The Reading Game: An Analysis of Digital Text Through the Lens of Visual Novels
Vugs, Joris

The Reading Game

An Analysis of Digital Text Through the Lens of Visual Novels

MA Thesis

Joris Vugs

Thesis MA Book and Digital Media Studies

Name: Joris Vugs
Student number: S1506471
Date: 21 February 2022
Wordcount: 21824
First reader: Dr. F.E.W. Praal
Second Reader: Dr. A.A.A. Mol

Table of Contents

Introduction

Reading is becoming an increasingly digital affair. Today, most of our daily reading is done either through computer screens or on smartphones.[1] Our contemporary reading world forms a stark contrast with that of the twentieth century, which was still dominated by the printed word. This shift from paper to screen, aptly dubbed the 'digital turn', has been a great centre of attention for textual scholars. It has allowed us to reflect upon text formatting, storage, authorship and much more. Hyperlinks challenge the notion of a linear text, as the reader makes their own way from one short text segment to the next. The online hosting of text means that webpages can change or vanish overnight, making their stored texts much more volatile than the printed book (highlighting the permanence of print), and through the accessibility of the computer and the internet, now everyone can make their ideas known to the world.[2]

While some enthusiastically embrace the new digital era, others voice concerns over what the long-term effects might be on our reading habits and abilities.[3] It has been found that we take information from a screen less seriously than that on paper, and increased computer and smartphone use might lead to shorter attention-spans and reduced information retention.[4] Some scholars also fear that we might lose our ability to 'deep-read', or our ability to critically read and examine a text for its deeper notions and the thoughts of the author.[5] Special concern is raised over younger readers, as their cognitive capacities are formed surrounded by electronic, often short-form, reading. Without exposure to long-form text, will they be able to process these later in life with the same skill aged readers today can?[6]

As we try to unravel the complex web of consequences wrought by the digital turn,

---

[1] P. Delgado et al., 'Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension', *Educational Research Review, Vol. 25* (November 2018), pp. 23-28 (p. 23).

[2] A. van der Weel, *Changing our Textual Minds* (Manchester: Manchester University Press, 2011), pp. 142-222.

[3] A. Mangen and A. van der Weel, 'The evolution of reading in the age of digitisation: an integrative framework for reading research', *Literacy,* 50:3 (September 2016), pp. 116-124; S. Birkerts, *The Gutenberg Elegies: The Fate of Reading in an Electronic Age* (New York: Ballantine Books, 1994) pp. 3-7.

[4] A. Mangen, B.R. Walgermo, K. Brønnick, 'Reading linear texts on paper versus computer screen: Effects on reading comprehension', *International Journal of Educational Research*, 58 (2013), pp. 61-68.

[5] N.S. Baron, *Words Onscreen: The Fate of Reading in a Digital World* (New York: Oxford University Press, 2015), pp. 230-231; Mangen and Van der Weel, 'The evolution of reading', p. 119;

[6] A. Mangen, 'The digitisation of narrative reading: Theoretical considerations and empirical evidence', in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 91-107 (pp. 91-92).

the comparison is often made between our new forms of media and printed text. This has proven illuminating in regards to how we approach the printed word. But in making the comparison we juxtapose print to digital while neither (and especially not the latter) are homogenic. Reading a Wikipedia article on your smartphone varies greatly from reading a thriller on your e-reader, cognitively and otherwise. Browsing online fora or reading a research PDF on your tablet are again different expressions, yet all are considered reading.[7]

Within this wide variety of devices and formats in which reading takes place, one of the lesser researched digital media are videogames. Videogames and reading have long held a strained relationship. Videogames have often been partially blamed for the declining rate of youthly readers (along with other new media).[8] More recently, there seems to be a shift in attitude towards videogames. Instead of demonizing them, they are actively used to get gamers interested in reading with so-called 'readification' projects. A pilot held by the Dutch Leescoalitie tied in short-stories with game developer Ubisoft's historical game *Assassin's Creed: Valhalla*. While the Leescoalitie was very enthusiastic about the results, reception by others has been more critical.[9]

While these initiatives tie gaming into reading, they still posit gaming and reading as separate activities. The Leescoalitie tries to get people interested in their short stories by tying them in with the videogame narratively, but they are not asking people to read in the game itself. At first glance this separation seems self-explanatory; videogames are often action-packed, cinematographic expressions of entertainment. While there is some text on screen, one could hardly call the usual blockbuster releases such as *Assassin's Creed* or *Call of Duty* proper reading experiences. But videogames are a heterogenic form of media, with many taking on text-based formats. In fact, some of the medium's earliest commercial successes were even completely text-based, such as *Colossal Cave Adventure* or its spiritual

---

[7] A. Mangen, 'Digitisation and Reading: What Do We Know, and What Do We Need to Know More About?', in *TXT 2020: Diving into Digital*, ed. by H. Schöb et al. (Leiden: Brill, 2020), pp. 94-102 (pp. 95-96).

[8] Birkerts, *The Gutenberg Elegies,* p. 5; J. Alberti, 'The Game of Reading and Writing: How Video Games Reframe Our Understanding of Literacy', *Computers and Composition,* 25 (2008) pp. 258-269, p. 264.

[9] E. van der Aa, 'Onderzoek: Games zetten jongeren aan tot lezen', *Algemeen Dagblad,* 24 September 2021. <https://www.ad.nl/gezin/onderzoek-games-zetten-jongeren-aan-tot-lezen~a0cfa927/> (17 January 2022); C. Peppelenbos, 'Slechts 29% van de jongeren leest een verhaal bij Readification, CPNB juicht', *Tzum,* 24 September 2021. <https://www.tzum.info/2021/09/nieuws-slechts-29-van-de-jongeren-leest-een-verhaal-uit-bij-readification-cpnb-juicht/?highlight=readification> (17 January 2022).

successor *Zork*.[10] There have similarly been a great variety of videogames developed in recent years, of which the primary form of expression was through text. Examples include *80 Days* — a gamified adaption of Jules Verne's novel *Around the World in Eighty Days* — and *Emily is Away*.[11] Additionally, there exists a fast-growing videogame genre, the 'visual novel', that is similarly based around text. This would imply that there is indeed a wide variety of videogames in which reading plays a large or even dominant role.

