

“There’s no point in saving anymore”: Diegesis and Interactional Metalepsis in Pony Island and Doki Doki Literature Club

Cassandra Barkman

Abstract

Recent independent titles Pony Island and Doki Doki Literature Club are filled with instances in which the boundary between what is real and fictional is blurred. This article considers the transgressing of different worlds, what Genette called metalepsis, as a narrative device and explores its impact on both videogame’s storytelling and player experience. Both Pony Island and Doki Doki Literature Club reveal how metalepsis can be employed to disorient, either through interweaving the player’s lived reality more tightly with the gameworld, or through intentionally leaving them out of the cybernetic system that makes up gameplay and imbuing moments of inaction with narrative significance. Through discussing both games, this article expands on metalepsis’ relationship with videogame affordances and the impact it can have when used as a narrative device within the medium.

Introduction

Videogames are no strangers to breaking the fourth wall. Whether it be resetting the danger room by resetting the console in *X-Men* (Western Technologies, 1993) or the oft-cited Psycho Mantis boss fight in *Metal Gear Solid* (Konami Computer Entertainment, 1998), on numerous occasions videogames have transgressed the boundary of fiction to either draw the player in to the gameworld or appear to enter our own world. The transgressing of boundar-

Author Biography

Cassandra Barkman is a PhD candidate at Swinburne University of Technology in Melbourne, Australia. Cassandra’s research regards the investigation of complex and puzzling narrativity within the affordances of videogames, with the eventual goal of identifying a connection between the medium and challenging storytelling techniques.

ies between different worlds, termed by Genette (1979/1983) as metalepsis, has long been a source of interest in narratology and across a variety of media (Campora, 2009; Wolf et al., 2009; Ryan, 2013; Kiss & Willemssen, 2017). This is arguably due to the significance metalepsis holds as a concept and narrative device—it can challenge the foundations of storyworlds by drawing attention to their artifice and eliciting comical or uneasy sensations from spectators based on their disrupted conceptions of what is truly fictional.

Metalepsis has also entered the realm of digital media via the discussion of interactional metalepsis (Ensslin, 2011, 2015; Bell, 2016), moments of metalepsis in interactive media that transgress the boundary between the real and digital world. The difference between interactional and typical metalepsis is that interactional describes a transgression that is not jarring but foundational to videogame play, but videogames also offer many examples of typical metalepsis that remain underexplored. This article contributes to this avenue of analysis by discussing the impact metalepsis has as a narrative device in the two case studies of *Pony Island* (Daniel Mullins Games, 2016) and *Doki Doki Literature Club* (Team Salvato, 2017). I argue that metalepsis in both examples takes advantage of videogame affordances to achieve various effects: disorient the player’s conception of what takes place inside and outside a storyworld, position inaction as a site of narrative significance, and alienate the player from the cybernetic system that makes up gameplay.

This article also discusses metalepsis in relation to videogame diegesis. I argue the oscillation of diegetic/nondiegetic videogame elements creates a favourable environment for the creation of metalepsis, meaning that it is common and even easy for the diegetic boundary to be transgressed. Diegesis refers to being in the world of a videogame’s narrative action and is contrasted with those nondiegetic elements of games that exist external to the world, typically elements like menus and heads-up displays (HUD). Thus, while playing a game, the player constantly swaps focus between the inside and outside of the fictional world of the game. I draw on Alexander Galloway’s (2006) conceptual framework of videogames as consisting of different acts across two distinct axes—diegetic/nondiegetic and operator/machine—to suggest that metalepsis does not just refer to disruptions of diegetic boundaries but describes the oscillation of authority between the player and the game they are playing. Whether that constitutes the game’s controls behaving in unexpected ways or the player altering the game’s code themselves, to properly consider metalepsis within the affordances of videogames involves observing its relationship to the various semiotic layers and interplay between the player and the game that create gameplay.

Positioning metalepsis as disrupting both diegesis/nondiegesis and player/game boundaries highlights it as a narrative device with the potential for meaningful impact upon the player’s experience and narrative comprehension. *Pony Island* and *Doki Doki Literature Club* both use metaleptic intrusions as a narrative device to elicit horror and uncertainty. Both games involve moments in which boundaries are transgressed, whether that be diegetic or between the player and the game, that inject their fictionality into the player’s real world and the

gaming apparatus. In doing so they foreground the role diegesis and inaction play in facilitating videogame narratives. By disrupting the relationship between the player and the game system they are operating, moments when interaction is taken away from the player become just as narratively significant as moments of interaction, which has consequences for the way play functions contrarily through metalepsis.

This article begins by defining metalepsis and its connection to narrative levels and digital media. I then connect the oscillation of diegetic and nondiegetic elements to metalepsis by arguing that alternating between the inside and outside the storyworld is a key part of videogame affordances and thus creates a tendency towards metalepsis within the medium. The significance of metalepsis as a narrative device will subsequently be supported by the analysis of two highly metaleptic case studies, *Pony Island* (Daniel Mullins Games, 2016) and *Doki Doki Literature Club* (Team Salvato, 2017). Both games have been chosen due to the significance metalepsis plays in their storytelling and thus the abundance of examples they offer through which to consider its impact on the player. Finally, I summarise the several effects metalepsis can have as a narrative device, ranging from implicating the player's lived reality into the gameworld, positioning the player as a 'metaphorical hacker', disrupting the distinction between player and gamic actions, and making moments of inaction narratively significant.

Narrative Levels, Metalepsis and Digital Media

The original term 'metalepsis' emerged from Genette's (1979/1983) *Narrative Discourse* in which he classified the separation of the telling and told through events being 'inside' and 'outside' of a narrative. He defined metalepsis as "any intrusion by the extradiegetic narrator or narratee into the diegetic universe (or by diegetic characters into a metadiegetic universe etc.), or the inverse" (pp. 234–5). This characterised metalepsis as an intrusion between different worlds or "levels," and while Genette's theory drew heavily from his interest in literature as a narrative medium, it still remains a useful theoretical starting point that subsequent theorists have built on.

The first level of Genette's (1979/1983) hierarchy is formed by the extradiegetic level, named as such because it exists outside the narrative and houses the narrator as separate from the diegesis they are creating through the act of narration. The extradiegetic level creates the intradiegetic level, which includes everything that takes place within the diegesis. For simplicity's sake, within the context of my analysis I use diegesis to refer to intradiegesis and nondiegesis to refer to extradiegesis. Genette's theory is further complicated by what he called the metadiegetic level. Later adjusted to the hypodiegetic by Bal (1983, p. 48) to describe the level as subordinate to the level that spawned it, a hypodiegetic level appears when a character in the diegesis becomes a narrator themselves and begins to describe a story on a further narrative level. If this new level spawns yet another hypodiegetic level, then this takes place in a further hypo-hypodiegetic level and so on *ad infinitum*. The border between these narrative

levels can vary depending on the relationship between them—if a hypodiegetic level exists within the same diegetic world as the previous level, the border between the two can be considered illocutionary, meaning the level exists within the one that spawned it. However, if a hypodiegetic level is fictional in relation to the level that spawned it, the border between the two is ontological, meaning that they exist on distinct and separate planes of existence (Ryan, 2004, p. 440). Within the context of this article, I will largely be discussing ontological hypodiegetic levels unless otherwise stated.

