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Strange Reality: Glitches and Uncanny Play
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> [H]ere then is the apparition of a strange creature: at the same time Life, Thing, Beast, Object, Commodity, Automaton—in a word, specter. This Things, which is no longer altogether a thing, here it goes and it unfolds, it unfolds *itself*, it develops what it engenders through a quasi-spontaneous generation, […] it gives birth through its head, it extracts *from* its wooden head a whole lineage of fantastic or prodigious creatures, whims chimera, […] non-ligneous character-parts, that is, the lineage of a progeniture that no longer resembles it, inventions far more bizarre or marvelous than if this mad, capricious, and untenable table, its head beginning to spin, started to dance on its own initiative. [1]

> —Jacques Derrida, *Specters of Marx*

Specters, apparitions, Life-things, Beast-objects, no-things unfolding themselves; vile, spontaneously-generated alien offspring pouring from the spinning, wooden head of a mad, dancing table. If it seems that Derrida is *animating* Marx's fetishistic table in the above passage, it is only a slight exaggeration of the uncanny life imparted to the table *qua* commodity-object by Marx himself. Or perhaps it seems this exaggeration is more than that, hysterical even. Derrida devotes pages unfolding this table which Marx himself devotes scant paragraphs. What is lurking that Derrida is looking for? It may simply be that this nimiety is self-serving—that his "specters of Marx" are really just the shadows of minor sprites enlarged by the flicker of his own writing. Or it may be that, re-reading Marx, it is necessary to perform such re-animations so that the original force of his discoveries are not lost on us—the impassive subjects of late-capitalism[2]. Are we jaded to such ghost-tales? Have we heard the same stories repeated so often that they seem implausible, or is it that these poltergeists are so suffused in our everyday world that they have now become a part of the décor? The gambit of Derrida's proposed *hauntology* is to opt for the latter, and attempt to account for these revenants in our midst. However it is simply this image of the unfolding table which I wish to set the scene of the present hauntology—an expedition which will take us to familiar haunts in the realm of videogames and their interactive, virtual worlds.

Reading this passage from Derrida for the first time I admit I was not attentively recalling Marx's table but was visited instead by a much different specter. Allowing Derrida's graphic prose to stir visions and animations in my mind, I tuned in to the eerie *séance* of the table becoming-commodity—its spasms and unfoldings, the grotesque display of it spinning and dancing madly, its apparition flickering like a poor television signal. I then realized that I recognized this flickering semblance as that of a *glitch*—the spectral appearance of failure in the virtual worlds of computers, cyberspace and videogames in which paradoxes and extremities of distance, geometry, velocity and shadow fold in on a single object/surface/function in the world until it—like Marx's table—becomes a Thing; an intrusive presence in an otherwise

charmed, virtual world. The presence of the glitch which Derrida's imagery recalled for me is an essentially *uncanny presence*, and it is the recurrence of these kinds of phenomena in videogames that I wish to address in what follows.

Why begin with *specters?* That is, why with Derrida and not Freud, whose 1919 essay, *Das Unheimliche* (The Uncanny) remains, if not the authoritative source on, at least the customary starting-point for any critical writing on the uncanny? The reason for being unorthodox lies not so much in the Derridean concept of specter but rather in the spectrality of the concept of the uncanny itself. Which is to say that the uncanny is itself a strange theoretical register of which there is a heterodoxy of interpretations and uses. It has been treated in psychology/psychoanalysis by Jentsch (1995) and Freud (1955b), from a feminist perspective in Zwinger (1992) and DeLamotte (1990), literary criticism in Todorov (1973) and Armstrong (1995), contemporary art Grenville (2001), film theory in Žižek (1991) and Gunning (2008), cultural theory in Jervis (2008) and Saler (2008), architectural theory in Vidler (1994), and colonial studies in Collins (2008). The concept of uncanny tends to bleed over into other concepts as well, like Derrida's *specter* and *trace*, Todorov's *fantastic,* Lacan's *extimité* and even the Kantian *sublime*, all of which leads one to believe that the uncanny as an analytic term is about as ambiguous as the phenomena it attempts to describe. But it is this very ambiguity which lends the uncanny its conceptual potency—it cannot *contain* its meanings since the uncanny designates the very hole in our meaningful world. It can only attempt to *communicate* it, as if in a *séance*. The versatility of the concept of the uncanny lies not in its (in)consistency, but rather in the proliferation of uncanny specters, holes and traces in our meaningful (read: "modern") world. The concept of the uncanny therefore finds its consistency in the consistency with which it returns to haunt all aspects of modern life.

How should we begin to locate the uncanny in videogames? Is it perceptible as a textual *trace,* does it appear as a phenomenal presence, or rather emerge as an aesthetic mode, as a generic *style*? I suggest that it manifests as all of these, without being reducible to any one of them. In what follows, I will examine the uncanny in videogames insofar as it can be seen to emerge from a set of cultural and technological practices oriented toward effecting a progressively more realistic experience of games' virtual worlds. From this perspective, of treating the uncanny as the symptom of (virtual) *reality-effects* and of virtual reality in general, we can account for it as all of these things—as an unconscious trace, as a threatening, alienating presence, and as a generic mode (horror) which utilizes these qualities. I suggest that, not only does the uncanny always *return* to videogames' virtual realities, but that its appearance is symptomatic of the pleasures and desires that speak to the heart of videogames as a cultural activity. Far from being incompatible with gameplay, I posit that the uncanny constitutes a mode of gameplay unto itself, in which case the videogame becomes a kind of ludic fantasy-aperture for the thrills of uncanny encounters. For this reason, one of the principal aims of this article is to establish a groundwork for a critical theory of uncanny (game)play. That is, to account for a certain cultural fascination with uncanny encounters with digital technology. Stressing that the examples of uncanny encounters we are investigating are borne via the technological channels of simulated virtual reality (VR) —that is, via computer programming, rendering and physics engines, object-oriented automata, etc. —it will thus be necessary to articulate our theory of the uncanny not just as a symptom of modernity in general, but of modern technologies as well.

