 2008; Calleja 2010; Montola

et al. 2009; Jayemanne 2010; Lehdonvirta 2010). Such a boundary may be present (as in a soccer field) or very difficult to locate spatially (as in an Alternate Reality Game). The magic circle, then, can be subjected to the same critique as Austin's certainty that framed situations only signify the difference between playful and non-playful speech acts. Using the methodology developed in this chapter, it is possible to describe any exterior boundary to the play space as just one kind of secondary digitalization that is *produced* by the total play ecosystem. This will be further examined in Chapter 10's discussion of the Game Over.

5. This quantitative measure of health, in which a character can sustain wounds but remain at full capability, is one very common area in which games display an extremely cavalier attitude towards realism. It institutes a digital distinction, an either/or state. Some games, such as *ARMAII* and *Metal Gear Solid: Snake Eater*, have more complex regimes where various parts of the body can be harmed, causing the character's capabilities to be reduced—they digitalize damage in different ways from the standard hit point metric.

Time Invaders – Conceptualizing Performative Game Time

The ultimate phase of a MMORPG such as *World of Warcraft* or the more recent hybrid RPG-FPS *Destiny*, where the most committed players tend to find themselves before long, is often referred to as the 'endgame'. This is a point where the leveling system tops out and the narrative has concluded. The endgame is thus the result of considerable experience with the game and its systems, a very large ensemble of both successful and infelicitous performances. This final stage still involves considerable activity – challenging the most difficult enemies in search of the rarest loot, competing with other players and so on. It is a twilight state of both accomplishment and anticipation. As an 'end', it is very different from the threatening Game Over screen that is always just moments away in many arcade or action games.

The differences between these two end states suggests that the notion of how games end, and the way this impacts on the experience of play, could be illuminating with regard to the problem of characterizing performances – because to end the game typically involves a summation or adjudication on the felicity of a particular and actualized performative multiplicity. Completing the game is, with regard to a given playthrough, the ultimate perludic act.

A particularly important ramification of the cybernetic method presented in Chapter 9 is that the 'magic circle' becomes one digitalization among the (potentially) many that produce the structure of performance and the experience of play. It may be highly important and influential (as in the case of someone deeply involved in a game such that they lose track of the external world), or it may be relatively trivial (as in the case of someone distractedly playing a game on their phone while carrying on a conversation or some other activity). In either case, the magic circle can be conceptualized as a sense of totality – weak or strong – that is *generated by* the apparatuses of the game and the cultural expectations of players. The magic circle need not be posited as a primary ontological phenomenon that determines the playful status of what it 'contains', which leads to the asymptotic task of definitively pronouncing on the status of paradoxical phenomena that this book has highlighted through the aesthetics of infelicity.

The concepts of the endgame and the magic circle both refer to a certain kind of high-level digital distinction that is the ludic equivalent of Austin's 'total speech act' in the 'total speech situation' – two notions that he leaves undeveloped the end of his lecture series. This raises the question of how it might be possible to think about the sense of totality (whether weak or strong) and, more generally, how to situate performances within the overall performative multiplicity of a given game. Where analyzing primary and secondary digitalization can help define particular performances, the problem of how to situate such performances in relation to one another raises additional problems, particularly in light of gaming's complex temporalities.

This chapter will develop a method complementary to the cybernetic technique of Chapter 9. Called 'chronotypology', the method is derived from Agamben's discussion of how playful signifiers change their temporal modality 'after the game'. To continue the argument developed so far in this book, this has to be done without establishing the 'whole' as a de facto unit of performance. Once developed, the method will then be applied to a number of examples. The most important of these test cases will be narrative – one of the more enduring problems in videogame scholarship – leading to a close reading of the final 'gallery scene' in the videogame *Life Is Strange*. Taken together, the cybernetic and chronotypological approaches form a comprehensive comparative method for analyzing videogame performances.

DIACHRONY: PLAY AND TEMPORALITY

The videogame concept of the 'endgame' is similar to the formulation 'end of the game', which appears as a pivotal concept in one of Agamben's most sustained discussions of play (1993a). Here he stages play in dialectical relation to the sacred, drawing on the work of Claude Lévi-Strauss (1966) and Émile Benveniste. According to Benveniste, there is an originary relation between play and the sacred.

The potency of the sacred act resides precisely in the conjunction of the *myth* that articulates history and the *ritual* that reproduces it. If we make a comparison between this schema and that of play, the difference appears fundamental: in play only the ritual survives and all that is preserved is the *form* of the sacred drama, in which each element is re-enacted time and again. But what has been forgotten or abolished is the myth, the meaningfully worded fabulation that endows the acts with their sense and their purpose. (quoted in Agamben 1993a, 69–70)

Play thus is liable to preserve a set of formal rules ('a topsy-turvy image of the sacred'). However, because it does not present a story or myth that connects with a meaningful history or tradition, it inscribes difference within repetition, resulting in a strong diachronic experience. For Agamben this is the import of 'Playland' in Collodi's *Pinocchio*, where there is only the bedlam of an eternal holiday: play involves the 'paralysis and destruction of the calendar' (68). This can be compared with the sacred, which signifies synchrony or an articulation of continuity with the past through a 'consubstantial unity of myth and ritual'. Play tends to produce signifiers of diachrony (turning structures into events), while ritual tends to foster signifiers of synchrony (events into structures).¹

In the Aranda culture of Central Australia, among the most synchronically oriented cultures of his considerable acquaintance – for whom 'even the relation between past and present...appeared in terms of synchrony' (Lévi-Strauss 1966, 238) – Lévi-Strauss notes the presence of initiatory objects called *churinga*. These are '...stone or wooden objects, often engraved with symbolic signs, sometimes just pieces of wood or unworked pebbles. Whatever its appearance, each churinga represents the physical body of a definite ancestor and generation after generation, it is formally conferred on the living person believed to be this ancestor's incarnation' (238). By confirming the identity of living person and ancestor, the ritual creates a synchronic link between generations.

According to Lévi-Strauss this process concludes with a strange reversal of the *churinga*'s own gesture within the ritualistic economy. If the *churinga* signifies the synchronic presence of the mythic past during the ritual (the 'palpable proof that the ancestor and his descendent are a single flesh'), at the completion of this operation it reverses its valency, coming to signify a diachronic residue: 'The role of the churinga would therefore be to offset the correlative impoverishment of the diachronic dimension. They are the past materially present and they provide the means of reconciling empirical individuation with mythical confusion' (238). Even for the Aranda, who Lévi-Strauss reads as highly oriented to the production of synchronic signifiers,² an object appears which furnishes 'tangible confirmation of the diachronic essence of diachrony at the very heart of synchrony' (237).

Agamben departs from the eminent structuralist's account by arguing the *churinga* does not represent an 'offsetting' of the tendency of the ritual to minimize diachrony. Rather, the ritual apparatus reveals a fundamental volatility in signification writ large: 'contrary to what Lévi-Strauss maintains, there is no contradiction between the fact that the Aranda declare the *churinga* to be the body of the ancestor and the fact that the ancestor does not lose his own body when, at the moment of conception, he leaves the *churinga* for his new incarnation; quite simply, a single object is here invested with two opposing signifying functions, according to whether the ritual is or is not yet terminated' (Agamben 1993a, 79). The *churinga* is thus an 'unstable signifier' capable of transforming its function upon reaching a certain limit: in this case, the end of the ritual. For Agamben what is at issue is not a logical contradiction between.

Agamben, drawing on Benveniste's arguments, compares the sacred *churinga* with the playful toy. In this way play and temporality are linked. The toy presents an analogous – but opposite – transformation when it leaves its own space:

... the toy, as a representation of a pure temporal level, is undoubtedly a signifier of absolute diachrony, of the prior transformation of a

structure into an event. But here too this signifier, once freed, becomes unstable, and is invested with a contrary meaning; here too, *at the end of the game*, the toy turns around into its opposite and is presented as the synchronic residue which the game can no longer eliminate. For if the transformation were really complete, it would leave no traces, and the miniature would have to correspond with its model, just as, *at the ritual's termination*, the *churinga* would have to vanish, corresponding to the body of the individual in whom the ancestor has been reincarnated. (Agamben 1993a, 79–80)

The toy is like the *churinga* insofar as it too is an unstable signifier liable to transform its modality at the limit of a certain procedure. These two 'embarrassing residues' (80) attest as disturbing remainders to the contingency of their own operation, surviving as they do the very spatiotemporal *topoi* that they serve to open.

The failure of both limit cases – the *churinga* and the toy, ritual and play – to complete their respective gestures shows that neither diachrony nor synchrony can ultimately eliminate the other pole: 'the pure event (absolute diachrony) and the pure structure (absolute synchrony) do not exist' (70). Instead, the continuity of the system requires the production of a differential margin between diachrony and synchrony. This is not to say that pure play or pure structure cannot be represented or evoked – the former has been depicted in the form of infernal punishments that involve permanent movement and interminable duration (Playland, Ixion's wheel, Sisyphus' stone) whereas the latter is imagined through imagery of perfect, unchanging and blissful heavens (Agamben 1993a). Similarly, because play and ritual both act on unstable signifiers, there are certain proximities, affinities and crossing-points between the two poles (such as funereal and initiatory games or the appearance of miniatures and toys in tombs).

CHRONOTYPOLOGY

Agamben thus modifies Lévi-Strauss' analysis by arguing that play is the diachronic correlate of ritual's synchronic effects, and that these two processes form two particularly acute moments of a larger temporal system. However, in other work Lévi-Strauss himself does venture some explicit, if speculative, remarks regarding memory and technology that anticipate Agamben's contentions. He compares the operations of ritual objects such as the *churinga* to documentary archives in Occidental

cultures. Such seemingly very different institutions, he suggests, serve a similar temporalizing function insofar as their loss would deprive the past of a signifier critical to its 'diachronic flavor'.

This argument parallels Benjamin's account of the decay of the aura (the aura as a 'unique duration' suffusing an original artwork). It also parallels Lévi-Strauss' dissatisfaction with theories of totemism that ascribe to a variety of practices a primitive denotative function. In this critique, totemism serves as a necessary precursor that designates the basic elements necessary for and is itself part of more complex and systematic institutional forms. For Lévi-Strauss, 'totemism' as an isolated phenomenon does not exist (Lévi-Strauss 1971), but is an artifact of an anthropological mode of inquiry itself bound by the diachronizing assumptions of linear historiography. He critiques the theoretical reduction to a single primary operation excised from its place in a 'a total system, which ethnologists in vain tried to pull to pieces in order to fashion them into distinct institutions' (Lévi-Strauss 1966, 218). Accordingly he objects to the contention of some nineteenth-century scholars that 'totemism was anterior to exogamy' because 'the former appeared to them simply denotative, whereas they divined the systematic nature of the latter' (231). There is however nothing necessary about this: 'totemism may either present or preclude the characteristics of a system ... it is a grammar fated to degenerate into a lexicon' (232).