This thesis departs from the hypothesis that certain videogames provide reading experiences similar to other forms of digital text, while the environment in which they do so is unique to the medium. By studying these works this thesis intends to show that these expressions of digital text are of interest to the text-researcher; on the one hand because they are reading experiences, shared by millions of (young) people, and on the other because they can put our currently held notions about digital reading in a wider frame of context. Videogames are a large and diverse medium, and so to keep things concise and approachable this introductory foray into their reading-environment will limit itself to one genre: the visual novel. This genre was chosen because of its inherently text-based nature and its ever increasing popularity among readers.

The hypothesis that visual novels are unique, textual reading experiences leads to the following three sub questions:

- Can the playing of visual novels be construed as reading?
- If playing visual novels can be seen as reading, why are they not part of the academic discourse on digital reading?
- If visual novels were to be included in the academic discourse, what would that mean for our currently held notions about digital text?

To answer these three questions, the thesis has been split up into several chapters. The first two of these intend to give an answer to the first sub question. Chapter one will deconstruct what a visual novel is, in order to show whether or not the playing of one can be construed as reading. As illustrated above, not all reading is done in the same way. Chapter two will therefore delve into the topic of reading itself and its relation with the visual novel, to

---

[10] W. Crowther and D. Woods, *Colossal Cave Adventure* (1977); C. Fernández-Vara, 'Adventure', in *The Routledge Companion to Video Game Studies*, ed. by M.J.P. Wolf and B. Perron (New York: Routledge, 2014) pp. 258-266; Infocom, *Zork* (Personal Software and Infocom, 1980).
[11] Inkle, *80 Days* (Inkle, 2015); K. Seeley, *Emily is Away* (Kyle Seeley, 2015).

display what type of reading is done when engaging with a visual novel. The second sub question will be answered in chapter three, where a historical analysis of the visual novel and text-based games in general is given. Chapters four and five are written with the last sub question in mind. Chapter four will list the salient properties of the visual novel and contrast them with digital media in general. This approach is borrowed from Adriaan van der Weel's conceptualisation of the salient properties of digital text, as given in his work *Changing our Textual Minds*.[12] In chapter five three case studies will be presented, namely *Phoenix Wright: Ace Attorney* (2006)*, Danganronpa Trigger Happy Havoc* (2014) and *Zero Escape: Virtue's Last Reward* (2012), to illustrate how the salient properties of chapter four and other conceptual ways to think about digital text apply to practical examples of visual novels.[13]

Videogames have held a large share of the entertainment market for over two decades now, and it seems they are here to stay. By examining the visual novel from a reading perspective, this thesis intends to shed light on this hitherto scarcely studied reading form. In doing so, we can broaden our understanding of both reading in the twenty-first century and the way different expressions of digital text have different effects on the way they are read.

---

[12] Van der Weel, *Changing our textual minds*, pp. 142-192.
[13] Capcom Production Studio 4, *Phoenix Wright: Ace Attorney* (Capcom, 2006); Spike*, Danganronpa: Trigger Happy Havoc* (NIS America, 2014); Chunsoft, *Virtue's Last Reward* (Aksys Games, 23 October 2012).

1 - What Is a Visual Novel?

The visual novel genre might not be familiar territory for everyone and even when it is, opinions can differ on what exactly constitutes a visual novel. It is the nature of videogames that new titles differentiate themselves from their predecessors by offering either new gameplay mechanics or by combining existing ones in new configurations, making it difficult to strictly define genres.[14] Even so, it would be prudent to establish some form of a definition in order to make clear what is meant with a visual novel within the confines of this thesis.

While there are no extensive writings on the definition of a visual novel, there are some developers and researchers that have weighed in on the topic. In his 2013 Game Developer Conference talk, visual novel developer Kotaro Uchikoshi preliminarily defined a visual novel as 'a text-based videogame featuring a narrative, using graphics and sound'.[15] As Uchikoshi went on, the porous boundaries of videogame genres became immediately apparent when he introduced the game *Real Sound: Kaze no Regret* (1997).[16] That game featured no visuals but only sound, being more akin to an audiobook, but according to Uchikoshi was still a visual novel. For Uchikoshi, the essence of a visual novel lies in its emphasis on narrative and the interactivity the player is offered with that narrative.[17]

In their text on the educational potential of visual novels, Kristine Øygardslia and her co-authors define visual novels as

> narratively driven experiences, consisting of mainly text, backgrounds and dialogue boxes with character sprites (...) and a branching narrative with multiple endings, based on the player's choices.[18]

Narrative and interactivity is once again emphasized, paired with the inclusion of graphics as well as a prominent place for the textual presentation. Absent in their definition is sound, but all the examples utilised throughout the paper are games that include music, sound

---

[14] G.Z. Kiss, 'Iteration and Procedurality in Game Studies', in *Cultural Perspectives of Video Games: From Designer to Player*, ed. by A.L. Brackin and N. Guyot (Brill 25 September 2020) pp. 81-89.

[15] K. Uchikoshi, *Visual Novels: Narrative Design in Virtue's Last Reward*, presentation at the 2018 Game Developers Conference, YouTube, 1 July 2018, <https://youtu.be/vrxz3s0L8F8> (03 January 2022).

[16] WARP Inc., *Real Sound: Kaze no Regret* (SEGA, 1997).

