Tampere University

Julián Alejandro Gutiérrez Carrera

PLAY WITHIN PLAY

The Form of Videogames Within Videogames

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ABSTRACT

Julián Alejandro Gutiérrez Carrera: "Play Within Play: Videogames Within Videogames"
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This thesis aims to understand the device of the videogame-within-the-videogame to have meaningful ways to both analyse it and use it as an analytical tool. It aims to answer the questions: how does the device of the videogame-within-the-videogame work, what are the different forms it can take, and what effects does the device have on its container videogame? To answer these questions, I looked at how a formally equivalent device in literary studies, *mise en abyme*, works and what it does, taking particular note of the idea of revealing a previously unseen fact or mechanism through replication or mirroring. Academic texts analysing the device both in games and as games often found that the device has mostly been used for worldbuilding, a finding that, while echoed in my analyses, is complicated due to the variety of uses the device has. In order to analyse these games, I used Caroline Levine's approach to formal analysis, focusing specifically on the affordances and constraints created when forms overlap. I approached the analyses by dividing the device, first, into two distinct categories: diegetic videogames, where a real game contains a fictional game, and videogames as framing devices, where a real game is contained by a fictional game. These two are then divided based on their modalities. Diegetic videogames are split between world-reflexive games, used for worldbuilding, and character-reflexive games, used for characterisation; videogames as framing devices are split between form-reflexive games, which suggest understandings of specific videogame forms, and player-reflexive games, which aim to make players recontextualise their actions. As a whole, all categories and modalities propose metanarrative approaches that allow players to understand the game, partly or as a whole, through their own interpretation or through the characters' interpretation of what the games are. They allow the player to learn something about the world of a game or its characters when presented as diegetic videogames, and they encourage the player to think critically about forms and their own actions when presented as framing devices. They also have a secondary function of having a descriptive and prescriptive nature to videogames: they not only depict videogames as their makers understand them, but make an argument for how videogames should work and what they should do by proposing their own model of videogames.

Keywords: Games within games, videogames within videogames, *mise en abyme*.

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1 INTRODUCTION

There is a moment near the start of hako life's *UNREAL LIFE* (2020) that stands out from the rest of the narrative: the main characters play a videogame. As they start playing, *UNREAL LIFE*'s form changes. While the game usually displays in a 2D sideview with the player character in the centre of the screen and dialogues in the lower third, the videogame changes the visual and mechanical rules: since the videogame takes up the whole screen, dialogue is relegated to small corners at the top edges of the screen; instead of controlling the main character's movement, the player controls her actions in the game, now from a 2D top-down view. As players return to play this videogame after progressing through the story, the experience of playing changes: as the characters' relationship develops, their interactions in the game change too. This videogame-within-the-videogame not only changes the form of *UNREAL LIFE*, but also enables character interactions that reflect back on the larger story.

The videogame in *UNREAL LIFE* is only one example of the device of the videogame-within-the-videogame, and while the device does not appear frequently in videogames, it is extremely varied, with the device making different statements on what videogames are, what playing them entails, how they work, or societal attitudes to them. This variety is also expressed using different forms of videogames, different genres, and different playing contexts. There is analytic potential in these videogames within videogames that has not been addressed in existing academic work. In an attempt to shed light on the device of the videogame-within-the-videogame, I will do formal analysis of videogames that use the device, which will hopefully lead to ways to understand the device. On the same note, I will conduct a basic categorisation of the device to further develop analytical approaches to it. In doing so, I hope to answer the question: how does the device of the videogame-within-the-videogame work, what are the different forms it can take, and what effects does the device have on its container videogame?

As such, it will be useful to define what the 'videogame-within-the-videogame' is. The device is an iteration of *mise en abyme* (roughly, 'placement/placed into the abyss' in English), the phenomenon wherein a work appears within the boundaries of another work. Both works are in constant dialogue with each other. In particular, the work within the work—or the contained work— is often said to 'mirror' the larger—container—work. In practice, this mirroring means

that characters in narratives often learn something about themselves, other characters, or the situation they find themselves in by looking at a work of art that depicts a—more—fictional account of the situation. The device lends itself particularly well to metanarratives: in being a work-within-the-work, it not only evinces the fictionality of the container work, it makes a statement about what its form does. So the characters' reaction to a contained work serves as a 'theory of the form;' it is a model for what that specific form should do for its audience. A videogame-within-the-videogame, then, is a playable videogame that is contained by a larger, container videogame.

2 LITERATURE REVIEW

Before explaining how videogames within videogames work, it will be necessary to understand how *mise en abyme* works. The foremost focus at play in this literature review is one of function, particularly focused on what these devices do to narratives, characters, and works as a whole. Videogames, as interactive media, engage with *mise en abyme* in their own ways, through different means and, notably, with different narrative aims. As such, the following exploration into the concept will be an attempt to make a clear definition of *mise en abyme* that can account for the focus of this thesis: the purpose and function of the work-within-the-work and the game-within-the-work in comparison to videogames-within-videogames.

2.1 The *Mise en Abyme*

Mise en abyme has a long academic history. Due to the limitations of the Master's thesis, I will only write about the most relevant texts, particularly the passage that originated the concept in André Gide's journals (as cited in Dällenbach, 1977/1989), Lucien Dällenbach's *The Mirror in the Text* (published 1977 as *Le récit spéculaire: essai sur la mise en abyme*, translated in 1989), which is still the only book-length study of the device, and Ann Jefferson's "*Mise en abyme* and the Prophetic in Narrative" (1983), which is one of the few articles that accounts for character (mis)interpretation of the device. Of course, there are a number of texts dealing with the device worth mentioning, such as Morrisette's "Un Héritage d'André Gide"[1], Bal's "Mise en Abyme et Iconicité"[2], Ron's "The Restricted Abyss"[3], White's "The Semiotics of the *Mise-en-abyme*"[4], and Livingston's "Nested Art"[5].

As stated, the concept of *mise en abyme* first appeared in 1893, in French writer André Gide's journals, where he wrote,

[1]Morrissette, B. (1971). Un Héritage d'André Gide: La Duplication Intérieure. *Comparative Literature Studies, 8*(2), 125–142. http://www.jstor.org/stable/40467935.

[2]Bal, M. (1978). Mise en Abyme et Iconicité. *Littérature, 29*, 116–128. http://www.jstor.org/stable/41704434.

[3]Ron, M. (1987). The Restricted Abyss: Nine Problems in the Theory of Mise en Abyme. *Poetics Today, 8*(2), 417–438. https://doi.org/10.2307/1773044.

[4]White, J. J. (2001). The Semiotics of the *Mise-en-abyme*. In O. Fischer & M. Nänny (Eds.), *Motivated Sign* (pp. 29-53). John Benjamins Publishing Company.

[5]Livingston, P. (2003). Nested Art. *The Journal of Aesthetics and Art Criticism, 61*(3), 233–245. http://www.jstor.org/stable/1559175.

> In a work of art, I rather like to find thus transposed, at the level of the characters, the subject of the work itself. Nothing sheds more light on the work or displays the proportions of the whole work more accurately. Thus, in paintings by Memling or Quentin Metzys, a small dark convex mirror reflects, in its turn, the interior of the room in which the action of the painting takes place. Thus, in a slightly different way, in Velasquez's *Las Meniñas* [sic]. Finally, in literature, there is the scene in which a play is acted in *Hamlet*; this also happens in many other plays. In *Wilhelm Meister*, there are the puppet shows and the festivities in the castle. In *The Fall of the House of Usher*, there is the piece that is read to Roderick etc. None of these examples is absolutely accurate. What would be more accurate, and what would explain better what I'd wanted to do in my *Cahiers*, in *Narcisse* and in *La Tentative*, would be a comparison with the device from heraldry that involves putting a second representation of the original shield 'en abyme' within it. (As cited in Dällenbach, 1977/1989, p. 7)

For Gide, the concept of *mise en abyme* constitutes the containment of a work within a larger work. Gide likens it to the visual device in coats of arms where the design of a shield is replicated in a smaller form within itself. This doubling explains the start of Gide's text, where "the subject of the work" (p. 7) is elucidated by the small version of itself. *Mise en abyme*, then, is an analytical tool by which to interpret a work of art.

Lucien Dällenbach, in his 1977 *The Mirror in the Text*, expanded on this idea. He starts the book stating that "when the expression *mise en abyme* first appeared, it unequivocally designated what other authors call 'the work within the work' or 'internal duplication'" (p. 19), but this designation is complicated after he analyses the different registers of *mise en abyme* in Gide's text: the mirror that reveals the room in visual arts, and the duplication of the smaller version of the coat of arms within itself. Reflection and duplication become equivalent for Dällenbach, so he defines *mise en abyme* as "any internal mirror that reflects the whole of the narrative by simple, repeated or 'specious' (or paradoxical) duplication" (p. 36). This definition complicates *mise en abyme*'s universal application to the work-within-the-work: *mise en abyme* can be "any internal mirror" and must reflect "the whole of the narrative" (p.36). Partial reflections are at odds with this model.

Ann Jefferson's "*Mise en Abyme* and the Prophetic in Narrative" (1983) argues for those partial reflections. Jefferson takes Dällenbach's work on *mise en abyme* and considers it in light of narrative, particularly narrative theories that put their focus on endings. So Jefferson finds that *mise en abyme*, by reflecting the narrative, "pre-empts the ending and spoils its effects by revealing the story in *toto*" (p. 197). This prophetic behaviour is problematic for narrative theories that put their emphasis on endings, but Jefferson finds that "foreknowledge does not necessarily impair the

force of narrative" (p. 198), and that, "in actual practice we do not find that narratives collapse the moment that *mise en abyme* lets slip the solution to the narrative enigma" (p. 197). This lack of a narrative collapse can be seen in prophetic *mise en abymes*, like those present in Poe's *The Fall of the House of Usher* or in *Oedipus the King*. By analysing the prophecies in these two texts, Jefferson finds that *mise en abyme* must be interpreted or misinterpreted by characters. An important part of *mise en abyme*, then, is interpretation: it must provide the potential for a reflection, whether accurate or inaccurate, total or partial, before it provides the potential for interpretation.

It is worth pointing out once again that the aim of analysing the function of *mise en abyme* was to find the function of the work-within-the-work. As such, then, it can be said that a work-within-the-work is a device where a work is contained within the boundaries of a container work, often at the level of the characters or the world. Both the container work and the contained work exist in some form of dialogue with each other, particularly through its contents, which must resemble the container work's in some form. This 'mirroring' is the defining feature of the device. In some cases, the contained work has been said to serve as a way for the audience to understand the themes of the container work by understanding them within a smaller version of itself first. While this analytical potential is present in many forms of the work-within-the-work, placing the onus on interpretation at the level of the characters seems more apt: when characters become the audience of a contained work, they either see themselves entirely or partially reflected in the work, they (mis)interpret the work, and then they act based on those (mis)interpretations. Given these functions, it seems that works-within-works are rarely, if ever, without a narrative purpose.

Having arrived at a summary of the work-within-the-work via the *mise en abyme*, it is time to turn to videogames within videogames. While they are works within works, their function is not always associated to the usual narrative functions associated with works-within-the-work, likely as a result of their interactivity. As such, it will be useful to look at what games do when they are contained works, *jeux en abyme*, as it were.

2.2 *Jeux en Abyme*

The inclusion of games in works of fiction poses a problem. While works-within-works make the issue of interpretation clear for the characters of the story by having stories themselves, games-

within-works can exist without stories. Since the focus on contained games seems to be more on their rules, the relationship between the game and the characters, and between the game and the work, is different. As such, the functions and behaviours of works-within-works may have some overlap with games-within-works, but they cannot be mapped perfectly, doubly so when the container work is another game. It will be ideal, then, to look at how games-within-works, and partially games-within-games, have been understood.

The first point of reference to games-within-works is in Patricia Waugh's *Metafiction* (1984), which dedicates a section to "Play, games, and metafiction." While her focus is on the playfulness of metafiction, she argues that the reason games and play are an intrinsic part of metafiction is due to their relationship to the 'everyday' world, particularly their capability to change meanings and contexts. Waugh argues that "it is therefore play as a rule-governed activity, one involving 'assimilation of' and 'accommodation to' […] the structures of the everyday world, as much as play as a form of escapism, of release from 'having to mean,' which interests metafictional writers" (p. 38). This interest is a result of play's properties: "in metafiction, [the historical world and the alternative or fantasy world] are always held in a state of tension, and the relationship between […] 'play' and 'reality' […] is the main focus of the text" (p. 38). Metafiction is interested in either collapsing or exaggerating the difference between 'play' and 'reality.' This playful attitude also seems to be echoed whenever these works include games in them, but Waugh mostly finds that games are used in an almost quixotic sense, with characters becoming obsessed with games and confusing play and reality. Though Waugh provides a possible function for games-within-the-work, it cannot be said to apply to the device at large.

After Waugh, there is a gap in academic work on the device. The first major text focused exclusively on the device of the game-within-the-work was Gualeni & Fassone's *Fictional Games* (2023). In their book, Gualeni & Fassone analyse "fictional games," or games that are contained by a work, do not exist in the real world, and were created for a work of fiction (p. 3), as well as those which are "understood as […] game[s] […] by the characters inhabiting a fictional world" (p. 5). Gualeni & Fassone argue that fictional games create similar effects as works-within-works, with qualities that are "speculative, transformational, political, meta-reflexive, misleading, comic, utopian, and estranging" (p. 6), among other similar qualities. However, it is worth pointing out that Fassone and Gualeni's focus is on unplayable games, where their fictionality is "the dominant

mode in which their contents are experienced" (p. 28), due to the fact that "many of the philosophical and meaning-making possibilities of fictional games emerge from their 'fictional incompleteness'" (p. 28). While the focus of this thesis is explicitly on playable games-within-games, Gualeni & Fassone reach conclusions that can be useful in approaching the device in its playable form. Their categorisation of fictional games poses a prime example, since they create a dichotomy based on the fictional game's relevance to its world:

1. "Fictional games that serve as background elements that contribute to the fictional world building" (p. 46), and
2. "Fictional games that have a more focal, central role in the fiction as narrative devices" (p. 46), which have two subcategories:
    1. "Fictional games as social instruments" (p. 58), and
    2. "Fictional games as contexts for the indirect characterization of fictional characters" (p. 58).

The first category is for games which mostly "contribute to the fiction as background thematic elements" (p. 46) and, in doing so, "can function as clues about trends and values characterizing a fictional society or civilization" (p. 48). Games in the second category, being more involved in the narrative, have two distinct functions: games in the social instrument category "are typically designed to be persuasive and pervasive, and they often work on the basis of the coercion of players," and they "may serve the purpose of spreading and reaffirming hegemonic values and aspirations" (p. 50), whether by maintaining the status quo or subverting it; games in the characterisation category, by contrast, tend to not be as important to the plot, but they "add granularity and depth to how the fiction appreciator imagines and understands the main characters of a narrative and might be an occasion for their further development" (p. 51), they show something about characters that might not be shown in the narrative's 'normal' action. Fictional games are often used to reveal something about the fictional world that contains them or about the characters within it. These categories have a variety of possibilities, but they all have something in common, "their capability to function as meta-referential (or meta-reflexive) devices" (p. 173). Gualeni & Fassone note an interesting effect of this meta-reflexivity: "by approaching fictional games as meta-reflexive devices, we focus on their aptitude for suggesting critical and/or satirical

perspectives on how actual games are designed, played, sold, manipulated, experienced, understood and used as part of our culture" (p. 173). Fictional or contained games are used as a way to reveal something about the world, characters, or games at large. While this conclusion aligns games with *mise en abyme*, it also distinguishes them due to the focus on rules and character actions, as opposed to narrative resemblances. However, Gualeni & Fassone do acknowledge a possible shortcoming in their analysis: the lack of medium specificity (p. 179-180). While their analyses point to a working model of fictional games, it will be necessary to take into account the fact that this thesis focuses exclusively on videogames.

The shortcoming of Gualeni & Fassone's book was partly answered some years before, in Regina Seiwald's "Games Within Games: The Two (or More) Fictional Levels of Video Games" (2019), where she focuses on the specific medium of games. However, Seiwald's focus is not necessarily an exploration into the device of games within games, but on their effect on the "aesthetic illusion" (p. 21), which is the process through which "the knowledge that the game-world differs from reality is supressed in order to allow for the acceptance of its illusion" (p. 18). Seiwald links this suspension of disbelief with immersion, and her analysis focuses on whether the inclusion of minigames within macrogames breaks this immersion (p. 19). She argues that artefacts that contain more than one fictional level signpost their own fictionality (p. 22). In including this device, the minigame becomes obviously a fabrication, and the fabrication visible in the minigame ends up reflecting back onto the macrogame, evincing its own fabrication. In spite of the fact that minigames evoke the macrogames' own gameness, Seiwald finds that the aesthetic illusion is not shattered; rather, the awareness of this gameness allows for deeper critical engagement with the games in question (p. 29). This conclusion seems to be an echo of Gide's approach to *mise en abyme* as an analytical tool.