As such 'There is no need to invoke the exercise of vanished faculties or the employment of some supernumerary sensibility' (221) to explain the prodigious classificatory schemes evident in cultures unacquainted with what we understand as scientific method. Such capacities are still in evidence in contemporary urban life 'when we drive a car and assess the moment to pass or avoid a vehicle at a glance, by a slight turn of the wheels, a fluctuation in the normal speed of the engine or even the supposed intention of a look...the signs expressed carry with them their meaning' (222–223). Thus for Lévi-Strauss what is at issue is not a primitive denotative set of practices (such as was assumed of totemism) that precede symbolic exchange and are subsequently lost in 'hot' or historically cumulative societies, but a cultural repertoire of procedures active across many levels.

The example of the motorist who 'does not distinguish the moment of observation from that of interpretation' is similar to Benjamin's notion of tactile habituation and Wilden's discussion of primary digitalization – although Lévi-Strauss' explanation for this capacity (a 'reciprocity of

perspectives', signs 'carrying' their meaning) is more strictly semiotic in its framework. His assessment of archives can also be linked with computers insofar as they are mnemonic systems of data archivization, manipulation and retrieval, especially in light of his somewhat whimsical speculation that '... the day may come when all the available documentation on Australian tribes is transferred to punched cards and with the help of a computer their entire techno-economic, social and religious structures can be shown to be like a vast group of transformations' (89).

Unstable Signifiers and Temporality

One wonders if the great anthropologist ever got around to playing *Civilization*: dubiously useful as a scholarly resource, but certainly a felicitous for those wishing to play with a 'vast group of transformations'. In the *bricoleur*-like adoption of the terms 'diachrony' and 'synchrony', then, I am less interested in Lévi-Strauss' structural explanations of social phenomena than the way that these concepts might be used to account nonreductively for the muddle of video-game performance.

These speculations about ritual and toys can be recruited for the analysis of videogame temporality by connecting framing devices with Agamben's 'unstable signifiers' – points of transformation between the production of synchrony and diachrony. Videogame performances act on these signifiers to change their temporal signification. Framing devices disseminate structures of performative judgment and thus facilitate performative transformations between synchronizing structure (ludological, tactile, narratological, semiotic, multiplayer, or any other that may be involved in a particular design) and the diachronic event and duration of play.³ A videogame is another apparatus for producing 'differential margins' between diachrony and synchrony. Where such margins once produced initiatory relations between entire generations or helped explain seasonal and cosmic phenomena, computers facilitate the production of increasingly compressed performative feedback loops and intensive fluxes of experience.

Some precise comparative definitions are possible at this point. *Diachrony* is produced by apparatuses that separate, disperse or distinguish performative multiplicities, making them more distal. *Synchrony* is produced by apparatuses that bring together, converge or concenter performances, making them proximal. Analysis of a videogame performance (or indeed

any other element) in these terms will be termed 'chronotypology'.⁴ The key unstable signifiers in gaming are those framing devices that have ludic significance: that sort between felicitous and infelicitous play. However, all signifiers in a videogame have the potential to produce diachronic or synchronic experience.

This approach adds temporal specificity to the performative theory developed in Chapter 9, which was oriented toward the analysis of how particular performances and framing devices arise (as illudic or perludic acts) by digitalization of the message-in-circuit or multiplicity of performances constituting a videogame. Chronotypology, by contrast, accounts for how performative multiplicities differ in comparative terms – how certain digital distinctions generate temporal experience. The approach allows the analytic location of illudic or perludic acts 'within' the game's performative multiplicities. This is especially useful with regard to characterizing perludic acts. Because such performances enact a secondary digitalization, they are capable of language-like abstraction and semiotic versatility. A perludic act could be as simple as selecting a character at the beginning of a game, or as complex as completing a level, or indeed an entire game. All of these performances introduce a secondary digitalization into the game, but they are obviously performative multiples of very different 'sizes' or magnitudes, with very different ramifications for felicity judgments and styles of play.

Chronotypological analysis is thus useful for orienting and characterizing perludic acts within the performative multiplicities of a particular game. For example, any nonreversible event or performance will exercise a strong diachronic influence over a particular playthrough, dividing it into two distinct segments. A very simple example would be the beginning of *Metal Gear Solid 3: Snake Eater*. Player character Naked Snake conducts a parachute drop and finds himself on a slightly elevated plateau above a forested area. All of his basic actions are available to him and players can run about on the plateau for as long as they please, but once he slides down from the plateau there is no way to return. The perludic act of exiting the plateau thus diachronizes two distinct performative ensembles. This can be distinguished from *Firewatch*, in which the player character can find themselves at a 'Long Drop Down'. This digitalizes the space as players cannot directly return to the higher area. However, it does not diachronize the two areas as distinct performative multiplicities because the level design allows players to access the previous space in other ways. A more extended example of diachrony is the Virmire mission in *Mass Effect*. During this mission difficulties arise and players must choose between the lives of crewmembers Kaidan Alenko and Ashley Williams. This is a binary decision—there is no way to save both characters. The Virmire mission has ramifications for the *Mass Effect* sequels because storylines and characters are carried over between the games. Even players who start fresh in *Mass Effect 3* are prompted to select one of these two characters to have survived the Virmire mission (Fig. 10.1) during player character creation.

Alenko and Williams represent two distinct performative multiplicities – distinct sets of dialogue options, plot points, ludic tactical options and skills, and so on. They thus diachronize all performances of the game series into one of two types.

Chronotypology can also facilitate the close analysis of performances by particular players. Say two hypothetical subjects, Players A and B both achieve the perludic act of completing a particular game level. The level design includes a scripted cutscene which changes the rules of the game – perhaps the sun rises and visual conditions become more favorable. Neophyte Player A has trouble navigating the early part of the level, becoming lost and dying a few times before encountering the cutscene after 40 minutes of play. She then

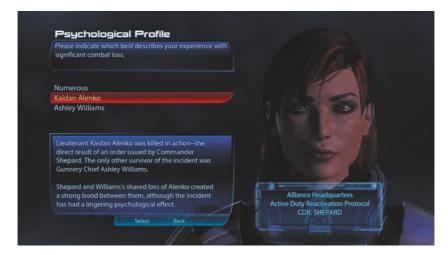


Fig. 10.1 Mass effect 3

completes the game level in 20 minutes more play. Player B, more experienced, fulfills the conditions that cue the scripted cutscene without any infelicitous performances in a relatively sprightly 20 minutes. However during the next section a certain lighting design element takes her fancy and she spends a lot of time admiring the scenery – she completes the level in 40 minutes more play.

These performances of the game level differ in innumerable ways depending on the scale at which they are analyzed. In spite of this it is possible to rigorously characterize the cutscene's chronotype in terms of its diachronic and synchronic functions within the level design. This method means that the equivalent of a page reference in a book or a time code in film becomes possible in the study of videogames (with important ramifications for the study of narrative, a point expanded below). Player A's 60-minute performance of the level is *diachronized* by the cutscene into a 40-minute and a 20-minute performance; Player B's is vice versa.

Conversely, the cutscene acts as a synchronic element that draws together both players' performances – and indeed acts in the same way for all possible performances of the level. The performative multiplicities on either 'side' of the diachronic event of the cutscene – conceived as multiplicities – can conceptually be composed of any number of illudic or perludic acts, any of the vagaries of any particular player engaged in any particular session of play. Chronotypology can make subtle distinctions between A and B's very different styles of play. This analysis could be carried out at any scale and according to any set of criteria according to which performative features are of research interest: A's could be further diachronically segmented by the various times she died; B's could be synchronized by her behaviors around new framing devices or design elements that happened to attract her attention after the cutscene.

FARMING DEVICES: SYNCHRONY AND PLAY IN VIDEOGAMES

A question arises at this point: if, for Agamben and Benveniste, play is associated with the production of diachrony, shouldn't we see only diachronically oriented processes in videogames? Gaming's fascination with forms and figures of motion certainly attests to an orientation toward playful diachrony as the fertile ground for the production of anachronistic signifiers; toward times long ago or yet to come, spectacular sporting events, other worlds and outer spaces, apparatuses ancient or medieval (such as in fantasy) and postmodern (such as science fiction). Marketing rhetorics of technological change and progress seek to maximize the production of diachrony in gaming culture.

Benjamin's treatment of the shock experience and cinematic montage can be seen as a particularly acute example of diachrony – the splitting apart or sudden digitalization of a mimetic field by a shattering event, a technique that reaches its apogee in action games for which felicitous play demands distracted habituation to rapidly changing fields of anterior motives. The action game seeks to flatten out temporality into a seemingly unalloyed 'present' which, as has been established, is in fact composed of a myriad of framing devices, forms of movement and montage effects generated by the apparatus. This seems to support Agamben's association between play and the production of diachronic signifiers. If 'even duration is subsumed to synchrony' in the *churinga*, then in gaming even repetition is subsumed to diachrony.

At least, that's how the gaming situation has always been sold. Belying the narrative of technological progress are constant repetitions that de Dyer-Witheford and Peuter (2009) term 'studied unoriginality' – the propensity of mainstream videogames toward sequels and remakes, as well as the use of serial aesthetics. Games have often remediated techniques that create powerful synchronic effects reminiscent of other media. Characterization, plot structures, thematics, the use of musical *leitmotif* and looping structures, cinematic sound staging and camera angles, popular voice actors, and many other game elements draw extensively on cinematic, literary and comic book tropes, techniques and formulae in order to create synchronizing effects of recognition.

Further, while many games present diachronic images of the past or future, just as many bring apparatuses from various eras into synchronic proximity – juxtaposing magical, religious and technological forms. Benjamin and Adorno both noted 'false resurrections of the aura' and 'dream kitsch' in their analyses of capitalism (Stoichita 1997). The auratic figures of *Final Fantasy* and other RPG series provide many equivalent examples of 'timeless' elements amidst gaming's characteristic diachronic din. As such, the association between diachrony and play does not seem conclusive in the case of videogames – or, if Agamben's theory is strictly construed, 'play' is only one component of what people do with videogames. This qualified concept of play and diachrony is in fact is to be expected, as for Agamben the association between diachrony and play is subject to the observation that the pure event does not exist: there is, even in the most diachronic operations of play, always a synchronic remainder. A videogame, then, can be considered a diachrono-synchronic machine in its own right. This situates ludological and player-centric perspectives within a single temporal framework: a chronotypological approach can account for both the diachronic (a player-centric, embodied view of the muddle of gameplay) and synchronic (ludic, narrative and other structures) orientations of the many elements that constitute the complex weft and warp of a videogame's temporal fabric. They are different points of view on the message-incircuit that constitutes the game.

circuit that constitutes the game. Framing devices are particularly important in terms of generating synchronic effects that draw together the many performances players undertake during a given game. A key example would be the *Half-Life 2* 'visual dictionary' explored in Chapter 5, which acts as a way of communicating felicity-structures to players through serial aesthetics. Synchronizations – particularly in the form of the figures of reversal and felicity judgments that draw together a performance in a single ludic assessment at the end of the game – are as important as diachronic durations in constituting the muddle of videogame play. Synchrony thus plays a powerful role in gaming and is operative at various levels.⁵ In particular, it gives a temporal quality to perludic acts, naming a point at which a certain set of performances come together to achieve a certain ludic effect. It thereby represents an 'end' to a given performance as the drawing together of certain elements, not as a totalizing 'whole'.