'So Real it Hurts'

A 1992 flyer-advertisement for Midway's *Mortal Kombat* (1992, abbr. *MK*) depicts two young boys standing in front of the game's arcade cabinet as men dressed as Kano and Raiden—two of the more fearsome characters from the game—emerge from the cabinet into reality and clutch the terrified boys by their collars. The text of the advertisement reads simply, "MORTAL KOMBAT: SO REAL IT HURTS!"

Figure 1: Mortal Kombat arcade flyer[3]

The message of this advertisement being, in effect, *reality sells.*[4] For a brief moment in 1992, Midway held the monopoly on *realistic gaming*. *MK*'s innovative reality-effect was to use real human actors as the source for the animated sprites onscreen. This meant that every frame of the animated characters was based on a sequence of still-frames taken of human actors performing the moves of the characters in costume. The resulting spectacle of stop-motion homunculi annihilating one another in showers of blood and gore subsequently became the exhibit A of an ensuing moral panic surrounding violence and videogames. The realistic violence of *MK* was touted as proof of the social hazard posed by videogames. Though a handful of games had raised prior controversies, *MK* was the game that mobilized every self-appointed, tutelary steward of America's moral pedigree into an all-out crusade against the videogame industry and what they saw as its syndication of depravity and graphic violence.[5]

The videogame industry in North America at this time was just beginning to rebound from a boom-bust and American start-up companies were emerging, eager to pry sales from the near-monopoly held by the Japanese giants, Nintendo and Sega.[6] Fierce competition was fueled by dramatic improvements to CPU speed, memory,

and in particular, graphics processing. Good graphics and graphic violence become a holy synergy of videogames marketing, which small, start-up game development companies used to gain some competitive traction against the Japanese. PC games like id Sofware's *Wolfenstein 3D* (1992) and *Doom I+II* (1993,1994), Running with Scissors' *Postal* (1997), Infrogrames' *Alone in the Dark* (1992), and Paradox Development's *Thrill Kill* (1998) carved a niche for themselves in the videogame market not only through cutting-edge 3D graphics, but through the design of a gameplay experience in these 3D worlds that showcased the new innovations through violent agency and visceral horrors. Good graphics and graphic violence were now, in a sense, conjoined: *graphics violence.* Graphics so real, they hurt.

It may be likely that there is a fundamentally sadistic desire which explains the popularity of a genre of games predicated upon the projection of violent agency. However, the overt desire expressed in the statement, "so real it hurts" is not for "hurt"—this is merely an effect—rather, it is for the "so real"; the superlative of realness; something *really real*. Ultimately, the fantasy-scene that the *Mortal Kombat* advertisement depicts is not based on the projection of violence but rather an encounter with profound (*hyper*) realness. Graphics violence addresses the aesthetic desire for sublime graphics, sublime (virtual) reality.

The shift in both hardware and aesthetics bearing evidence of this desire is not difficult to spot: from the crudely cartoonish pixel-sprites of the 8-bit era toward the (ever-more) realistic graphics promised by the 64-bit generation, to PC graphics cards and the unprecedented Playstation 3 console and its Reality Synthesizer graphics chip.[7] The desire for realness still drives game production and consumption in a fundamental way, even if the practice of "retro-gaming" and the same-gen graphics of the Nintendo Wii show certain exceptions to this rule.[8] This trend has been unfolding for almost twenty years, limited only by the pace of constantly-evolving technology and the ingenuity of programming practices. In regards to an aesthetic shift, we might look to 1992 as the symbolic inauguration of this shift. Two games published in 1992; *Wolfenstein 3D* and *Alone in the Dark,* were each progenitors of what would become two of the prime genres of videogame: the first-person shooter game (FPS) and the survival horror game, respectively. These two games were to become flagships for emerging 3D graphics rendering, lighting and camera techniques, and other innovations. The feeling of being present in the 3D worlds so immaculately rendered in these games has since become a central trope of scholarly interest into videogames.[9]

A comparison of the two genres is illuminating. In the embodied first-person perspective of the FPS the player is allowed more freedom of vision around the game, and therefore more violent agency in the game. The principal feature of the FPS is that anywhere you can look, you can shoot. Movement around the game becomes simply a way of dollying and tracking this vision around the world. The FPS as a genre conventionalizes the first-person perspective as *lethal vision.* In survival horror games, on the other hand, the third-person, "over-the-shoulder" perspective is used in order to play on the vulnerability of the avatar in its environment. The player, in this case, sees through the fog of a mortal *death vision*. Things appear out of nowhere—from beyond view—that might hurt you(r avatar) and the presence of death and darkness pervades.

The horror game is thus an obvious place to start our present investigation for it is certain to turn up ample evidence of the gamic uncanny at work. It will only need to be shown that the uncanny is not merely a stylistic feature of the survival horror genre, but rather *returns* to videogames on a more general level—at the level of their simulation of reality.

Strange to be Home

> [T]he uncanny is that class of the frightening which leads back to what is known of old and long familiar.[10]
>
> —Sigmund Freud, *The Uncanny*

The classic formulation of the uncanny handed down to the horror genre from Freud is the familiar-yet-strange—that which recalls some lost memory or place, but in an alienating, threatening way. The uncanny in this psychoanalytic conception behaves like a Möbius strip; it is the effect of an oscillation between two opposites occupying the same surface, an ambivalence, or as Ernst Jentsch (1995) put it in an earlier essay cited by Freud, "unsureness" (*Unsicherheit*). The familiar is bent back on itself, twisted, such that it becomes strange—familiar-yet-strange. Freud etymologically assessed the German word and found that the meaning of the former had been pushed to the extreme such that it finally coincided with its negative form; familiar-*cum*-intimate-*cum*-secret-*cum*-strange.