[17] Uchikoshi, *Visual Novels*, 7:44-14:30.

[18] K. Øygardslia, C.L. Weitze and J. Shin, 'The Educational Potential of Visual Novel Games: Principles for Design', *Replaying Japan*, 2 (2020) pp. 123-134, pp. 123-124.

effects and in some cases voice-overs.[19]

Kuo-Wei Lai and Hao-Jan Chen give a comparative definition in their study on how visual novels can assist with vocabulary learning. They state that

> visual novels include interactive, static or sprite-based visuals (...), sounds, interactivities and dialogues that offer various plot and endings based on the choices made by the player during in-game conversations.[20]

Here we again see the importance of narrative and interactivity, as well as the inclusion of graphics and sound. Lai and Chen mention the text-based nature of the genre, but seem to ascribe less value to it in their genre definition.[21]

While both Uchikoshi and Lai and Chen seem to attribute most value to narrative and interactivity, I believe the textual nature of the visual novel deserves more consideration. After all, virtually all games feature some form of narrative and many story driven games include player based decisions. What sets visual novels apart from other narratively driven games is its emphasis on text, both in presentation and prevalence, as is further emphasised by the term 'novel' in its genre descriptor. Taking these considerations into account, an amalgamated definition can be that for a game to be a visual novel it has to:

- Be text-based
- Feature a narrative
- Offer player choice
- Include graphics
- Include sound

The above lists the characteristics in hierarchical order, insofar there can be one within such a dynamic medium as videogames. The emphasis on narrative and player-choice is what sets visual novels apart from most other games, whereas the text-based nature differentiates it further from other narratively oriented games. The graphics and sound are secondary criteria that mainly aid in giving the visual novel genre its distinct feel, as will be expanded on below. While these five characteristics do not always all appear in games that are still

---

[19] Øygardslia, Weitze and Shin, 'The Educational Potential of Visual Novel Games', p. 126.
[20] K.K. Lai and H.H. Chen, 'A comparative study on the effects of a VR and PC visual novel game on vocabulary learning', *Computer Assisted Language Learning* (07 June 2021) pp. 1–34, p. 5
[21] Ibidem, pp. 5-6.

deemed visual novels, they broadly cover what makes a visual novel a visual novel and not a different kind of game. To better illustrate this list its features will be examined one by one, through the lens of an actual visual novel: *Steins;Gate*.[22] As some readers might be unfamiliar with the genre as a whole, this examination will be done by first analysing the presentational elements of text, graphics and sound, giving an understanding of how these games look and feel, before delving into the more abstract and gameplay-related concepts of narrative and player-choice.

Originally released in 2009, *Steins;Gate* follows a group of Tokyo university students as they accidentally invent a time-machine. As the game does not include game-mechanics from other genres, such as strategic battles or puzzles, it provides an ideal starting point for an introductory analysis of the visual novel genre. Figure 1 shows a typical scene of the game, featuring the textbox (A), a character portrait (B), a background (C) and additional user-interface elements (D). While presentation may differ between visual novels this is a fairly stereotypical layout for the genre.

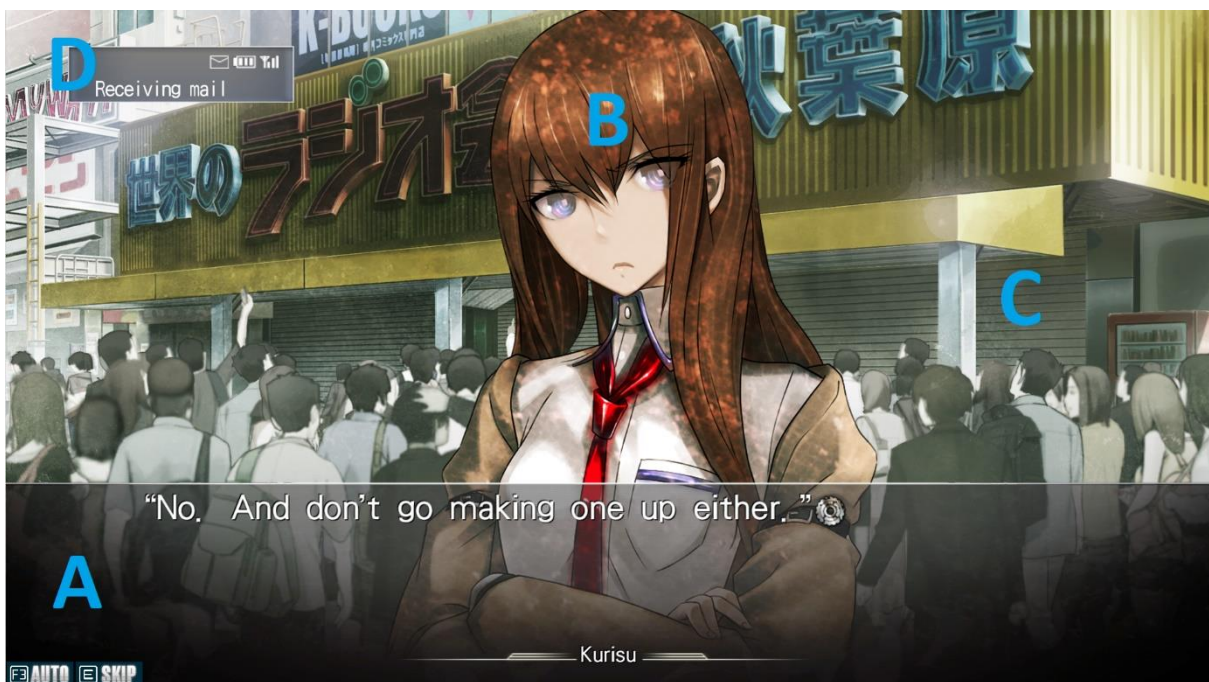Figure 1: A typical scene in Steins;Gate. Screenshot provided by author.