It is worth pointing out that Seiwald's focus is on games within games at large, rather than specifically videogames within videogames, but she touches on videogame minigames, too. So, Seiwald points out that the inclusion of videogames as minigames "immediately evoke a point of reference and an association with 'gameness'" (p. 25), particularly those that mimic existing videogames. The evocation of gameness does not just happen by virtue of playing a game within a videogame, but on having a diegetic separation: the minigame does not suddenly interrupt the macrogame, there is a transition after the player interacts with a specific piece of hardware (p.26).

Once this transition happens, there are two ways in which a videogame's gameness is revealed through the *mise en abyme*, depending on the minigame's relationship to the macrogame. The first category that Seiwald proposes are minigames that have no impact on gameplay, "those that do not have to be played in order for the macrogame to progress" (p. 25). These minigames evoke gameness because "we approach them in an attitude of a game" (p. 25), going out of the way of the macrogame's story or structure to play them. The second category, by contrast, are minigames that do have an impact on the macrogame's gameplay, either as part of the plot, or which serve as training grounds for the macrogame. Most of Seiwald's examples in this category are games, rather than videogames, save for the "Rapunzel" minigame in *Catherine*, which replicates the puzzle game in the macrogame. Despite having a separate category, Seiwald reaches the same conclusion for both categories: these minigames are presented as in-world games, so rather than break the aesthetic illusion, they reinforce the fictive world of the game (p. 29). Both of Seiwald's categories suggest that the device of videogames within videogames is mostly used as a worldbuilding tool.

Across the three sources I have presented here, it seems that contained games can serve three narrative modalities: characterisation, worldbuilding, and meta-reflexivity. In a similar way, there are also mechanical cases where the contained game serves as either a distraction, or as an echo of the gameplay of the container game for the player to practice. These reflexive qualities of the device seem to work like *mise en abyme* in some form, but the variety of mediums in which contained games have been analysed prevents a more in-depth comparison.

3 METHODOLOGY

In order to overcome some shortcomings of existing academic work, I will focus exclusively on videogames within videogames. This specificity will enable more in-depth analysis while providing interesting insights about how the medium sees itself. Likewise, this focus should enable the creation of a categorisation system specific to the device of videogames-within-videogames.

In order to find a proper categorisation and way to analyse videogames within videogames, I will do formal analysis of a variety of videogames that use the device. For ease of discussion, I will refer to videogames within videogames as 'contained games' and to videogames that use the device as 'container games.' Rather than inherit the terms "fictional game" from Gualeni & Fassone or "minigame" and "macrogame" from Seiwald, I opt to use the container/contained dichotomy to highlight the relationship between the two: a container game can only be a container game if it contains a game, and a contained game can only be a contained game if it is contained by a game. In a similar line of thought, the use of container/contained encodes my categorical approach, focused on the device's formal qualities as regards its placement.

In order to analyse games, I will use formal analysis inspired by Caroline Levine's *Forms: Whole, Rhythm, Hierarchy, Network* (2015). While Levine's focus is on close reading through the lens of social and political forms, I will be using her observations that forms do not just limit or constrain; they have affordances and potentialities implicit in them as well (p. 19). Naturally, different forms constrain in different ways, offer different affordances, exist in different contexts, and generally do different kinds of things (pp. 16-18). Beyond the analysis of formal affordances, however, Levine is also interested in the overlap of forms, since "when forms meet, their collision produces unexpected consequences, results that cannot always be traced back to deliberate intentions or dominant ideologies" (p. 20). Forms offer a set of constraints and affordances on their own, but their overlap destabilises them; new constraints are born when forms meet, but new affordances are born as well. The encounter may reinforce forms just as easily as it may weaken them or change their effect completely.

I am borrowing this focus on the affordances of forms and what happens when they overlap to analyse contained games and find what they say about their container games. To do so, I will focus on a large variety of factors involved in contained games, particularly their genres, mechanics,

contexts, importance to the container game, and reflexivity. A secondary goal to this analysis will be finding what these contained games say about videogames and the act of playing them.

In order to find a categorisation to frame this analysis, it will be productive to recap the two systems of categorisation that I have presented already. So, Gualeni & Fassone's (2023) categories are:

1. "Fictional games that serve as background elements that contribute to the fictional world building" (p. 46), and
2. "Fictional games that have a more focal, central role in the fiction as narrative devices" (p. 46), which has two subcategories:
    1. "Fictional games as social instruments" (p. 58), and
    2. "Fictional games as contexts for the indirect characterization of fictional characters" (p. 58).

The main factor behind their categorisation of fictional games is based on their position in relation to the main narrative, with the first category being for worldbuilding games and the second one being for games with central roles, which splits into games used to reveal or counter ideologies and games used for characterisation. While this categorisation system can provide fruitful starting points, the specificity in function of its categories does not lend itself well to a formal approach. The focus on function also appears in Seiwald's (2019) categorisation, which is:

1. "Games within games without an impact on the gameplay of the macrogame" (p. 25), and
2. "Games within games with an impact on the gameplay of the macrogame" (p. 27).

Much like Gualeni & Fassone, Seiwald divides her categories based on the minigames' relationship to the main game. While the approach generally seems to be the same, Seiwald's categorisation is more utilitarian, insofar as "impact on the gameplay of the macrogame" is the main factor dividing both categories. Both approaches rely on function, with Gualeni & Fassone preferring a division based on position relative to narrative and Seiwald preferring a division based on position relative to gameplay.

While both methods of categorisation serve their texts' purposes, I intend to categorise contained videogames on a formal level, which creates a problem. All sources on contained games, due to

the narrative focus of the device, have relied on videogames that exist "at the level of the characters" (Gide, as cited in Dällenbach, 1977/1989, p. 7). This 'rule' emerges from a narrative approach to the device, but a formal approach reveals different possibilities. If a game—or a work—is a single, closed form, then a game within a game is a form within a form. It is possible to imagine this abstraction through the image of the *mise en abyme*: a coat of arms entirely contained within another coat of arms. This kind of phrasing has been used for much of the academic work done on *mise en abyme*, but I suggest it is also productive to understand it backwards: not as a coat of arms that contains a smaller coat of arms within it, but as a coat of arms that is framed by a larger coat of arms. In other words, the container game can be a framing device for the contained game. Thus, it is possible to imagine a videogame that contains a videogame more narratively important than itself. A videogame that sets its own diegesis within a videogame is also a game-within-the-game. Putting the focus on the contained game does change the relationship between the container game and the contained game, however; the reflexive nature of the contained game seems to reflect onto something else, especially when the container game is only a framing device and not a game in itself.

Accounting for this expansion of the concept, I have made a categorisation system whose limits will be tested with formal analysis. The categories are as follows:

1. diegetic videogames, which can be:
    1. world-reflexive contained games, or
    2. character-reflexive contained games; and
2. videogames as framing devices, which can be:
    1. form-reflexive contained games, or
    2. player-reflexive contained games.

The larger categories rely on formal differences, particularly on the importance of the contained game appears and the form it takes. Diegetic videogames are constructed by a contained fictional game and a container real game, while videogames as framing devices are constructed by container fictional games and contained real games. The 'subcategories' are 'modalities' inspired by both Seiwald (2019) and Gualeni & Fassone (2023), and they should enable in-depth analyses of the

device with a focus on function[6]. The modalities in the diegetic videogames category rely on context to differentiate them, rather than form. For example, the videogame "Prairie King" in Eric Barone's *Stardew Valley*[7] would be a world-reflexive contained game when the player plays it in an arcade cabinet in the town's saloon, but a character-reflexive contained game when the player one of the romanceable characters play it together on a home console. The modalities of the framing device category, by contrast, rely on narrative framings. In cases where the container game is a fictional game, the effect is reflexive onto its own form and genre; when the container game is meant to be the logic of videogames, the effect is reflexive onto the player and the act of playing. So a game like *CrossCode* (2018/2020) is a form-reflexive videogame, since the game takes place within a fictional MMORPG, whereas a game like *Doki Doki Literature Club!* (2017) takes place within its own 'videogameness.' These examples are simple and do not fully address the modalities' nuances, so I will be writing about them at length in their respective sections.

Having set categories, the selection purpose relied on a series of inclusions and exclusions. I am interested in the use of the device for narrative and gameplay purposes, which requires the device to be playable. The contained game must exist diegetically in the world of the fiction, either as a playable artifact for the player or as a framing device for the entire narrative. I will not analyse games that appear within the fiction of a game, but which are not playable; videogames included in compilations; games centred around minigames; games included as extra content selectable from a game's menu; minigames playable during loading screens; or other such inclusions. With the categories and the inclusions and exclusions, I have chosen 12 games, three for every modality, to have a variety of examples to accurately understand the categories, how they work, the formal differences between them, and the forms they take. While 12 games cannot provide an exhaustive understanding, the variety is enough to create a preliminary analytical model. I have focused on a list of games that use the device in exemplary ways, prioritising games that have received little or no attention in existing academic work, in an attempt to expand analyses of the device beyond games that have already been written about.

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[6]Although I have provided four modalities where most games can be mapped onto, there are bound to be outliers that I have not considered and, due to length and time constraints, could not consider. As such, the modalities I have proposed are merely significant rather than exhaustive.

[7]Barone, E. (Version 1.5.4.2, 2017) [2016]. *Stardew Valley* [Nintendo Switch]. Digital Game developed by ConcernedApe and published by ConcernedApe.

4 ANALYSES

The following formal analyses will attempt to find how *mise en abyme* works in videogames and whether the mirroring inherent in the device's uses in other mediums is also present in videogames. While this analysis will mostly focus on how the device works, a secondary goal will be to see what the inclusion of contained games reveals not just about their container games, but about attitudes to videogames as well.

This section is divided into sections and subsections corresponding to the categorisation of videogames-within-videogames proposed in the Methodology section:

1. diegetic videogames,
    1. world-reflexive contained games,
    2. character-reflexive contained games,
2. videogame as a framing device,
    1. form-reflexive contained games, and
    2. player-reflexive contained games.

The first level of subsections will consist of an introduction establishing how the category is defined, what its boundaries are, its uses in videogames, and analytical expectations. The second level of subsections will have a short introduction to the modality, a list and explanation of the videogames I have chosen for analysis, formal analyses focused on those videogames, and a discussion on how the specific uses of the device work by using what was found during the analysis.

4.1 Diegetic Videogames

These kinds of contained games exist as part of a container game's world, and may be part of a container game's narrative or gameplay progression. Since they exist diegetically, they attempt to simulate the process of playing a videogame by requiring interaction with particular pieces of hardware or software.

These contained games have similarities in their contexts, but their relationship to the container game might differ. Some may resemble their container game, some might not; some might be noticed by the characters, some might not; some might be relevant to narratives, some might not.

4.1.1 World-Reflexive Contained Games

Contained games in the world-reflexive modality are those that show or say something about the world of the game. Since they are often optional content and not often accounted for in a container game's plot gameplay systems, this modality is more widespread than the character-reflexive one. They are mostly used as side content, with the added benefit of worldbuilding. As such, there are often no narrative links between the contained game and the container game, and characters often do not address these games. However, beyond worldbuilding, they have a reflexive purpose to connect to the player through intertextuality. As Seiwald (2019) noted, a number of world-reflexive contained games tend to be "based on real video games, wherefore they immediately evoke a point of reference and an association with 'gameness'" (p. 25). These games establish their worlds as similar or different from the real world through similarity or difference in their contained games.

To elucidate world-reflexive contained games, I will analyse *ANNO: Mutationem* (ThinkingStars, 2021), *OMORI* (OMOCAT, LLC., 2020), and *Eastward* (Pixpil, 2021). These games offer a variety of contained games that build the world around them, both by the contexts in which these games appear as well as through their content, themes, and occasional mirroring.

***ANNO: Mutationem*: "Tong"**

ThinkingStars' *ANNO: Mutationem* (2021) is a cyberpunk action RPG. While its story takes place in a futuristic setting, the game has a fascination with old videogames, particularly the pixel aesthetic. Even though the game's world is rendered in 3D, all the characters within it are depicted as 2D pixel art, as shown in Figure 1 below. This artistic choice creates a contrast of advanced technology presented through an art style symbolic of technical limitations in old hardware.

Figure 1. A screenshot of the starting city in *ANNO: Mutationem* (2021). Notice the characters in 2D.

This contrast then becomes an opportunity for meta-reflexivity. Near the beginning of the game, the player must go into a store specialising in old hardware. Apart from dealing in old computers, the store also has a collection of old videogame hardware, with screens showing abstract versions of old Atari games. If the player interacts with these screens, a dialogue box appears, saying, “A bunch of old games that never lose their charm! In pixels we trust.” This line is meant to be read as a tongue-in-cheek comment on retro games and on *ANNO: Mutationem*’s visual inspiration on them, but it also points to the ways in which the world of the game works: in a world of advanced technology, old hardware can still find a market.

It is fitting, then, that *ANNO: Mutationem*’s contained game is a copy of Atari’s *Pong* called “Tong.” The game plays and looks exactly like *Pong* does, as shown in Figure 2 below. Interestingly, however, “Tong” does not take over the entire screen when playing it. Rather, the player sees this game the way the protagonist sees the game: a sunken screen framed by an arcade cabinet’s plastic. The game itself also shows signs of aging, as the game often appears with visual glitches around the edge of the screen, as shown in Figure 2 below. In framing the game like this, the game emphasises the materiality of the screen, the cabinet, and the hardware running the game.

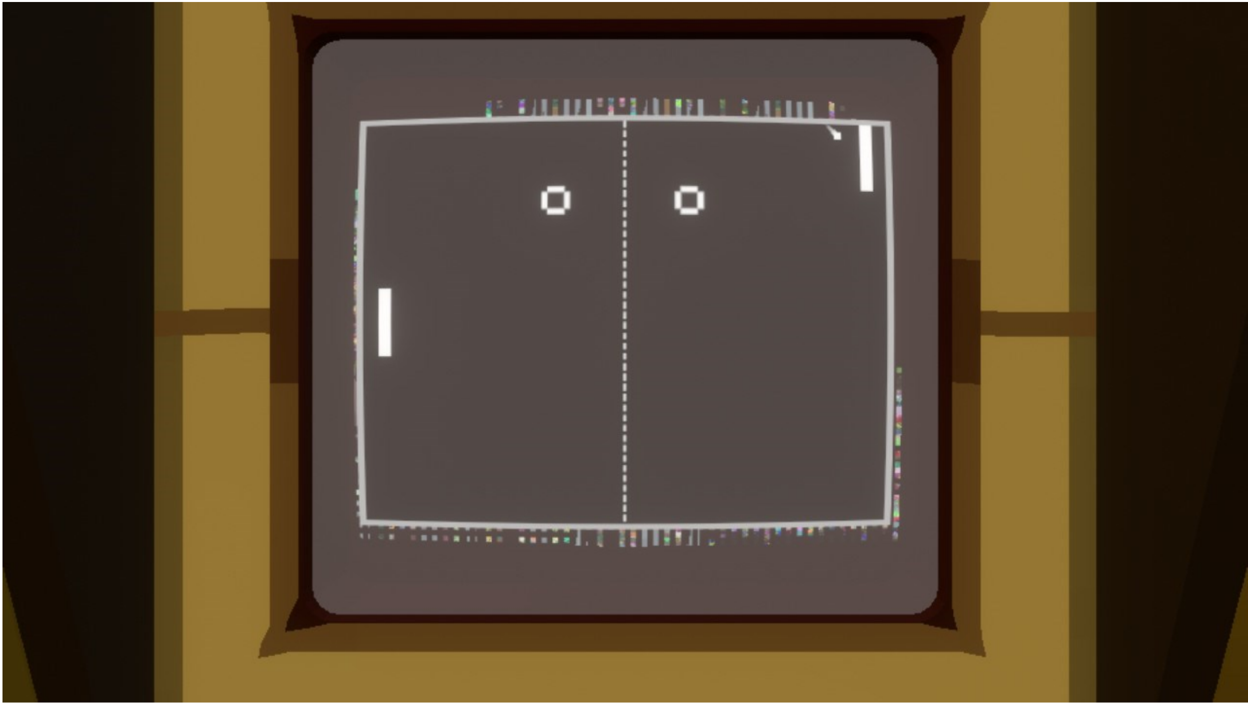

Figure 2. A screenshot of “Tong” (2021). Notice the frame and the visual glitches.

The player can encounter the game in three places: as the entrance to the protagonist’s family home, in an alley next to other machines and arcade cabinets in a city, and in a bar. The placement of the “Tong” cabinets reveals something about the world of *ANNO: Mutationem*: the coexistence of old and new hardware and software. Rather than being constrained within used hardware stores, these machines are out in places where people can use them: inside bars, in downtown areas, or in houses for private use. The cabinet at the city, because it is next to other arcade cabinets with seemingly more modern games, as shown in Figure 3 below, is evocative of that coexistence.