There are no shortage of examples from popular horror fiction and film to demonstrate the effects of this estrangement of formerly familiar objects, places, people and situations. In horror videogames this is no different. *Silent Hill: Homecoming* (Konami Digital Entertainment 2008) is a descendant of the seminal horror game *Alone in the Dark*, and is the sixth installment of a successful survival horror franchise. Using the same third-person perspective, minimal soundtrack, claustrophobic interiors and eerie lighting pioneered by earlier horror titles *Silent Hill: Homecoming* (*SH:H*) can be thought of as an exemplary case of a contemporary current-gen survival horror game. The familiar-yet-strange dimension of the uncanny is pervasively felt in *SH:H.*

In the game, Alex, the protagonist, returns to his hometown following a tour of duty to find his father and his younger brother missing. In an early cut-scene, Alex approaches the looming porch of the old, grey, ghostly house and remarks, "Home—it feels strange to be back here again." The image of the house which sinks slowly onto the screen is familiar—it belongs to the same kin as the house perched ominously on a hill in Hitchcock's *Pscyho,* or in Edward Hopper's painting, *House by the Railroad*—a house in which every childhood memory has been marred by some stain, every room a witness to some forgotten crime. The Freudian uncanny that returns from the past in a strange and threatening form is evident in these houses. In the case of *SH:H,* the uncanny, that is brought about through symbolic imagery and

played out in diegetic cut-scenes, is overwhelmed by an altogether different order of the uncanny, one which suffuses the air and space of the gameworld itself.

SH:H, like other *Silent Hill* games, disturbs the player's sense of reality by juxtaposing ordinary-world gameplay with gameplay which takes place in nightmares, then subsequently reintroducing the nightmare into the ordinary world.[11] Much of the game is dark, and the world is visible only through dense fog or in the dim, wavering glow of Alex's flashlight. Advanced graphics hardware now capable of simulating dynamic lighting effects like Alex's flashlight were not available when *Alone in the Dark* was released, but horror games developed since have progressively emphasized the use of lighting.[12] The flashlight in *SH:H* creates a palpable sense of claustrophobia and vulnerability; things seem ready to jump out of the amorphous darkness at any moment, and it is this darkness which seems to hide the evil that haunts every room and street. When using the flashlight, specters and ghosts latent in the forms of the nearby objects glance off the walls around you. A horrific scene may appear in the corner of a room that turns out to be only a pair of mannequins or bits of garbage. Such is the effect of the flashlight in the darkness that dumb objects in the world become animated and frightening.

One could say it is primarily through objects that the reality of *SH:H* is constituted. While cut-scenes and dialogue fill in important details, the anonymous, abandoned objects littering the streets and rooms of buildings are notations of a previous life. Wooden boxes suggest the life of the contents they might have held; trash cans connote a whole rhythm of life and activity outside themselves. The minimalist aesthetic of *Silent Hill* demonstrates that, while a virtual world may have a horizon, light, and gravity, without objects it would remain, for us, an utterly alien landscape. In *SH:H* the objects that constitute reality also conspire to render it uncanny. This is due to their function as *reality-effects* in videogames' 3D virtual worlds. "Reality-effect" is understood here in the sense Barthes uses it to designate the role of objects in the realist literature of Michelet and Flaubert (Barthes, 1984, p.142). Such objects are, for Barthes, "insignificant notations" deprived on any immediate analogical value toward the narrative itself. They are mere stand-ins for reality. The muted histories of these objects do not interfere with their primary function, which is simply to sit, expressionless and dumb, suggesting only the plausibility of their matte existence in the world. In *SH:H,* a lone traffic sign emerging from the fog is a reality-effect abandoned by the rest of reality, ambilvalent in its silhouetted form. Encountering such an object, one becomes unsure of the reality they belong to. Other objects in the game—washing machines, chairs, trash cans, shopping carts, old boxes, pipes, fans, vents and toilet stalls—become haunted by their place in this unstable world. A broken wheelchair suddenly rolls out in front of Alex, and crashes into the wall of the corridor we are in. No explanation is given; none is called for. Reality is falling out of this world; its objects have become untethered.

Objects in *SH:H* are spooks and poltergeists. They gaze back at us like the clichéd, haunted portrait, tracing our steps as we pass by with dead, waxy eyes. Barthes' suggestion, that "empty forms irresistably invite a content" (1972, p.204) is affirmed in the mise-èn-scène of this game, which sit empty and dumb, yet conspire with the darkness to suggest their evil histories. The eerie shadows cast by objects caught in the glare of Alex`s flashlight appear as blots in the world; gestalt forms that do not immediately fit with the rest of the scene and must be continually rescued from the

nightmare and reincorporated into reality. In horror games, reality is akin to the uncanny houses mentioned earlier, ambivalent and strange. It is an empty, petrified image populated with dead objects (and waxy-eyed CG characters), which constantly loom strange in our vision.[13] Objects are secretive; they might reveal the reality they simultaneously affect and inhabit as only a semblance, a shadow cast in the wavering beam. Such is the uncanny paranoia characteristic of survival horror's *death vision.*

Fatal Exceptions

Whereas horror games like *SH:H* rely on techniques that blur the player's sense of gamic reality, FPS games rely heavily on crisply rendered graphics and an unambiguous sense of ordinary reality. Reality in the FPS genre is a finely-tuned instrument that, much like the rules most competitive sport, cannot be obtuse or fallible. Players get accustomed to a familiar set of coordinates: scale, distance, rhythm, timing, movement, where to find things, which direction to follow, where to shoot, etc. The *technical reality* of the game's physics—the world's physicality (e.g., geometry, collision, light, speed, etc.)—is still, in most cases, accompanied by a familiar *symbolic reality* involving, at the very least, human-looking characters and human-looking buildings.[14] We might speak about a minimum-reality for videogames in general—not just realist 3D games—that is required to take account of oneself in the world of the game and to make informed decisions within it. Granted, this *degree zero* of videogamic reality is a constant that would be impossible to pin down, but if we can speak of videogames' 3D virtual worlds as simulated *realities*, then hypothetically there exists some unknown arc tracing the line between *real* reality and the point at which reality becomes so disintegrated that it is no longer recognizable as such. Preventing such an entropic dissolution from happening in videogames are a battalion of reality-effects performed by a series of objects, behaviors, and information, as seen in the case of Alex's flashlight. However, when these facilities fail, the reality of the gameworld flickers and becomes uncanny. In *SH:H* we saw how horror games harness this uncanny effect to their benefit, but in other games these failures have an adverse effect, destabilizing the very symbolic construction of the game's reality.