The textbox is where the majority of the "game" takes place. Game is in parentheses because the only input the player gives in these sections is the press of a button to let the game know they have finished reading the text on screen and would like to see the next

---

[22] 5pb and Nitroplus, *Steins;Gate* (Spike Chunsoft, 9 September 2016).

string of text. The textbox is not exclusive to dialogue such as is seen in figure 1. It is equally used for descriptions, inner monologues and other forms of text as are found in a novel. Figure 2 shows an instance of such use, where an action by the protagonist is described.
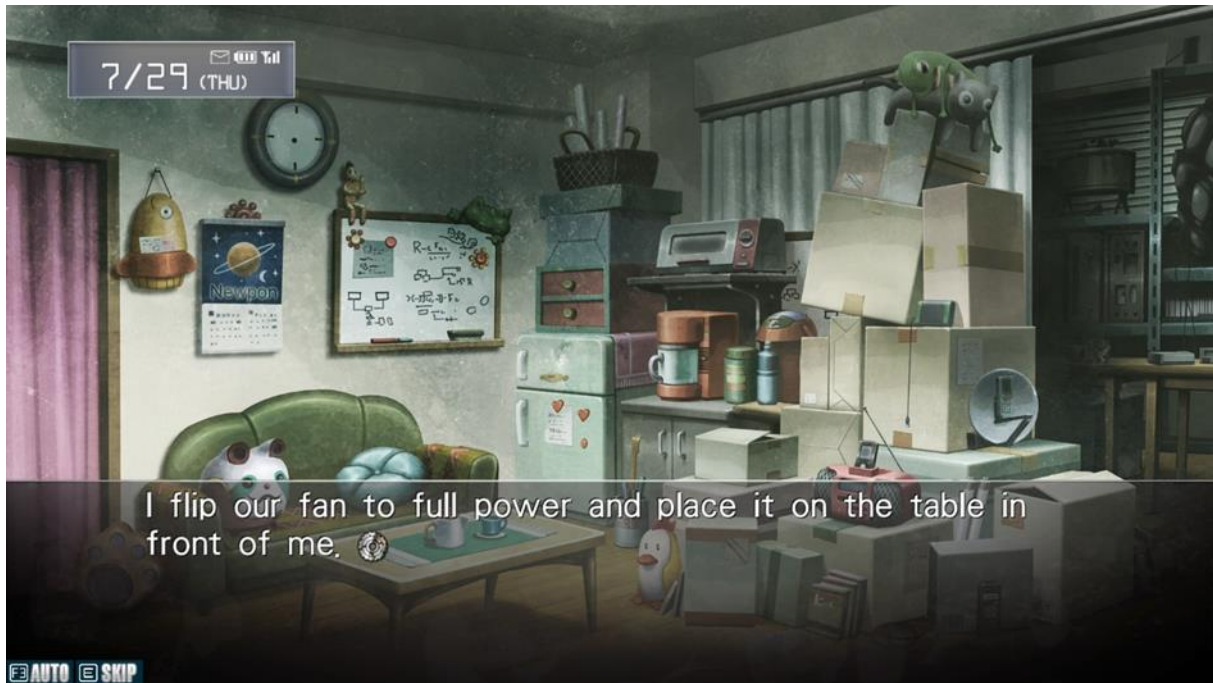

Figure 2: Descriptive text fragment in Steins;Gate. Screenshot provided by author.

As can be seen in both images the textbox is not particularly tall. In *Steins;Gate*, the maximum number of lines to be displayed at once is four. The player therefore continuously presses a button to proceed through the story. Within game design there is the concept of the 'gameplay loop'. In short, these are the repetitive actions that the player will take while playing a game. In a classical role playing game for example, the loop might exist out of (1) exploration, (2) battling monsters, (3) leveling up. A player reaching a higher level might then be allowed to explore new regions, and so the loop repeats.[23] In *Steins;Gate* and other visual novels however, the gameplay loop exists out of a much simpler cycle: (1) read text, (2) make decision. The core gameplay loop of a visual novel is therefore age-old act of reading, interspersed with the occasional decision. The majority of the time spent playing a visual novel is thus spent reading, exemplifying its status as a text based medium. Text is not part of the game, it *is* the game. This textual nature of the visual novel is a defining characteristic that sets it apart from other genres.

---

[23] E. Guardiola, 'The Gameplay Loop: a Player Activity Model for Game Design and Analysis', *ACE '16: Proceedings of the 13th International Conference on Advances in Computer Entertainment Technology* (New York: Association for Computing Machinery, 2016) pp. 1-7.

Having discussed the textbox and the genre's dependence on textuality, let's now turn our attention to the visual elements of the game. In figure 1 these are represented by the character portrait (B) and the background (C). The character portrait is a still image representing one of the visual novel's characters present in the scene. Regularly a scene will feature multiple of these at the same time. While the image itself is not animated, the game includes a variety of portraits for the same character in order to display different expressions. Additionally, a portrait might be enlarged or shrunk in order to demonstrate depth, or moved around in specific ways to simulate movement. The adding, removing or changing of a portrait is dependant on the displayed text, and thus on the player's decision to progress to the next string of text. Contrary to the character portraits, the backgrounds in *Steins;Gate* are completely static. They do not move or feature animated parts. The only change that might happen is that the background switches to an entirely new background image, if the player progresses to the next scene.