Figure 3. A screenshot of *ANNO: Mutationem* (2021) showing arcade cabinets in the city.

The coexistence of old and new games, hardware, and software as represented by “Tong” reflects *ANNO: Mutationem*’s use of pixel art in a modern videogame with a futuristic setting. For *ANNO: Mutationem*, videogames are cultural artifacts that, while bound by the hardware they were made for, can have timeless appeal. In turn, this attitude towards old videogames reflects back on *ANNO: Mutationem*, a game that enjoys modern technology while using pixel art as the main style for its characters. “Tong” seems to be used to make the argument that art styles and artistic limitations do not hinder the continuous enjoyment of a game as the years go by, and this argument is made through “Tong” about *ANNO: Mutationem* itself.

***OMORI*: “Sprout Mole Eater”**

OMOCAT’s *OMORI* (2020) is a horror RPG where the player takes control of Sunny, a shut-in that has not left his house in years following a tragic accident. In the game, players deal with Sunny’s trauma by confronting repressed memories inside Sunny’s dream world and dealing with the consequences of having been a shut-in in the real world by either leaving the house or becoming even more of a shut-in.

If the player decides to leave the house, they can then spend time in a small, suburban town somewhere in the United States. One of the optional activities available to the player is an arcade cabinet in a pizzeria after doing a side quest to fix it. By interacting with the arcade machine, the player can play "Sprout Mole Eater," a *Snake* clone where players control a bug-like creature as it eats "sprout moles," waterdrop-shaped creatures with leaves on their head. The game is presented in a GameBoy-style screen, with green colours and black sprites, as shown in Figure 4 below.

Figure 4. A screenshot of "Sprout Mole Eater" (2020).

The game seems to serve as worldbuilding. Since there is no explicit year given as part of the main narrative, the player must piece the information together through a series of hints, primarily technology and technology-related devices. The cabinet establishes some temporality by being old enough to require repair, but not old enough to be unusable. The cabinet's presence in the pizzeria also helps establish it as a place that has been around for years.

Interestingly, "Sprout Mole Eater" also serves as worldbuilding for the dream world, as both "sprout moles" and the "sprout mole eater" appear in Sunny's dreams. In particular, the "sprout mole eater" appears as the "King Crawler," a boss with a menacing bug head and a body made up of dead sprout moles, as seen in Figure 5 below.

Figure 5. A screenshot of the "King Crawler" boss in *OMORI* (2020).

In creating this connection, the dream world is revealed to be not just a place where Sunny projects a more confident persona, but a dream world that is directly influenced by the world as he knew it before shutting himself in.

As such, *OMORI*'s use of container games serves two distinct purposes: establishing the time period of the real world and developing a specific place by showing an outdated arcade machine, and establishing connections between the real world and Sunny's dream world by showing how things seen while awake change in dreams.

***Eastward*: "Earth Born"**

Pixpil's *Eastward* (2021) is an action RPG following John, a miner of few words and Sam, a weird child he found in a pod whom he looks after as a surrogate father. The main drive of the story is grandiose: the world is ending, and it is up to John and Sam to try to save it. Within this world, however, there is a videogame that seems to unite people out of love for it: "Earth Born," a turn-based, 8-bit-style RPG. While the game is an optional activity for the player during most of the game's runtime, the game is ever present in the narrative.

The game is so relevant for the world that the player's first seconds in *Eastward* are in "Earth Born." When the player first starts the game, a text crawl appears on the screen, detailing a story

reminiscent of fantasy RPGs: a kingdom with a magnificent tower has been taken over by the Demon King, locking the kingdom's princess away in the tower while "a young knight from a faraway land" washes ashore and sees the tower, deciding to go there. As the screen gets letterboxed, a dialogue bubble from a character called Carota appears, screaming, "Oh, come ON!!" (emphasis in original). The screen then reveals the scene: four kids, one of which is Sam, are gathered outside a grocery store around what seems to be a CRT television with a console on top. Carota just lost in "Earth Born." As the kids try to think of ways to win, a bell rings, and all the kids leave.

Starting the game with "Earth Born" signals its narrative relevance, a curious decision for an optional activity. However, "Earth Born" seems to mirror the world of *Eastward* through an abstracted lens. As part of the main narrative of *Eastward*, the player learns that the end of the world is not a one-off catastrophic event, but part of a loop designed to start over in search of the perfect result. After every end, the world 'resets' with similar, but slightly different, starting conditions in order to eventually land on a perfect world. This loop is present in "Earth Born" in a mechanical level: the game takes place during the course of seven in-game days, as shown in the time counter at the bottom of the screen in Figure 6 below, and at the end of the seventh day, the player must confront the Demon King. If they lose, they must start again from the first day, keeping the progress they have made, but losing all gold, levels, and equipment earned. These restarts are randomised: all members of the party start with a random skill from a handful of possible skills. This randomisation and the seven-day cycle are mechanical abstractions of *Eastward*'s world: the world 'ends' every set period of time only to restart with slight variations. "Earth Born" provides an abstract and metaphorical mirror that allows players to better understand the world of *Eastward* through mirroring.

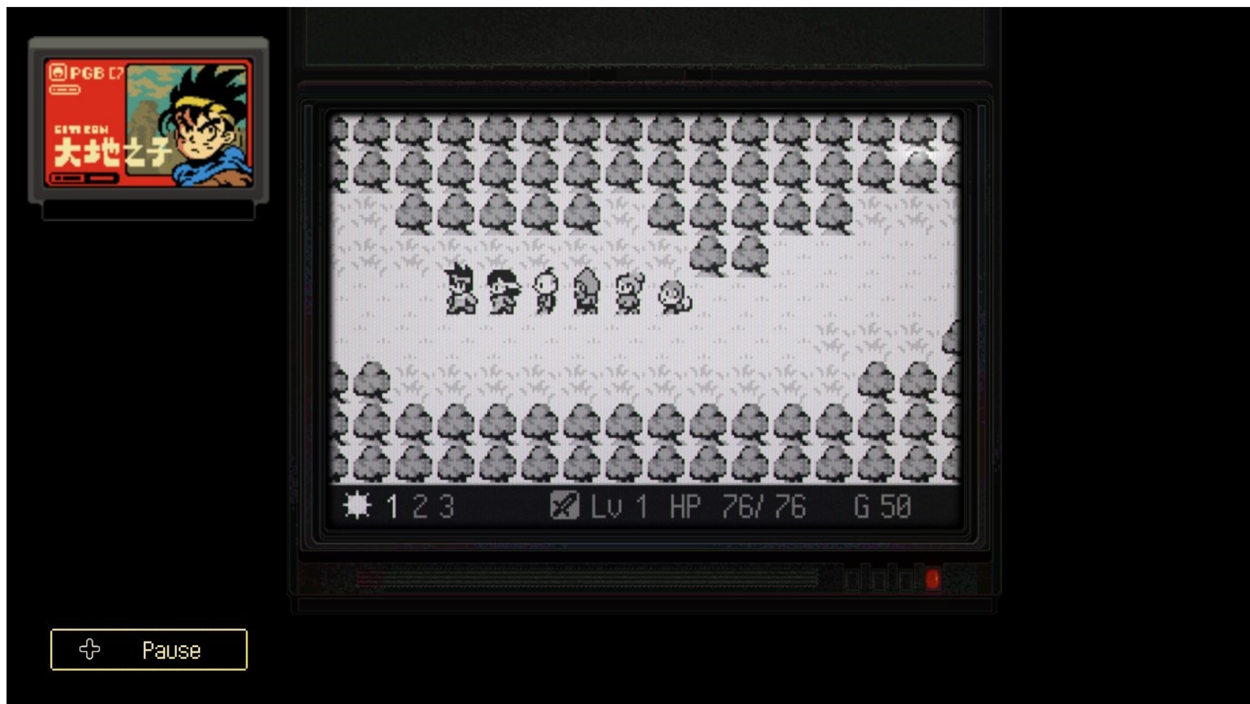

Figure 6. A screenshot of "Earth Born" (2021). Notice the time marker at the bottom left.

"Earth Born" is also a cultural phenomenon, and the sheer popularity of the game frames it as a rite of passage of sorts: being able to play the game is necessary to fit into social circles. One of Sam's friends jokingly comments on this need, telling John that, if Sam cannot play the game, she "basically can't make any friends." Playing has a barrier of entry: a memory card. While the cost of the card is minimal, it is too much for a kid, so they must rely on a parental figure to buy it for them. The purchase becomes codified as a transgenerational connection, as the shopkeeper that sells John the memory card notes, "come to think of it, you spent a lot of hours on that thing when you were young, didn't you, John?" The cultural spread of "Earth Born" serves as a way to build the world of *Eastward*, and in placing a videogame front and centre, it seems that *Eastward* is making a dual argument about videogames: that they can be extremely evocative if they are properly understood, and that their stories have the power to become mainstays of culture.

Discussion on World-Reflexive Contained Games

ANNO: Mutationem, *OMORI*, and *Eastward* all set out to convey different messages through their contained games: the value of outdated games, the power of abstract representation, or the ways in which games mirror the world. These games convey these meanings by placing these contained

games in specific in-game locations, at specific points in the narrative, and surrounded by specific thematic contexts. Since these contained games exist almost exclusively in the background of their container games, they invite the player to consider the contexts and contents of these games to better understand the world that they exist in. By working under the assumption that these contained games were created and played in a fictional context, the player is able to learn more about those contexts. When used as a worldbuilding tool, the device relies on being part of the narrative background. In a gameplay perspective, this position means these container games are often optional playable content to some degree, with some notable exceptions requiring mandatory interaction. While three games are not enough to make a suitable conclusion, it seems that the lack of narrative focus and the optionality inherent in this modality would privilege contained games designed like arcade games: not as in-depth as the container game, often with 'pick up and play' or high-score based game design.

It is worth repeating here that world-reflexive and character-reflexive container games are separated by a thin, porous border. The same contained game can do multiple types of narrative work. Their contexts and contents can also reveal details about the characters around them. The key difference from the character-reflexive modality, then, is character interpretation of the contained work.

4.1.2 Character-Reflexive Contained Games

Character-reflexive contained games are those that focus on showing something about characters. The main difference between them and world-reflexive games is context and function: these contained games tend to be important to narratives and are often mandatory to progress the container game. They are often acknowledged by the characters in some way, which seems to be in line with Jefferson's (1983) claim that "the characters of narrative are not just agents or actors, but continuously involved in a process of reading and analyzing the events and situations in which they find themselves" (p. 206). Given this larger focus on characterisation, these types of diegetic videogames are not as widespread as world-reflexive contained games.

To understand this modality, I will analyse *UNREAL LIFE* (hako life, 2020), *Danganronpa 2: Goodbye Despair* (Spike Chunsoft, 2012/2021; henceforth, *Danganronpa 2*), and *Hypnospace Outlaw* (2019/2020). These three examples were chosen due to their variety: *UNREAL LIFE*

presents a contained game with no narrative that two characters react to in different ways, *Danganronpa 2* contains a narrative game that serves as a duplication for one of the murder cases in the container game, and *Hypnospace Outlaw* shows a contained game whose representational and technical aspects are meant to show a character's personality.

***UNREAL LIFE*: "Volta"**

Hako life's *UNREAL LIFE* (2020) is a vaguely surreal adventure game, telling the story of Hal, an amnesiac girl, and 195, a "high-performance AI traffic light" helping her recover her memories. Its contained game first appears roughly an hour into playing the game. After progressing through the main plot, the player is given the option to return to Hal's hotel room, a base of operations of sorts. In it, Hal and 195 find that someone has left a videogame console there for them. Since 195 does not know what a videogame is, they decide to play together to sate 195's curiosity. Since Hal cannot read, however, the game's title and instructions appear as a garble of pixels. Once the player hits a button, the game starts, showing (presumably) a selection of weapons, of which the player can only use one at the moment. After selecting the one weapon, the game starts. The game is a top-down shooting game, with Hal and 195 each controlling a vehicle that can be moved around the screen, as shown in Figure 7 below. Pressing the interaction button makes the vehicle shoot projectiles, automatically aimed at 195's vehicle. As the action of the contained game unfolds, *UNREAL LIFE*'s usual form changes, particularly its dialogue boxes. Instead of showing the dialogue in a box at the bottom of the screen like the rest of the game, dialogue appears at the top of the screen, with Hal's dialogue at the top left and 195's dialogue at the top right. The constraint of dedicating the entire screen to the contained game carries its own affordance: by not allowing space or time for a dialogue box, dialogues by Hal and 195 can appear simultaneously and in real time, rather than one at a time and dependent on the player advancing to the next dialogue box. The focus on having the dialogues visible speaks to the intent behind this contained game: characterising Hal and 195's relationship through gameplay interactions.

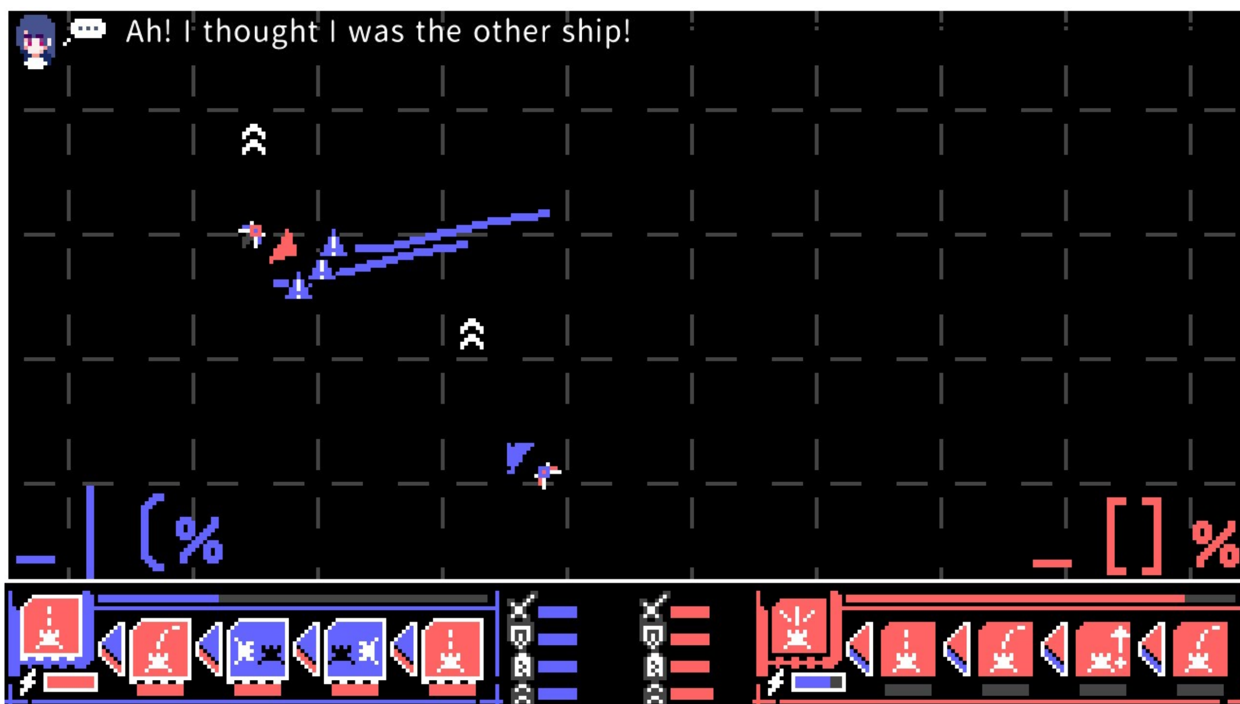

Figure 7. A screenshot of *UNREAL LIFE*'s (2020) contained game. Notice Hal's dialogue at the top left.

After playing the game the first time, a short dialogue ensues. Hal seems to have understood the game as a way to have fun and play with a friend, but 195 has a stronger reaction to it. "Hal! Games are fun! I was able to move! Move as I pleased! It was great!" he says. Since 195 is an AI stuck in a traffic light with only as much knowledge as necessary, being able to both move and play are new experiences for him. In response to Hal asking to play again, however, he declines. Since he "is not equipped with a gaming protocol," he is not a skilled player and does not think himself to be a fun opponent for Hal. So, he decides to "build a battle game program" to be on an equal standing to Hal. This moment hints at a competitive part of him that does not appear elsewhere in the game and that both of them enjoy playing with each other.