In addition to analyzing the temporality of performances and unstable signifiers, chronotypology can also be applied to signifiers as they appear more generally in gaming. Newman's question about what constitutes the 'Donkey Kongness' of *Donkey Kong* games (2009), for example, can be conceptualized as a set of synchronizing elements (performative types, framing devices, music, character designs and so on) operative across the series. In spite of the great variations in the hardware, software, art, audio and other elements that appear across such a broad set of games, they retain a synchronizing influence, and this accounts for their 'Donkey Kongness'. This arguably finds an apogee in *Super Mario Maker*, which places myriad elements at the disposal of players, all of which are elegantly synchronized by the core jump mechanic of the series.

Synchronic effects can also be located in the curious repetitions and behavioral patterns that characterize videogaming as much as shocks, ebullient marketing and new graphical techniques. It is precisely because the temporal structures of gaming involve unique modulations of diachrony *and* synchrony that a distinctive cant can arise in order to discuss performances in specific games. Terms like 'ticks' (referring to the sound of a clock), 'rounds' (a certain time interval in which characters have a defined capacity to act), 'dots' (damage over time) and 'dps' (damage per second) all indicate the strange sectioning of time effected by performances and framing devices in games.

The venerable institution of the save game is perhaps the most obvious example of synchronization. Saving a game essentially establishes a point at which the performances conducted thus far are synchronized - marking a game state from which further performances can be undertaken (each of which will be diachronic with respect to one another). While this function may seem a simple expedient to allow players to leave off games that are too long to be completed in one sitting, there can be important performative ramifications to savegame regimes. Games that include a quicksave and quickload function, or a checkpointing system that automatically saves the game when players reach certain areas encourage a rather casual attitude to the particular performance. Some games, such as Dark Souls and in particular Alien: Isolation, make progress much more precarious (Conway 2012) and thereby give more emphasis to particular performances. The save function is not simply an auxiliary compensation for real-world limitations on play time, but a synchronizing process that, in its specificity, can have a powerful effect on a given performance and the experience of play.

Platform manufacturers also direct studios to legislate rewards for certain kinds of performance that are registered at a platform level – 'achievement' or 'trophy' systems which present criteria of performative felicity attached to a particular player's online profile (Jakobsson 2009). Upon completing certain challenges or milestones, players receive an emblem which signifies their felicitous performance of that particular multiplicity. These rewards can encourage players to attempt new synchronizations of their performances that would not necessarily arise in the native game context – playing according to rules set by the platform's reward system rather than the particular game. They also attempt to abstractly synchronize the performative multiplicity of a particular gaming career, evaluating the 'quality' of a player (albeit with a view to maintaining players' investment in particular platforms).

Playful Repetitions and Varieties of Synchrony

Between the poles of diachrony and synchrony is a spectrum of complex temporal experience. Most any gamer knows the sensation of a Game Over which has returned them to a prior game state. After such a setback, play can seem a grinding imposition rather than an exhilarating anterior motive. The performative multiplicity has lost something of its diachronic capacity to generate novelty; the various subtasks and accomplishments imposing themselves all at once in a synchronic haze that can feel more like work than play. There is still, however, a diachronic element to winding back the infelicitous performance: an interminable duration that stands between the player and a new part of the game. It is important, then, not to simply dub a performance or signifier as diachonic or synchronic, but to think about the way that these temporal structures are intertwined in each case.

'Grinding', 'farming' and 'spamming' are repetitive perludic acts that provide further examples of performances that operate in a highly synchronic register, but which pursue an elusive diachronic event. These refer to a repetitive task that has little meaning in and of itself, aimed at some form of quantitative accumulation that will eventually lead to a qualitative shift. Grinding is to consistently execute a performance (such as continually making one type of item to practice a particular fabrication skill, or repeating one type of mission) that yields experience points or some other advancement criteria. Farming is the repeated exploitation of a resource, perhaps in the hope of gathering a certain threshold amount or to trigger an event that has a low probability of occurring (such as a 'rare drop' where defeating an opponent has a low chance of yielding a coveted item and is thus likely to require defeating that enemy many times in order to acquire the item in question). Spamming, related to the general term for junk email, is the constant repetition of a performance (such as using the same move over and over), perhaps because it is particularly efficient or perhaps because of panic or ignorance of more elegant play styles.

Although these activities may seem aberrant, mechanistic or otherwise against the 'spirit' of play, they are in fact codified by rule structures in many videogames. In order to access the most challenging areas and opponents of MMORPG games, there is often a structural requirement to attain higher character levels and abilities. The way to do this is by gathering experience, items and equipment. As one Wired commentator opines, this involves 'Hours upon hours of mind-numbing grinding. To 'level up' your character, you've got to gain experience, and that generally involves doing a few simple tasks – mostly 'killing stuff' and 'collecting stuff' - over and over again' (Thompson 2008, online). The MMORPG promise of extreme diachrony – the escape from everyday drudgery into a completely different temporality of high adventure and fantasy – is belied. In the performance of farming, the rush of combat against fantastical beasts becomes a repetitive harvesting operation, an almost empty synchronization of time that bulks out the play experience – fossicking for a deeply buried seam of diachrony in dense synchronic performative strata.

Such performances are not without pleasures or attractions, however. Academic Liz Lawley writes, '... unlike many of my 'serious' gamer friends, I love the leveling grind of WoW... I spend far too much of my personal and professional life strategizing, dealing with intellectually and emotionally challenging situations. I don't want to replicate that stress in a game environment...instead, I want to relax, to clear my mind, to do something repetitive that provides visible (to me, not to you) and lasting evidence of my efforts...' (Lawley 2006, online). The desire to find 'lasting evidence' in repetitive acts is evi-dence of the dynamism of temporal experience in games, and reinforces the point that synchrony is not to be construed as stasis or lack of movement. Just as diachrony is an active creation of a distinction between performative multiplicities, so synchrony is not stasis but actively makes performances more proximal. The production of synchrony may involve a lot of work.

Another structure particularly associated with MMORPGs in which such transformations are evident is the 'instance' – an area in the virtual world which possesses qualities of both uniqueness and repetition. In the shared world (itself divided up between various servers) are dungeons in which players can quest for experience, items and money. According to Blizzard's official guide,

An instance is a personal copy of the dungeon for you and your party. The only players in this instance will be yourself and members of your party - no one else can enter your dungeon instance. Instances allow you and a group of friends to have a more personal experience exploring, adventuring, or completing quests in your own private dungeon. (Blizzard Entertainment 2015)

Entering an instance thus inscribes another moment of temporal transformation within the performative multiplicity of the game. While the group is entering the same 'space' (at least in terms of level and encounter design), the instance diachronizes the group's performance, hedging it off from the rest of the server and game world. Players may run through an instance many times, typically in order to coax a low-frequency drop from certain enemies.

Structurally, the instance is a time loop: the tasks to be performed have both been accomplished many times before and desperately require the attentions of intrepid adventurers. The instance itself, as well as its inhabitants, exist in a strange quasi-persistent state: they are neither alive nor dead, but 'killable'. One such character is the Lovecraft-inspired monster that is the final enemy of the 'Polaris' dungeon in *The Secret World*. This character is faced whenever players enter the Polaris dungeon, after a certain period of time has elapsed after their last attempt (Fig. 10.2).

When a particularly important instance is introduced (a 'raid' dungeon), the most involved and organized guilds will compete to beat it as a world first, often posting video online to prove their claim. This moment



Fig. 10.2 The secret world

of diachrony is similar to the setting of a new record in a sporting context. It will help establish certain effective patterns, approaches and tactics for subsequent groups, enabling them to better synchronize their performances toward a felicitous performance of the raid.

These examples show the complexity of the exchanges between synchrony and diachrony in extremely common game structures, as well as the way that performativity mediates the transformation of unstable signifiers. In the most demanding performances such as speedruns, felicitous play is contingent on reducing alternate (i.e., diachronic) procedures and durations as much as possible into a single, flawless temporal sculpture. Just as this optimal synchronization is achieved, however, the performance flips its signification and becomes unique: separate from all other performances of the game, a diachronic marker that acts as a challenge for others to do better.

The Game Over

The ultimate perludic act and synchronic effect in a videogame is the 'end of the game'. This end is operative as a kind of ludic 'horizon of expectation' (Jauss and Benzinger 1970): a set of anticipations about what signs are unstable and will, over the performance of the game, change their mode of signification. This characterizes what is often referred to a 'winning' or 'beating' (or, in a suggestive earlier parlance, 'clocking') the game as a perludic act. By exploring this element of synchrony it is possible to respond to and advance Austin's speculations at the end of *How to Do Things with Words* regarding the 'total speech act', and thereby conceptualize a 'Total Ludic Act': the *Game Over*.

The critical point to draw from Agamben's discussion is that there can be no complete synchronic intuition of the game's performative multiplicity; the pure structure, as such, does not exist: at any one time, the process of play involves a particular (and hence, diachronic) performance. As with absolute diachrony or synchrony, while the Game Over cannot be directly *experienced*, it can be *represented*. As they make their way through a game, players form a kind of mental model of the total set of performances that the game will involve.

At the beginning of the game, the Game Over is experienced as a relatively pure diachrony: the game's signs represent the duration of the immediate play experience and the promise of more play. The temporal margin here takes the form of anticipation about the game's intention span, storyline, characterization, serial aesthetics and any other systems that may be present. From this fresh point of view, the Game Over appears as a pure 'yet-to-beplayed'.⁶ As play progresses and players habituate themselves to the title's particular performative multiplicity, expectations arise as to which signs are volatile framing devices and are thus liable, at the end of the game, to change their signification from highly diachronic ('yet-to-be-played') to a diachronic-synchronic balance ('can-be-played-with') or to highly synchronic ('always-will-be-played'). These can be identified with ludological elements, which signify the diachronic-synchronic balance of 'can-be-played-with' and narratological elements, which begin in a diachronic 'yet-to-be-played' and come to signify an 'always-will-be-played'.