The technical failure of objects, behaviors and information in a game manifest as *glitches*—perceptible symptoms of errors in the game's processes. Because the processes that govern the game's reality are subject to these failures, glitches often manifest inside the game's reality—perceptible in the objects, behaviors and information of the gameworld. During a glitch, things in the game appear to stretch and warp; objects become caught in wall and surfaces or hover frozen in midair; "dead" objects and characters come (back) to life; strange apparitions emerge in the geometry.[15] When game designers set out to design a reality in their games—by modeling terrain, lighting, A.I. behaviors, characters, buildings, cars, washing machines and teapots—this reality is itself an elaborate reality-effect. Glitches are ruptures and irruptions in this reality-effect, and are, therefore, in the context of the virtual worlds in which they appear, uncanny.

Some gamers, reading this, may protest that glitches are common, even banal everyday occurrences, and that to confer them with significance as *uncanny* is

intellectual hyperbole. If glitches are indeed everyday occurrences then this would necessarily preclude them from being intrusions into the everyday (*qua* everyday reality of the gameworld) and they would simply becomea regular, tolerable phenomenon like lens-flare, aliasing or pixel-artifacts. But if they were banal, then a glitch would not appear as a glitch *per se*. That is, we recognize the glitch in its very extra-ordinariness in the gameworld; it is by definition non-banal.

The uncanniness that emerges into the ordinariness of reality is at the heart of a theory of the uncanny elaborated in Jervis (2008). "We could refer […] to an 'uncanny realism': the world has to be fundamentally *ordinary* before being invested with an uncanny aura; or, the uncanny works *through* the ordinariness of the world, even produced *by* it, as though a de-sacralised, disenchanted world becomes uncanny in its very essence" (p.28). For Jervis, this disenchanted, de-sacralised world is the reality of modernity. It is the demystified post-Enlightenment world in which man, as Kant suggests, is freed "from his fear of shadows" (Morgan 2000, p.56). Slovenian philosopher Mladen Dolar agrees that "[t]here is a specific dimension of the uncanny that emerges with modernity" (p.7). Jervis, for his part, goes as far as to suggest that the uncanny may be considered "a distinctively modern experience" (2008, p.1). If this is so, then this experience is redoubled in videogames' simulated virtual realities. The "ordinary reality" of the game's physics,. becomes uncanny *in its very essence* because while it produces a graphic realism that is faithful, proportioned and believable for the player, this reality remains merely an effect played out on screen and issubject to the vicissitudes of the game's process and the player's suspension of disbelief. Glitches emerge into this fragile, objective/object-oriented simulation of reality and threaten to destabilize it.[16]

Again thinking of a curve between *real* reality and unreality we might place various glitches at points along this curve—from a barely noticeable tic to a screen-filling crash. There are perhaps as many points along this curve as there are varieties of uncanny situations described in literature, art, and film. In order to avoid an attempt to classify glitches by means of some haphazard, ad-hoc typology, we will make here only the most basic typological distinction between glitches producing a relatively minor effect as inconsistent *presences* in the scene, and glitches whose presence destabilizes the scene itself, turning the objective reality of the gameworld back on itself and inducing a kind of *vertigo*. The terms of this distinction—presence and vertigo—are by no means exclusive, yet this abstraction will allow us to analyze some examples of videogame glitches that present exemplary cases of either mode.

The extreme of this latter category, it should be duly noted, is the effective end of gameplay for the player. It is "game over"—whether this is caused by the red, black, or blue-screen of death; an unresponsive, frozen or lost avatar; or any other debilitating permutation on the rules and conditions of the game that might induce the player to press the reset button. The reason I prefer presence and vertigo as categorical markers instead of a more straightforward, ludologically-oriented distinction between glitches that debilitate the gameplay and those that do not, is precisely because of the non-straightforward sense of "play" that glitches elicit. I hold that the player and only the player can say when play has stopped, and in this context it makes sense to appeal to experiential categories of glitch-phenomena, rather than attempt to hammer out objective ones indifferent to the player's experience. This is consonant with the basic phenomenological dictum of

horizontalization—that is, in this case, not to fall into the trap of treating a glitch differently because it exists outside the purview of the game's 'proper' rules and functioning. Thus, the categories of presence and vertigo do not exclude each other, but provide a handy set of what in phenomenology are called *invariant features*— patterns which will, in turn, provide the foundation for the following analyses of some exemplary videogame glitches.[17]

In order to set the stage for these analyses, it will help to discuss these categories briefly. To think of glitches in terms of their uncanny presence is to think about ghosts. Like ghosts (and Derridean *traces*), glitches appear negatively. They are present as an *absence*, as revenants and null-values returning to haunt the gamic reality. To think of glitches in terms of *vertigo* is to place them on par with the gamic reality itself, engendering a double reality parallel to the game's causing something between delight (as in optical illusions) and nausea (as in seasickness) as the subject vacillates between worlds. The first of these worlds is the regular, ordinary gameworld, with its crisp outlines and its straightforward objects that behave in straightforward ways, their movements in smooth, unpunctuated lines. The other world is the uncanny glitch world, where unknown errors in the code manifest as fatal intrusions into the game and its reality-effect. It would not be a stretch to take a psychoanalytic stance here and suggest a link between glitches' fatal relationship to the games and the Lacanian Real *versus* the Symbolic and Imaginary. Could the death-drive be lurking in the fascination many players have towards glitches?

The Glitch as Presence: The Case of MissingNo.

Dieu a tout fait de rien. Mais le rien perce. [18]

(God made everything from nothing, but the nothing shows through.)