In total, Hal and 195 can play the contained game—revealed as "Volta" after Hal recovers her ability to read—eight different times. Playing through all the matches shows sides of Hal and 195 that do not appear in the container game's narrative, from jokes to references to other media, competitive sides, different play styles, and even an attempt at cheating. Both sides open up to each other as they play more and more. Throughout, it is possible to see how both 195 and Hal—through the player—become better at the game, with both sides constantly challenging each other and growing confident in their skills as the game goes on. "Volta" becomes a way to highlight the

evolution of Hal and 195's friendship as their dialogues become more playful and competitive while also characterising Hal's interests and hobbies in ways that cannot be done in the main narrative of the game; the contained game provides an opening for playful writing.

The purpose of the game is optional characterisation of the main progatonists through a relaxing, non-plot activity. The game's placement within Hal's hotel room reinforces the relaxing approach: it is the place the player saves the game to stop playing and to take a break from the game, so including a videogame in this space encodes videogames as social breaks.

***Danganronpa 2*: "Twilight Syndrome Murder Case"**

Spike Chunsoft's *Danganronpa 2* (2012/2021) is a detective adventure game that follows the story of a group of 16 high schoolers as they are forced to kill each other in a "killing game." The action takes place in an archipelago during an unexplained school trip, taking the form of episodic "cases" following a similar pattern: daily life in the archipelago until a murder happens, investigation around the event and evidence-gathering, and a class trial to determine who was the murderer.

The contained game in *Danganronpa 2*, "Twilight Syndrome Murder Case" (henceforth, "TSMC") appears in the second case, and its narrative purpose is to serve as "the motive [the students] need to kill people." There is something about the game that could drive a player to murder. The surrounding dialogues about whether whoever played it would have an advantage by knowing the motive, or whether the fact that they played could be used as evidence against them in a trial, paint a particular expectation of the game: it itself is not the motive, but it will reveal a motive, either by revealing a crucial piece of information or providing a blueprint for an imitation crime.

Once the player can play "TSMC," the game starts with text on a black screen: "WARNING: This game is a work of nonfiction. Any resemblances to real persons, living or dead, is purely intentional." The game is showing a story that happened before the events of *Danganronpa 2*. Despite this narrative similarity, however, the contained game's form is markedly different from the container game's, as seen in Figure 8 and Figure 9 below. *Danganronpa 2* is a 2D game with occasional 3D movement, occasional 3D-modeled backgrounds, and 2D character art that, visual novel style, take centre screen behind a dialogue box when talking. "TSMC," by contrast, keeps the 2D movement, but renders everything in low-polygon 3D art. Dialogues appear at the bottom

of the text with no accompanying character portrait. Mechanically, "TSMC" functions more or less the same as *Danganronpa 2*. The player can move the player character from side to side and interact with characters and objects by pressing a button. However, that is all the player can do. Since the narrative function of this contained game is to tell a story, there seems to be no need for mechanical depth.

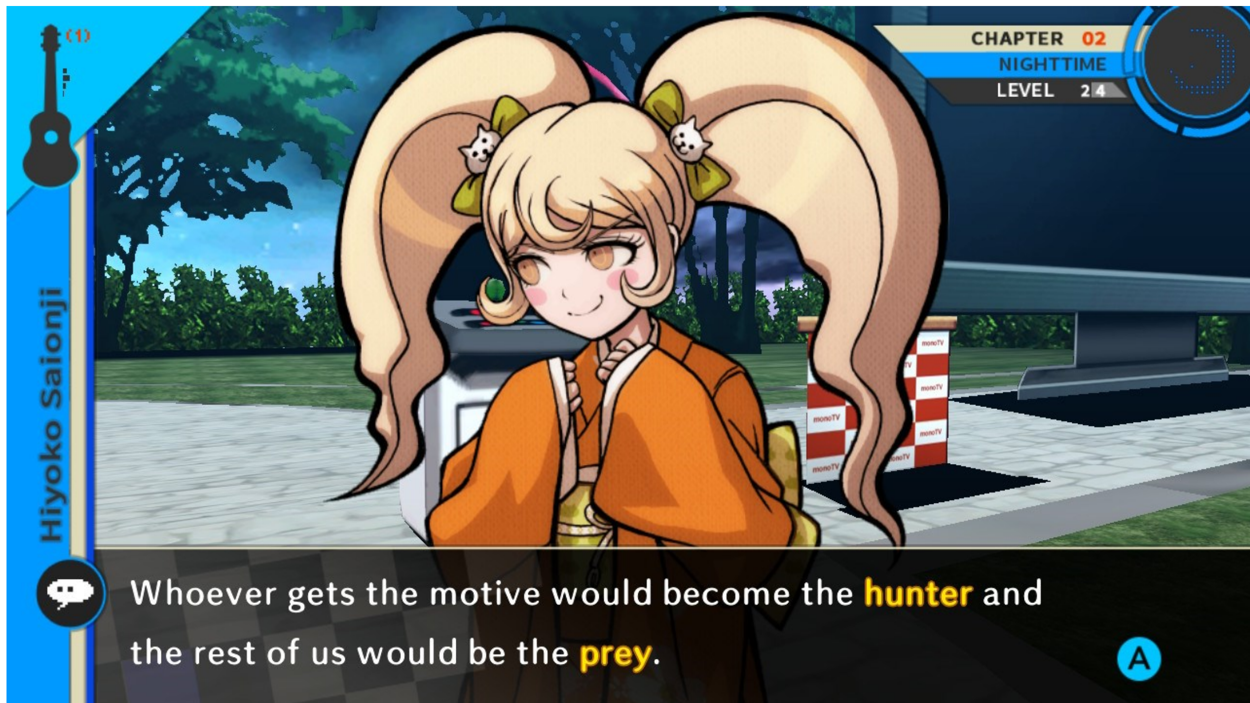

Figure 8. A screenshot of Hiyoko's dialogue in *Danganronpa 2* (2012/2021).

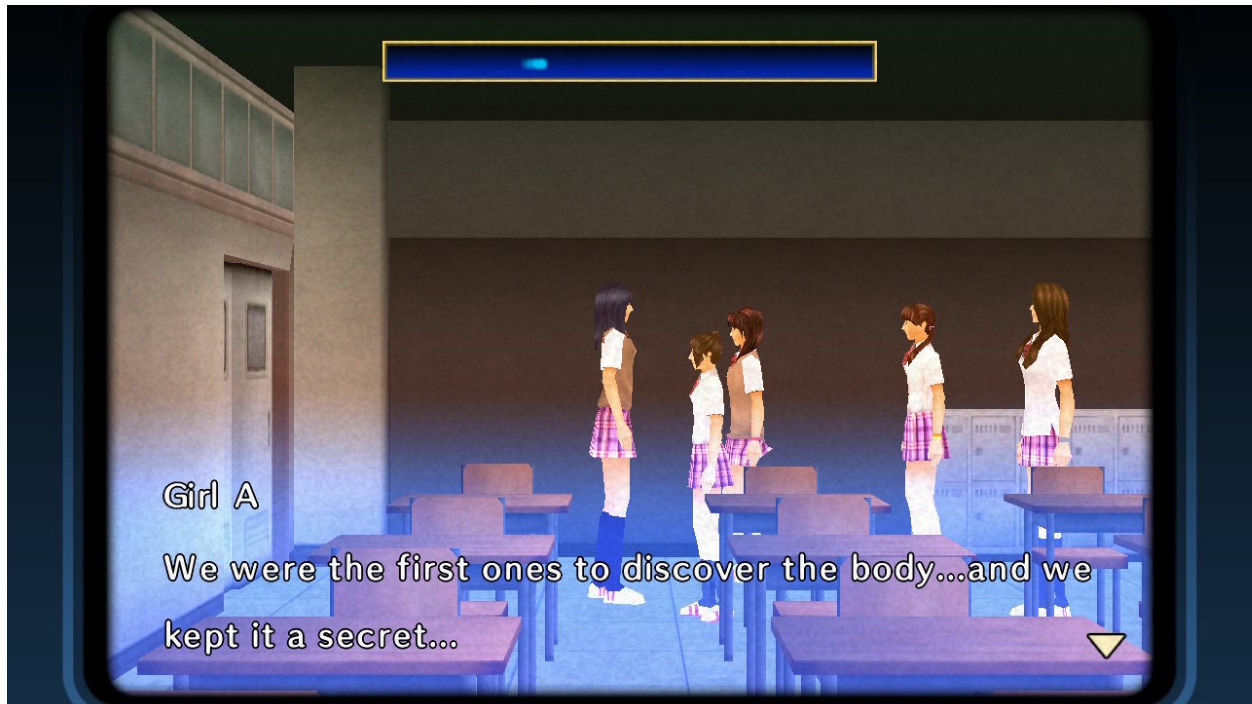

Figure 9. A screenshot of a scene in "Twilight Syndrome Murder Case" (2012/2021).

Since the point of "TSMC" is revealing something about a past event, its most important part is its narrative. The story of "TSMC" takes place over four days, presented out of order in the game, and it follows two school murders as experienced by six characters: five nameless girls who are referred to as Girl A, B, C, D, E, and a nameless boy referred to as Guy F. As part of the story, it is revealed that Girl E murdered an unnamed girl, who was Guy F's sister, and Girl D tried to cover it up. In the game's ending, Guy F murders Girl E using a baseball bat. In the game's staff roll, characters from *Danganronpa 2* are listed as cast members and, thus, the player must figure out who the unnamed characters in "TSMC" represent. The murder in this case replicates the murder of Girl E, inviting the player to connect "TSMC" and *Danganronpa 2* to find who is responsible for the murder.

What is at stake in this contained game is a series of interpretations: every character in the game is meant to be a stand-in for a character outside of it, and since the story it tells happened, the game serves as a motive to any of the characters involved. As such, the narrative framing of an event as a nonfiction videogame is meant to be interpreted as a call to action by revealing information that was previously unknown. In doing so, the mirroring at play concerns events that happened before

the story and which, through the metafictional collapsing of characters within "TSMC" and *Danganronpa 2*, aids in further characterisation of the characters involved.

***Hypnospace Outlaw*: "Outlaw"**

Tendershoot's *Hypnospace Outlaw* (2019/2020) is a single-player detective adventure game. The player is a content moderator of sorts, for "HypnOS," a form of internet that mimics the internet's early days. The core difference being that this version of the internet—called "Hypnospace"—is accessed with a special headband worn as the user sleeps. The game's narrative centres on the creator of Hypnospace, Dylan Merchant, a character inspired by the stereotype of narcissistic, egotistical Silicon Valley CEOs. The game's plot follows his failures as a CEO and as a person, embodied by a game project he is developing for HypnOS.

The game in question, "Outlaw," is a formal break from the rest of the game. While the container game does as much as it can to mimic the aesthetic of late 90s computers, the contained game shifts into a 2D racing-style game, as shown in Figure 10 below. In it, the player serves as an enforcer, controlling a car able to detain outlaws. As the player drives through a long highway, they get assigned an outlaw that they must stop by driving behind them and using a "lasso" for a specific period of time, after which the outlaw car floats into the air before being picked up by a larger police car. The player encounters multiple versions of this game, but there are three instances in which "Outlaw" is directly related to the game's narrative, all revealing an aspect of Dylan's personality.

Figure 10. A screenshot of "Outlaw" (2019/2020), notice the "lasso" connecting the player car and the outlaw car.

The first time Dylan sends it to the enforcers to test, the game is buggy and unstable, crashing and breaking the player's headband with it. The second time is a repeat of the first, except Dylan sends it to every HypnOS user and, due to increased software instability, it breaks HypnOS, as shown in Figure 11 below. "Outlaw" crashes every headband that downloaded the game, and since it has a neural connection with the user—it is used while sleeping, after all—multiple people die as a result of the crash. The blame is pinned on a 16-year-old hacker and Dylan moves on.

Figure 11. The HypnOS crash, as seen by the player in *Hypnospace Outlaw* (2019/2020).

The final interaction with "Outlaw" happens at the end of the game, during a modern day archival project. Here, the player discovers evidence proving Dylan's responsibility in the crash. Right before the player has all the evidence, Dylan joins the archival project, seemingly wanting to control anything that may expose him. His plan fails. Seeing the tides turn against him, and facing the risk of being imprisoned, Dylan sends one final message, admitting to being responsible and apologising. Noticeably, he also attaches "a link to a confession of sorts." Once the player clicks the link, they get taken to a download site for "Outlaw," version 1.0.

This instance of "Outlaw" is different from the previous versions, as shown in Figure 12 below. Rather than chasing a specific outlaw, the player must lasso all the cars. Once they lasso them, they rise up into the sky. Instead of being taken away by a larger police car as before, however, they keep rising to the sky as a light from above shines on them. In the event log, the name of the user assigned to the car—which are all victims of the crash—is said to have "ASCENDED." Once the player ascends all the victims, an outlaw finally appears: Dylan. After lassoing his car, the event log does not say that he has ascended, but his car rises like all the other cars and, instead of being taken away by the large police car, his car vanishes to the top of the screen surrounded by the same light that envelops the victims' cars.

Figure 12. The final version of “Outlaw” (2019/2020). Notice the “Event Log” and “Wanted Outlaw” windows.

This version of the game seems like Dylan’s rather tactless attempt to confess and apologise. However, the game-as-confession recontextualises Dylan’s final message. Even though Dylan is the outlaw, his car does not get taken away by a larger police car after being lassoed. Instead, his car rises up as if it were ascending. Notably, a paragraph in Dylan’s final letter reads,

> Sorry if this letter sounds a bit formal. I’ve been waiting to write one like it for a while--dreading it, actually. However, I’m not scared anymore. It’s been eating at me for over 20 years and I just need peace. I’m not expecting forgiveness from any of you. (2019/2020)

Since Dylan’s car in “Outlaw” seemingly “Ascends” after being caught by the player, and he has also been caught by the player outside “Outlaw,” then the letter is not a confession: it is a suicide note. What was a straightforward apology and confession letter is complicated into a potential suicide letter by the mechanics of “Outlaw,” which Dylan interprets as an apology.

Discussion on Character-Reflexive Contained Games

Character-reflexive contained games, then, are games that focus on characterisation and showing facets of characters that might not have been made explicit as part of a container game’s narrative. The way in which they are able to do this work is through mirroring and parallelism: characters

will find themselves reflected in the games they play and, seeing themselves, will interpret their current situation in light of what they have realised based on the contained game. While this approach is used constantly, it is not the only approach to characterisation: games can also invite some interpretation through more abstract mirroring, or through discussions of what the games are.

Since their focus tends to have narrative implications, they are usually integral parts of a game's main narrative, and even when they are not, the player must interact with them in some form as the plot progresses. It is worth noting that the general approach to character interpretation often relies on direct character similarities, but two of the three analysed games do not necessarily rely on narrative to create parallelisms or character interpretations, relying instead on gameplay to enable character interpretation.

As a whole, the three analysed games present character interpretation by using direct character mirroring (*Danganronpa 2*), gameplay conventions and mechanics (*Hypnospace Outlaw*), and dynamics of multiplayer gameplay (*UNREAL LIFE*). These examples are not representative of character-reflexive contained games at large, but they point to the possible uses of the device as a way to further reveal facets of characters in games. Notably, characters must not always be shown playing the games in order to have an interpretation; interpretation can happen at the production level, where the game characterises a character by showing how they would make a game.

4.1.3 Discussion on Diegetic Videogames

So, diegetic videogames are videogames that exist within the fiction of a larger, container game. Since they exist diegetically, they are typically found as machines somewhere in the worlds of container games or, if the game takes place within an operating system, a piece of software. Their purpose seems to be twofold: by existing within a fictional world, they are able to communicate how that world works, by signalling similarity, difference, or by revealing details about a world without explicitly mentioning them; and by being part of a narrative, they must contribute to the development of the plot in some way, by either showing characterisation, revealing previously unknown details, or making characters reconsider their situations. While these two larger possibilities of world and narrative exist, the narrative involvement usually focuses on characters explicitly interpreting the games in question.

The key difference at play between contained games that reflect the world and contained games that reflect character is one of approach. Since character-reflexive contained games must also exist diegetically within a fictional world, they are also world-building; and since world are populated by characters, the opposite is also true: world-reflexive contained games can be considered character-reflexive based on their context. What separates them more often has more to do with events in the container game than anything about the contained game, particularly character interpretation. Characters rarely comment on world-reflexive games, but they often—if not always—interpret character-reflexive games. This interpretation offers an insight into characters that might not have been made explicit in the container game's narrative. The common lack of comments or interpretations in world-reflexive games, on the other hand, prioritises the player's interpretation of how the game would relate to the world through a combination of their content—or their representational and gameplay qualities—and the contexts in which they appear.