While the genre bears the moniker of visual novel, sound also plays an important part next to the text and the game's visual presentation. *Steins;Gate* features three kinds of audio, similar to many other visual novels. These are the character voices, the background music and the sound effects. All spoken dialogue is accompanied by corresponding lines by the game's voice actors. It should be noted that in the case of *Steins;Gate* these only exist in Japanese, the game's original language. Many visual novels that feature spoken voices do not provide an English audio track, however it is not uncommon for games with a larger budget to also include an English voice setting.[24] Like most videogames, *Steins;Gate* also continuously plays music in the background. These are composed in a way to match the mood of the scene being displayed, while not being obtrusive. Tracks might range from cheerful, perhaps to underscore an everyday scene, to tense and dramatic for appropriate events.[25] Lastly, many actions being described in the textbox might be accompanied by a sound effect. Someone carrying a tray might trip, prompting the game to play a clattering sound, or a gunshot might ring out of the player's speakers. By using these three forms of audio, the game's designers try to add to the player's narrative experience.

---

[24] For some examples, see Spike*, Danganronpa*; Chime Corporation, *Re:ZERO -Starting Life in Another World-The Prophecy of the Throne* (Spike Chunsoft, 2021); Chunsoft, *Virtue's Last Reward*.

[25] For audio examples of these tracks, see respectively: T. Abo, *Cycle*, audio recording, Youtube, 30 december 2011 <https://youtu.be/MQAMFihTvx0> (22 January 2022) and T. Abo, *Crossroads*, audio recording, Youtube, 27 July 2014 <https://youtu.be/Fr5bt8yYjMI> (22 January 2022).

Having examined the presentational elements of a visual novel, there remain the characteristics of narrative and player-choice. Narrative within videogames is a long debated topic within the game studies field, with no generally accepted definition of the term.[26] This is due to a dichotomy between classical interpretations of narrative and the ludologist approach proposed by some game studies scholars, where narrative can be construed through play.[27] These discussions will be touched upon more extensively in chapter 3, but in this chapter the more classical interpretation of narrative will be used, in which narrative is an account of related events, conveyed to the reader or listener. This more traditional definition is chosen due to the text-based nature of the visual novel, which makes it rely little on play-emergent narrative and therefore more akin to traditional narratives than many other videogames.

Continuing with the example of *Steins;Gate*, its narrative consists of the aforementioned premise in which a group of university students accidentally invent a time-machine, and the events that follow. Describing the plot as such can make one wonder how narrative can be a defining characteristic of the visual novel. After all, movies such as *Back to the Future* feature a similar narrative, and most other games also include narrative in some shape or form. For example, the popular creature collection/battling games *Pokémon Red* and *Blue* (1996) also feature a narrative, and can even be found to fulfill the other criteria of the visual novel as well.[28] They feature sound, graphics, player-choice and the vast majority of events is described to the player in text form. Besides walking across the map, everything happens through text; from selecting your next move and what it does, to what items you pick up and why a tree is blocking your path, all is told to the player through the in-game message box.

While it can be argued the Pokémon games meet all the criteria for being a visual novel, most players would be hesitant to describe the games as such due to the fact that reading its text is not necessary for experiencing the game. The games are completely playable without any reading comprehension from the player. All a player needs to progress is knowing that pressing a certain option deals damage and which way to walk to move

---

[26] H. Koenitz, 'Narrative in Video Games', in *Encyclopedia of Computer Graphics and Games*, ed. by N. Lee (Springer, 2018) pp. 1-9 <https://doi.org/10.1007/978-3-319-08234-9_154-1>.

[27] Ibidem, pp. 2-5.

[28] Game Freak, *Pokémon Red Version* (Nintendo, 27 February 1996); Game Freak, *Pokémon Blue Version* (Nintendo, 27 February 1996).

forward. There is of course some part of the experience lost by not reading or comprehending the text, but it is in no ways a requirement to enjoy the game. What this alludes to is the difference between text as *narrative* and text as *commentary*. Commentary textual elements reflect on the way a game is played and information about the game's mechanics, like the battle information in *Pokémon Red* and *Blue*. Narrative text on the other hand relates the game's story to the player, such as we have seen above with *Steins;Gate*. Therefore for a game to be deemed a visual novel it does not only need to be text-based and feature a narrative, these criteria need to be a central part of the experience. In a visual novel, narrative is not merely the context for the gameplay, it is an integral part of the experience and the primary facet being enjoyed by the player-reader. Without comprehension of the narrative, a visual novel cannot make sense.

That textual narrative is front and centre with the visual novel is exemplified when we take a look at visual novels that feature gameplay elements from other genres. Having other genre elements does not exclude a game from being a visual novel, but it can make the terminology slightly confusing. It is however the nature of the medium that new games differentiate themselves from their predecessors by offering either new gameplay mechanics, or by combining existing ones in new configurations.[29] An example of a visual novel that mixes in elements from a different genre is 2017's *Utawarerumono: Mask of Deception*.[30] The majority of playtime is spent reading text that presents the game's narrative, accompanied by sound, visuals and featuring the occasional player choice (figure 3).

---

[29] Kiss, 'Iteration and Procedurality', pp. 81-89.
[30] Aquaplus, *Utawarerumono: Mask of Deception* (Deep Silver, 23 May 2017).

Figure 4: Scene from Utawarerumono: Mask of Deception. Screenshot provided by author.

Utawarerumono however also features grid-based strategy gameplay sections. In these sections the player moves their units across a map divided in squares, attempting to outmanoeuvre the game's AI and defeat all the enemy units (figure 4). Even though the game features these tactical battles, the visual novel segments are what players spent the most time engaging with. Furthermore, the game features a toggleable difficulty option that makes the battles trivially easy, specifically designed for players that just want to enjoy the story.

Figure 3: Battle section from Utawarerumono: Mask of Deception. Screenshot provided by author.

A foil for *Utawarerumono* can be found in *Fire Emblem: Three Houses* (2019).[31] The game features a narrative that is presented in a way that meets all the criteria for a visual novel (figure 5). However, the focus of the game is primarily on its tactical battles. *Three Houses* is at its core a strategy game that can still be enjoyed without paying attention to its story . This is made clear by the developer by making the narrative segments skippable, but not the battles.