Metalepsis is significant to this structure in its disruptiveness. It describes instances that transgress the boundary between different narrative levels, whether that be between the diegesis and nondiegesis, or various hypodiegetic levels. Genette (1979/1983) described it as “produc[ing] an effect of strangeness that is either comical... or fantastic” (pp. 235–6). “The most troubling thing about metalepsis indeed lies in this unacceptable and insistent hypothesis that the extradiegetic is perhaps always diegetic and that the narrator and its narratees—you and I—perhaps belong to some narrative” (Genette 1979/1983, p. 236). Metalepsis is thus ontologically disorienting, drawing attention to the artifice of the storyworld while also challenging the narratee to determine where exactly the boundaries of fiction lie. Being instructive to understanding narrative and fiction is potentially why it and its effects have been expanded on by Genette (2004) himself, adopted into transmedial narratological terms (Wolf, 2005; Klimek, 2009) and applied to a variety of different mediums and topics (Kukkonen & Klimek, 2011).

Amongst the media-conscious affordances of digital media (Thon, 2017), the potential and significance of metalepsis is no less pronounced. A more explicit adaptation of Genette’s ideas to digital media came from Ryan (2004). She compared Genette’s (1979/1983) narrative levels to computing and visualised the structure spatially as akin to a data stack, with metalepsis being described as “a grabbing gesture that reaches across levels and ignores boundaries, bringing to the bottom what belongs to the top and vice-versa” (Ryan, 2004, p. 441). Ryan (2004) described metalepsis across two categories: rhetorical and ontological. Rhetorical refers to an intrusion between the nondiegetic and diegetic levels through the narrator’s voice briefly interrupting the diegesis. While initially premised on examples from literature, Ryan (2004) also compared it to “glimpse[s] behind the stage [to] show how the text is made”, such as the user of a digital text glimpsing the code that allows the text to function (p. 453). Rhetorical metalepsis thus “opens a small window that allows a quick glance across levels, but the window closes after a few seconds and the operation ends up reasserting the existence of boundaries” (p. 441). Rhetorical metalepsis, though it briefly acknowledges the artifice of the diegesis, does not challenge it in the way the subsequent type of ontological metalepsis does.

Ontological metalepsis represents a more drastic instance in how it “opens up a passage between levels that results in their interpenetration, or mutual contamination” (Ryan, 2004, p. 442). Occurring between the diegetic and the hypodiegetic (or the hypo-hypodiegetic and so

on), ontological metalepsis occurs when the ontological borders between two levels is broken and what was originally fictional combines with the level that created the fiction. The term was described by McHale (1987/2003, p. 120) in relation to Hofstadter's (1980) "strange loops" concept, which occurs in fiction whenever "by moving upwards (or downwards) through the levels of some hierarchical system, we unexpectedly find ourselves right back where we started" (p. 10). Ryan (2004) echoed this by suggesting that in ontological metalepsis, "the two levels [become] so hopelessly entangled that [the primary fictional world] becomes a moot question" (p. 442). Ryan (2004) contrasted the effect they have on narrative levels to the effect of various tumours: "We may compare rhetorical metalepsis to a benign growth that leaves neighbouring tissue unaffected, and ontological metalepsis to an invasive growth that destroys the structure of these tissues" (p. 442). Ryan (2004) also concluded by speaking to the prominence metalepsis can play in the videogame medium:

[Videogames] offer a particularly favourable environment for metalepsis: as programs that produce fictional worlds, they can play with the levels of world and code; as worlds that invite the player to play the role of a character—the avatar—they can exploit the contrast between the player's real and fictional identities; and as fictional worlds, they can resort to many of the metaleptic tricks of standard literary fiction. (p. 458)

Expanding upon Ryan's consideration of metalepsis in digital media is the concept of "interactional metalepsis." Initially proposed by Kukkonen (2011b, p. 18) as an avenue for future analysis, the term was adopted by Ensslin (2011, 2015) and Bell (2016) to describe the numerous metaleptic instances that can occur through the player's interaction with a digital text. Ensslin's description of interactional metalepsis adds a further categorisation to metalepsis by suggesting it can either elicit "anti-illusionist or illusionist effects" (2011, p. 6).

It's probably more obvious that metalepsis is likely to cause laughter, bewilderment or at the very least surprise, because it marks a rupture between what are normally perceived to be strictly separate ontological spheres. But likewise, and particularly in interactive media, metalepsis is used to quite the opposite effect: to increase immersion—as, for instance, in digital fiction and games, where the audience is pulled into the fictional world in various ways, for instance by enacting the textual you in text adventures and interactive fiction... or by seeing a 3D gameworld from the first person perspective as if we were physically present in it. (Ensslin, 2011, p. 6)

She described avatars in videogames as "probably the most immersive metaleptic tool as it offers user-players the opportunity to project themselves physically and graphically into the storyworld" (Ensslin, 2011, p. 14). This description of interactional metalepsis sees the player descending from the extratextual world to apparently appear within the diegesis, an instance of metalepsis that disrupts narrative levels to draw the player in as opposed to drawing attention to a gameworld's artifice. Bell (2016) took this even further by suggesting that all digital fiction inherently embodies the player via representing them inside the storyworld, thus making interactional metalepsis "fundamentally built into and therefore an inevitable feature of ergodic digital fiction" (p. 299). This consideration of interactional metalepsis by both Ensslin and Bell articulates metalepsis as a tool for immersion rather than disruption.

The suggestion that videogame avatars are metaleptic makes interactional metalepsis, as Neitzel (2014, n.p.) put it, “not an artistic deviation but the basis of the game”. Arguably this conceptualisation of metalepsis does not disrupt the illusion of fictional worlds but instead draws players in to supposedly immerse them within the fiction. The ubiquity of this form of interactional metalepsis threatens to make the concept rote, which is why Ensslin (2011, p. 16) distinguished between this definition and the “more conventional function of metalepsis” via the categorisation of divergent and convergent. Convergent metalepsis “blurs ontological boundaries to create the illusion of co-presence, colocation and conversation between the virtual and the actual” whereas divergent refers to the disorienting forms of metalepsis described by Ryan (2004) that actively disrupts this illusion and create a sense of unease.

Summarising, divergent interactional metalepsis describes acts in digital media that draws attention to the artifice of its storyworld, either via ontological contamination between distinct narrative levels or rhetorical instances that temporarily reach across boundaries. Divergent metalepsis is not new in videogames, existing as far back as *Deadline* (Infocom, 1982), nor is it a new point of discussion in games studies (Harpold, 2007; Conway, 2010; Fuchs, 2013), but the affordances of videogames provide additional avenues through which to continue to apply it. Metalepsis in videogames is particularly meaningful in how players during the act of playing constantly oscillate between inside and outside the diegesis in a process that creates the potential for metaleptic instances to readily occur.