Chronotypology thus provides a powerful vocabulary for thinking about a nonlinear or ergodic text such as a videogame as a 'whole', but this whole is conceptualized as the Game Over as a *process of synchronization*. This expresses the phrase, used in Chapter 5's critique of Galloway's notion of allegory, of games as an 'allegory in a state of collapse' with temporal precision. In this way it is possible to conceptualize the whole of a game while still honoring the requirement to avoid theoretically nominating that whole as a kind of unit in its own right. The Game Over is particularly significant for game criticism as it allows thinking all the heterogeneous components – whether diachronic and player-centric or synchronic and formalist – within one conceptual framework.

From a chronotypological point of view, the Game Over is in fact operative at various intensities at every moment of a videogame. Although in Chapter 9 it was argued that it would be unwise to theoretically prescribe certain perludic acts (as opposed to utilizing the theory in the analysis of particular game performances), with regards to the Game Over there are three 'levels' of synchronization that may be useful to postulate as rough benchmarks. Some of these terms are drawn directly from existing game-related discourse. They help to show the versatility of chronotypology as a comparative approach to videogame performances capable of accounting for how experience is structured in videogames.

Fail State

The first level is the Game Over in its classic arcade sense, where the end of the game appears as a proximal performative concern – the possibility of a performance that pushes a critical metric or resource beyond an allowable digital threshold and thus ends the game infelicitously. This Fail State (which could of course be one of many) causes the game to end and reset

to some allowable state, as well as synchronizing a particular performance (perhaps in the numerical judgment of a score). This type of Game Over, sometimes quite remote at the start of play (due to a tutorial level or other safe area in which players can become habituated without the threat of failure) can intensify as play progresses, critical resources are depleted, and certain performances become closed off. The iconic example would be the gnomic instructions of *Pong*: 'Avoid missing ball for high score'.

This situation is taken to an extreme in hard core genres and games such as God Hand or Demon's Souls, in which terminal infelicity is an incessant pressure. In Danmaku - literally 'bullet curtain' (Bailey 2013, online) - games such as Ikaruga (Treasure, 2001), a hail of deadly ordinance emerges in established (synchronizing) patterns across the screen. The performances necessary for survival are extremely tightly interlinked and circumscribed. Margins for error are slim to nonexistent, overtaxing players' intention spans. The argot physique of gaming is maximized: intuition and interaction asymptote toward a single flux. As in the speedrun, the temporality of performance is hammered out into almost pure spatialities - 'pulsating, multi-hued latticeworks and arabesques' (Bailey 2013, online) - that demand distracted habituation of a very high order. As the curtain of bullets move across the screen, players must not only guide their avatar with exacting precision through an urgent multitude of framing devices, but do so with the knowledge that certain paths may allow momentary felicity but lead to an inexorable dead end.

Players may also formulate their own Fail State conditions for a particular performance: cases in which infelicity is not terminal according to the rules of the game, but would cause the player to re-start the game or reload a previous setting. Such specific and exacting performances are often recorded or streamed for an audience. In games in which score multipliers are based on continuous combos or linked performances, and as such optimal performance is demanded from the outset in order to be competitive, an early mistake may cause players to abandon a performance. A 'permadeath' run (Abraham 2009; Keogh, forthcoming), for example, is one in which any death will cause the performance to be abandoned.

Endgame/The Game Teleonomy

The 'Endgame', which could also be referred to via the more technical term 'Game Teleonomy', designates the sense of a videogame in a holistic sense as a text or cultural artifact. Rather than a constant entropic potential or threat of the Game Over, this longer-term 'end' has more to do with a felt coherence or synchronic quality to a gaming text's overall performative multiplicity. This may very well be a sense of overall narrative coherence (a point that will be expanded below), but many performances may have primarily ludic ramifications for the Game Teleonomy: choosing a race in *TES V: Skyrim* has a far-reaching synchronic effect on all subsequent performances.

A performance of a videogame through to the Endgame can be termed a 'full playthrough'. This is the experience of the Game Over as 'Total Ludic Act', a sense of emergent cohesiveness and context that acts as a synchronizing anterior motive. The term 'teleonomy' (which Wilden (1972) explicitly deploys in favor of 'teleology') is important here as it emphasizes that the experience of overall cohesion to a game is variable and multifinal rather than necessarily linear – even though in many games there are identifiable linear or highly synchronic structures such as narratives and level progressions. Completing the game felicitously performs a transformation in which many of the game's framing devices shift from signifying diachrony (the yet-to-be-played) to signifying synchrony (the Game Over).

As emphasized above, even though the Endgame is a synchronic expectation or horizon, it is in fact operative at every moment of play, helping to define the diachronic duration of the experience. This teleonomic sense is, for example, evoked by players who seek to sanction certain types of play or specific performances – complaining about spawn camping in FPS games, continuous early rushes in RTS games, the choosing of characters who are judged overpowered in fighting games, and so on. The argument that certain performances are against the spirit of the game in question relies on a certain notion of its teleology: how the performative multiplicity *feels*. These performances are perfectly indifferent to the apparatus, but they violate players' sense of what the game is and should be as a felicitous whole.

This formulation of the Endgame can address both narrative-centered games such as *Final Fantasy VII* and 'sandbox' style games such as *Grand Theft Auto V* or *Minecraft*. The former titles feature nonreversible performances in terms of the advancement of a plot, whereas in the latter games (though they may have a central plot that can be completed this may be largely ignored or held in abeyance indefinitely) their Game Teleology is, primarily, the euporetic imperative to explore a vast ensemble of performances. These games effectively offer a capacious enough set of

performances to give players the latitude to establish and pursue a large number of goals as perludic acts (driving a taxi in *Grand Theft Auto*, buying a house in *TES V: Skyrim*) that are constituted by the game's repertoire of performances. In such cases, narrative synchronies are subordinated. They can often be ignored or delayed indefinitely. Conversely, such game worlds can often give the impression of being highly synchronic: frozen in time until the player character comes along to sort out whatever problems the local NPCs have managed to get themselves into.

Imagery invoking the Game Teleology is common in wider gaming culture and in marketing. In the classic arcade cabinets, these images take the form of a literal off-frame space. The cabinet is traditionally illuminated with an image that influences what it feels like to play with the game's performative multiplicity: even if the graphics of early arcade games were very simple, they still supplemented their abstract forms of movement with lurid pulp images. The cabinet's imagery is, therefore, not simply an arbitrary fictional layer imposed on the abstract forms of gameplay, but a synchronizing imaginary: an affective visualization of the Game Teleonomy.

The synchronic potentials of imagery to encourage extrapolation and speculation are very important in game marketing. Demos and other promotional materials are often oriented to providing a similar sense of what the finished game will feel like. Typically, game demo performances at trade shows or distributed to players will be tightly circumscribed and utilize special builds in order to evoke a game that does not yet exist. As a result, the demo performance will only go to certain areas and undertake certain tasks – but these performances may not appear in the final game at all. The demo thus faces the difficult task of using a highly synchronized performance to create the diachronic feeling of a far more expansive world to explore and set of performances to enact.

These attempts to envisage the experience of play before the game is shipped can lead to thorny issues. If players eventually discover that the specifics of the Game Teleology intimated by the demo or other advertising material does not conform to the finished game (as was the case with games such as *Destiny*, *Bioshock: Infinite* and *Aliens: Colonial Marines*) they may feel that they were misled. From a consumer point of view a demo advertises a certain experience which was not vindicated by the finalized product, whereas from a developer and publisher point of view it may be necessary to cut game elements regardless of what the marketing department has been up to. An infamous example of this was the *Killzone* 2 trailer shown at E3 2005. The trailer's graphics gave the impression that they were running in real-time on the then-upcoming PS3 console, although it was subsequently revealed that the demo was in fact prerendered by the studio based on what they thought the machine could do. Similarly, *No Man's Sky* (Hello Games 2016) was marketed to create a headily euporetic sense of diachronic potential through a procedurally gave rise to synchrony because there was only a small set of things to do in this immense space. The backlash in each case was intense, and serves as an index for both the importance and the perils of representing the Game Teleonomy in such a heterogeneous medium.

Trade publications and advertising images also try to envisage the Game Over when they cover games that are still in development through representative imagery. However, these are not simple captures of inengine visuals but are edited to adjust lighting, smooth edges, add characters and so on. While touching up images is regular practice in advertising, games often sell themselves on the capacity of their engines to generate remarkable graphical experiences. Such images have colloquially come to be known as 'bullshots' (Plunkett 2012) because they give an erroneous impression of what the game will actually look and feel like in the diachronizing muddle of play. Similar issues arise in crowdfunding, where campaign backers are effectively helping to finance a game product on the basis of a certain expectation that creators construct of its overall Game Teleology.

These examples are all evidence that players begin forming a synchronizing notion of the Game Teleology even before a game is released. The most remarkable example of this was *P.T.* (Kojima Productions, 2014). Short for 'playable trailer', this was ostensibly a demo for the AAA game *Silent Hills*, but it was released in a grainy state that made it seem as if it was produced by a nonexistent indie called '7780s Studio'. The demo attracted considerable interest and once the puzzles were solved, the game's production quality improved considerably and credits revealed that Kojima, film director Guillermo del Toro and actor Norman Reedus were attached. The final twist was that Konami and Kojima subsequently parted ways, meaning that *Silent Hills* would never be developed. *P.T.* thus has the opposite temporal signification of the typical game demo, bullshot or trailer. Where the typical demo is a synchronic structure that can never really live up to the diachronic experiences of the game it foreshadows, P.T. actually offered genuinely diachronic possibilities for play – only to be forever frozen in time as the signifier of a possibility that will never come to pass.

The Gaming Situation

This expanded set of influences on the play experience leads to the third level at which the Game Over can be said to be operative. It is more strictly an 'after the game': the activity and cultures of videogaming itself, taken as a field of cultural production (Bourdieu 1993). This, in an efficient phrase coined by Eskelinen (2001), can be referred to as the Gaming Situation.

A proper analysis of this level is clearly the province of sociological and ethnographic methods, which are beyond the scope of this book's discussion of performativity. However, there are some aspects of the videogamespecific 'after the game' that can briefly be discussed here. Retrogaming culture, for example, seeks to create a temporal margin that evokes and nurtures a nostalgic Gaming Situation. The figure of the 'gamer', the development of which Kirkpatrick (2015) has reconstructed through gaming magazines, exerts a very high-level and potent synchronizing effect over the mainstream industry as a presumptive 'target market' that motivates both publisher investment and design aesthetics. Games (often those made by independent designers or studios) that depart from this set of conventions or refuse to present the usual anterior motives are liable to be labeled as 'non-games', 'walking sims' or other derogatory labels.