—Paul Valery

MissingNo. is possibly one of the most popular glitches of all time.[19] First documented in a 1999 issue of *Nintendo Power Magazine*, it now appears on t-shirts, in fan-art and fan-fiction, and live in costume at videogame conventions. This is impressive when one considers that the source of all this popularity about MissingNo. is essentially, a missing number.[20] Though often identified with its common appearance as a blocky, scrambled mass of (lovable?) purple pixels, MissingNo. has no real identity; it signifies, if anything, precisely a lack of identity. MissingNo. emerges *ex nihilo* into the gamic reality of *Pokèmon,* but once it emerges it is given form and value. It takes on appearances, can be collected and used as a pokèmon, is exchangeable and persists in the game world (and the outside world for that matter) well after its original appearance. We might say in this case that MissingNo. is not a "fatal" glitch. It stabilizes itself in its most common symptoms and does not generally threaten the stability of the game itself once it has appeared; it is merely *present*. This is an apt description of our first class of glitches, the *glitch-as-presence*.

Like MissingNo., these manifest as a stain, a blot, a Thing, a gap, a ghost or specter in the scene. They are apparitions that haunt the scene without dissolving it under their spell.

Figure 2: The purple MissingNo. glitch in Pokèmon Red and Blue[21]

Slovenian philosopher and Lacanian cultural theorist Slavoj Žižek might draw a line here; from this apparition toward the Lacanian *objet a,* the object-cause of desire. Not to be confused with the object *of* desire, but rather "that [object] which sets desire in motion" (1997, p.149), the *objet a* functions as "an empty surface, […] a kind of screen for the projection of desires" (1991, p.8). This "black hole in reality" (Ibid.), like Barthes' "empty form", seems to invite some content to be put inside of it and to fill it with meaning. Indeed, player attempts to fill out the MissingNo. as a canonical character in the Pokèmon storyline have been so remarkable that they have become the subject of sociological study (Bainbridge and Bainbridge, 2007). An attempt to draw a psychoanalytic link between the glitch-as-presence and the Lacanian *objet a* is not such a frivolous association as it suggests; the meanings we attach to the anonymous presence of objects in videogames are inscribed with unconscious desire.

The fascination that glitches sometimes call forth from players, as in the case of MissingNo., speaks to a desire—a cause—opened up by their fundamental hollowness. In his *Four Fundamental Concepts of Psychoanalysis* (1998) Lacan states: "[w]henever we speak of a cause, […] there is always something anti-conceptual, something indefinite. [T]here is a hole, and something that oscillates in the interval. In short, there is cause only in something that doesn't work" (p.22), a point he makes only to show how the unconscious, "is situated at that point, where, between cause and that which it affects, there is always something wrong" (Ibid.). Which is to say that wherever there is desire, something is always lacking, and where meaning arises it is because it is there to fill an empty form with content. At the heart of this argument is the notion of desire as directed at images and objects that are fundamentally partial, empty, or missing. Desire, for Lacan is traced back to an orginal estrangement. When desire reaches too close to its generative lack—its null-point—it becomes, as in the myth of Daedalus and Icarus, fatal.

Drives, that facilitate such fatal attempts, are said to be perverse. Glitches are thus implicated in a perverse drive for gamic transgressions (of reality, of rules, norms, etc.), as can be seen in the word's proximity to similarly perverse words like cheat and exploit as they are applied to practices in gaming. If this is so, what does it mean that they are uncanny? What is the meaning of a perverse, uncanny drive in videogames? Before addressing these questions, it is necessary to highlight the uncanny in its relation to repetition, pleasure and death in situations where reality is not so much stained by the presence of a glitch, but *unwound* by it.

Vertigo: (Beyond) the Minus World

The minus world is an infamous glitch in *Super Mario Bros.* (1987) the span of an entire level. It was also the very first glitch ever to be documented, in *Nintendo Power* #3 (Fall, 1988). By following a complex sequence of initiatory actions, players could push Mario through a block wall to emerge in a secret "warp zone". (*see Fig. 3*)
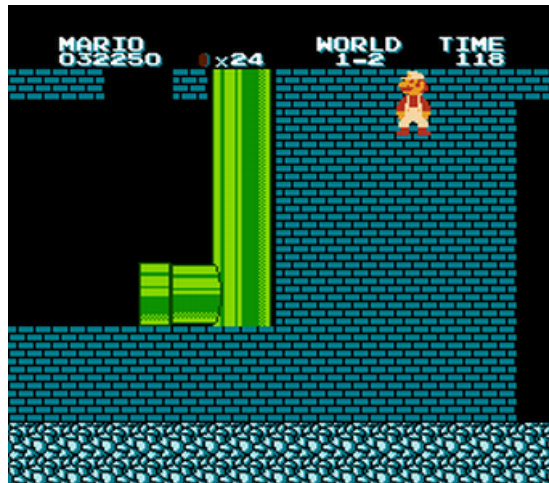

Figure 3: Getting to the minus world[22]

By using the tubes in the room to warp to another level, Mario is transported to "World -1," that is world negative-one, followed (in the Japanese Famicon Disk System version), by a "World -2" and "World -3". These levels were basically identical copies of other worlds in the game with odd exceptions: the final 'boss' Bowser and other minor bosses appear out of context, multiple copies of Princess Peach (for whom players spend the entire game searching) are littered about, where there is usually lava there is water, etc.[23] On the Nintendo Entertainment System (NES) version the glitch would place Mario at the beginning of the level whenever he reached the end, effectively trapping the player in an endlessly repeating, negative world. A subtle nothingness descends on the player who, upon reaching the end of the level, finds no prize but simply the repetition of what came before, *ad infinitum*.