Videogame Diegesis

Many videogames make the frequent oscillation between diegetic and nondiegetic elements a central part of their experience, making the player frequently fluctuate between being inside the diegesis (diegetic) and outside it (nondiegetic). As Galloway (2006) identified, the nondiegetic “is much more common in gaming than in film or literature” and thus “impossible not to employ in analysis” (p. 8). Galloway (2006) described the diegesis of a videogame as “the game’s total world of narrative action” (p. 8). Akin to cinema, this diegesis includes both onscreen and offscreen elements, such as characters and events both seen and referenced. This is contrasted with a videogame’s nondiegetic elements, which according to Galloway (2006) included “those elements of the gaming apparatus that are external to the world of narrative action” (p. 7). In film, nondiegetic refers to a variety of formal techniques that are part of the viewing experience but still outside the narrative world of the film. Comparatively, Galloway (2006) described nondiegetic play elements as “inside the total gamic apparatus yet outside the portion of the apparatus that constitute a pretend world of character and story” (pp. 7–8).

The impact this has on the player is that their perception of a videogame constantly fluctuates between the diegetic world and the many nondiegetic elements that surround it. These can range from a game’s heads-up display (HUD), menus, settings, power-ups, and other elements that nothing within the diegetic world of the game can explain. The extent of

nondiegetic elements varies from one example to the next—for instance, walkers like *Gone Home* (Fullbright, 2013) and *Dear Esther* (The Chinese Room, 2012) strip their mechanics and HUD to offer players a more unobstructed view of the diegesis compared to the dense displays of mechanically complex games like *Civilization VI* (Firaxis Games, 2016) and *Dragon Age: Inquisition* (BioWare, 2014). Even what constitutes a nondiegetic element varies from one game to the next—while the HUD would be considered nondiegetic in most games, a game like *Deus Ex: Human Revolution* (Eidos-Montréal, 2011) uses the diegetic justification of the player’s avatar being technologically augmented to include the HUD inside the diegesis instead of outside it.

The dynamic of diegetic and nondiegetic elements has a precedent in interactive fiction. Both Aarseth (1997, p. 118) and Montfort (2009, pp. 34–5) described the tendency for interactive fiction to frequently oscillate between commands both inside and outside the diegetic world. Aarseth (1997) suggested interactive fiction’s voice embodies not a single speaker “but, rather, a composite mechanical chorus [that comes] from both inside and outside” (p. 120). Montfort’s theory is especially notable in how it distinguished inputs and outputs based on whether they occur within the diegesis or not. Diegetic inputs are described as commands and usually take the form of an action, ranging from physical such as ‘pick up sword’ to more abstract such as ‘think’. This is contrasted with nondiegetic inputs he defines as directives which refer to the program itself rather than the narrative world, such as saving and quitting.

Galloway (2006) adopted a similar method of classifying diegetic and nondiegetic elements by arguing that both the player and the game itself can perform acts inside and outside the diegesis. This is articulated across two distinct axes—diegetic/nondiegetic and operator/machine—that categorises instances in videogames across four distinct acts. What this identifies is both the player/operator and game/machine perpetually function inside and outside the diegesis, with the player both performing acts inside the gameworld while also manipulating menus or the HUD that are overlaid but exist separately. Videogames, too, alternate between acts within the diegesis, such as playing cutscenes or controlling the behaviour of enemies, to nondiegetic acts, such as altering the HUD or a character’s statistics.

What all these theories suggest is that the dynamic between diegesis and nondiegesis is a significant part of the videogame medium, which has consequences for the way metalepsis disrupts such a boundary. One way to think of these consequences is provided by Conway’s (2010) reformulation of the fourth wall in videogames. Using Huizinga’s (1938/1949) concept of the magic circle that described games taking place in their own defined reality as a basis, Conway (2010) rejected the idea of breaking the fourth wall in favour of a process of expansion and contraction. Because of the prominence and interplay of diegetic and nondiegetic elements in videogames, he argued the medium has the potential to “relocate” the fourth wall, shifting the diegetic boundary to make what was nondiegetic diegetic and vice-versa (Conway, 2010, p. 149). An expansion of the magic circle occurs “when the

synthetic world of the game expands beyond the screen, encompassing the technological apparatus of the console/PC or the paratexts packaged with the game, so that the console, memory card, controller, or game manual momentarily becomes part of the fictional world” (Conway, 2010, p. 145).

The concept of the magic circle is not interchangeable with diegesis, but Conway’s description is useful in how it can also spatially describe the shifting of diegetic and nondiegetic elements in videogames, and by extension the role metalepsis plays. Because of the prominence of nondiegetic elements in videogames and the frequent tendency for the “expansion/contraction of the fourth wall”, I argue that it is possible to think of the diegetic boundary of videogames as dynamic, meaning that it is possible and even easy for what is diegetic to become nondiegetic and vice-versa. This contributes to Ryan’s (2004, p. 458) claim that videogames provide a “favourable environment” for metalepsis: Not only can they play with “levels of world and code”, but they can also toy with the diegetic status of various actions. This makes metalepsis a meaningful consequence to the way videogame diegesis functions. Galloway (2006) echoed this argument when he suggested videogames are perpetually interested in blurring the diegetic/nondiegetic divide together “as seamlessly as possible” (p. 8).

The rest of this article will be dedicated to unpacking how diegesis and metalepsis functions in *Pony Island* and *Doki Doki Literature Club*. As has been covered, metalepsis is not new in videogames, but I have chosen these two examples for several reasons. First is the critical lauding both games received for the way they play with the fourth wall within the videogame form (Walker, 2016; Beach, 2016; Rose, 2017; Nolan, 2018), indeed to the point that metalepsis is arguably central to their appeal and popularity. Both games take advantage of what Ensslin (2011, p. 14) referred to as author-driven metalepsis in how each moment of metalepsis is predetermined by its creators to achieve a certain effect rather than occurring through unintentional means. They were also released exclusively on the distribution platform Steam and can be categorised as “indie games” which, due to a variety of socio-economic factors, have been pointed towards as an emerging site of “textual experimentation that provocatively have mutated and altered typical gaming formats in terms of mechanics, gameplay, visual style, and theme” (Clarke & Wang, 2020, p. 9). Both games also support Edrei’s (2018, p. 121) claim that ontologically disorienting videogames are becoming a trend in independent titles, with other examples including *Undertale* (Toby Fox, 2015), *The Magic Circle* (Question, 2015), *The Stanley Parable* (Galactic Café, 2011), *Stories Untold* (No Code, 2017), *ICEY* (Fantablade Network, 2016), *The Hex* (Daniel Mullins Games, 2018), and *SUPERHOT* (SUPERHOT Team, 2016) to name a few. As case studies, they therefore both represent a wider phenomenon and foreground the impact metalepsis as a narrative device can have on the player.