The concepts of intertextuality and serial aesthetics explored in previous chapters are some examples of how the Gaming Situation and gamer culture can often exercise a synchronizing effect on the experience of playing individual games. Many forms of the wider gamer culture, including official trade publications and magazines as well as cultural texts such as chiptunes music, Let's Play videos, streaming practices and webcomics, thrive on the web of pop-culture literacy and intertextuality that characterizes much of popular fan culture (Ndalianis 2004). Particularly influential performances and framing devices can enter the wider Gaming Situation, becoming important reference points for gaming as a culture and attitude. Aeris' death in *Final Fantasy VII*, the tram-car bound introductions to *Half-Life* games, and the controller-port switching encounter with Psycho Mantis in *Metal Gear Solid* are all examples that have become indelible parts of the collective lexicon of gaming culture.

VIDEOGAME NARRATIVE: A TEST CASE FOR CHRONOTYPOLOGY

As a test case for chronotypology (and in particular, the concept of the Game Teleonomy) I will turn to the problem of narrative. This has been a contentious issue in the study of games (Murray 2005; Apperley & Jayemanne 2012), insofar as narratives are often seen as linear while games can have multiple outcomes. It is certainly true that many games do not possess a readily identifiable narrative (i.e. *Tetris*), or that the stories are somewhat pro forma pretexts to the more important action gameplay. However, there are numerous games for which narrative is clearly identifiable, generating what Costikyan (2013) identifies as 'narrative uncertainty'. This is a very similar sense of anticipation concerning narrative events and sequences to that of a linear novel or film.

The rise of video sharing and networked publics has made it very easy to show the importance of narrative and narrative uncertainty to many players: 'all-cutscenes movies' that edit together all the key cinematic sequences of particular games often have millions of views on YouTube. This indicates that videogames can generate significant narrative and spectatorial uses and gratifications. Popular channels such as 'The Game Theorists' are devoted to exploring the 'spatial' (Jenkins 2004) and 'indexical' (Fernández-Vara 2011) storytelling that shape the environments of games such as *Dark Souls, Destiny* and *Five Nights at Freddy's*. Narrative is an extremely important element in many videogames – and, as the creation of many different narrative forms in game fan culture shows, even nonnarrative games tend to be comprised of highly 'narrativizable' elements.

Chronotypology can aid in the analysis of videogame narrative because it provides a comparative method capable of moving past the binary of linear and nonlinear form. From this point of view, narrative – barring modifications, glitches or other departures from the 'orthodox' game text – can be rigorously defined as an apparatus that synchronizes all full performances of a game. All performances of the Mass Effect series will task players with choosing the death of a crewmember. All performances of Planescape: Torment will begin with The Nameless One waking in the Sigil Mortuary. All performances of Alien: Isolation will involve Ripley making her way to the supercomputer at the center of Sevastopol space station. These narrative devices act as synchronizing 'anchors' across any performance of a given game. It is this temporal function that has the most similarities to the development of fragmented narrative form in film, television and postmodern literature, albeit it is deployed in a different way.

Countable diachronic elements (such as multiple endings) are common in games and can be designated as *variable* narratives. Games such as 80 Days introduce different characters and plot possibilities depending on which routes players take through the game. Some narrative-centered games explicitly signify when a variable choice has been made. The Walking Dead (Telltale Games 2012) will alert players if their actions have a certain effect on the attitude of a particular NPC, thereby identifying a forking point in the narrative. Both Until Dawn (Supermassive Games 2015) and Life is Strange make use of the butterfly motif to signal points at which a diachronic effect has split the narrative. Life is Strange offers a limited time-travel ability, enabling players to redo recent events and see how they might play out in light of different conversational threads or actions - essentially, making the save game mechanic part of the diegetic game world itself. The way that these diachronic choices play out in the longer term is still something that needs to be discovered through extended and repeated play: re-approaching the point of diachronic divergence in order to make a different choice.

Although narrative synchronizes all complete performances of a videogame, as noted above this is to be understood as a process that is only maximized at the Game Over. Story elements are highly *diachronic* from the point of view of an initial playthrough: players want to know how the game's story unfolds. The death of the playable character Aeris at the hands of antagonist Sephiroth in *Final Fantasy VII*, told through a cutscene, is such an event. Generally, playable characters in JRPGs are knocked unconscious rather than killed in combat.⁷ To have a character in whom ludic effort and time was invested (leveling up, collecting equipment, etc.) removed from play by narrative fiat proved shocking both on narrative and ludic levels. An unspoken agreement between designers and players seems to be broken.

Aeris' murder seems to have left something of a lasting legacy even in the mercurial culture of gaming. As one player wrote:

Once the shock of witnessing Aeris' sudden and unexpected death subsided, I immediately assumed she would return in one way or another. After all, this was fantasy, right? Sticking to the rules of fantasy, the dead maiden is always revived by the daring hero and we, the audience, will walk away with a smug smile on our faces. (Ambigore 1998, online)

The event is described by this player in terms of extreme diachrony – as a shock that violates an expected formal closure based in determinate generic tropes. The sense of betrayal is framed in explicitly temporal terms, set off against a determinate notion of the Endgame: 'Alas, Aeris does not come back and this important promise is meaningless, not to mention a total waste of time' (*ibid*, online).

This sense of an 'important promise' indicates the power of the narrative form within the game. Rumors circulated that it was possible, if the right actions were performed and conditions met, to resurrect Aeris. In fact the character's death, combined with the game's enigmatic closing sequence, turned *Final Fantasy VII* as a whole into something of an unstable signifier. An 'incomplete game theory'⁸ arose holding that the game had shipped before the developers could implement Aeris' revivification due to time pressures from producers and marketers. However, according to this theory, these time pressures also meant that the game launched before the creators could remove all narrative and ludic evidence that it had originally been planned.

A related notion arose in fan discussions that the game's commercial release had been bowdlerized. For these players, certain unstable signifiers and performances took on extremely powerful significance. This complexity is evident in the narrative form through which they sought to place these elements within the complex regimes of diachrony and synchrony at work in *Final Fantasy VII*:

When you get Aeris's fourth limit break she has most likely already died. If you actually do what you need to do to get it before she dies you waste vast amounts of time (it took me three extra hours of getting her limit breaks up). The point is that if you get it before she dies, it doesn't seem like you should have it yet. (RTSmith005, quoted in Cheshire 2004, online)

Such highly involved negotiation of tenses and persons is common in commentary on videogames, arising from the difficulties involved in characterizing a performative multiplicity. The assertion of performances feeling like 'a waste of time' in light of Aeris' death is notable insofar as this sense of superfluity comes into relief against structures (narrative in the first case, ludic in the second) that might be projected to obtain at the end of the game: that is, the point at which diachronic unstable signifiers sustaining the events and duration of the particular playthrough will have changed their valence to signify synchrony. This is expressed with regard to *both* narrative and ludic elements.

The dismay shown in RTSmith005's response to Aeris' death indicates how the various apparatuses involved in a game dynamically build up expectations during the course of play: the sense players develop of *Final Fantasy VIP*'s 'off-frame space' is one with strongly narrative characteristics. The incomplete game theory is evidence that narrative can have a high-level synchronic effect on the reception of a videogame. Furthermore, expectations about the development of narrative can spur speculation about ludic systems.

The game's protagonist (and for the majority of the game, the avatar), Cloud Strife, can be usefully contrasted with Aeris in terms of how his plotline responds to the chronotypological demands of the game. Cloud is one of gaming's numerous 'amnesiac protagonists': viewpoint characters who awaken in a strange world. This trope (which also appears as a key plot point in *Planescape: Torment*) has something of the reputation of a tired cliché in gaming, but the purpose it serves is to place the protagonist in a position of ignorance and wonder that resonates with players' diachronic sense of possibility: in this way, the character's aporia is mapped onto players' euporia, and diachronizing setting, narrative and characterological elements can be introduced with equal justification across the avatar-player message-in-circuit. Both have the effect of giving a rationale for an exploratory attitude toward the game world. Cloud's complex chronotypology indicates the way that avatars in general serve as nodes for the balancing of diachronic and synchronic signification: they must bind performances together through characterological and narrative means, while also providing diachronic possibilities envisaged by the game design. This has led to the creation of strange character types, such as the 'silent protagonist' and the 'customizable avatar', that are endemic to gaming.

Although *Final Fantasy VII* is a venerable title, more recent phenomena also show that players still actively construct a sense of the Game Over through narrative form. The obscure narrative to *Dark Souls*² history was pieced together by fans in forums and online videos. The ending to *Mass Effect 3* caused a storm of online controversy. The main complaint was that the intricate decisions and outcomes that occurred across the three games in the series were not represented in the closing cinematic. Instead, the same simple fireside vignette was seen by all players. That is, the diachronic aspects of performances of the *Mass Effect* series – the specific details of which made each unique – were subordinated to a single anodyne cutscene. This ending was subsequently expanded in response to this player protest. Similarly, the online reception of the episodic *Life is Strange* involved players seeking to intuit and predict the game's future narrative and ludic structure: to extrapolate what the extant signifiers of the game would look like at the synchronizing moment of a Game Over.

Narrative, then, is one apparatus through which games engender diachronic and synchronic experiences from a performative multiplicity. This takes many intertextual forms. Many fighting games, such as the Street Fighter series, feature multiple narratives. Typically each character has a storyline that progresses as the player wins matches. A felicitous playthrough ends with the player's character winning the World Warrior Tournament. Therefore there are several endings to the game which are obviously mutually exclusive to some degree or another. 'Canonical' victors of each tournament are often only established with the release of a new game in the series, at which time all the other alternate endings become somewhat counterfactual. This results in a motley sort of storytelling, in which the caricatural design elements of the characters are often played up in picaresque, comical and outré scenarios: the hirsute and nomadic Blanka, for example, finds himself deposited in a zoo at his ending for Capcom vs. SNK 2: Mark of the Millennium 2001 (Capcom, 2001). In the Guilty Gear series, where the participation of some characters in the game's tournaments concern existential questions and worldshattering events, for her part trainee chef Jam Kurodaberi wants to win enough money to establish her own restaurant.