Repetition, as *Wiederholungszwang*—the 'compulsion to repeat' is considered by Freud to be an expression of what he calls the *death instinct*. (C.f. Freud 1955a) and, furthermore, a symptom of the uncanny (Freud 1955b, p.3690). Specifically, Freud speaks about "the double"—that is, the double of oneself—as a particularly unsettling semblance which seems to emerge as an "uncanny harbinger of death" (Ibid., p.3687). Freud thus associates the compulsion to repeat with the death instinct, and as such suggests that "whatever reminds us of this inner 'compulsion to repeat' is conceived of as uncanny" (Ibid., 3690). Laura Mulvey (2006) observes that Freud seems to be poised between two sources of the uncanny, from the dead which return to haunt from the past and the death that inevitably faces the subject from some indeterminate point in their future (p.37). Freud appears to take the position that the uncanny is always something that returns from the past, and rejects the suggestion by Ernst Jentsch in his 1906 essay, *On the psychology of the uncanny* that the new and unfamiliar—like waxworks, steamboats and automata—can be a source of a future-uncanny. (Freud 1955a, 3676). Yet, many, like Mulvey, now challenge Freud's judgment on this matter. We need only recall Derrida's description of Marx's table, Walter Benjamin's essay *The work of art in the age of its technological reproducibility*, or roboticist Masahiro Mori's hypothesis of the "uncanny valley" as the effect (on humans) of robots and human-looking automata. In each of these examples there is an explicit focus on capitalism, modernity, and technology, as well as appeals to "ghosts in the machine." In Benjamin's analysis, the machine eats the ghost (*aura*), whereas, in Mori's, spirits haunt us through the medium of robotics yet n both there is a connection made between the emergence of new technologies and sacral, enchanted realms of spirits and auras. Popular film, art, and literature also seem to corroborate such beliefs; characters such as HAL from *2001: A Space Odyssey* (1968) or the machines in *The Matrix* (1999) are expressions of this uneasy relationship with technology. In any case, the consensus—contra Freud—seems to be that the uncanny returns both from the past *and* future.

This paradoxical state of affairs which seems to haunt all attempts to define the uncanny (familiar *yet* strange, from past *and* future) Lacan has called *extimitè* (extimacy), formed using the superlative of interior—*intimitè*—and substituting the prefix *in-* with *ex-*. What Lacan aims to describe with this neologism is the particular character of the unconscious—what seems most inside of us is in fact outside of us—it is Other. That is to say, Lacan uses this term to "designate in a problematic manner the real in the symbolic" (Miller 1994, p.75) or the way in which our symbolic reality—our ego, our language, our reality itself—is structured around something that is not there. Extimacy has a peculiar topology (much like the Möbius strip) that conflates inside with outside, up with down, past with future, desire with death. It is the most fitting psychoanalytic interpretation of the Freudian uncanny to understand how certain uncanny experiences seem to return not only from the past, but from the future and from an *extimate* part of ourselves located within our machines and automata.

Apropos of the uncanny's connection to automata and videogames, Masahiro Mori`s theory of the uncanny provides a way to think about the 'return' of the uncanny through our technologically doubled avatars and worlds. According to Mori's theory, there is an increasing charm and attraction toward automata following an increase in their human likeness, but only up to a point. The "uncanny valley" Mori discovers is a sudden drop in this graph reflecting human subjects' tendencies to be unsettled by

these likenesses when they become too lifelike—too close to reality (MacDorman 2006, p.9). Mori finds that animatronic models, wax mannequins, prosthetic limbs and corpses all share the same uncanny quality that make subjects react negatively to his lifelike robots. At the heart of this experience is the same quality that makes Marx's table begin to dance and spin and resemble an uncanny specter—the premonition of a hidden *animus*. That is, against the purifying light shone by modernity into the dark shadows of myth and superstition, our technologies seem to invoke spirits; we know better, yet we, nevertheless, believe in ghosts in the machine.

What animated Derrida's description of Marx's fetish-table for me was the way it seemed to jerk and spin and dance like an object possessed by a glitch. Glitches which manifest in the attributes and behaviors of objects and characters in the game seem to possess these objects and characters with an unknown will, as though a poltergeist is animating its spasms or some daemonic spirit is conducting its dance.[24] In "ragdoll" physics modeling—used to give characters in 3D videogames lifelike movements—bodies and limbs become possessed by glitches that cause them to contort, swirl, stutter and spasm. A coding glitch known as an infinite loop will cause these movements to repeat *ad infinitum,* or until some other force in the game world is able to slap it back to reality. Other glitches reveal hidden countenances of characters, as in the ghastly, grinning rows of teeth seen in a glitch from *Half Life 2* (Valve 2004) (*see Fig. 4*), or the queer, floating blue faces which seem to detach from, and hover around characters in a glitch in *The SIMS* (Maxis 2000) (*see Fig. 5*).

Figure 4: Half-Life 2 *face glitch*[25]

Figure 5: The 'blue-face' glitch in The SIMS

The animus, which seems to make its presence felt in such situations, is nothing less than the spirit of the machine itself, the trace of the quasi-animate registers and loops and functions within any programmed object. We know these phenomena are generated from perfectly rational (if at times complex) mechanical processes, but at the same time we admit them their destabilizing, supernatural effect. The particular manner by which this is effected, "at the basis of [the] fabrication of the uncanny" (Dolar 1991, 22), is referred to by Žižek as (the formula of) "fetishistic disavowal"; or, as it is commonly phrased, "I know very well… nevertheless I believe..." (1989, p.18), In this case, the player *knows very well* that he/she is only playing a game, and that the strange symptoms exhibited by the object or character onscreen are only an effect of some "bug" in the game's code, but, nevertheless, some nagging, unconscious dread is roused by this uncanny intrusion into the game's ordinary reality.

Videogames' 3D virtual worlds are uncanny in their very essence. The wavering lifeworld of the reality they effect is always threatening to fail, to turn strange and become its opposite—vertigo, unreality, death. This ambivalence is played upon for dramatic effect in horror games, but it also returns in genres with a vested interest in maintaining the ordinary familiar coordinates of their virtual reality. The uncanny appears most spectacularly in these situations as glitches, which, as we have argued, are also implicated in a strange (cybernetic?) economy of desires and drives. But apart from glitches, this uncanny drive can be seen in other examples from videogames. This can be seen in the strange character of the G-man, in the *Half-Life* games (Valve 1998, 2004), who appears to the protagonist in dream-sequence cut-scenes, as well as, in-game in what I would call beyond the looking-glass scenarios in which the protagonist is separated from (interaction with) the G-man by glass and/or distance. The G-man appears at one point in a burning, collapsing building in his trademark suit and tie, calmly walking to an exit.