Pony Island

Pony Island is a point-and-click adventure/puzzle game released on Steam in 2016 by Daniel

Mullins Games. Taking place in a derelict arcade, the player takes control of an unnamed protagonist as they play a mysterious arcade cabinet also called 'Pony Island'. The game appears unfinished, with several menu options not responding to player input and its rudimentary graphics often appearing to glitch. As the player proceeds through the basic side-scrolling level of the arcade game, it is eventually revealed the cabinet was created by Satan himself to steal the protagonist's soul. Over the course of the game the player not only plays through 'Pony Island' the arcade game, but several iterations of it, as well as breaks into the fictional game's code to delete three demonic programs and save thousands of other souls that Satan has trapped inside the machine.

Pony Island is a game that thrives on the intrusions between diegetic levels, both between the game and the player's extratextual experience but also between its diegesis and the nested diegesis represented by the "Pony Island" arcade cabinet. The hypodiegetic level (that is, another diegesis nested within a diegesis) of "Pony Island" is initially extremely rudimentary, largely consisting of a pony jumping over poles in a fantasy setting, but it remains ontologically distinct from the level of the protagonist and the arcade itself. It possesses its own nondiegetic elements such as the main menu as well as a range of setup options much like the options presented to a player starting a new game. Indeed, the concept of playing a game within a game is explicitly and frequently put to the fore of the game's visual design—the frame of the arcade screen, as well as additional dust and cobwebs remain visible to the player on the border of their own screen. Even the game's collectibles, tickets reminiscent of those provided by real arcade machines, reinforce this ontological separation to the player. As opposed to these collectibles being acknowledged in the nondiegetic realm of either the "Pony Island" arcade game or *Pony Island* itself, the player is shown the tickets by the protagonist presenting them in the corner of the screen and outside the screen of the arcade cabinet, visually reinforcing the separation between *Pony Island* and the "Pony Island" arcade game.

All these visual and nondiegetic elements consistently foreground the experience of playing "a game within a game" to the player, as well as the perpetual blurring and overlapping of diegetic and nondiegetic elements this highlights. For instance, the act of the pony jumping over poles in the arcade game is a diegetic act relative to both the arcade game and the game itself. This is contrasted with the arcade game's main menu which is nondiegetic relative to "Pony Island" but exists within the diegesis of the actual *Pony Island* game. In creating another level of diegesis, an act such as entering "Pony Island's" game files to save the multitude of lost souls trapped within becomes diegetic as opposed to nondiegetic. This diegetic hierarchy turns *Pony Island* from a game about playing an arcade cabinet to a game in which "the act of configuration is the very site of gameplay" (Galloway, 2006, p. 13). What is distinct about the configuration acts of *Pony Island* however is that the additional narrative level makes such acts nondiegetic to the "Pony Island" arcade game but diegetic to *Pony Island* itself. It turns configuration into the very site of gameplay but in a way that does not eschew it from the diegetic completely.

These configurative acts reframe the player’s experience as less in the gamic sense and more as the role of a subversive programmer or even hacker. Edrei (2018) described *Pony Island* as containing “interstitial diegetic spaces, and empower[ing] the player to move through ‘cracks’ in the façade of the fictional world by acting as a metaphorical programmer, manipulating game files and other [nondiegetic] components” (p. 112). This positions the game and story itself as about the act of intruding on and disrupting the code of the arcade cabinet, going outside the boundaries of what diegetic play would typically allow. This manifests through the exploitation of glitches, the breaking of menus, constantly attempting to “pull back the curtain” or “break the fourth wall” as it were to glimpse the cabinet’s “digital underwear” and achieve the narrative goal set by the actual game’s premise. These attempts begin to bleed into each subsequent iteration of the “Pony Island” arcade game, with satanic symbolism such as pentagrams, and gruesome displays increasingly poking through the cutesy pony façade of the arcade’s diegesis. One iteration even introduces a *Super Mario*-esque overworld with typically predetermined paths that the player can escape, allowing their avatar to roam beyond the boundaries of the map and encounter various glitches and demonic programs. And yet, the nesting of one game within another keeps all these metaleptic acts entirely within the bounds of *Pony Island*’s diegesis. The player’s frequent movement between the diegetic world of “Pony Island” and the “demonic” nondiegetic code powering it may be ontologically disruptive but are kept within the confines of a single storyworld.

However, *Pony Island* also provides several examples of highly divergent metaleptic moments that temporarily challenge the player’s conception of what takes place inside and outside the game’s diegesis. One instance occurs in a puzzle during which the player must answer several questions correctly to delete a core program called *Asmodeus.exe* and continue progressing through the game’s files. *Asmodeus.exe* attempts to distract the player through nondiegetic machine acts that intrude on the game’s diegesis. The first of these occur when *Asmodeus.exe* requests the player type something “disgusting and vile”, only for the player to appear to receive several Steam (the software client the game is being played on) messages from someone on their friend’s list. In actuality, the game borrows the avatar and name of a random Steam friend of the player and imitates the act of receiving Steam messages via pop-up. These fake messages are made even more disorienting through them referencing what the player wrote in-game, as well as posing the question “did someone hack you?” before inevitably revealing them as an extension of *Asmodeus.exe* through messages that read “ANSWER ME MORTAL” and “PATHETIC FOOL”. All of this is done in service of distracting the player from *Asmodeus.exe*’s next question which, if the player does not accurately answer, means they fail the puzzle and must begin the section again.

Steam messages exist in a nondiegetic overlay that can be accessed while playing any game on the platform, with the overlay existing firmly outside the diegesis of the game and thus in the realm of what Galloway (2006) called nondiegetic machine acts. These are actions performed by the machine and are essential to the game, but not contained within the world of the game (Galloway, 2006, p. 28). Nondiegetic machine acts include the previously

discussed examples of the HUD and power-ups, but what is most significant is how Galloway (2006) directly connected these actions to metalepsis:

Nondiegetic machine acts can be defined as those elements that create a generative agitation or ambiguity—what Genette calls metalepsis—between the inside of the game and the outside of the game, between what constitutes the essential core of the game and what causes that illusion (literally “in-play”) to be undone. (p. 34)

This describes the ability of nondiegetic machine acts to intrude on the diegesis of the game in ways that both disorient the player and draw attention to the artifice of the storyworld, much like the way *Pony Island's* fake Steam messages function. Accessing the Steam overlay, it is easy for the player to discover the Steam message notifications are false, but it is possible the player was initially fooled and thus highly disoriented when a familiar Steam user began to comment on what was happening in-game, as I was on my first playthrough. This clearly represents a moment of metalepsis in how the diegesis of the game temporarily intrudes into the nondiegetic realm of the platform.