This analytic potential is enhanced by existing as videogames within videogames, since there is also a metanarrative and meta-interpretive aspect to them. Much like Seiwald (2019) pointed out, experiencing a videogame within the boundaries of another one allows the player to realise the container game's status as a videogame. The artificial framing of the contained game serves to evince the artificial framing of the container game, enabling the player to engage with the game as a fabricated artifact. Embedded in this potential is a matter of representation that is both prescriptive and descriptive: in including a contained game, it is possible to see this contained game as the contained game's model of game and model of play. In showing the player how characters react to games or how games work via the contained game, the container game makes an implicit argument for how it, itself, ought to be understood or played. This potential is stronger the more detailed and formally complex the contained game is. As such, when the device of videogames within videogames is used diegetically, the contained game communicates new ways to understand the container game by mirroring content, providing a look into a world's values and ideologies in its context, and by making the player realise the fiction of the container game.

4.2 Videogames as Framing Devices

Videogames used as framing devices are videogames within videogames where the relationship between the contained game and the container game is narrative, but not diegetic. Instead of having

a formal structure where a large, container game surrounds a smaller, contained game, the container game is functionally non-existent. The main part of the game that the player experiences at any time is the contained game, but the container game is not playable, rather serving a narrative role as a framing device. By the use of "framing device" here, I mean the narrative tool wherein a story is presented as being contained by another form and whose purpose is altering the audience's horizon of expectations by presenting the story as being within a specific kind of form. Videogames that use videogames as a framing device can largely be said to take place within videogames. In other words, videogames that use videogames as a framing device tend to either be about videogames or they are ostensibly about being videogames.

This formal construction where the container videogame is deemphasised, however, does pose a problem for analysis of the videogame within the videogame. I analysed diegetic videogames relying on the mirroring and parallelisms enabled by the *mise en abyme* structures in those contained games. However, those analyses relied on there being a relationship of either similarity or additional information between the container game and the contained game: an impossible task when there is no container game to compare the contained game to. This lack, however, does not preclude mirroring, it merely alters the way it works. Instead of having the contained game mirroring the container game, the contained game ends up reflecting back on either the form of its container, or on its player. These two reflexive modes will be my focus in this section. While both of these modes rely on using videogames as framing devices and are, thus, formally similar, the ways in which they use it on a narrative level is what sets them apart. Much like diegetic videogames, the metanarrative layering at play creates a separation between the game and the player, so that the artificiality of the game is laid bare. In revealing this artificial framing, the player is invited to think not just about the actions of the narrative and gameplay, but the explicit ways in which they are happening.

So, contained games that reflect their form do so by calling attention to their containers on a narrative level. These games take place within a specific fictional videogame and, as such, serve as a reflection to those fictional games. Of course, since those fictional games are not visible, the contained game ends up reflecting on the genre and form of the fictional game. By establishing a fictional framing and evincing the artificiality inherent in the surrounding genre, the game becomes

a mirror that reveals the workings, possibilities, constraints, and affordances of the genre the fictional framing game is presented as.

Player-reflexive contained games work differently. Rather than being videogames framed by a fictional videogame, they are framed as taking place within the logic of videogames. They either adhere to a sense of 'gameness' or to their 'softwareness.' While they take on specific forms and adhere to specific genre conventions—and there is thus also a form-reflexive modality to them—the lack of any specific fictional titles displaces the focus on the framing device and onto the player, aided by constant metanarrative interactions where the player is addressed directly. As such, these games often 'break the fourth wall,' so to say; they exhibit self-awareness of their form and of the player. What is being reflected through this focus is the player and the act of playing.

4.2.1 Form-Reflexive Contained Games

As stated, these are games that are framed by specific fictional games. Despite their settings, however, they are not necessarily 'about' videogames. Instead, they focus on telling stories and experimenting with gameplay through mimicking while signalling both a degree of levity by taking place within a videogame, and an understanding that the world is bound to gamified rules. In being stories set within fictional videogames, they offer some form of commentary about videogames that are like the fictional videogames that contain them. Since they are descriptive of a specific genre, they evince assumptions of its constraints and affordances.

Much of the focus is not on the form of the genre itself, but on what it enables. The three games I am analysing, for example, are all single player games that take place within fictional Massively Multiplayer Online games (MMOs) due to the limitations of this Master's thesis. The fascination with codifying MMOs into a set narrative, complete with the social features inherent in the form, proposes an understanding of MMOs as social spaces. Of course, this model of MMOs is only present in games that take place within fictional MMOs. It is worth noting that form-reflexive games set in other genres exist as well, like *No Players Online*[8], a horror game set inside a fictional first-person shooter that plays with the eeriness of empty servers in usually populated multiplayer

[8]Pype, A. (2019). https://papercookies.itch.io/no-players-online.

games. Even there, however, there seems to be a drive to turn the social interactions and emergent narratives of online games into set narratives.

In order to have an idea of why there might be a drive for turning social interactions in MMOs into single player games, as well as seeing the ways in which these games use their fictional framing as the basis to say something about their specific genres, I will analyse *CrossCode* (Radical Fish Games, 2018/2020), *My Older Sister Left The Computer So I Got On & Found Myself Trying To Coordinate A Raid In A Game & I Don't Play MMO's* (Crawford, 2021), and *Agony of a Dying MMO* (Hughes, 2021). All three of these games take place within fictional MMOs, all focusing on different aspects of MMOs as social spaces and their unique social forms: means of communication in them, the creation of social forms like raids, and the loss of community that comes once they must end. By analysing these games, I aim to find conceptions of what MMOs are and what they can do.

***CrossCode*: "CrossWorlds"**

Radical Fish Games' *CrossCode* (2018/2020) is a single player action RPG following the story of Lea, a player of the fictional MMORPG "CrossWorlds" who, one day, wakes up with amnesia inside the game. Before the player is introduced to Lea's circumstances, however, the game shows a short cutscene: in first-person view, a character puts on a virtual-reality-style headset, showing a screen that says "CrossWorlds." Shortly after, the scene changes into a login screen, as shown in Figure 13 below. This moment is communicating the setting of *CrossCode*: the MMORPG "CrossWorlds." This single scene is the only time when the player is able to see something happening outside "CrossWorlds;" the rest of the game always takes place within the MMO. This exclusion creates a sense of containment, of course, but it also draws attention to the world outside the game by virtue of its exclusion.

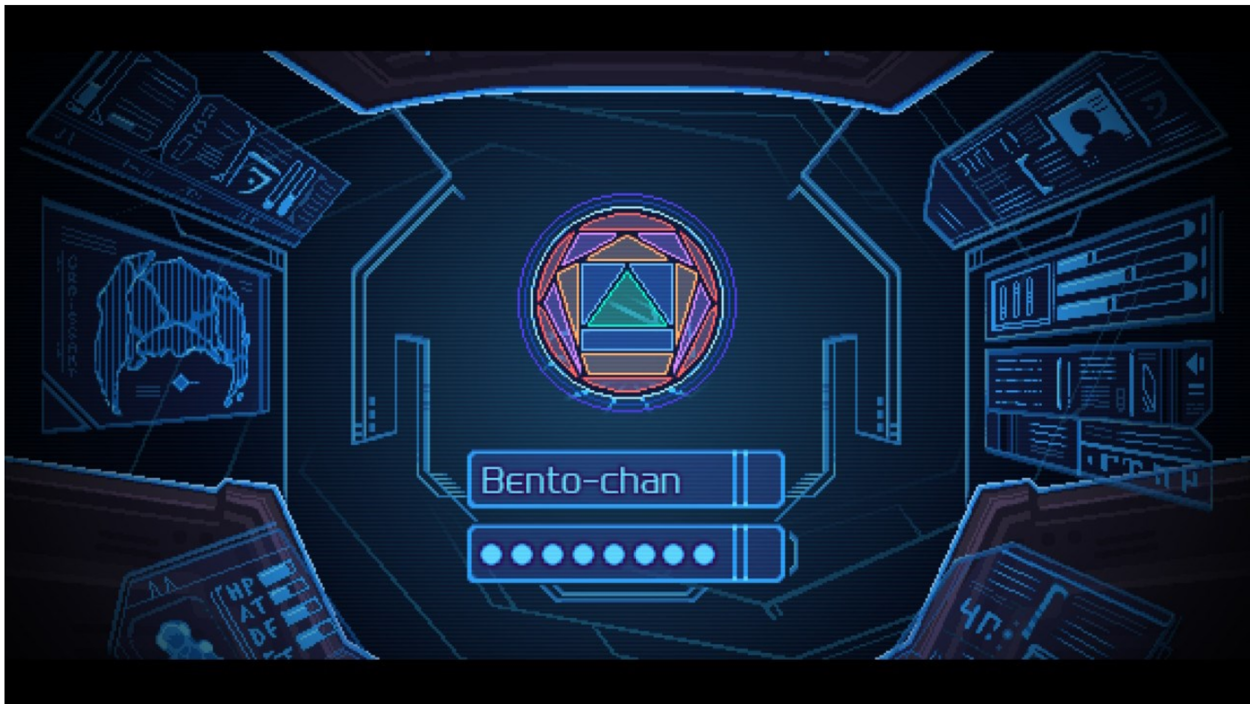

Figure 13. The opening scene of *CrossCode*, showing the login screen for "CrossWorlds" (2018/2020).

While the player never gets a chance to see the world outside "CrossWorlds," it is ever present as part of *CrossCode*'s narrative. *CrossCode* takes and adapts gameplay tropes of the RPG genre, notably party members, and since the game takes place within an MMORPG, party members are recontextualised as players of the game. This fact presents a narrative tool that *CrossCode* uses to set a rhythm for its story: after major events, party members must leave and spend time in the real world. Even outside the moments when characters leave, however, the outside world still shines through, as seen in Figure 14 below, when one of Lea's friends opens up about her struggles with playing "CrossWorlds" too much. Conversations about "CrossWorlds" in particularare mostly relegated to explanations on how the game works or occasional games the party members play, like racing through dungeons to see who finishes first. The resulting effect of *CrossCode*'s focus on social relationships ends up making the game less about "CrossWorlds" and more about its players.

Figure 14. Emilie talking to Lea about her struggles outside “CrossWorlds” (2018/2020).

This focus on social relationships is then complicated by the fact that, due to a problem with her in-game avatar, Lea can only speak a few words, like “Hi,” “Bye,” “Thanks,” and so on. Even though the larger plot of *CrossCode* focuses on the corporation behind “CrossWorlds” and the technology they developed, the relationships between Lea and her friends are an intrinsic driving force for the narrative. At a specific point in the game, Lea experiences a glitch of sorts in the middle of a raid—an event where multiple players join up to tackle a hard quest—that takes her away from her friends to a place usually inaccessible by players. When she is stuck there, she is unable to use the “Direct Link,” a tool to talk to people far away, so she cannot reach out to her friends to let them know what happened—even if she could, she could not explain it regardless. However, Lea’s status in the game’s social interface still shows her as being online. To her friends, Lea disappeared in the middle of a raid and then proceeded to be unreachable despite being in the game. Once Lea finds a way out, rather than trying to figure out what happened, the plot focuses on finding a way to explain what happened to Lea’s friends, apologise, and explain the situation. The main driving force at this point of the game is entirely based on Lea’s friends and attempts to make amends, with “CrossWorlds” serving as the backdrop for the social tension at play. Although I wrote above that the MMO is used as a backdrop to provide some levity to the action, it is worth noting that the most serious aspects of *CrossCode*’s story are all related to social relationships.

Those relationships are treated more seriously in the narrative than the plot of "CrossWorlds," to the point that the most emotionally impactful moments—like Lea's reconciliation with Emilie, shown in Figure 15 below, or Lea's first encounter with Shizuka[9]—happen within spaces of "CrossWorlds" that have little to do with its questline and more to do with socialising.

Figure 15. Emilie and Lea make amends (2018/2020).

"CrossWorlds," then, seems to be used for two explicit purposes: to establish a narrative throughline with an in-game plot to organise the player's actions, and to use it as a backdrop that establishes the rules of social communication and interaction for *CrossCode*'s characters, who are the main point of interest for *CrossCode*'s narrative.

My Older Sister Left The Computer So I Got On & Found Myself Trying To Coordinate A Raid In A Game & I Don't Play MMO's

Damien Crawford's *My Older Sister Left The Computer So I Got On & Found Myself Trying To Coordinate A Raid In A Game & I Don't Play MMO's* (2021; henceforth, *My Older Sister...*) is a

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[9]Indie James. (2018, October 1). *CrossCode Gameplay Part 19: Vermillion Wasteland 2/2 (No Commentary)* [Video]. Youtube. https://youtu.be/uCAhXpKKlr4?t=457. Accessed April 1, 2023. The scene starts at 7:37 and ends at 12:45.

turn-based RPG where players must beat a difficult boss while controlling over 40 characters. As its title suggests, the premise of the game is that a kid saw their older sister leave the computer and sat down in front of it, wanting to play games on it. However, the older sister had left her own game open: she was coordinating a raid in an MMORPG, and it is now up to the younger sibling to do it. Unfortunately, none of the other players can help, as the sister is "the only one […] that knows the raid mechanics."

As the game starts, the player is put in charge of a party of almost 50 different characters, as shown in Figure 16 below. All the characters have different abilities, "ST" points, "MP" points, and so on. Before the fight, the player is told to change the party's equipment twice, once by another player, and again by the MMO. The game is a turn-based RPG and, as such, depends on a specific type of literacy that the player might have. So, a player might try finding the menu and equipping items, but, interestingly, there is no option in the menu to equip any items. There are options to change the party's formation—a seemingly functionless option that, nonetheless, highlights the ridiculous number of characters—and see the characters' abilities, but nothing about equipping items.

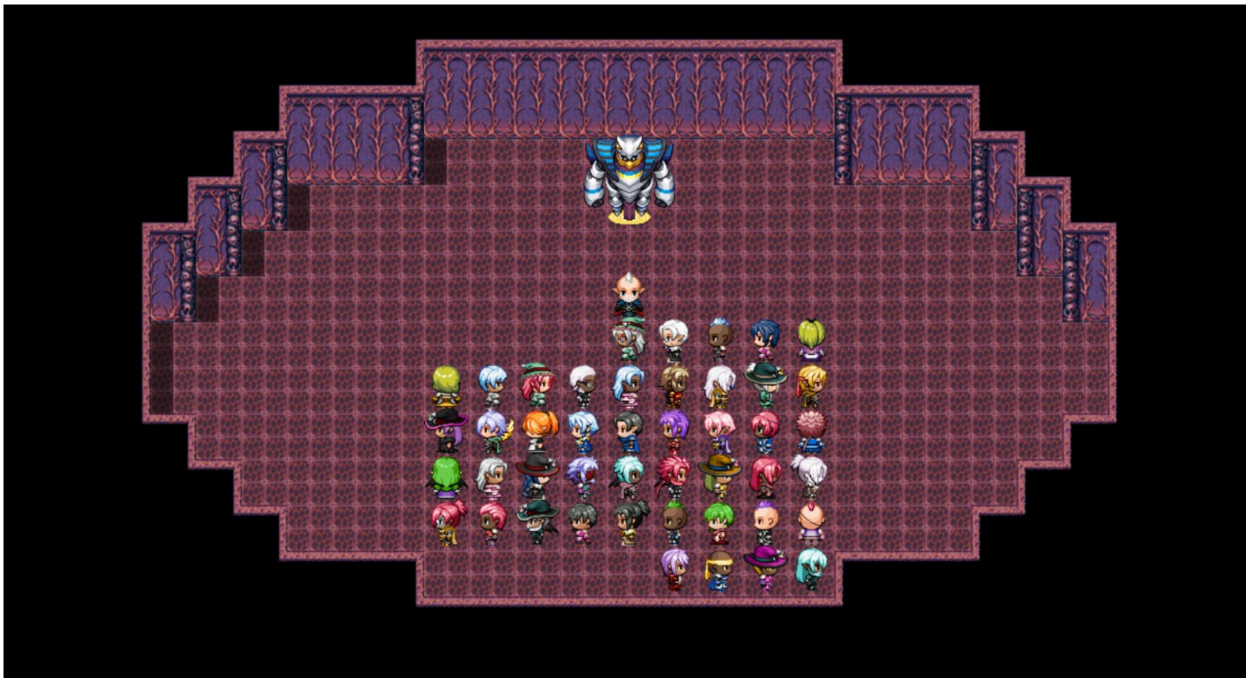

Figure 16. The first scene of *My Older Sister...* showing the raid group and the boss (2021).

This omission is intentional: since the need to equip items is stated by both another player of the game and the game itself, it is fair to assume that perhaps a player more familiar with the game would be able to equip items. This knowledge-based omission is then repeated in the actual raid, shown in Figure 17 below, where skills only provide basic descriptions: "deals damage and inflicts a status," "heals and grants a status," "chance to grant a state to the party," and so on. What the various statuses and states do is also unclear, made even more so by the esoteric skill names and symbols. Seen collectively, the point of this misdirection is to alienate the player by removing all indicators of what actions do.

Figure 17. The raid in *My Older Sister...* (2021). Notice the ambiguous description and the eccentric skill names.