These sorts of exuberantly variable narratives, which revel in the inconsistency of branching plots and unevenness of tone stand in contrast to more conservative licensed properties that aim for fictional and stylistic consistency. Newman reports that the *Halo* novelizations are officially endorsed by the game's corporate owners, granting them the same source of legitimation as the games themselves. They take place in the game's offframe space: 'the novelizations precede, move on from and connect the portions of the narrative presented in the games' (2008, 50). In this form of remediation, the Game Over is represented as being coterminous with a highly integrated group of media products. Surman (2007) argues that in the comparatively ramshackle *Street Fighter* constellation it is the highly distinctive special moves of the various characters that, across a heterogeneous set of contexts, are remediated over and above any particular narrative forms. In the live-action *Street Fighter: The Movie* (1994): Importantly, the performance of special moves in the movie is central to the appeal of the film to fans of the videogame. These signature poses are reserved for the closing scenes of the movie, and function as 'deciders' in these final staged action sequences. Ryu's '*hadou-ken*' fireball, Ken's '*shor-yuken*' dragon punch, Guile's 'flash kick', Blanka's 'electric attack', Vega's 'rolling slash' and Bison's irrepressible 'psycho crusher' all make noteworthy appearances, to assure that the iconicity of the videogame is rehearsed with due thoroughness. (Surman 2007)

Where the *Halo* franchise redeploys narrative events from the games into action-oriented novels and comics, remediations of *Street Fighter* both celebrate and lampoon the salient features and spectacle of the characters' super moves. The former emphasizes the synchronization of a single narrative line; the latter facilitates multiple synchronic affects.

Narrating Gameplay

Techniques and practices that synchronize videogame performances are not confined to storylines. Players often narrate their performances, and this takes the form of several genres such as the FAQ, the walkthrough and the Let's Play. E-sports events such as professional Starcraft or League of Legends tournaments (Taylor 2012) often require the contribution of commentary teams (referred to as 'casters', while those who govern what is seen by audiences are 'observers') whose role is to help audiences understand the various performances they witness. Much like commentary in televised sports and athletics, e-sports commentators contextualize, clarify and critique the ongoing process of play – constructing a narrative that both characterizes past performances, contextualizes play as it occurs, and anticipates future possibilities. The casters' discourse thus acts to synchronize the elite performances of the players, conveying structures of performative judgment and evaluating felicity. Where a particular opening by one professional player may seem to an inexperienced audience member as a confusing muddle of separate performances or acts, the commentator identifies the synchronic element as a build order (Chapter 7) and can thereby speculate on the diachronic possibilities that this opens up as play proceeds. Winn (2015) has argued that the design of MOBA games such as League of Legends is oriented from the ground up to be streamed and presented before large audiences: the narrative constructed by commentators to synchronize the performance of

the elite players is also key to the success of the genre as a spectacular e-sport for mass consumption.

Another genre of videogame-generated narrative is the 'Let's Play' or 'LP', which developed on message boards but has expanded in style and format to currently include some of the most wildly popular videos on YouTube. In a LP video, players will record a performance of the game for distribution and commentary by others, possibly through an online forum of some kind (LPs are often organized through forum threads). The host player may request input from others at certain points (naming characters, assigning stats, rehearsing in-jokes and so on), thereby synchronizing the group's contributions into a single performative style. LPs made by more popular and established players will generally be edited to eliminate infelicitous segments in which they are stuck or unable to proceed: celebrity YouTubers abhor an aporia. On the other hand, 'Long Plays' eschew slick editing and instead record an entire performance including grinding, farming and failures.

The LP could involve screenshots and bridging text, or a video recording of the performance with or without a commentary track. In this way an individual or community narratively synchronize their performance of a game. A notable example of this genre is a LP of a set of connected performances of *Slaves to Armok: God of Blood Chapter II: Dwarf Fortress* (Adams 2006–ongoing) called 'boatmurdered'. Each player completed a year of game-time and then passed the save file to another while constructing a narrative detailing the events that occurred during their performance (a 'succession style' LP). The LP synchronizes the performances of the multiple players and the fate of their shared city.

Game-related narratives can thus arise at various stages of play and reception. They can be produced by various groups who may have differing levels of cultural, legal and commercial legitimacy (Newman 2008). These value and status judgments flow on to their narrative productions (as 'canon' and apocrypha), but common to them all is their synchronizing approach to videogame performance.

'Sins Against Videogame Time': The Chronotypology of *Life Is Strange*

The final example of chronotypological analysis is a gallery scene that will complete the arc threaded through *The Cabinet of Cornelis van der Geest, The Unknown Masterpiece, The Crying of Lot 49* and *Oryx & Crake.* This scene appears in the episodic *Life is Strange*, a videogame which explores

temporality through figures of reversal. Like other key game texts explored in this book, *LiS* articulates an auto-critique of gaming through an aesthetics of infelicity. This will also serve as an example of the capacity of chronotypology to think ludic and narrative elements together within the one framework.

The gallery scene in this case sees protagonist Max Caulfield tearing in half a selfie that she has taken with her analog instant camera. This figure of reversal frames her in front of a wall in her dorm room that she has covered with her own photographs – an intimate metapictorial gallery that she calls her 'cocoon'. Her analog photography links her to specific spatial and temporal contexts: a polaroid's photochemical processes cannot be manipulated with the same facility as digital images. The analog quality to her photography is reflected in the game's art style, which almost has a painterly quality. It's as if we see everything through Max's 'eye': 'If I'm not looking through a viewfinder, I'm looking through a window. Always looking'.

That eye is talented: Max is a student at a prestigious art school called Blackwell Academy in the fictional town of Arcadia Bay, Oregon. Her gallery selfie was to be her submission to the prestigious 'Everyday Heroes' competition, the reward for which is exhibition in San Francisco's Zeitgeist Gallery. Her charismatic and accomplished teacher Mark Jefferson, who is fond of Hitchcock's maxim that film is 'little pieces of time', has been urging her to enter a photograph. However, Max has confidence issues and is reluctant to enter her selfie for judgment. After a terrifying dream in which she witnesses a tornado destroying Arcadia Bay, a shaken Max heads to the bathroom where she finds and takes a photo of a striking blue butterfly. She then witnesses an altercation between a bluehaired girl and an unstable student which ends with the girl being shot.

It is at this moment of shock that she discovers that she has the power to rewind time, appearing back in Jefferson's class. Forewarned, she is able to save the life of the girl in the bathroom, who she later recognizes as her childhood friend Chloe. The pair begin to explore Max's powers (as she tells herself, 'It's time to be an everyday hero'), and the *Twin Peaks*-esque mysteries of the seemingly quiet town. Their investigations are propelled by the case of a missing student called Rachel Amber and a viral video of another student, Kate Marsh, who had been drugged against her will.

Max quickly finds that her rewind ability allows her to approach social and other situations with newfound confidence reminiscent of Hugo's description of Enjolras: 'he had already, in some previous existence, been through the revolutionary apocalypse'. If a situation goes awry, Max can simply rewind and try again. This capability only extends into the relatively recent past, however: if overused, Max starts to feel ill and blots reminiscent of photochemical overexposure blur the screen. The sleuthing she undertakes with this ability comes naturally – as many characters note, she is a very nosy person (Chloe's mother Joyce jokingly calls her 'Nancy Drew'). As is quite typical of adventure games, players can have her wander about blithely reading people's email and other private documents. The flipside is that she is capable of gaining a more complete view of the context for people's actions and behaviors, a tendency that her power accentuates.

The time span she is capable of rewinding appears in the game interface as a spiral. While the spiral is analog (reversed animations play out as Max rewinds), it is marked with dots which represent digital and diachronic potentials. Essentially, each spiral represents a 'a little piece of time' – a temporal eddy. The spiral designates a perludic act that Max can resynchronize again and again, 'developing' the performative multiplicity in what is truly her own time. Max's power and the centrality of her gallery selfie write the figure of reversal and the framing device into the textual fabric of *LiS*, thus making it a fitting close to the gallery-scene series explored in this book.

Later in the game, Max discovers another temporal ability: the capacity to travel back even further in time through focusing on polaroid photographs. Where her rewind spiral is limited to the immediate past, her ability to enter an instant photograph is bounded in space: she cannot leave the photographed scene. It is also prone to the common time-travel trope of unintended consequences: she cannot predict how her adjustments of the past scene will diachronize the present when she returns through the polaroid. She isn't even sure if the timelines she is traversing rearrange one world, or if each represents a completely separate reality.

Players are warned that certain performances have a diachronic effect that is beyond the scope of Max's immediate rewind ability by the appearance of a butterfly motif and the message 'This action will have consequences...'. Essentially, the butterfly icon indicates that a certain performance is an unstable signifier. Where the basic rewind is more like a snapshot with relatively simple outcomes (whether a conversation goes well, for example), the butterfly motif represents more sustained causal threads. The signifier in question was liable to remain unstable for quite

some time for players who, if they were playing as each episode was released across 2015, would have to await future installments. As in *PS:T* and *Dark Souls*, the save-game mechanic is incorporated into the diegetic world and the ludological structure of the game, informing Max's experience of her world and dramatizing her difficulties negotiating between observation and action.

Like Balzac's painters, Max and Chloe are inscribed with distinctive temporal significance⁹ and conflicting attitudes to memory and futurity: the former's surname references Salinger, and the latter's, the goddess Demeter. Max's return to Arcadia Bay leaves her feeling guilty for having left Chloe, whose father William died in a car accident during her absence. Chloe has not moved on from this event as attested both by herself and by her mother Joyce: 'Chloe chose to remain in the past.' These temporal motifs influence their characterization: Max is reserved, and Chloe urges her to make the most of both her artistic and temporal abilities. For her part, Chloe is overconfident to the point of being extremely prone to finding herself in lethal situations. The two friends are linked by a blue butterfly that evokes both the stasis of the cocoon and the potentialities of metamorphosis and Lorenz's 'butterfly effect'.

Tropes and imagery invoking temporal loops and figures of reversal recur as Max explores her old childhood town, including birds flocking in synchronized patterns; vortices; images and locales of the past; a junkyard hideout; time-travel sci-fi; theories of relativity; teen drama and smalltown Americana clichés; concerns about surveillance. However, as Max uses her powers over the course of the episodes, increasingly diachronic and nonreversible phenomena start to appear: dead birds, beached whales, meteorological and climactic aberrations such as unseasonal snowfalls, untimely eclipses, double moons. These are all capped by the prophetic vision of the tornado: climate change appears as the paradigmatic diachronic signifier. The episode titles also develop from synchronic to diachronic signifiers: from Episode 1 ('Chrysalis') to the proliferating possibility of Episode 3 ('Chaos Theory') and finally the binary of Episode 5 ('Polarized').

The game's most affecting signifiers of diachrony are the viral video of a drugged Kate Marsh, and the *memento mori* of a vanished Rachel Amber. Unlike Max's reversible vignettes, the pious Kate's exposure to a digital networked public is nonreversible. The strictly religious Kate, tormented by the video's distribution and her inability to remember the night in question, is driven to the roof of the school. Max can help Kate, but at a

time when she has overtaxed her rewind power: the scene has a strong diachronic quality because players must navigate the outcomes of this conversation without the game mechanic which they had come to take for granted. Later in the game, Max and Chloe discover Rachel's decomposing body: preventing her death is outside the scope of Max's temporal powers, constituting another moment that is a sheerly diachronic moment contrasted with the game's endemic loops.