Asmodeus.exe's final puzzle continues this intrusion of nondiegetic machine acts when it requests the player write the number 2023, only for the game to appear to crash before they can type the final number. This crash manifests in a display the player would likely be familiar with through appearing as a windows error claiming “PonyIsland.exe is not responding” and giving the player the option to close the program or wait for it to respond. If the player clicks “Wait for Program to Respond”, Asmodeus.exe winks, thus acknowledging the ‘crash’ as not an actual failure of the game system but a specific act by the machine to disorient the player in much the same way as the fake Steam messages. Galloway (2006) expanded nondiegetic machine acts to external forces “such as software crashes, low polygon counts, temporary freezes, server downtime and network lag” with the game crashing thus firmly falling into this category of action (p. 28). Receiving Steam messages and crashing can therefore both be described as nondiegetic machine acts, and in this case they both intrude on the diegesis of the game in a way that is both highly disorienting and alludes to their “generative agitation”.

Both instances can be considered rhetorical metalepsis in how story events affect the underlying code, temporarily reaching across boundaries and implicating the player's system into the game itself. Waszkiewicz (2019) described glitches such as these as “a symbol of transgression”, bringing to the foreground what is usually invisible (p. 216). Waszkiewicz (2019) further suggested glitches create a sense of the uncanny, a level of psychological discomfort they relate to cognitive dissonance that occurs in the presence of “two contradictory judgements” (p. 220). The contradiction that occurs here is the appearance of drawing in elements such as Steam and its friend system from the real, lived reality of the player into the game's fiction, interweaving the platform into the game's narrative in a way that may be artificial but no less unnerving. Per Genette's (1979/1983) original description of metalepsis, its most troubling implication is the “unacceptable and insistent hypothesis that the extradiegetic is perhaps always diegetic” (pp. 235–6). *Pony Island's* rhetorical metalepses

toe the line between convergent and divergent in how they both highlight the game’s fictional nature while also interweaving that fictionality with the player’s real life. Reaching across this barrier conflates the player with the fictional protagonist, contributing to the horror genre trappings of the game by attempting to imply that it is the player themselves that has become another lost soul trapped in the confines of the arcade cabinet.

Doki Doki Literature Club

Building on the metalepses of *Pony Island* is my second case study, *Doki Doki Literature Club* (DDLC). Released by Team Salvato on Steam for free in 2017, DDLC is a horror game masquerading as a visual novel dating simulator in which you play a boy (for whom the player can choose the name of) who attends a new school and befriends a group of girls that run the school literature club. Over the course of three in-game days and approximately 2–3 hours of gameplay, the player chooses between dialogue options and branching narrative paths to appeal to specific girls. However, after one of the girls is found dead at the beginning of day four, the game restarts from the beginning of day one as if that girl never existed. After this highly disorienting moment, the game slowly reveals that the head of the literature club, a character named Monika, is a sentient AI aware of her role in the game and is ‘manipulating’ the game’s code until she is the only character left for the player to date.

DDLC in relation to *Pony Island* both expands on the instances of metalepsis already discussed and engages Galloway’s four acts differently. While *Pony Island*, through its hypodiegetic level and rhetorical metalepses, disrupts Galloway’s axis of diegetic/nondiegetic, DDLC frequently manipulates gamic acts alongside Galloway’s other axis of operator/machine. Galloway (2006) described the difference by defining machine acts as “acts performed by the software and hardware of the game computer, while operator actions are acts performed by the player... locating a power-up in *Super Mario Bros.* is an operator act, but the power-up actually boosting the player character’s health is a machine act” (p. 5). He did acknowledge this division is “completely artificial” in how both machine and operator acts “work together in a cybernetic relationship... as a *unified, single phenomenon*, even if they are distinguishable for the purpose of analysis” (Galloway, 2006, p. 5).

This ‘cybernetic relationship’ between the player and the game was discussed by Keogh (2014) when he suggested “during videogame play, the player embodies a hybridised body, incorporating flesh, hardware and virtual objects and beings into their corporeal schema” (p. 15). Schmalzer (2020) described this hybridised body as:

Flows of information in the form of sights, sounds, and haptic output from the videogame; inputs from the player in the form of trained, precise gestures; and electrical impulses connecting the two create a cyborg entity that quickly, effortlessly, and seamlessly translates information between alien entities, breaking down boundaries between the constituent parts. (n.p.)

While this description alludes to a fluid and frictionless process between the player and the

game, Schmalzer (2020) identified that this is not always the case. Schmalzer introduced the concept of jank and colloquially described it as “a catchall phrase for a certain kind of weirdness” that can be used in relation to everything from bugginess to minor glitches and even poor control schemes (n.p.). More specifically, she argued that jank can be properly defined as describing “disconnects between player expectations about how elements of the videogame (software, hardware, interface, rules, mechanics, visuals etc.) ‘should’ behave and how they actually do” (n.p.). Jank thus highlights how a videogame’s cybernetic relationship is not perfect and the exchange between the player and the game can be prone to disruption and messiness. In the case of *DDLC*, this cyborgian construct becomes the site of metalepses that function like jank, disrupting the player’s expectations of how the game functions and leaving them outside the cyborgian construction of gameplay.

Informative instances of this in action begin to occur directly after the game’s façade as a visual novel dating simulator is dropped. On the beginning of the fourth in-game day, the protagonist enters the home of one of the girls, Sayori, only to find her dead. The game appears to glitch, the background splintering and then showing the text “An exception has occurred. File ‘game/script-ch5.rpy’, line 307 See traceback.txt for details” as if something in the coding of this game sequence has gone wrong. Eventually the background fades to black and the music continues playing the same score as the rest of the game, but off-key as if similarly broken. The protagonist proceeds through a series of lines, one of which self-reflexively reads “this isn’t some game where I can reset and try something different” only for the scene to abruptly end.

After this sequence, the game unexpectedly forces the player back to the main menu, a menu that replaces a picture of Sayori with a glitching Monika and the “New Game” option with a garbled series of symbols. Appearing as if their previous save file no longer exists, the player is forced to start a new game during which the narrative never acknowledges that Sayori existed in the first place. This moment, in which the game forces the player back to the main menu to start a new game, is the first instance of the machine taking over what was originally a nondiegetic operator act. Returning to the main menu and starting a new game falls into the previously discussed category of setup actions—acts that are “interstitial acts of preference setting, game configuration, meta-analysis of gameplay, loading or saving, selecting one player or two, and so on” (Galloway, 2006, p. 28). *DDLC*, in this moment, takes this option away from the player, thus turning the act of starting a new game from a nondiegetic operator act to a nondiegetic machine act and subverting their expectations akin to jank. Despite being a moment of inaction, the lack of actions available is what disorients the player, making this a significant instance of interactional metalepsis defined not by interaction but a lack of it.