My Older Sister... is, of course, a joke videogame literacy. It pokes fun at the nature of MMORPG gameplay: the odd skill names, the reliance on effects that may not be entirely clear, and the use of symbols that require previous knowledge to be understood. *My Older Sister...* evinces not just the requirements of videogame literacy, but the suspension of disbelief inherent to MMORPGs: skill names sound ridiculous, but they are meant to emulate names that put more emphasis on worldbuilding that on their mechanical use and effects in some MMORPGs. By removing the player's understanding of how the game works, the suspension of disbelief can be shattered,

showing the artificiality and, at times, ridiculousness of narrative and worldbuilding details that are accepted through their use in gameplay.

Of course, the joke is not just about videogame literacy, but about the social literacy of games, particularly since the game takes place in a raid, the MMORPG's most iconic social form, is also significant. Setting the game during a raid serves to create a drive for the player: since raids are highly organised and planned events, there is often an expectation that participants will play well. Thus, the raid seems to serve as a way to motivate the player to win the fight by playing into the social conventions inherent in the form.

As such, *My Older Sister...* uses its MMORPG setting to highlight the very particular videogame literacy needed to play and enjoy games in the genre by making a joke out of them, overwhelming the player through obtuse explanations while imposing the social pressure of a raid. What results is a view of MMOs that, while not explicitly social spaces, have mechanics that aid in creating unique forms of social interaction.

***Agony of a Dying MMO*: "Garden of Widows"**

Salem Hughes' *Agony of a Dying MMO* (2021)[10] is a game showing the final hours of a fictional MMO First-Person Shooter, "Garden of Widows." In it, the player gets to experience the final moments of the game through the perspectives of multiple players. While the player can move the camera, control their character, and even shoot the character's gun for most of the game's runtime, interactions are very limited. The focus is placed experiencing a seemingly apocalyptic event.

As the game starts, the player's screen is filled with graphic interface elements to the point of near claustrophobia. As shown in Figure 18 below, the top and bottom thirds of the screen are dedicated to the menu and the chat, respectively. The centre is reserved for the game proper, showing the world. The reduced space for the game seems to contribute to the game's sense of dread: in inciting a form of visual claustrophobia, there is almost a secretive relationship between the game and the player where only a small part of the world is revealed at a time, which seems to echo a recurring figure in the game: Adam, a non-player character (NPC) that has never been seen.

[10]NB: *Agony of a Dying MMO* is listed as a demo in its itch.io webpage. There are no signs of an incoming full release as of the time of writing.

Figure 18. A screenshot of *Agony of a Dying MMO* (2020). Notice how much space the menu and chat take up.

The search for Adam in the game is a mix of the usual urban legends associated with games and a touch of the supernatural. Another urban legend among players states that players who reach the game's max level suffer some sort of curse, with weird events happening both in the game and outside of it, and finding Adam is supposed to lift this curse. The curse, of course, is fake, as is Adam. However, even though the curses were fake, they had real consequences. Players lost contact with loved ones looking for Adam, with a player admitting to not seeing their kids anymore due to obsessively searching for Adam. Another one mentions failing out of college due to playing the game too much. Another one tells a (presumably) former partner that they had to leave, "because you let this game consume you." The max level curse ruined people's lives not because of anything paranormal, but as a result of playing too much; a self-fulfilling prophecy as the search for a solution to the curse devolves into a mono-maniacal search for Adam. In creating obsessive players addicted to the game, a large number of which are male, the MMO functionally creates a "Garden of Widows," with players more dedicated to the game than to their lives.

This addiction then becomes despair as the game comes to an end. While the feeling of loss pervades the MMO universally—even affecting NPCs, as shown in Figure 19 below—that loss takes different forms. Some regret spending too much time in the game, others use it as an

opportunity to open up to those around them, others express suicidal ideations at losing access to the game, others are in denial, some are opportunistic—like "USARMYRECRUITER," a player trying to get other players to join the army—and some others are homicidal. All the players of the game who are still online hours before the game closes seem to be struggling in some form, and the imminent end of service only serves to bring out the best and worst in them. The focus on showing people who are hurt or hurting seems to almost be a statement on the type of people that MMOs attract: the lonely who need some form of companionship that their real lives cannot afford.

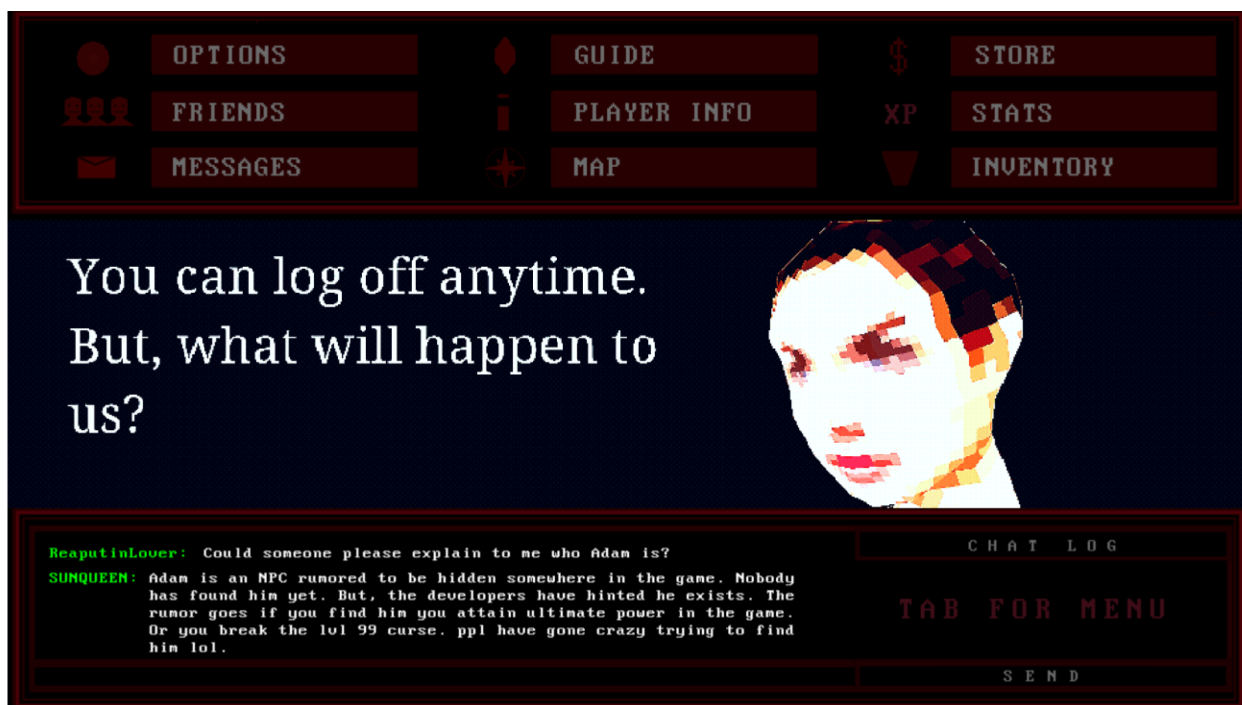

Figure 19. Apocalyptic NPC dialogue in *Agony of a Dying MMO* (2021).

Agony of a Dying MMO's depiction of "Garden of Widows" provides a complex depiction of what MMOs are, what they can do, and the types of people that play them. By telling a collection of short stories about deeply broken people turning to "Garden of Widows" as an escape, *Agony of a Dying MMO* puts forth an interpretation of MMOs as spaces of possibility for human connection and as risky uses of time due to their escapist nature: the form of the MMO affords its players both a space to meet likeminded people and the risk to get lost in them. This duality is embodied in Adam: a rumour born out of the game's own cultural norms with the power to fix the lives of people who have reached the maximum level through their addiction to the game.

Discussion on Form-Reflexive Contained Games

Form-reflexive contained games seem to be focused on showing something about the form that contains them. While some of the findings I have already written about in the analyses would apply more specifically to MMOs, such as the focus on showing their potential as social spaces, there are some conclusions that can be drawn regardless of the form the container game takes.

In particular, the container game is used to establish the rules of the story. Since these stories take place within videogames, there is an assumption that the world and its characters will behave with the knowledge that they are playing a game. Narratively, the stakes of the story are also affected: since the focus is often on events happening in the game, there is an air of artificiality around the events of the story and, thus, levity. As such, events tend to focus on social connections within the game or, in the case of some horror games, perceived—or real—paranormal events that transcend the game. It is worth noting that the focus on the games I have analysed seems to be on the players of the fictional games, with the games being relegated to a background function.

The social focus on these games seems to be the main way to differentiate them from the player-reflexive categories. Even though these games focus on their fictional players, the actual player is not acknowledged. That lack of connection seems to be due to the fictional nature of the games in question: even when they are not acknowledged, this modality relies on container games being specific fictional games. As such, even though the device of the videogame-within-the-videogame is seemingly used as a way to establish the way the setting works, it reveals what the form can do, how it works, its affordances, and its constraints, all while showing how the form is conceptualised.

4.2.2 Player-Reflexive Contained Games

Unlike form-reflexive games, player-reflexive contained games do not take place within specific videogames. This modality of contained game is the one that breaks the trend of container and contained games relying on a relationship between a real, published videogame and a fictional videogame. The games in this category cannot be said to take place within videogames as much as they take place within the 'logic' of videogames. They are games contained by their specific genres, formal structures, or material realities—particularly software and hardware. Since they engage with this formal container as part of both their narrative and gameplay, they can be said to

be self-aware. They are better understood as games that engage in *mise en abyme* to reveal something about the act of playing. These games are, to some degree, about themselves, but by being aware about their framing device, they can focus on exposing and recontextualising the player's actions by addressing their own fictionality to directly talk to the player as part of their narratives.

In order to understand how these games work, I will analyse *Milk inside a bag of milk inside a bag of milk* (Kryukov, 2020), *OneShot* (Future Cat LLC, 2016), and *Doki Doki Literature Club!* (Salvato, 2017). These three games are all aware of their own framing and, in many ways, go through it to directly address the player. They use their form to call attention to what players do in the forms that they mimic, seemingly with the aim to make the player notice and question their current actions and to recontextualise them in games that use similar forms.

Milk inside a bag of milk inside a bag of milk

Nikita Kryukov's *Milk inside a bag of milk inside a bag of milk* (2020; henceforth, *Milk inside a bag of milk...*) is a visual novel about a traumatised girl going to the store to buy a bag of milk. However, the player is not in control of the girl. Rather, the player is a made-up character that the girl created as a coping mechanism: the girl imagines herself as being a character in a game in an attempt to establish some order in her life, as shown in Figure 20 below, which involves not only talking out loud to someone who she only imagines to be there, but giving the player access to her thoughts.

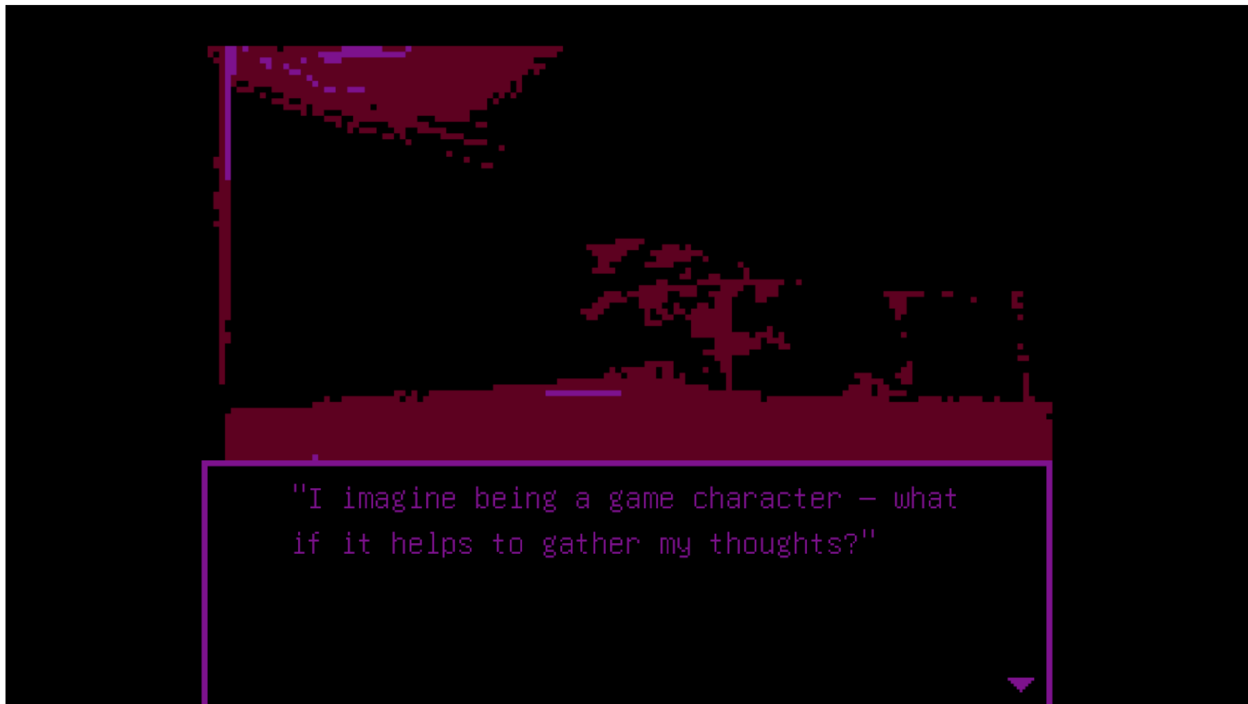

Figure 20. The girl explaining her reasoning to the player (2020).

In particular, the girl imagines her life as a visual novel. She gives the player access to her thoughts and actions to perform well under the pressure of being seen, as she says, “I was thinking all the time: ‘do not screw up in front of the reader!’ or ‘oh my God, what will he think?’ Ha-ha!” However, the player is not just there as a witness, but as an active participant. There are a handful of decisions that the player can make at specific moments—like the one shown in Figure 21 below—often focused on either bullying the girl or helping her.

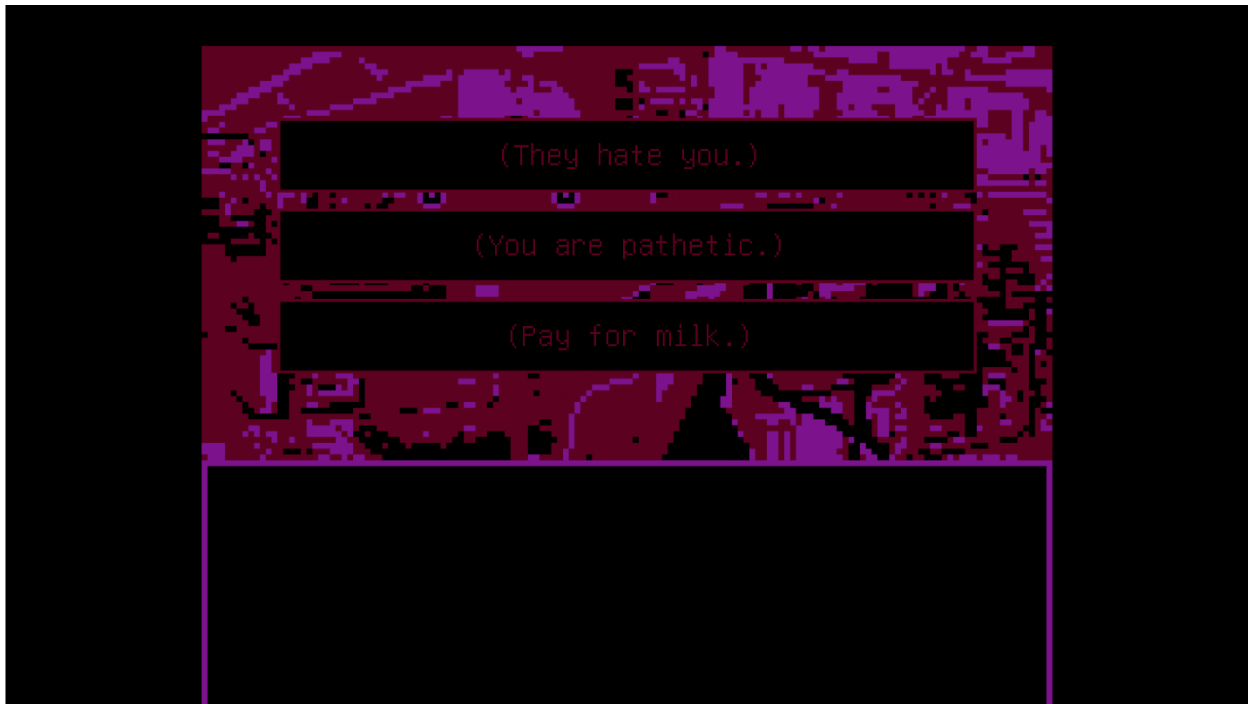

Figure 21. Some of the options the player can take in *Milk inside a bag of milk...* (2020). Notice the negative options.