Figure 5: Narrative scene from Fire Emblem: Three Houses. Screenshot provided by author.

Furthermore the game does not offer a lower difficulty setting suited for players that just want to read through the story. It only allows for increasing the difficulty if players want a harder tactical challenge. While *Three Houses* thus features elements from the visual novel genre, it cannot be deemed to be the kind of text-driven, narrative game that we refer to here when discussing the term visual novel.

Having discussed all other traits of the visual novel, there remains the facet of player choice. In most visual novels, the player is regularly presented with a set of options to choose from, the effect of which ranges from slightly different dialogue, to changing the outcome of the story altogether. In this aspect *Steins;Gate* is no different, as it often presents the player with story effecting choices like the one seen in figure 6.

---

[31] Intelligent Systems and Koei Tecmo, *Fire Emblem: Three Houses* (Nintendo, July 26 2019).
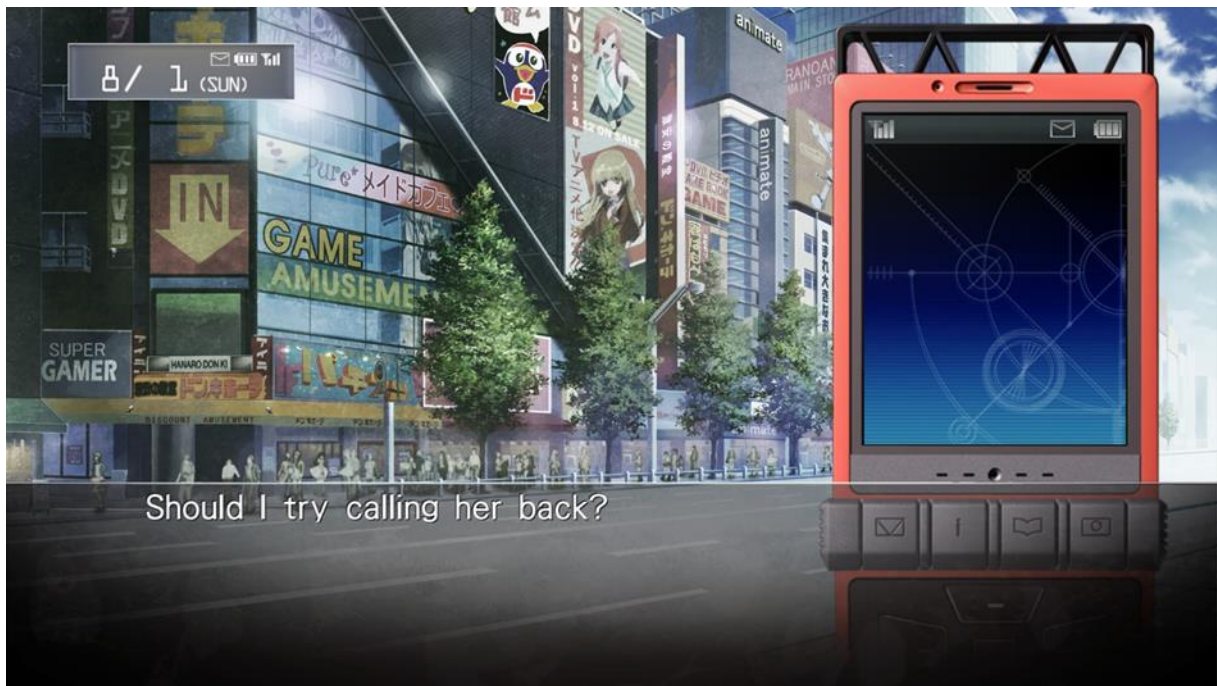
Figure 6: choice presentation in Steins;Gate. Choices are inputted by making selections on the phone, in this case the player-reader would select the relevant contact and press call. Screenshot provided by author.

The above choice results in one of two different scenes playing out in the second chapter of the game, but the story itself is not inherently altered. More impactful are the choices at the end of later chapters, which puts the player on the path to one of four different endings. Additionally the game features a hidden 'true' ending, which can only be achieved if the player made certain choices at specific points throughout the whole game. This feature is not exclusive to *Steins;Gate* either, as many visual novels contain hidden story-branches for players to find. This interactivity is defining for the visual novel, in that it differentiates the genre from other narrative media such as traditional books or film, where the viewer is only passively engaging with the work.

In conclusion, for a game to be regarded as a visual novel it has to feature a narrative and player-choice, be text-based and include sound and visuals. Within these criteria, the text-based narrative has to be the primary vehicle through which the reader engages with the game. While a game can feature other game-genre mechanics and still be a visual novel, the visual novel segments cannot be optional to the experience if the game is to be discussed as a visual novel within this thesis.

2 - On the Definition of Reading

Throughout the introduction the importance of reading has been emphasized, but what exactly is meant with that term within the context of this thesis? Firstly, there exist a narrow and a broad conception of the term reading. In the narrow use of the term, reading is exclusively meant for the decoding of written text. The broad understanding on the other hand, includes the reader's engagement with other modalities such as sound, images, animation, hyper-links and other interactive elements.[32] Within this thesis the narrow use of reading will be used, as to avoid confusion when discussing the other modalities of the visual novel later on and to provide a clear distinction between the reading of the visual novel's text and its other attributes.

When discussing the reading of a text one can also discern different ways of engaging with a text. Textual scholar Adriaan van der Weel identifies three main different methods, namely:[33]

- Skim reading, in which the reader leaves through the text looking for key words or phrases, reading only parts of the text. Examples include scanning through news articles or examining a book in the bookstore to see if it's worth purchasing.