After the player is forced to start a new game, albeit with a narrative that indirectly acknowledges the previous save, other acts begin to be “taken over” by the game. Moving the cursor, fast-forwarding dialogue and even choosing dialogue options are all stripped from

the player at various points across the game’s branching narrative paths. This is emblematic of what is going on in the narrative of the game—Monika is acting as an independent entity, manipulating the game’s code to slowly take autonomy away from the player until she alone remains for the player to choose. Within the diegesis, this positions Monika as an oppositional player using cheats and game hacks to manipulate the game system. Cheats and hacking are described by Galloway (2006) as nondiegetic operator acts that are often discouraged in gaming as “they essentially destroy traditional gameplay by deviating from the established rule set of the game” (p. 13), a description that is apt as *DDLC*’s initial gameplay, established in the first 2–3 hours of play, begins to deviate as the rules change in favour of the machine. Ryan (2004) referred to hacking or the playing with what she referred to as the “digital underwear” of a text as a form of metalepsis (p. 452), one perpetrated by the player as opposed to the machine. *DDLC* adopts this conceptualisation of the hacker into the game itself through metalepsis and the character of Monika. The game creates the illusion that Monika is operating as another player, existing both inside and outside the diegesis and thus able to manipulate the game’s code, while effectively the game itself is the hacker. Outside of the diegesis of the game, Monika is obviously synonymous with the machine, meaning that the game is, in essence, appearing to hack itself.

This dynamic of Monika and the player as separate player/hackers comes to the fore in the game’s conclusion. Regardless of the decisions the player has made to this point, all other characters besides Monika have been deleted and the protagonist remains trapped in an abstract room across from Monika, who begins to call the player not by their chosen protagonist’s name, but the name on the computer the game is being played on. It is at this point that the game’s diegesis becomes further indistinguishable from its nondiegesis in how Monika suddenly looks beyond the protagonist to the player themselves. This ambiguity at the border of the game’s diegesis is blurred even further when, to complete the game, the player must metaleptically enter the game’s files themselves and delete a file designed to represent Monika. The player must adopt the guise of the hacker themselves and manipulate the nondiegesis to continue the narrative within the diegesis. The diegetic boundary is briefly reached across and a nondiegetic act of configuration is turned into a diegetic act.

DDLC’s metaleptic instances foreground the cyborgian relationship between the player and the game via disruption. Rather than being a smooth process of input and output as is typically characterised, the game highlights Kukkonen’s (2011) claim that “metalepsis works as a strategy in the struggle for power” between characters and their creators (p. 214), in this case between the game itself and the player engaging with it. It narrativizes this struggle by positing the game as a site ripe for manipulation or hacking: both by the subversive character of Monika who acts as a pseudo-player by modding the game to suit her own conceptions of what the game “should be”, but also the player who is only able to complete the game by breaking into the game’s files and deleting the troublesome character. Monika’s desire for autonomy emerges from the game’s initial setup that positions everyone in the literature club except for her as a potential “date” option. Her breaking free of such a passive

role represents a narrative challenge to the authority of the game system in much the same way a player would mod a game to suit their own desires.

The control *DDLC* exerts (through the diegetic character of Monika) over the player's actions unnerves and subverts their expectations as to how the game should function akin to jank. Schmalzer (2020) also argued that "while any game *can* be interpreted as janky, designers can exploit common literacies and expectations to encourage the experience of jank" (n.p.). Examples of "designed jank" as she called it includes intentionally janky controls that can either exclude the player from the cybernetic system in games like *Qwop* (Bennett Foddy, 2008) or to connect them more directly to the gameworld as in *Octodad: The Dadliest Catch* (Young Horses, 2014). In the case of metalepsis functioning as a form of jank, it does both: disconnecting the player from the cyborgian construct of gameplay while also further interweaving the player's reality with the gameworld.

Metalepsis as a form of intentional jank also has consequences for the role inaction plays in facilitating *DDLC*'s narrative. Running contrary to other conceptions of play and videogames being prefaced on interaction, *DDLC* is notable in how its experience is defined by when it *does not* afford interaction and intentionally and overtly takes it away. Inaction becomes a site of unease and narrative significance, with the player frequently being left out of the cyborgian construct of gameplay. In this way, *DDLC* exploits the expectations as to how videogames and their afforded interactions should function to great narrative and conceptual effect. *DDLC* therefore represents an instance of designed jank added into the cybernetic system of gameplay to highlight the struggle for control and artificiality that metalepsis implies.

Divergent Metalepsis as a Videogame Narrative Device

The use of metalepsis as a narrative device in both *Pony Island* and *DDLC* makes visible the variety of effects such developer-driven instances can have on the player and the narrative. While a part of two distinctly different game genres, both case studies possess several parallels between their metaleptic intrusions, the most overt potentially being how it is used to reveal the façade of a gameworld. Per its ability to draw attention to the artifice of a diegesis by revealing its boundaries, metalepsis becomes a narrative goal in *Pony Island* in how it lets the player exploit glitches in the arcade machine that allow them to "save their soul" by deleting core programs and escaping. Doing so slowly breaks the façade of "Pony Island's" cutesy exterior to reveal pentagrams and blood-spattered imagery hiding in the game's code. Similarly, ontological metalepsis combines the initial playthrough of *DDLC* with the "new game" the player is forced to start to reveal the horror game behind its façade as a dating simulator.

Both games also appear to invade the player's extratextual reality through manipulating details collected from the platform they are played on, whether that be their Steam friend

list, or the name registered on their computer. This arguably has two functions in relation to the player: to imitate the encroaching of the game’s fiction in an ontologically unsettling way, and to imitate a trojan horse, a virus that appears like one program only to invade or infect other parts of a computer system. The latter is bolstered by visual details in *Pony Island*, most notably the imitation of systems that the game should not have access to, namely the player’s steam friend list and the ability to reset the entire PC. It even posits to the player “did you get hacked?” as if to narratively connect its actions with the presence of an outside force with sinister intentions. While *DDLC* does not possess comparable imagery, the fact that it was released for free on Steam does lend a level of credence to the game program apparently possessing similarly duplicitous intentions. However, the “game as virus” is only an imitation and a concern that can be easily resolved. Checking the Steam overlay immediately reveals the messages to be false and the *Asmodeus.exe* puzzle quickly reveals itself to be only an imitation of system processes. Ryan (2004) does suggest it would be possible to create a trojan horse videogame that could destroy/invade a user’s system (p. 461), an example being *Lose/Lose* (Zach Gage, 2009) that deletes a file whenever an enemy is killed, but for obvious reasons this would never exist within the realm of financially viable videogames. Instead, it acts as a means of disorientation, temporarily implying to the player that the game program has intentions beyond facilitating their narrative experience.

The second function of these rhetorical metaleptic moments, to implicate the player’s reality in the game’s narrative, alludes to Genette’s (1979/1983) original description of the term. As he outlined, “the most troubling thing about metalepsis indeed lies in this unacceptable and insistent hypothesis that the extradiegetic is perhaps always diegetic and that the narrator and its narratees—you and I—perhaps belong to some narrative” (pp. 235–6). Both *Pony Island* and *DDLC* accentuate their narrative via these intrusions to create the uncanny effect that Genette described. In doing so it performs a function like convergent metalepsis in how it “blurs ontological boundaries to create the illusion of co-presence, colocation and conversation between the virtual and the actual” (Ensslin, 2011, p. 16), but instead uses this process of metaleptic immersion to produce an uncanny effect, challenging the player’s conception of fictionality in a way that erodes the diegetic boundary.