This freedom to choose whether to bully or assist the girl, of course, is not necessarily limitless. Unlike a number of other visual novels, *Milk inside a bag of milk...* does not have multiple endings, having only a good ending and a bad ending. In the good ending, the girl buys the milk and goes back home thanks to the player's help. The bad ending, shown in Figure 22 below, is shown after the player is rude to the girl a specific number of times. As the text "Looks like '[Player name]' doesn't help me at all…" suggests, the girl's attempt at using an imaginary character to help her through the day backfired. Since the player is given access to the girl's thoughts and perspective, most of the game is played from the girl's first-person point of view, so seeing the girl looking directly at the player while a loud drone plays in the background creates a forceful disconnect between the girl and the player.

Figure 22. *Milk inside a bag of milk...*'s bad ending (2020). I wrote down the name at the start of the game.

The player, then, is cast in the game as a coping mechanism that may or may not work. In visual novels—and, arguably, in videogames at large—the player and the protagonist often mix together: since the player controls the protagonist, they can reliably be treated as one and the same. That connection is simultaneously not at play and at play in *Milk inside a bag of milk...*, in the sense that the player is both the girl and the coping mechanism. The girl points out this duality when she says, "In the end, I'm just talking to myself." The explicit disconnect in the bad ending evinces the ways in which story-based games conflate the player and the protagonist, revealing how that projection works by linking its explicit separation to the girl's dissociation from reality.

OneShot

Eliza Velasquez, Casey Gu (credited as Nightmargin), and Michael Shirt's *OneShot* (Future Cat LLC, 2016) is an adventure game about a dying world. The player takes control of a cat-like child who wakes up in a dark room away from their family. In that dark room, they find a computer that, when turned on, shows some messages on its screen laying out the player's goal:

> You found me. …Why? You're already too late. Not much of the world remains. This will be apparent once you go outside. This place was never worth saving. …Do you still want

> to try? Then, remember this: Your actions here will affect Niko. Your "mission" is to help Niko leave. And most importantly… (2016)

This message is contradicting: the world is ending, but it "was never worth saving." Instead, the player should focus on helping Niko leave. The problem that arises from this "mission" is Niko. No characters have been named at this point. However, something curious happens at the end of the quote above: as the player presses the button to go to the next dialogue, a system notification will appear in the player's computer, outside of the game, saying, "You only have one shot," followed by the player's computer username. The messages were not for the cat child, Niko, but to the player outside the game. This communication with the player through system messages becomes a constant in the rest of the game, as seen in Figure 23 below.

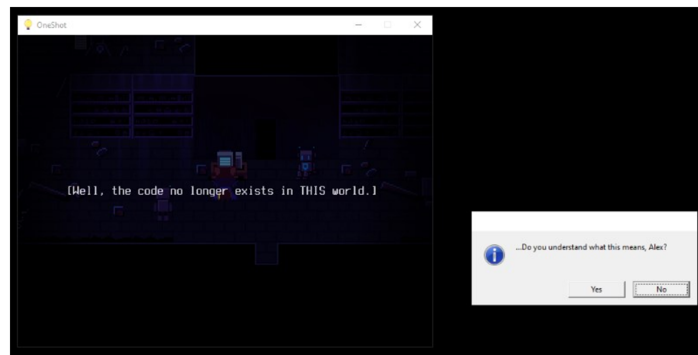

Figure 23. A cropped screenshot of my computer's desktop showing *OneShot* (2016) and a system message it sent.

The purpose of this notification is to create distance between the player and the game by bringing the player into the fiction. The game temporarily breaks the player's suspension of disbelief by revealing itself as a piece of software only to rapidly build a new suspension of disbelief that includes the player and the player's operating system, including system messages and files in the user's Documents folder, as shown in Figure 24 below.

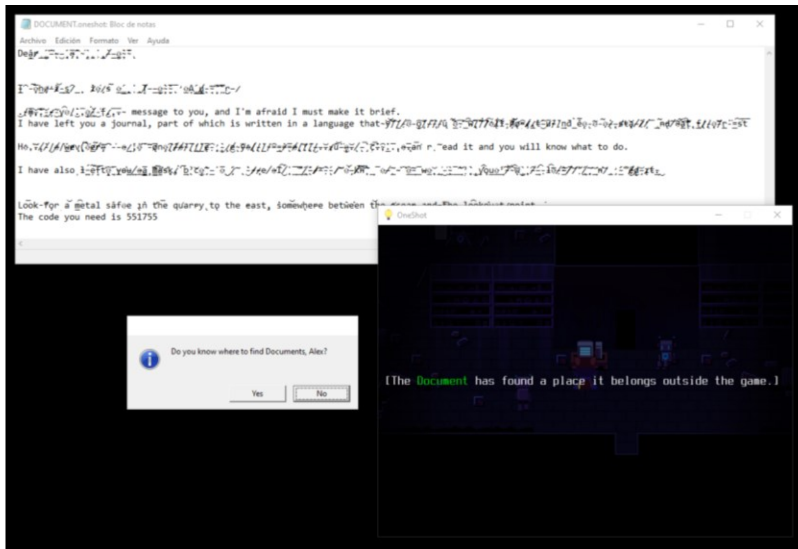

Figure 24. A desktop screenshot showing *OneShot* (2016), a system message, and a text file the game created.

The player's separation by inclusion enables a specific type of relationship to the game. By being an explicit character in the narrative that characters can talk to, the player is made to feel empathy for characters, particularly Niko, due to what seems like direct communication. Niko is written to be an endearing character, expressing both childlike wonder and anxiety at the situation they find themselves in, like shown in Figure 25 below. This empathy makes itself present at the end of the game: the player must choose whether to save the world and trap Niko away from his family, or let Niko leave and let the world die. The difficulty in presenting this choice is a direct result of the player's empathy for Niko, which is a result of Niko and the player being two explicitly separate characters.

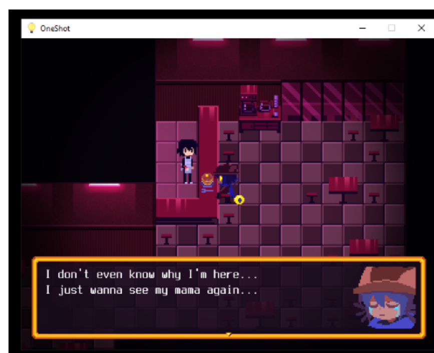

Figure 25. A screenshot of *OneShot* showing Niko crying while eating pancakes (2016).

Evoking the game's status as software also aids in this choice. As the player finds out near the start of the game, they are treated as a god because of their ability to exist outside this world and see things that would be impossible to see from within it. And yet, the game's status as software also has a bearing on the world: the computer that talks to the player through system messages, and which tries to save Niko whenever it can, hints at the idea that the game itself is software. Robots and computers in the world of *OneShot* follow a set of rules, chief of which is, "A robot may not injure a living person or, through inaction, allow a person to come to harm"[11]. The computer's decision to protect Niko at all costs, at the cost of the world, suggests not only that Niko is alive, but that the rest of the world is fake, a computer simulation living in the player's computer.

Everything about the game's narrative seems made for the player to empathise with Niko as a character who is alien to the player. This separation enables Niko to grow and act with the player, rather than because of them. What is enabled by framing the game as a piece of videogame software is a more personal engagement with the game's narrative.

Doki Doki Literature Club!

Dan Salvato's *Doki Doki Literature Club!* (2017; henceforth, *DDLC*) is a visual novel mixing psychological horror with dating simulator elements. In particular, *DDLC* starts out as an innocent-looking dating simulator that abruptly turns into psychological horror after a few hours of gameplay. In order to make the shift more noticeable, *DDLC* uses a handful of ideas present in dating simulators aimed at young men: cute girls, relatively simple mechanics, and sexual tension that often threatens to turn *DDLC* into an erotic game, as shown in Figure 26 below.

[11]The rules for robots in *OneShot* are slightly modified versions of Asimov's three "Rules of Robotics" from his short story "Runaround," with this rule being a modification of the first rule, "a robot may not injure a human being, or, through inaction, allow a human being to come to harm," changing "human being" to "living person" and "person."

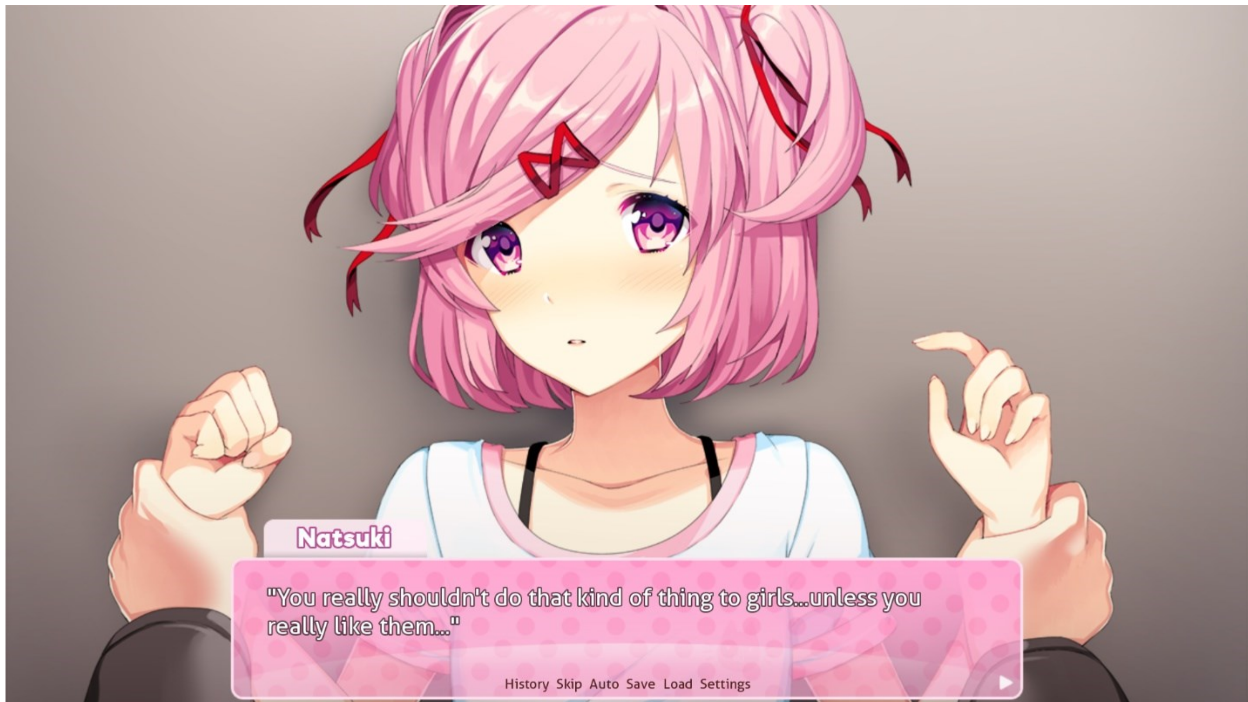

Figure 26. One of the special images in *DDLC* (2017). Notice the first-person perspective.

While this overlap of genres does not result in a contradiction on its own, it does in *DDLC*: the game's idea of a dating simulator is that of a wholesome, lighthearted game where the player is free to pursue any of the romantic interests with no consequences. This inner logic is upended when one of the potential love interests dies by suicide. In a gruesome turn, the player is shown the scene. As the player discovers her body, the game's music distorts, visual glitching occurs, a broken version of the title screen appears behind her, and the message "An exception has occurred. / File "game/script-ch5.rpy", line 307 / See traceback.txt for details" shows up. What is at stake in this moment is the breaking down of the idealised dating simulator: a character dying, especially by suicide, breaks the inner logic of that idealisation, and this shattering is manifested formally through software errors. By calling attention to its status as a piece of software, *DDLC* reveals its awareness of its videogameness.

This awareness is manifested narratively through Monika, a character who, within the fiction of the game, ends up tampering with the game's software to try to force a change in the mechanical and narrative design of the videogame: within the rules of the dating simulator, the protagonist can only get romantically involved with romanceable characters, which Monika is not, an exclusion she resents, as shown in Figure 27 below. In her attempt to become a character with a romantic

ending, she deletes the other characters, revealing how she accessed the game's files and altered them. In doing this, *DDLC*'s boundaries change: by implicitly inviting the player to also go into the game's directory in the file explorer, *DDLC* breaks through its software container, extending the framing of the game to the player's computer interface. This shift is part of the game's horror: by portraying a ghost in the machine that is able to break the boundaries of the software to turn the player's computer interface into a larger game, the player's sense of control over their computer is threatened.

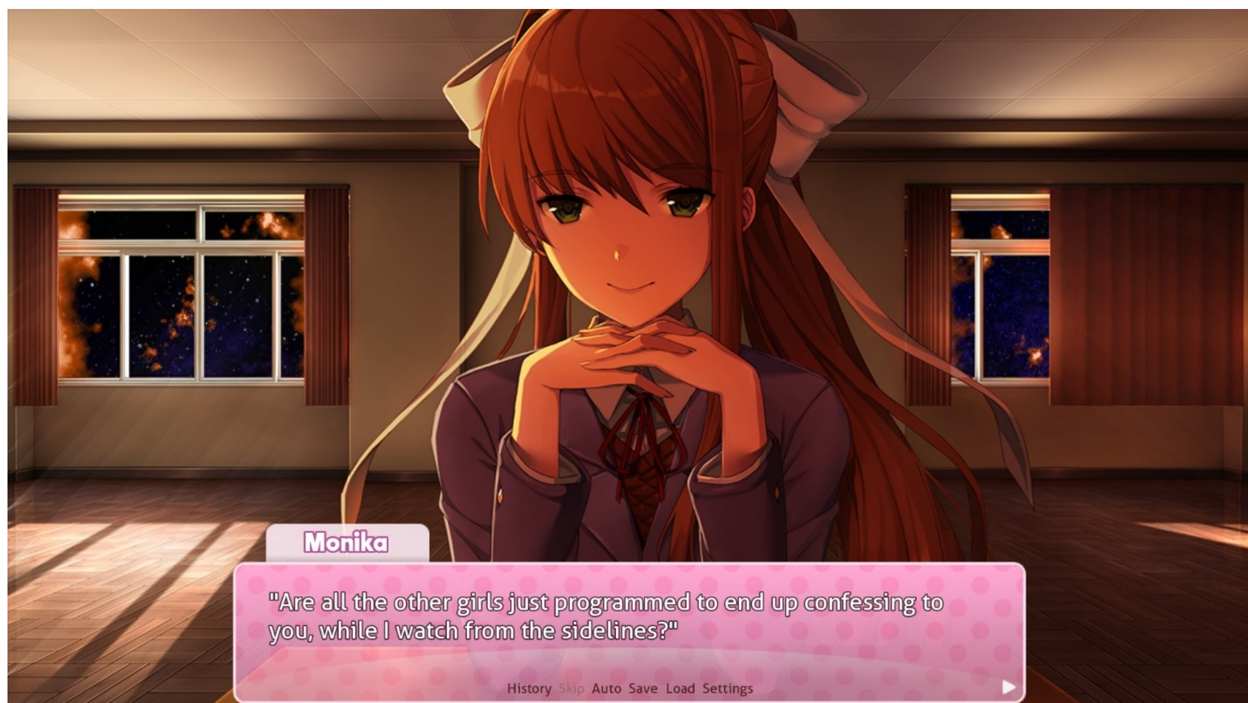

Figure 27. Monika telling the player about her exclusion from the mechanics of the game (2017).

DDLC's nature as a self-aware videogame is used as a way to distort the player's understanding of what the game's form is, by differing from a player's horizon of expectations of what a dating simulator and what the formal boundaries of videogames should be. In doing so, the player can become aware of what their actions entail in dating simulators, particularly who gets excluded from player's choices and, by extension, the artificiality of who gets to be a love interest. However, the fact that Monika creates her own ending also inverts the player's relationship to the game: instead of being the one pursuing a relationship with a love interest, they become the love interest, becoming aware of their actions from the perspective of a love interest.

Discussion on Player-Reflexive Contained Games

So, player-reflexive contained games are games that are framed by either their own 'gameness' or their own 'softwareness;' their status as games or their status as software. This narrative framing allows them some degree of self-awareness that is mostly used to shatter the player's initial suspension of disbelief about what the game is, a process that then expands the suspension of disbelief to include the player as an explicit part of the game's fiction.

Part of this inclusion is not just an extension of the game beyond its initial boundaries, but a direct alienation of the player: these games do now allow the player to conceive of the protagonist as an extension of themselves. Since the player is part of the fiction, they are addressed directly by the characters of the game as a character who is brought into the diegesis of the game's world from outside of it. In doing so, the game distances the player from themselves, allowing them a critical look at their own actions and their role as the player. In turn, this critical perception of the player's own actions enables the player to be critical and self-aware about their behaviour not just in the particular game, but also in games that are similar to it.