- Immersive reading, in which the reader reads the complete text but is not constantly thinking about the text critically, allowing themselves to be mentally immersed in the work. A prime example includes the reading of a thriller.

- Deep reading, in which a reader thoroughly reads and analyses the text, engaging in a critical way with the work before them and trying to comprehend the deeper meanings behind a text. One might apply this reading style when reading a literary classic or a scientific text.

These three methods of reading do not stand completely separate from one another. The skim reading of a book in the bookstore might be followed by the immersive reading of it once it has been brought home.[34]

Studies such as the OECD PISA report have shown that reading comprehension and

---

[32] Mangen, 'Digitisation and Reading', p. 95.

[33] R. Hisgen and A. Van der Weel, *De Lezende Mens: De betekenis van het boek voor ons bestaan* (Amsterdam: Atlas Contact, 2022) pp. 18-20. For a similar, yet two pronged, approach, see: Baron, *Words on Screen*, pp. 21-24.

[34] Hisgen and Van der Weel, *De Lezende Mens*, pp. 18-20.

the amount of hours spent on leisure reading are both on a downward trajectory, especially among children and young-adults.[35] When discussing these figures it is often the lessened ability to deep-read that is being lamented by scholars, especially when regarding literary works, and with good reason: deep-reading has been linked to an increase in our analytical and critical prowess, our sense of logic, our vocabulary and our attention-span.[36] Even so, deep-reading is not a skill that is acquired easily or without practice. A child has to learn to walk before they can run and in order to critically engage with a text, a reader first has to develop their general reading abilities.[37] That trying to skip this learning curve not only makes it hard to deep-read texts but also hampers the enjoyment of reading, can perhaps best be illustrated in the deep resentment students often display to the reading they are assigned to do in secondary school. They are asked to deeply analyse the text and its themes, when often they are still fledgling readers who have difficulty diving into a text for an immersive reading session.[38] If a goal of reading research is to find better ways to have children and young-adults develop their reading skills, especially in an evermore digitizing media landscape, it is prudent to divert some of our attention to immersive reading practices.

Videogames are regularly mentioned as a form of media that takes up time that people might otherwise have spent reading. One argument that this thesis wants to make is that a subsection of videogames, text-driven games and specifically the visual novel genre, are instead actually expressions of reading themselves. The merits for this will be expanded on throughout the thesis, but presuming for now that these text-driven games are indeed examples of reading, as what kind of reading would they qualify? Due to the nature of the medium, skim-reading is inherently difficult as games do not usually allow you to flick from one section to the next, as one might do with a paper book (as we will return to in chapter four). Text-driven games are usually works of fiction featuring a narrative. While many raise deeper themes that invite critical analysis and potential deep-reading, in most cases text-

---

[35] J. Jerrim and G. Moss, 'The link between fiction and teenagers' reading skills: International evidence from the OECD PISA study, *British Educational Research Journal*, 45(1) (February 2019) pp. 181-200, pp. 181-182.

[36] M. Wolf, *Reader come home* (New York: Harper, 2019) pp. 35-68.

[37] K. Douglas et al., 'Building reading resilience: re-thinking reading for the literary studies classroom', *Higher Education Research & Development*, 35:2 (2016) pp. 254-266, pp. 254-264.

[38] S.S. Pak and A.J. Weseley, 'The Effect of Mandatory Reading Logs on Children's Motivation to Read', *Journal of Research in Education,* 22:1 (Spring 2012) pp. 251-265; Hisgen and Van der Weel, *De Lezende Mens,* pp. 165-166.

driven games will be read in an immersive fashion.

If text-driven games are primarily experienced as immersive reading, the term requires some closer scrutiny. It has earlier been partly defined as 'mentally submerging' within a text, but what exactly does this mean? Additionally, so far the assumption has been that because both traditional texts and text-driven games are about reading, we can use the terms relating to reading interchangeably for both media. Furthermore, when talking about immersion in a work, textual and game researchers both use the same term, but the interpretation might be different between these fields of study. These issues warrant an extensive look at the term 'immersion', and an explanation on how it will be applied going forward in this thesis.

A brief, clear-cut definition on immersion is difficult to find within the scholarly debate. Discussing immersion within a literary context, Anderson and Iverson argue that the core of immersion is that:

> 'the mutual enactment of narrative by reader and reader by narrative is complementary to understandings of cognition as distributed across brain, body, and world, which includes by extension story-worlds, which add to the numerous virtual coordinates through which we more generally orient ourselves and enact our worlds.'[39]

They emphasize the give and take of the reading experience, in which the reader's mind acts on past experiences to imagine the scenario described by the text, while the text at the same time creates new memories or insights about such scenarios.[40] In this, the essence of immersion is the, perhaps unconscious, transposition to another world to reflect on our own, and vice versa.

Jacobs and Lüdtke take a psychological approach to immersion when reading fiction. They argue that for immersion to take place, four elements need to be in place.[41] Firstly, the reader needs to not only be familiar with the act of reading, but also with the textual world they are engaging with. The less the reader can relate to the material, they argue, the more

---

[39] M. Anderson and S. Iversen, 'Immersion and Defamiliarization: Experiencing Literature and World', *Poetics Today*, 39:3 (September 2018) pp. 569-595, pp. 578-579.
[40] Ibidem, pp. 570-579.
[41] A.M. Jacobs and J. Lüdtke, 'Immersion into narrative and poetic worlds: A neurocognitive poetics perspective', in *Narrative Absorption*, ed. by F. Hakemulder et al. (Amsterdam/Philadelphia: John Benjamins, 2017) pp. 71-78.

difficult it is for the reader to engage with the text in an immersive manner. Secondly, it requires unforced concentration by the reader. By this they mean that the reader needs to keep their attention to the work, but the reading has to be effortless so that they have the mental capacity left for their mind to lose itself in the story. Thirdly, the reader needs to be able to empathise with the text, having genuine emotions to what happens in the story. Lastly, the text needs to invoke the narrative concepts of suspense, curiosity and surprise within the reader, as they create the motivation necessary for the reader to keep on reading in the invested manner of points one, two and three.[42] While Jacobs and Lüdtke do not give an exact definition of being immersed by a text, if we read between the lines of the criteria they give it seems to be they see immersion as losing oneself in the story world.