Another notable characteristic in both is how they foreground the player as adopting the role of what Edrei (2018) calls the “metaphorical programmer” whose role it is to manipulate game files and other nondiegetic components (p. 112). This perhaps best exemplifies the aspects of the videogame medium that interactional metalepsis can highlight, the role of code in forming the digital basis of the cybernetic relationship between the player and game. *Pony Island*’s narrative becomes about being a rogue hacker inside the “Pony Island” arcade cabinet and disrupting its diegesis to the point of ongoing ontological contamination between the world of a pony jumping over poles and the demonic code that supports it. In *DDLC*, the conceit of Monika the hacker becomes even more disruptive in how it leaves the player out of the cyborgian construct of gameplay to create a sense of unease and disconnect. Eventually the game thrusts the role of the “metaphorical programmer” upon the player also

in how they must directly enter the program files to delete the rogue A.I. of Monika directly. In both instances, metalepsis functions as a means of gaining authority, a “struggle for power” (Kukkonen, 2011a, p. 214).

The way metalepsis disrupts the cybernetic relationship between the player and game is also especially notable in *DDLC*. It narrativizes jank, something common across videogame play, akin to the designed jank of challenging control schemes (Schmalzer, 2020). Jank as an intentional narrative and metaleptic device turns instances of inaction often disregarded in typical conceptions of videogame storytelling into moments of narrative significance. Using metalepsis in this way also foregrounds its ability to represent struggles for control, in this case between the player and the game itself, through the dynamic autonomy afforded to the player. While discussing the metalepses of *Alan Wake* (Remedy Entertainment, 2010), Fuchs (2013) made the point that main character Alan Wake’s arc mirrors that of the player. *Alan Wake* is a game of near-constant cutscenes that briefly take agency away from the player, leading Fuchs to suggest that the cinematics “repeatedly disrupt the participatory experience, taking control away from the player [and] thus reinforcing the sense that a metaphysical ‘authorial’ force is at work, shaping the logic of the game” (Fuchs, 2013, p. 101). *DDLC* functions similarly but to a greater extent, positioning moments when agency is taken away as both sites of unease and narrative significance.

Both *Pony Island* and *DDLC* highlight how disruption, whether that be to diegesis or between the player and the game, can be used to great narrative effect, posing questions as to how metalepsis can be used as a tool for disorientation. *Pony Island* foregrounds the oscillation of diegetic and nondiegetic actions in videogames to intentionally blur different narrative levels, and *DDLC* highlights how moments when interaction is taken away can be just as narratively significant to the player. In *DDLC*’s case, unintentional instances of metalepsis that disrupt the player/game dynamic already abound—glitches that limit a player’s movement, losing a save file, the game freezing during a pivotal gameplay moment—but designed, developer-driven metalepses have the potential to use such disorienting and frustrating moments in narratively-relevant ways. Both games thus represent several ways metalepsis can be used to foster novel narrative experiences centred on both diegetic boundaries and subverting the player’s expectations of how a game system should behave.

Conclusion

The expansions digital media provide to the concept of metalepsis must continue to be explored and articulated. The appeal of metalepsis and the way it can challenge our notions of authorship, fictionality, ontology and more ensures that the concept continues to thrive and remain informative to the construction of worlds and boundaries. Videogames especially are a bountiful medium for metalepsis due to the prominence of nondiegetic elements and the requirement that players frequently oscillate between performing actions

both inside and outside the gameworld. The two case studies of *Pony Island* and *Doki Doki Literature Club* fit into an increasing lineage of videogames that use metalepsis as a key narrative device to draw attention to the artifice of the gameworld for fantastic, comedic, or, in this case, unnerving results.

What *Pony Island* and *Doki Doki Literature Club* overall highlight is the meaningful effect of metalepsis as a narrative device that can disrupt both the oscillation of diegetic and nondiegetic elements in videogames, but also the “distributed, cyborgian, embodied perspective” that combines the player and game into “a single, cyborg body” (Keogh, 2014, p. 16). Both games use it to accentuate their horror elements by unnerving the player in ways that metalepsis can. This ranges from imitating the presence of a virus, intertwining the player’s reality with the game’s fiction, narrativizing moments of inaction and disrupting the cybernetic relationship between the player and the game. What remains prominent in these metalepses is the intention to reveal the façade of both fiction and the videogame form, allowing the player to glimpse behind the curtain to the code to manipulate it for their own narrativized goals.

There is still much to consider regarding metalepsis in videogames and other digital media. The ways videogame diegesis can facilitate metalepsis to either disrupt or immerse players in storyworlds are wide-reaching and have various effects on narrative comprehension and player experiences. The potential for metalepsis to disrupt the cybernetic relationship between the player and game especially requires greater unpacking—Schmalzer (2020, n.p.) outlined jank only in relation to controls and similarly acknowledged that instances in which the player’s expectations of how a game system should work not aligning are potentially expansive. Similarly, narrativized inaction is something that challenges many conceptualisations of videogame storytelling and play more generally and thus is something that requires further unpacking beyond my solitary case study. Regardless, as alluded to by Neitzel (2014) and Conway (2010), metalepsis remains a frequent and meaningful component of videogames. *Pony Island* and *DDLC* illustrate the means through which metalepsis can be used as a narrative device to unnerve and disorient the player, but they are only two examples across a whole range of potential avenues for future analysis.

References

- Aarseth, E. (1997). *Cybertext: Perspectives on ergodic literature*. Maryland: JHU Press.
- Bal, M. (1981). Notes on narrative embedding. *Poetics Today*, 2(2), 41–59.

- Beach, J. (2016). *Pony Island* is a daring, demonic and demented gaming masterpiece. *Vice*. https://www.vice.com/en_uk/article/9bgjyd/pony-island-is-a-daring-demonic-and-demented-gaming-masterpiece-2122
- Bell, A. (2016). Interactional metalepsis and unnatural narratology. *Narrative*, 24(3), 294–310.
- Foddy, B. (2008). *Qwop*. PC: Bennett Foddy.
- BioWare. (2014). *Dragon Age: Inquisition*. PC: Electronic Arts.
- Campora, M. (2009). Art cinema and New Hollywood: Multiform narrative and sonic metalepsis in *Eternal Sunshine of the Spotless Mind*. *New Review of Film and Television Studies*, 7(2), 119–131. doi:10.1080/17400300902816812
- Clarke, M.J., & Cynthia W. (2020). *Indie games in the digital age*. Bloomsbury Publishing.
- Conway, S. (2010). A Circular wall? Reformulating the fourth wall for videogames. *Journal of Gaming & Virtual Worlds*, 2(2), 145–155.
- Daniel Mullins Games. (2016). *Pony Island*. PC: Daniel Mullins Games.
- Daniel Mullins Games. (2018). *The Hex*. PC: Daniel Mullins Games.
- Edrei, S. (2018). The world that wasn't there: Interstitial ontological spaces in contemporary video games. *Frontiers of Narrative Studies*, 4(1), 112–122.
- Eidos-Montréal & Ion Storm. (2011). *Deus Ex: Human Revolution*. Xbox 360, PlayStation 3, PC: Eidos Interactive & Square Enix.
- Ensslin, A. (2011). *Diegetic exposure and cybernetic performance: Towards interactional metalepsis* [Paper presentation]. Staging Illusion: Digital and Cultural Fantasy, Sussex.
- Ensslin, A. (2015). Video games as unnatural narratives. In M. Fuchs (Ed.), *Diversity of play* (pp. 41–70). Lüneburg: Meson Press.
- Fantablade Network. (2016). *ICEY*. PC: X.D. Network.
- Firaxis Games. (2016). *Civilization VI*. PC: 2K Games.