Polaroid Temporality

The increasing tendency to diachrony becomes the basis of *Life is Strange*'s aesthetics of infelicity: the more that Max tries to definitively resolve the temporal complex she has created, the more loose ends and unintended consequences crop up. Infelicity also obtains at the level of plot, as Max's attempts to uncover who was responsible for what happened to Kate and Rachel lead to a false conclusion, allowing the true culprit – Mark Jefferson – to kidnap her, killing Chloe in the process.

Jefferson turns out to be something of a Humbert Humbert crossed with a comic book villain: he is obsessed with photographing what he perceives as the moment of transition between innocence and experience. Max escapes her imprisonment by going back in time through the selfie she took in the game's opening scene, looping back to Jefferson's class with full knowledge of his misdeeds. She ensures that Jefferson is apprehended, preventing him from ever killing Chloe. She also gains the courage to enter her gallery scene selfie into the Everyday Heroes contest and wins a flight to San Francisco and a career as a feted photographer. Her 'selfie cocoon' has become the gallery scene of a true artist.

Through this gallery scene everything, it seems, is wrapped up in a nicely felicitous Game Over. However, the game keeps going. Hints of infelicity begin to mount. Max once again struggles with her social anxiety when mixing at the gallery. Another indication that something is wrong is the farcical nature of the gallery scene, which sours the triumphant exhibition by pastiching the art world's denizens as vainglorious and trivial – not really worth networking with in the first place. Finally, Max receives a call from Chloe, who says that the storm has indeed come to destroy Arcadia Bay before being abruptly cut off.

Max chooses to travel back in time through her Everyday Heroes photo in order to destroy it at the moment it was taken. Enacting this figure of reversal, she wagers, will ensure that she never wins the competition and remains in Arcadia Bay to help save her friends and family: the loss of a career seems trivial by comparison. However, where previously her trips into the polaroid past have been to scenes bounded by a dreamy white light, now there is the angry blurs, streaks and mottles of badly developed photographs. 'What am I doing to time?' she wonders as she tears apart the selfie.

The resulting timeline is overtly infelicitous at both narrative and ludic levels. Max is forced to re-navigate many scenarios she has performed felicitously (or at least, survived) in previous episodes. Reality itself seems to break down: surreal level designs present twisted rehearsals of past events and distorted versions of other characters. Finally, Max finds herself before the very storm with which the game opened, save that this Chloe is there as well. Chloe argues what they have long suspected, that the temporal anomalies and ultimately the storm arise from the initial rewinding of time to save her life. Max then faces a choice: sacrifice Chloe to save Arcadia Bay, or sacrifice the town to save Chloe.

Many players received this stark binary ending with sentiments similar to those of the *Mass Effect 3* ending controversy: a game which had tasked players with deciding the outcomes of so many plotlines and relationships failed, in the end, to play them out in a nuanced and spectacular game-ending cinematic. Here too, the ending was often judged as insufficiently diachronic. The game proper is a genuine performative multiplicity, but it ends in a mere forking path.

Another common player reaction is reminiscent of arguments that time spent improving Aeris' abilities in *Final Fantasy VII* is a 'waste' from the point of view of the Game Over. *LiS* wraps back to a 'before-the-game': the moment of Max's first rewind, a time before time became so crumpled. The polarized choice between Chloe or Arcadia Bay frames all the other choices and temporal complexes in the game, but is not meaningfully diachronized by any of them: 'At its conclusion, *Life is Strange* leaves players with one of two possible outcomes, and in either case absolutely nothing from earlier in the season matters anymore' (Sanskrit 2015). These frustrations once more show the complex interplay between ludic and narrative elements, reaffirming the ways in which players actively construct a sense of the Game Teleology in the muddle of play. These dynamics are particularly evident with regards to *LiS*, as players produced forum posts and videos outlining their theories of what would occur in forthcoming installments. These conceptions of the ending of *LiS* as an excess or as wasteful can be analyzed in chronotypological terms. As noted, the game builds its aesthetics of infelicity across each episode as the core game mechanic – seemingly so oriented to synchrony – leads to narrative, thematic and ludic consequences that have increasingly aggravated diachronic qualities. However, it is not as if the felicitous ending does not exist, so much as that it is subordinated to the true Game Over. As noted above, Max seems to have resolved her time-hopping problems by travelling back through her gallery selfie, breaking out of her 'cocoon' with the ability to solve the town's problems. Because she can act with the foreknowledge granted by her power's figures of reversal, characters comment on how self-confident and capable she has become: a veritable Everyday Hero.

The abrupt reintroduction of the tornado plot amidst what seems to be the denouement of a felicitous Game Over gives the subsequent gameplay a supplemental character: it seems like an 'after-the-game'. This is reflected in a surreal breakdown of established game design codes and pretenses to realism. Ludic structures become unmoored and lose their synchronizing reliability. This aesthetics of infelicity coincides with a caustic dose of autocritique: the dream-sequence is the most 'videogamey' part of LiS. Interspersed among the interpersonal themes, character-centric dialogue and measured pacing that form the main materials of the game are scenarios that seem included mainly in order to incorporate stock videogame mechanics: a fetch quest involving searching for bottles in a junkyard, stealth gameplay avoiding security guards in the academy pool, and door digicode puzzles.¹⁰ Max expresses her exasperation as she encounters belated - almost apologetic - versions of these mechanics in her nightmare: 'Oh no, bottles... this might be hell'; 'I'll be so grateful if this is the last digicode' and in an unused audio file 'I'm going to make the designers pay for all these bullshit code puzzles'.¹¹

Near the end of her nightmare, Max emerges into a scene set in the town's familiar diner, in which doppelgängers of most of the characters that she has met throughout the game are assembled (Fig. 10.3).

The assembled characters comment critically on players' decisions, upbraid Max for misusing her powers, mock her pretensions to heroism, or lambast her for missing opportunities to help them. Finally, she finds a version of herself sitting in a booth: 'I'm you, dumbass. Or I'm one of many Maxes you've left behind... Thought you could control everybody and everything, huh? Twist time around your fingers? You only wanted to be popular. And once you got these amazing powers, your big plan was to



Fig. 10.3 Cart life

trick people into thinking you give a rat's ass... You've left a trail of death and suffering behind you'.

LiS gallery scene thus leads to a final episode that is overwhelmingly characterized by the aesthetics of infelicity. The neat synchronizing loops that players expect from conventional videogames are supplemented by the irreducible diachrony of the game's final choice, and no amount of rearranging the past will afford a felicitous ending. Read in this way, *LiS* is an autocritique and refusal of the aesthetics of felicity that are so dominant in mainstream game design and indeed in technoculture more broadly. The dismissive attitude to the typical structures mandated by game design (fetch quests and so on) combines with the title of the gallery scene – Everyday Heroes – in order to highlight how impoverished the temporal schemas of gaming are when they bear the ludic weight of achievability.

Although branching paths and satisfying endings are diachronic at the level of individual games, at the larger level of the gaming situation they are imparted with a retroactive equivalence through what Keogh (forthcoming) terms gaming's 'hacker technicity': the logics of a consumer culture in which potentiality is routinely subordinated to the expectation of its eventual actualization. The Game Over must deliver in shock or in spectacle; above all, it must not feel like wasted time. However these design imperatives mean that videogames' diachronic potentials are provisional and to some degree equivalent, imparting a synchrony across the cultural field that *LiS* refuses with its indelibly diachronic 'after-the-game'.

Simultaneously, in the refusal encoded in its aesthetics of infelicity, LiS highlights the difficulty that mainstream videogames have in exploring the everyday: their temporal structure. The form's obsession with anterior motives, with conflict and warfare, with far futures or distant pasts – with heroism that is anything but everyday – means that euporetic moments of stillness and reflection (as noted in Chapter 6, these are featured in LiS) and everyday heroes are comparatively rare in a field of production that insists on new innervations. Games which evoke other modes of experience are liable to be derided as 'walking sims' and 'non-games'. LiS makes the most typical game mechanical sections seem supplementary and excessive and in this way acts as a provocation not only to the exploration of wider thematics in videogames (adolescence in a networked society, same-sex attraction, abuse of authority and so on) but also to a more sophisticated attitude to the diachronic and synchronic potentials – the chronotypologies – of performance.

At the same time, the game's supplementary diachrony reflects an everyday characterized by multiple apparatuses and processes of innervation – from mass surveillance to anthropogenic climate change – that produce the complex couplings and decouplings of temporality that Boris Groys (2010) terms 'projects'. Chloe, as *memento mori* and strange performative attractor, insists on the reality of the ragged, threadbare time that has comprised the game, precisely because it has no bearing on the final scene: 'Wherever I end up after this... in whatever reality, all those moments between us were real, and they'll always be ours'. Max's infelicities (she just really isn't much good with her either her detective work or her 'power') belies the rhetoric of the avatar as a simple channel for player choice or empowerment. This final gallery scene leads not to virtuoso control but the aesthetics of infelicity: sins, to paraphrase Pynchon, against videogame time.

Notes

1. As Agamben insists, is important to note that in Lévi-Strauss' usage, diachrony and synchrony do not imply dynamism and stasis respectively: rather they pertain to processes of temporal separation and convergence. Combined, these constitute a 'synchrono-diachronic system' (Lévi-Strauss, 236). These processes may be as 'dynamic' or 'static' in producing signifiers of synchrony as they are in diachrony.

- 2. The institution of the *churinga* 'diminishes until it disappears altogether as one progresses northwards' (237) toward societies such as the Arbanna and Warramunga.
- 3. As has been stressed throughout, this does not imply simply the 'instantiation' of a rule set in a particular play situation but as Chun puts it, new ways of going astray.
- 4. This term is indebted to Bakhtin's literary-critical category 'chronotope' (1982).
- 5. 'Synchronous play' and 'asynchronous play', for example, are common terms in game design to refer to whether players act at the same time or in a staggered turn-based fashion.
- 6. Even here, however, diachrony is not absolute: players' experience with previous games in the genre or the particular hardware setup create synchronies at other levels.
- 7. This is not one entirely unprecedented in the genre of JRPGs but nonetheless fairly rare. The character Galuf dies as a storyline event in *Final Fantasy V*, for example, but even here his abilities as developed by the player are passed on to his granddaughter, who becomes a playable character – the time spent making Galuf more powerful is not lost. A commercially produced device that allowed manipulation of the game code (a 'Gameshark' for the Playstation) can 'resurrect' Aeris so that she can participate in battles, but in terms of the storyline sequences she remains dead.
- 8. An example can be found in a *FF VII* plot FAQ by falsehead (Cheshire 2004).
- 9. Agamben (1993a) argues that the striking co-incidence of playful and funerary phenomena in many cultures is due to both being unstable signifiers: initiates take the place of departed ancestors through ritual. *LiS* draws these themes together through the perennial American preoccupation with teenage years, and Chloe's own penchant for getting herself killed. Also important is the search for the dead Rachel Amber, who is represented by a ghostly doe, and the name Arcadia Bay, which evokes *memento mori* canvases entitled *Et in Arcadia ego* by Barbieri and Poussin.
- 10. *LiS* also caricatures another of gaming's too-easy design tropes in the firearm: use of guns in the game is never powerful or successful, and Chloe even manages to kill herself with a ricochet in one particularly infelicitous scene.
- 11. Unused audio files for *Life is Strange* can be found at http://life-is-strange. wikia.com/wiki/Unused_Audios.