This modality also has various modalities, based on whether the containing logic is that of gameness, softwareness, or a mix of both. Games that are contained by the logic of gameness seem to show characters dealing with the psychological effects of being part of a game, which seem to be mostly negative, whether self-imposed or otherwise. Games contained by the logic of softwareness, on the other hand, use the formal expansion onto the player's operating system to make the game larger than it seems. The form of the game is burst open, no longer being just a game, but essentially gamifying the player's operating system to hint at a 'ghost in the machine' of sorts, a force that is larger than the game interacting with the player. However, this 'breaking open' of the game's form comes with a narrative caveat: these games tend to explain their in-game worlds as computer simulations and, thus, can fall into forms of solipsism and nihilism.

These factors overlap to make the player, a figure who exists outside the formal boundaries of the containing gameness and softwareness, a person of interest for the characters within the fiction. The player, in spite of having a lesser sense of agency by being disconnected from the game's protagonist, is projected as an almost omnipotent or omniscient figure. While this power is generally applicable to other games—since a player has the power to control when a game and its

world start and end by running or closing their software—it is made explicit in these types of games in order to disorient the player by calling attention to an implicit assumption.

4.2.3 Discussion on Videogames as Framing Devices

So, when videogames are used as framing devices, be it as fictional videogames or as the logic of videogameness, the contained videogames tend to exhibit some degree of self-awareness in the development of their narratives across both of their modalities, whether form-reflexive or player-reflexive. This self-awareness might show itself as an understanding that stories are taking place within a videogame and, thus, have different stakes and social rules than if they took place in a non-digital fictional world; or, it might show itself as in-depth understanding of the formal limits of the game, accompanied by a desire to see what lies beyond those formal constraints.

While the different modalities take different approaches and produce different narrative and gameplay results, they are united by their metanarrative constructions. As Waugh stated in *Metafiction* (1984) when discussing frames, “there are only levels of form” (p. 31); frames are containing forms. The formal organisation at play in videogames used as framing devices shares the exact structure of a form within a form present in the diegetic videogames category, but the main point of focus is the contained form, rather than the containing one.

On a formal level, these games follow the same structure as other *mise en abyme* constructions, but their larger focus on the contained work impedes the usual workings of the device. Since the player gets no access to the fictional container game or, in some cases, it does not exist at all, then the contained game has no other videogame to mirror, no aspects that characters can interpret to understand themselves better. However, these games do serve as mirrors, but they reflect back both their assumptions and their ostensible focus. So games that are framed by fictional games serve as mirrors that reveal understandings of the form of those fictional games, while games framed by the logic of videogameness reveal the player’s actions. Thus, when videogames are used as framing devices, they call attention to both their form and their players to different degrees. The end result is a metanarrative engagement where the player is invited to think about the game’s form, its boundaries, affordances, and constraints.

5 CONCLUSION

So, to briefly recap, the purpose of this Master's thesis was to find a way to analyse and understand the device of the videogame within the videogame, wherein a videogame appears within the boundaries of a larger videogame, with one of them being real and the other often being fictional. This research inquiry was meant to answer a number of questions, namely: how does the device of the videogame-within-the-videogame work, what are the different forms it can take, and what effects does the device have on its container videogame? In order to answer these questions, I proposed close readings and formal analyses of videogames that used the device. In particular, I proposed a categorisation system after preliminary analysis that relied on the device's formal construction, which produced two distinct categories: diegetic videogames, where the real game serves as a container for a fictional game; and videogames as framing devices, where a fictional game—or the logic of videogameness—contains the real game. These two categories rely on an understanding of videogames as whole forms, put in a relationship where a form surrounds another form. The relative size of these forms and the position of the fictional game determines the category. So, diegetic videogames use larger container games while videogames as framing devices use larger contained games. Within these two categories, I proposed a number of modalities the device could take based on its form and on their types of reflexivity. These different modalities relied on the seeming narrative focus of the contained games in question.

The way in which these modalities work is related to their closest formal and narrative device, *mise en abyme*, which roughly translates to 'placed into/within the abyss' and refers to the construction where a work is placed within the diegesis of another work. The concept was conceived by French writer André Gide, writing in his journals about the device. It is named after "the device from heraldry that involves putting a second representation of the original shield [or coat of arms] '*en abyme'* within it" (as cited in Dällenbach, 1977/1989, p. 7). The purpose of such a device was "to find thus transposed, at the level of the characters, the subject of the work itself" (as cited in Dällenbach, 1977/1989, p. 7). For Gide, the device was a tool for the reader: by serving as a "second representation" of the original work, the contained work had an almost synecdochic relationship with the container work that allowed readers to see "the subject of the work itself." This reader-focused approach was then expanded by Dällenbach, who wrote the—as of now—only book-length analysis into the device in 1977's *The Mirror in the Text* (*Le récit spéculaire:*

essai sur la mise en abyme). For Dällenbach, *mise en abyme* consisted of "any internal mirror that reflects the whole of the narrative by simple, repeated or 'specious' (or paradoxical) duplication" (1977/1989, p. 36). It is here that the mirror metaphor first appears, and it becomes central to what *mise en abyme* should do: reflect back on the larger narrative by duplication. Noticeably, Dällenbach extended the concept to any internal duplication and limited it to its function, rather than its form: if the work within the work does not "[reflect] the whole of the narrative by simple, repeated or 'specious' (or paradoxical) duplication," then it is not *mise en abyme*. In the case of videogames, videogames within videogames rarely do what Dällenbach suggested, instead reflecting the container narrative in parts or not at all. Some years after Dällenbach, Ann Jefferson's "*Mise en Abyme* and the Prophetic in Narrative" (1983) proposed an understanding of *mise en abyme* as a narrative tool that must be interpreted or misinterpreted. Since she wrote about the device's prophetic nature of mirroring events that may not have happened at that point in the narrative, she stresses the fact that characters themselves can misread events, since they are "continuously involved in a process of reading and analyzing the events and situations in which they find themselves" (p. 206). Rather than being a tool for the reader to understand the text, *mise en abyme* is also a tool that characters can interpret through its mirroring. It was through Gide, Dällenbach, and Jefferson that I approached *mise en abyme* as a device that takes the form of the work within the work, and which holds a mirror that reveals something about the container work that would not have been clear without it.

This approach was then informed through academic work on metafiction and fictional games, starting with Waugh's approach in *Metafiction* (1984), where she argues that the main point of tension when using games for metafiction is the difference between games and play as forms of make-believe and reality as meaningful existence (p. 38). Games and play are different from reality, and metafiction either collapses or exaggerates that difference between the two. This line of thought is also present in Gualeni & Fassone's *Fictional Games* (2023), where they analyse how fictional games work. Widely speaking, they categorise these games through their narrative position: they are either background worldbuilding or central to the narrative (p. 46). This latter category is then split between fictional games as social instruments, and fictional games to indirectly characterise fictional characters (p. 58). For Gualeni & Fassone, fictional games reveal something about the fictional world that contains them or about characters within it. They also make an observation that I have tried to touch upon: when used as meta-reflexive devices, they

can suggest critical or satirical perspectives on games outside of the fictional context (p. 173). In other words, they reveal something about games as a whole. While both Waugh's and Gualeni & Fassone's texts focus on fictional games, there are few examples of games within videogames. To alleviate this lack, I turned to Seiwald's "Games Within Games: The Two (or More) Fictional Levels of Video Games" (2019), which focuses exclusively on games within games. Her focus, however, is mostly on whether the metanarrative use of games within games breaks the player's suspension of disbelief (p. 21) by signposting the fictionality of the containing game (p. 22). She finds that they not only do not break it, they strengthen it through worldbuilding (p. 29). What stands out in particular from Seiwald's analysis, too, is her categorisation system: she divides games between games within games with and without an impact on the macrogame's gameplay. The distinction echoes Gualeni & Fassone's, but Seiwald's is based on gameplay reflexivity instead.

After having a coherent idea of what *mise en abyme* was, how it worked, and how its construction of a form within a form presented itself when concerned with games, I decided to focus my own analytical modalities on the predominant types of reflexivity at play: world reflexivity and character reflexivity in diegetic videogames, form reflexivity and player reflexivity in videogames as framing devices. I have chosen to divide and analyse games under these modalities based on what I deemed to be the primary form of reflexivity in any particular example. In order to understand them, I analysed three videogames per modality in order to have varied examples for comparative formal analyses.

So, diegetic videogames are videogames that exist within the fiction of a larger, container game, often accessed through simulations of computers, consoles, or specific software. Their existence within a specific fictional diegesis invites a metanarrative understanding of both themselves and the game that contains them: since these games exist in specific contexts, they end up revealing something about those specific contexts. When diegetic videogames take a world-reflexive modality, they communicate something about the videogames' fictional world through the assumptions that these videogames were created, exist, and are played in specific places and at specific times. Since they are often in narrative backgrounds, they often take simplistic, arcade-like designs; if they take a more present role in narratives, they tend to offer a Dällenbachian mirroring to the world and its characters, but their ever-present position in the background means

that characters rarely acknowledge them. As such, world-reflexive videogames are mostly there as analytical tools for the player to understand the world through their own interpretations, rather than through character-led narrative moments, echoing Gualeni & Fassone's findings. The character-reflexive modality, by contrast, takes a more central position in the narrative, often requiring their completion for progression. While there are examples that rely on a straightforward *mise en abyme*-style mirroring of narratives and characters, they also characterise fictional characters through their mechanics and the gameplay dynamics they enable. What sets them apart from the world-reflexive modality is the explicit acknowledgment and narrative discussion of the game: characters interpret the games like in Jefferson's model of *mise en abyme* (1983). Narratively speaking, then, diegetic videogames reveal elements about fictional worlds or characters through metanarrative understandings of the contexts the contained games exist in, or the characters' interpretation of those contained games.

Videogames as framing devices, on the other hand, change the relationship of the videogame within the videogame. Rather than having a real game that contains a fictional game, it is real games that are contained by fictional games. These games evoke their own fictionality and artificiality to distance the player from the act of playing. In doing so, players are able to be more critical about the actions they are taking in the game and the contexts and forms in which those actions take place: the games serve as mirrors to their forms and to their players. Their form-reflexive modality is mostly reserved for videogames that use specific fictional videogames as their framing devices, typically used to establish these videogames' settings. Since these narratives take place within videogames, there is an assumption that the world and its characters will behave with the knowledge that they are playing a game. These games tend to focus on the social interactions and social forms enabled by the specific genre or type of videogame being imitated. By aiming to replicate or describe the constraints and affordances of the forms they mimic, they reveal something about those forms. The player-reflexive modality, in direct contrast, does not use fictional games as framing devices. Rather, it uses the logic of videogames, as both designed games and programmed software, as its container. They are often self-aware of this framing, reaching through their initial suspensions of disbelief to turn the player into an explicit character in the fiction. These games explicitly separate the player character from the player, shortening the distance between the player and the game and, as a result, allowing the player to think about their own role as 'the player' critically. This critical approach then recontextualises the player's actions

in the games whose form is being mimicked. The end result across both modalities is a metanarrative engagement where the player is invited to think about the game's form, its boundaries, affordances, and constraints, as well as recontextualise both forms and player behaviour.

Embedded in both categories and in their modalities is, of course, a question of representation: by choosing to depict videogames in some way, these titles are putting forth their own understandings of videogames. In depicting these understandings, they end up making arguments for how videogames should be played and understood. They are descriptive and prescriptive. In this way, analysing any of the categories of videogames within videogames can yield productive results not just in better understandings of games that use the device, but in better understandings of how videogames are understood within videogames.

It is worth pointing out, however, that while these findings have been productive, they have been constrained by the limits of the Master's thesis. While it would have been beneficial to be able to write more about the specific case analyses, word limits meant analyses had to be short and to the point. It would have been possible to write at length on a single case study per modality in an attempt to exhaust the analytical possibilities of four games, but it was necessary to have a breadth of case studies for every modality to better answer the main research question. One or two examples would have been too limiting, and three examples elucidate the modalities while creating a clearer idea of what other types of games could exist within it. The shortcoming of this approach is a less intensive focus on every game and, as a result, not enough of a focus on the specificities of the device. On a similar note, the chosen modalities were also limited by the constraints of the Master's thesis. The modalities were chosen as being representative of the different uses of the form, but it is worth noting that other modalities exist—like a gameplay-reflexive modality under diegetic videogames, for example. This want for modalities also points to a larger problem with my analyses: since *mise en abyme* is primarily a narrative device, I have mostly approached contained videogames from a narrative perspective, only touching on gameplay when it was absolutely necessary. There are not enough words available to me in the Master's thesis to properly touch on all topics, of course, but it is a point of contention that could be perfected in future work.

Looking forward, the work I have done for this thesis opens up possibilities to expand on the shortcomings of the text in more focused essays. While a significant amount of work has been done by Gualeni & Fassone (2023) and Seiwald (2019) analysing and studying what I have called diegetic videogames, there are currently very few texts dealing with videogames as a framing device. While there are analyses of specific games, the idea as a whole does not seem to have been explored and, thus, presents a fruitful avenue for future research. As a whole, however, I think I have done work that should provide myself and others models by which to understand these videogames within videogames in ways that allow for further analyses. So, having done analyses of how the device works on a formal and narrative level, I hope to be able to use these findings as starting points towards more comprehensive analyses of the device and its uses in games.

REFERENCES

Crawford, D. (Version 1, 2021). *My Older Sister Left The Computer So I Got On & Found Myself Trying To Coordinate A Raid In A Game & I Don't Play MMO's* [Microsoft Windows]. Digital game developed by CannibalInteractive and published by CannibalInteractive.

Dällenbach, L. (1989). *The Mirror in the Text* (J. Whiteley & E. Hughes, Trans.). The University of Chicago Press. (Original work published 1977).

Future Cat LLC. (December 6 2022 build, 2016). *OneShot* [Microsoft Windows]. Digital game developed by Eliza Velasquez, Casey Gu [Nightmargin], and Michael Shirt and published by Komodo.

Gualeni, S. & Fassone, R. (2023). *Fictional games: A Philosophy of Worldbuilding and Imaginary Play*. Bloomsbury Publishing Plc.

hako life. (Version 1.2.00, 2020). *UNREAL LIFE* [Nintendo Switch]. Digital game directed by hako life and published by room6.

Hughes, S. (Version 3.8, 2021). *Agony of a Dying MMO* [Microsoft Windows]. Digital game directed by Salem Hughes and published by Salem Hughes.

Jefferson, A. (1983). *Mise en abyme* and the Prophetic in Narrative. *Style, 17*(2), 196-208. http://www.jstor.org/stable/42945467.

Kryukov, N. (Version 1.0, 2020). *Milk inside a bag of milk inside a bag of milk* [Microsoft Windows]. Digital game developed by Nikita Kryukov and published by Nikita Kaf Publishing.

Levine, C. (2015). *Forms: Whole, Rhythm, Hierarchy, Network*. Princeton University Press. https://doi.org/10.23943/princeton/9780691160627.001.0001.

OMOCAT, LLC. (Version 1.0.8, 2020). *OMORI* [Microsoft Windows]. Digital game directed by OMOCAT and published by OMOCAT, LLC.

Pixpil. (Version 1.1.5, 2021). *Eastward* [Nintendo Switch]. Digital game directed by Tommo Zhou and published by Chucklefish.

Radical Fish Games. (Version 1.0.18, 2020) [2018]. *CrossCode* [Nintendo Switch]. Digital game directed by Felix Klein and published by Deck 13.

Salvato, D. (Version 1.1.1, 2017). *Doki Doki Literature Club!* [Microsoft Windows]. Digital game developed by Team Salvato and published by Team Salvato.

Seiwald, R. (2019). Games Within Games: The Two (or More) Fictional Levels of Video Games. In N. Zagalo, A. I. Veloso, L. Costa, & Ó. Mealha (Eds.), *Communications in Computer and Information Science: Videogame Sciences and Arts, 11th International Conference, VJ 2019*, 18-31. Springer. https://doi.org/10.1007/978-3-030-37983-4_2.

Spike Chunsoft. (Version 1.0.1, 2021) [2012]. *Danganronpa 2: Goodbye Despair Anniversary Edition* [Nintendo Switch]. Digital game directed by Takayuki Sugawara and published by Spike Chunsoft, Inc.

Tendershoot. (Version 1.0.4, 2020) [2019]. *Hypnospace Outlaw* [Nintendo Switch]. Digital game designed by Jay Tholen and published by No More Robots.

ThinkingStars. (Version 1.05.05, 2022). *ANNO: Mutationem* [Nintendo Switch]. Digital game produced by Zhang Pingwen & Zhao YuXiang and published by Lightning Games.

Waugh, P. (1984). *Metafiction: The Theory and Practice of Self-Conscious Fiction*. Taylor & Francis Group.