Figure 6: The apparition of the G-man in Half-Life 2

Who is this G-man? What reality does he inhabit? His ambiguous status in the *Half-Life* gameworld is what makes him such a compelling—and creepy—character. The innovation of an "insanity meter" in *Eternal Darkness: Sanity's Requiem* (Silicon Knights 2002) is another example of the incorporation of uncanniness into regular gameplay. If you failed to fully kill the monsters in the area you were in, your insanity meter would begin to turn critical, in which case certain perceptual hallucinations would occur—horrific noises would ring out, large insects appeared to crawl on the screen, and the player would return to a previous room in the game only to feel that their avatar was much smaller than before, the hallways longer, the walls more canted. Such contrivances play on a fascination towards the very fringes of reality. When we play videogames, there seems to be a latent, unconscious desire for an encounter with the ghost in the machine. What could account for this perverse fascination at the margins of gamic reality? What precedent is there for this kind of uncanny gameplay?

Roger Caillois, in his treatise *Man, Play and Games* (1961) outlines four fundamental categories of game: games of chance, *alea*; games of contest, *âgon*; games of make-believe, *mimicry*; and games of vertigo, *ilinx* (pp.14-23). Given Caillois' prominent status as a theorist and scholar in the emerging body of videogame studies literature, it is remarkable how little theoretical attention is given to the latter category vis-â-vis videogames. The concept of ilinx is of critical importance to the present argument because it provides a theoretical precedent for uncanny gameplay. For Caillois, illinx is "based on the pursuit of vertigo and which consists of an attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic upon an otherwise lucid mind." (Ibid. p.23) In the Freudian sense, Caillois' categories of game could be treated as the expressions of certain desires which games are modeled to fulfill. So, we could rudimentarily suggest that games of contest fulfill some drive to mastery, games of chance some desire for serendipity,

etc. The Freudian interpretation of Caillois' categories of game would, thus, involve unconscious desire structuring the pleasures of the game experience. The *categories of game* could, thus, be interpreted in terms the orientations of drives—*play drives.* In this way, it becomes easier to account for *mimicry* and *ilinx*, which are characterized by the play-experiences they engender rather than by typified structures of rules. Mimicry, the "dissimulation of reality and the substitution with a second reality" (Ibid. p.22), speaks directly to videogames' endless pursuit of reality through advanced graphics, physics, etc. Ilinx speaks to a kind of play that is the opposite of mimicry, its counterpart. Ilinx is, "[i]n all cases, […] a question of surrendering to a kind of spasm, seizure, or shock which destroys reality with sovereign brusqueness" (Ibid. p.23). If Caillois did not completely identify as a card-carrying Freudian, there are, nevertheless, remarkable similarities between his formulation of *ilinx* and that of Freud's *death instinct.*[26] Indeed, Caillois frequently makes reference to a "play instinct" (Ibid. p.28, 32), that "rules play" (Ibid. p.50).

To bring this comparison into a more Lacanian perspective and to harmonize it with our formulation of the uncanny thus far, ilinx can be thought of as the play of the Real in the symbolic—that is, it resides at the very topological crux of the formation of desire and the unconscious. In videogames, we must think about uncanny gameplay as ilinx taking place in the context of a broader mimicry—that of gamic reality. The play of the Real (i.e., the constitutive nothingness against which the symbolic and imaginary registers take form; the nothingness alluded to by the *something-ness* of our symbolic reality and imaginary ego) inside the doubled, symbolic and imaginary reality of VR is felt in the uncanny artifacts and traces which return through the seams and fissures of this reality. The question following this pertains to the meaning of such a doubling: why mimic reality only to watch it fall to pieces? Again, why *uncanny* gameplay?

Coda: Uncanny Gameplay Apropos the Real of Virtual Reality

> Every drive is virtually a death drive.[27]
>
> —Jacques Lacan

Until now, a relatively important qualification has been left absent from these arguments about videogames' simulation of reality, the uncanny gameplay that emerges in this reality and the instinctual desires which have been used to explain a certain fascination with it. This is the notion of VR as a *fantasy space*. It would be absurd to propose that virtual reality is the expression of a desire for (just another) dumb reality when it is obvious enough that these worlds are only just the chassis for some deeper, *driven,* fantasy situation. In Lacanian terms, we might say that the *symbolic* construction of videogames' virtual reality—the material coding, the diegetic content and the generic conventions that allow players to suspend their disbelief— has thus far been privileged over its *imaginary* construction; that is, the unconscious meanings and desires which somehow find expression in the play within virtual

reality. Taking this into account, virtual reality is no different from 'real reality' in the Lacanian sense, because it is constructed through both the symbolic and imaginary registers and against the aporia of *a* Real (which nonetheless remains *the* Real). If, by virtue of VR's redoubling of the coordinates of reality itself, we extend to it a Lacanian understanding of the operation of the drives, we find that the uncanny gameplay that we have shown here and are attempting to understand in terms of *ilinx* conforms to Lacan's propositions about the drives. As Dylan Evans (1996) writes, for Lacan, "'every drive involves the subject in repetition, and every drive is an attempt to go beyond the pleasure principle, to the realm of excess *jouissance* where enjoyment is experienced as suffering" (p.34). With regard to videogames and play, we might say that every game is predicated on the promise of some gratification (a certain goal or experience), that it redoubles the subject in an agency and position within a gamic reality, and that gameplay, in its very essence, suggests its own transgression (*jouissance*); the desire to transcend its rules and boundaries and to play the game, perversely, to a point so deeply hidden in the game (its uncanny form, its glitch) that the regular opposition inside/out (in-game/*beyond*-game) no longer holds meaning for it. Uncanny gameplay is the expression of a desire for an *extimate* encounter with the game, virtual reality, technology, etc., to play the game so intimately so as to *kill* it.