CONCLUSION: A COMPARATIVE METHOD FOR STUDYING VIDEOGAME PERFORMANCES

This book opened with England's discussion of videogame doors, and the many disciplines tied up in such a seemingly simple virtual object. Austin's treatment of the performative, when reconsidered in light of the art history of the framing device and the mass media-specific insights of writers such as Benjamin, provides a useful way of thinking about how games produce experience.

The resulting theory of the performative multiplicity led to a cybernetic method of analyzing how particular performances arise from the multiplicity that constitutes a game, and an interlinked chronotypological method for analyzing how performative multiplicities relate to one another.

This comparative methodology takes the following steps by synthesizing Chapters 9 and 10:

- 1. Consider the game as a message-in-circuit, and any analog relations that may have bearing on the performance in question. An academically rigorous understanding of this stage will likely require methods from platform studies, ethnography, phenomenology, media studies and other disciplines as appropriate to the research question. Key considerations include:
 - 1.1. What is the social situation of play? What other people are around the play space (whether immediately or in a distributed network) and what influence do they have on the

performance? What social, cultural and political assumptions does the performance involve?

- 1.2. What is the hardware equipment in use? This would include controllers and other play devices and develop a thick description of how they impact the haptic feel of play (Keogh forthcoming; Parisi 2015; Swalwell 2008) and the specific technical qualities of the platform.
- 1.3. What mods are installed and in what way do they influence the performance? Are there any paratexts in use? How do they inflect play style and perceptions of felicity and infelicity?
- 1.4. Analyze the poles in the message-in-circuit that constitutes the game's performative multiplicity. These include human players, apparatus-controlled NPCs and the game system or apparatus itself. How precisely do these interact and relate to one another? Is there an avatar which focuses player engagement, or is their perspective more remote as in *Civilization*? What channels and modalities of communication inflect this circuit? What high-level decisions have been made at the start of the performance, and how do they exert an ongoing influence on the performance?
- 2. Determine whether the performance is *illudic* or *perludic* by analyzing how it digitalizes the message-in-circuit or performative multiplicity that constitutes the game.
 - 2.1. If a performance utilizes integral framing devices to introduce a continuous primary digitalization (such as aiming a projectile or moving continuously through space in an action game), it is illudic.
 - 2.2. If a performance utilizes integral or hypermediate framing devices to introduce a discrete secondary digitalization to the game (such as moving across tiles in a turn-based game), it is perludic.
 - 2.3. Clarify the mimetic processes activated by the performance: from the measured pace of a text adventure (optical, contemplative engagement) to the frenetic APM of a professional e-sports athlete (tactile, distracted habituation). What 'bodies eclectic' are thereby formed? How do these modes of

engagement work within the dynamic of the game? Chapter 8 contains the key discussion of these concepts, but phenomenological analysis is crucial here for understanding the embodied engagements of a particular performance.

- 2.4. Clarify *for whom* these distinctions arise as subsystems or poles of the message-in-circuit: for a single player, for a group or community of players, for an apparatus such as a NPC or computer-controlled player(s), for the 'rules' in which the computer acts as an adjudicator, or in some combination of these. Experienced gamers, for example, will be more capable in navigating videogame framing devices than people who have never played a game before. What is a clear perludic act and secondary digitalization for some may be a confusing aporia for others.
- **3**. Analyze the specific performative characteristics of the digitalization in terms of success and failure (performative felicity).
 - 3.1. Does the performance result in a felicitous or infelicitous distinction? Is this from the point of view of players, or the apparatus? If for players, do all players engaged in the performance feel the same way, and do they have the same power to enforce their judgment?
 - 3.2. Does this result in a Game Over, whether felicitous or infelicitous?
 - 3.3. What can a reading of the aesthetics of infelicity (such as aporia/euporia, glitches, errors, fog of war, and so on) tell us about the game's wider possibility space?
- 4. Analyze the chronotype of the performance in order to place it within the overall performative multiplicity of the game.
 - 4.1. Which unstable signifiers does the performance digitalize, and does it thereby shift their signification within the overall diachrono-synchronic system of the game? Does it effect a diachronic effect that distinguishes performances (such as a choice at a branching path), or does it synchronize performances (such as earning an achievement).

- 4.2. What is the size or magnitude of the performance within the game's overall performative multiplicity?
- **4.3.** To what degree is the performance reversible (capable of revision) or countable (a set of delimitable outcomes)?
- 4.4. Is this a single-player game with one locus (such as an avatar or high-level strategic point of view) that determines the game's design, or is it a multiplayer game in which synchronizing multiple human player inputs is a critical element of the design?
- 5. Analyze the function of the Game Over and how the performance relates to it as a 'horizon' in which all currently diachronic signifiers will come to signify synchrony.
 - 5.1. What signifiers do players think are unstable and liable to change their signification at the Game Over, and does this impend significantly on the performance in question?
 - 5.2. How immediate is the synchronizing force of the Game Over, and how does it act as an anterior motive? Is it a constant challenge that activates mimetic processes of distraction, or a relatively remote concern that is more contemplative?
 - 5.3. Does this generate narrative form as a synchronizing element, and if so is this narrative linear, variable or procedural?
 - 5.4. Is there a concept of the 'metagame' at work in a multiplayer game scenario, and how do these elements affect the performance in question?
 - 5.5. Is this a replay? If so, what effect does this repetition have on the specifics of the performance? What pleasures are involved in repetition?
 - 5.6. How does the performance relate to the Gaming Situation? What synchronic elements are drawn in from the culture of gaming, or from culture more generally analyzed?
 - 5.7. In what ways do players recreate the synchronizing aspects of a game in wider culture, such as through cosplay or creating a video stream?

This mode of analysis works with concepts that exceed many of the binaries that cause difficulties in understanding games and other heterogeneous texts

(e.g., player-centrism vs. formalism and ludology vs. narratology). It seeks to avoid assumptions about the nature of the elements that go into a videogame performance, and instead provides a vocabulary for analyzing each case that will be useful for interdisciplinary scholarship.

Few research projects will need every stage of this method. A given project could take a 'slice' that concentrates on one particular chronotype, rather like a core sample or a biopsy offers knowledge in climate science or medicine. A study that takes a *diachronic slice* would be a close study of a particular performance and its various determinants (which could range from contextual issues such as the player's background, the equipment and situation of play, the closely read experience of play, the decisions that may have been made and the felicitous or infelicitous outcomes and so on). A *synchronic slice* would study more structural aspects operative across a game's entire possibility space, such as ludic rule structures or narrative form that act to draw performances together. Scholars can use these terms to help clarify their aims and the point of view they are taking on a given game.

One of the most important concepts developed in this discussion of performativity is that of the Game Over, which can be of particular use to scholars outside the game studies field who are interested in questions of ideology, narrative, characterization and so on. As a way of addressing the 'total ludic act', the concept offers a way of conceptualizing the heterogeneous elements and variable outcomes of a game as a *process of synchronization*. The concept of the Game Over obviates any claim that methods for analyzing narrative derived from feminist, Marxist, cultural, cinema or literary studies are somehow inappropriate because of the non-linear structure of games: each project can rigorously clarify a diachronic or synchronic slice as their particular object of analysis.

The Game Teleology gives a coherent concept through which such modes of analysis can comment on and interrogate the global effects that a game as a 'total ludic act'. This concept can be useful for designers who wish to make the totality of the game a site of design interest. As *Life is Strange* shows, the multifinal potentialities of games are one of their most interesting capabilities and means of generating aesthetic experience. Reading between and designing for diachrony and synchrony can help clarify the potentialities of the form.

The method developed in this book is timely because, as with most media studies disciplines, game studies is moving from a situation in which gathering primary data on audience response was troublesome to one in which it is overwhelmingly plentiful. Due to livestreaming and video sharing websites such as Twitch.tv and YouTube, an enormous repository of videogame performances is forming, quite apart from any scholarly or museological attempts at ethnography or archivization. Where studying the performances of single or small groups of players in domestic space presented one set of ethnographic difficulties (Taylor 2009), the vast quantity of self-uploaded performances online constitute a very different set of problems that will increasingly define scholarship in this field. Cybernetics and chronotypology are well suited to producing knowledge from this vast archive of performances.

Given these ongoing transformations, it is important to note the significant limitations of this discussion and flag avenues for future research. It has been focused on games from the console and PC platforms. These once-central platforms have already ceded their fixed position to mobile phones and other devices (Berry & Dieter 2015; Jayemanne et al., 2016). Crowdfunding, mobile technologies and 3D printing have allowed playful devices at more modest economies of scale to be manufactured and distributed, which bring new challenges to the theory and analysis of playful situations. Similarly, the book has traced a specific path in thinking about performativity leading from Austin to media theory: the vast and intricate field of performance studies has been beyond its purview. The book has also been limited to Occidental literature and art history, as well as games that would be familiar to Anglophone gamers. This Anglocentrism will rapidly show its parochial aspects.

The sweeping transformations in the culture and practice of videogames—the rise in experimentation due to independent game development, new forms of distribution, hardware and middleware, the exploration of increasingly diverse thematic and aesthetic material, the struggle of minority perspectives against systemic marginalization, cultural exchange across borders—present major challenges for scholarship. As videogame designers continue to explore the capacities for contemporary apparatuses to facilitate a massively expanded set of articulations between sensory, intelligible and tactile flows, the pace of change over the last few decades will no doubt accelerate. This book has shown that playful and ludic media in fact have a long history and have taken many forms. Videogames themselves may soon seem something of a temporary or embryonic phenomenon anticipating a great post-digital efflorescence of new eclectic bodies, forms of physical wit, anterior motives and intention spans. The interdisciplinary method proposed in this book is oriented to these future challenges.

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