- Fuchs, M. (2013). A horror story that came true: Metalepsis and the horrors of ontological uncertainty in *Alan Wake*. *Monsters and the Monstrous*, 3(1), 95–107.
- Fullbright. (2013). *Gone Home*. PC: Fullbright.
- Gage, Z. (2009). *Lose/Lose*. PC: Zach Gage.
- Galactic Café. (2011). *The Stanley Parable*. PC: Galactic Café.
- Galloway, A. (2006). *Gaming: Essays on algorithmic culture*. Minnesota: University of Minnesota Press.
- Genette, G. (1979/1983). *Narrative discourse: An essay in method* (Vol. 3). New York: Cornell University Press.
- Genette, G. (2004). *Métalepse. De la figure à la fiction [Metalepsis. From Figure to Fiction]*. Paris: Seuil.
- Harpold, T. (2007). Screw the grue: Mediality, metalepsis, recapture. *Game Studies*, 7(1). <http://gamestudies.org/0701/articles/harpold>
- Hofstadter, D. (1980). *Gödel, Escher, Bach: An eternal golden braid*. New York: Vintage Books.
- Huizinga, J. (1949 [1938]). *Homo ludens: A study of the play-element in culture*. London: Routledge.
- Infocom. (1982). *Deadline*. PC: Infocom.
- Keogh, B. (2014). Across worlds and bodies: Criticism in the age of video games. *Journal of Games Criticism*, 1(1), 1–26. <http://gamescriticism.org/articles/keogh-1-1>
- Kiss, M., & Willemsen, S. (2017). *Impossible puzzle films: A cognitive approach to contemporary complex cinema*. Edinburgh: Edinburgh University Press.
- Klimek, S. (2009). Metalepsis and its (anti-) illusionist effects in the arts, media and role-playing games. In W. Wolf, K. Bantleon, & J. Thoss (Eds.), *Metareference across media: Theory and case studies* (pp. 169–187). Leiden: Brill Publishers.
- Konami & Konami Computer Entertainment Japan. (1998). *Metal Gear Solid*. PlayStation,

PlayStation 3, PC: Konami.

Kukkonen, K. (2011a). Metalepsis in comics and graphic novels. In K. Kukkonen & S. Klimek (Eds.), *Metalepsis in popular culture* (pp. 212–30). Berlin: Walter de Gruyter.

Kukkonen, K. (2011b). Metalepsis in popular culture: An introduction. In K. Kukkonen & S. Klimek (Eds.), *Metalepsis in popular culture* (pp. 1–21). Berlin: Walter de Gruyter.

Kukkonen, K., & Klimek, S. (2011). *Metalepsis in popular culture* (Vol. 28). Berlin: Walter de Gruyter.

McHale, B. (1987/2003). *Postmodernist fiction*. London: Routledge.

Montfort, N. (2009). Toward a theory of interactive fiction. In K. Jackson-Mead & J. R. Wheeler (Eds.), *IF theory reader* (pp. 25–58). Boston: Transcript in Press.

Neitzel, B. (2014). Narrativity of computer games. <https://www.lhn.uni-hamburg.de/node/127.html>

No Code. (2017). *Stories Untold*. PC: Devolver Digital.

Nolan, D. (2018). How *Doki Doki Literature Club* frames you. *Rock Paper Shotgun*. <https://www.rockpapershotgun.com/2018/07/25/how-doki-doki-literature-club-frames-you/>

Question. (2015). *The Magic Circle*. PC: Question.

Remedy Entertainment & Nitro Games. (2010). *Alan Wake*. Xbox One, Xbox 360, PC: Remedy Entertainment, Microsoft Corporation, Xbox Game Studios & THQ Nordic.

Rose, V. (2017). *Doki Doki Literature Club* is an Uncontrollably Horrific Visual Novel. *Polygon*. <https://www.polygon.com/2017/10/22/16512204/doki-doki-literature-club-pc-explained>

Ryan, M.L. (2004). Metaleptic machines. *Semiotica*, 150(1), 439–469.

Ryan, M.L. (2013). Impossible worlds and aesthetic illusion. In W. Bernhard & W. Wolf (Eds.), *Aesthetic illusion in literature and other media* (pp. 131–148). Amsterdam and New York: Rodopi.

- Schmalzer, M.D. (2020). Janky controls and embodied play: Disrupting the cybernetic gameplay circuit. *Game Studies*, 20(3). <http://gamestudies.org/2003/articles/schmalzer>
- SUPERHOT Team. (2016). *SUPERHOT*. PC: SUPERHOT Team.
- Team Salvato. (2017). *Doki Doki Literature Club!* PC: Team Salvato.
- The Chinese Room. (2012). *Dear Esther*. PC: The Chinese Room.
- Thon, J.N. (2017). Transmedial narratology revisited: On the intersubjective construction of storyworlds and the problem of representational correspondence in films, comics, and video games. *Narrative*, 25(3), 286–320.
- Toby Fox. (2015). *Undertale*. PC: Toby Fox.
- Walker, J. (2016). Wot I think: *Pony Island* - The smartest game of 2016. *Rock Paper Shotgun*. <https://www.rockpapershotgun.com/2016/01/05/wot-i-think-pony-island-the-smartest-game-of-2016/>
- Waszkiewicz, A. (2019). Glitch as the representation of the uncanny in *Oxenfree* (2016). *Homo Ludens*, 1 (12): 213–25.
- Western Technologies Inc. (1993). *X-Men*. Sega Genesis: Sega.
- Wolf, W. (2005). Metalepsis as a transgeneric and transmedial phenomenon. In J. C. Meister (Ed.), *Narratology: Beyond literary criticism* (pp. 83–107). Berlin: De Gruyter.
- Wolf, W., Bantleon, K., & Thoss, J. (2009). *Metareference across media: Theory and case studies*. Leiden: Brill Publishers.
- Young Horses. (2014). *Octodad: The Dadliest Catch*. PC: Young Horses.