And is this not the fundamental pleasure of first-person shooters, this *lethal play*? How else could we describe the singular enjoyment of "head shots"? The player scans the screen deeply through the zoom of a scope, catching a bobbing enemy head in its sights unawares—taking advantage of the moment, the player shoots, and the enemy head falls lifeless out of view. *Graphics violence.* Pushed to its extreme, this aggression sets its sights on the very reality of the game itself. Uncanny gameplay delights in seeing the Real bleed into the scene through its many cracks and fissures—this is its *condition.*

"There is a specific dimension of the uncanny that emerges with modernity." (Dolar 1991, p.7) Insofar as videogames appear to (technologically) recapitulate this emergence in a way that incorporates it into/as gameplay, and given what has been argued here about the nature of this gameplay as it relates to psychoanalytic conceptions of the drives, it appears that uncanny gameplay is capable of telling us a great deal about modernity, play, technology and the (death) drives. But beyond these arguments, which some readers will inevitably wave off as illegitimate psychobabble, I have also attempted to highlight an overlooked area of videogames—failure, unreality, glitching—in order to demonstrate how the dearth of our understanding about videogames might be addressed by "looking awry" (Žižek) at the subject. That is, by not assuming that, when it comes to gameplay, we know what we desire and (ordinary) gameplay supplies it to us. The paradox of graphics violence shows us that while we might think we know what we want, we are drawn towards the "voluptuous panic" of uncanny gameplay in ways we have yet to fully understand.

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Notes

[1]   Derrida, J. (1994) *Specters of Marx.* New York: Routledge, p.151.

[2]   C.f. Mandel, E. (1972) *Late Capitalism.* London: Humanities Press. One can imagine, in an era of junk bonds, liquid assets, derivatives and all other manner of monstrous financial fauna following the wake of the recent, catastrophic financial collapse in the United States, (and the cynicism surrounding its subsequent, taxpayer-funded rebound), that Marx' metaphor of the commodity-form table might seem antiquated if not downright prehistoric.

[3]   Image retrieved from
http://www.arcadeflyers.com/?page=flyer&db=videodb&id=697&image=1
[Accessed: 23 January 2010].

[4]   Such flyer-ads were targeted to the owners of arcades and bars who stood to increase their revenue through the purchase of a popular arcade machine. The message 'reality sells' would therefore be directed to their interests as the operators of these machines.

[5]   These efforts culminated in the 103rd Congressional Senate Hearings on videogame violence in 1993-94, leading to the establishment of the Entertainment Software Ratings Board that now oversees the assignment of age-specific ratings to videogames with violent, sexual, or otherwise contentious content.

[6]   C.f. Kline, S. et al. (2003) *Digital Play*. Montreal and Kingston: McGill-Queen's University Press. p.103-104.

[7]   *Wikipedia: the free encyclopedia.* RSX 'Reality Synthesizer'.
http://en.wikipedia.org/wiki/RSX_'Reality_Synthesizer' [Accessed: 23 January 2010]

[8]   'Same-gen' is used here in contrast to the industry term, 'next-gen' to describe the 'next generation' of game consoles and game hardware. The use of *-gen* as a suffix to situate games/platforms in an historical genealogy is prevalent in mainstream writing on videogames and is adopted here and elsewhere in the article for this purpose.

[9]   C.f. McMahan, A. (2003) Immersion, engagement and presence. In Wolf, M.J.P. and Perron, B. (eds.) *The video game theory reader.* New York: Routledge, p.67-84.

10   Freud, S. (1955) The Uncanny. In Strachey, J. (trans.) *The Standard Edition of the Complete Psychological Works of Sigmund Freud,* XVII (1917-1919). London: Hogarth Press, p.3685.

11   It is interesting to note this motif in earlier, non-horror games like *Zelda: A Link to the Past* (Nintendo, 1992), in which an original, pristine home(land) polluted by the intrusion of some evil force becomes the narrative motivation for the player's actions in the game.

12   Recall the emphasis on lighting in the much-heralded, *DOOM 3* sequel, in which whole areas were left pitch-dark. Players were forced to choose between readying their weapon or a flashlight. For an example of the popular frustration at this element, see Kasavin, G. (2004) Doom 3 Review. *Gamespot*, http://www.gamespot.com/pc/action/doom3/review.html [Accessed: 23 January 2010]

13   The 'old photograph' is a recurrent aesthetic trope in *SH:H*, seen in the cover art for the game, as well as, in the grainy film appearance of the 'flashback' cut-scenes.

14   C.f. *Glitch* (TeamGlitch 2008) for a notable exception to this rule. https://www.digipen.edu/?id=1170&proj=1470 [Accessed: 23 January 2010]

15   Note that 'glitch' almost always designates the effect of software errors *for the player*—if an error is discovered before a game is finished developers refer to this as a 'bug'. While 'bug' and 'glitch' describe essentially the same thing, there is a categorical distinction drawn between their appearance for developers versus for players.

16   C.f. Barthes, R. (1972) Objective Literature. In Howard, R. (trans.) *Critical Essays.* Evanston: Northwestern University Press. p.13-24.

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19   C.f. *IGN AU staff.* (2009) Gaming`s Top Ten Easter Eggs http://games.ign.com/articles/971/971383p1.html [Accessed: 23 January 2010]

20   For a more technical summary of the cause of the MissingNo. glitch, c.f. MissingNo. In *Wikipedia: the free encyclopedia.* http://en.wikipedia.org/wiki/MissingNo.#Characteristics [Accessed: 23 January 2010]

21   Image retrieved from http://tvtropes.org/pmwiki/pub/images/Missingno.gif [Accessed: 23 January 2010].

[22]   Image retrieved from
http://sydlexia.com/imagesandstuff/a_n_n_s_m_b/ann_no_minus_world-1.png
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[23]   The Minus World. In *Wikipedia: the free encyclopedia.*
http://en.wikipedia.org/wiki/Minus_world#The_Minus_World [Accessed: 23
January 2010]

[24]   'Dancing glitches' are a common theme in player-posted glitch videos on sites
such as YouTube. Rather than provide specific examples which may not be held
for posterity, I would urge the reader to simply enter 'dancing glitch' as a search
term on YouTube and browse through the many pages of interesting and often
entertaining results.

[25]   Image retrieved from http://unrealitymag.com/wp-content/uploads/2009/01/half-
life-2.jpg [Accessed: 23 January 2010].

[26]   For an example of Caillois reading Freud, c.f. Caillois, R. (1934) La Mante
Religieuse. *Minotaure 5,* p.23-26.

[27]   Lacan, J. (1968) *Écrits.* Paris: Seuil, p.848.