Both Anderson and Iverson, and Jacobs and Lüdtke looked at immersion through the lens of a traditional reader. When discussing digital texts, it has been argued that immersion works at least somewhat differently. In 1997's *Hamlet on the Holodeck*, Janet Murray argued that there are differences between immersing oneself into traditional literature and digital instances of text, such as the world wide web. She likened both as submerging oneself in digital waters and going for a swim, but added that within digital fiction a large component aiding in this submersion is the interactivity of the work.[43] She proposes that to achieve proper immersion within a digital work, the reader has to be able to engage with the work themselves, preferably with a high-degree of agency.[44] In this, she separates digital textual works that translate the conventions of the printed world to the digital world, such as e-books, from digital-only textual works such as hypertext novels. This seems to betray that the distinction when it comes to immersion is not so much between digital and physical, but between how textual works are structured and what ways they offer the reader to interact with them.

Continuing on the topic of immersion in digital reading, Bell et al. summarize immersion by discerning four different types of immersion.[45] These are as follows:

---

[42] Jacobs and Lüdtke, 'Immersion into narrative', pp. 71-78.

[43] J.H. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, MA: The MIT Press, 1999) pp. 98-99.

[44] Ibidem, pp. 99-153.

[45] A. Bell et al., 'Immersion in Digital Fiction: A Cognitive, Empirical Approach', *Literary Linguistics*, 7:1 (January 2018) pp. 1-22, pp. 3-4.

- **Narrative immersion**, which is the reader's absorption into the narrative and where that might take them.
- **Spatio-temporal immersion**, which is the sense of being present in the scene being described.
- **Ludic immersion**, which is being absorbed in the interactivity of the text.
- **Social immersion**, which relates to losing oneself in the interaction with other players, be that through action or dialogue.

Bell et al. constructed this framework around an interactive wall display, featuring 3D game-like graphics, in which the player-reader walks around as an avatar together with other player-readers. They argue that because of this avatar, a representation of the player-reader within the work, they can easily transpose themselves into the narrative.[46] However many text-driven games do not feature an avatar; some adopt a narrator and others operating from a first-person view, showing the events through the protagonist's eyes but never the protagonist themselves. Because Bell et al. based their framework solely on their display, we cannot translate their four types directly to other text-driven games. Many, for example, do not feature multiplayer options negating social immersion.

Moving away from text-driven works for a moment, we can see a remarkable similarity between the above framework by Bell et al. and a framework developed for videogames in general. Game studies scholar Mata Haggis-Burridge argues that within videogames there are also four types of immersion.[47] Namely:

- **Narrative/sequential immersion**, which can be used to describe a player's compulsion to see how a sequence of events continues, typically in a narrative, but this is related to any progression, such as exploring new spaces or evolving gameplay mechanics.

- **Systems immersion,** which can be used to describe when players are deeply engaged with the mechanics, challenges, and rules of a game, and is similar to a state of 'flow'

---

[46] Bell et al., 'Immersion in Digital Fiction', pp. 6-7.
[47] M. Haggis-Burridge, 'Four categories for meaningful discussion of immersion in video games', *Published on Researchgate* (2020) pp. 1-14, p. 1.

• **Spatial immersion,** which is the sense of a player being present in, or transported to, the virtual world, and is linked to the concept of embodiment

• **Empathic/social immersion,** which describes the connection that a player may develop towards the characters (AI or human) and the social context of a game

Similar to the framework proposed by Bell et al., Haggis-Burridge's framework features narrative, spatial and social immersion, with similar descriptions for these concepts. Additionally, while using different designators both ludic immersion and systems immersion describe the player-reader getting lost in the act of playing. One key difference between the two systems is found in the category of social immersion. Whereas Bell et al. describe this as the immersion that happens through interaction with other players, Haggis-Burridge's framework has a broader definition that includes the interaction with a game's fictional characters. On a practical level, this allows us to apply Haggis-Burridge's framework on all games, whether they feature multiplayer options or not. Furthermore, it argues that within gaming the interaction between the player and the game's fictional characters is an important factor in achieving a state of immersion. As an expression of both a readable text and a videogame, we could therefore assume that this interaction is also of importance for the visual novel genre.

While text and game scholars appear to mean the same cognitive experience when using the term immersion, it has become apparent that the criteria needed to achieve that state differs per medium. I have argued that visual novels qualify as reading earlier in this chapter, but as has been displayed in the previous segment they differ from traditional expressions of written text because they apply a videogame framework to the presentation of- and interactivity with text. While all above frameworks could be applied when analysing how the visual novel stimulates immersion in its written text, the framework proposed by Haggis-Burridge appears to be the most suitable. Not only because it allows for the specific affordances of videogames, but also because it allows for the reading aspects of immersion as found in the other frameworks discussed. The visual novel genre will be held against the framework by Haggis-Burridge in chapter five, through the case studies.

3 - Historical Background

Although they are a relatively new form of media, text-based videogames have been around for quite some time now, pre-dating the web. Over the years there has been a variety of developments, both within the commercial industry and in the way academics look at the medium. While visual novels have been primarily gaining popularity in the West this past decade, analysing the history of text-based games can provide us with the necessary insight to study this genre. In the first part of this chapter the history of the text-based game in the West will be discussed, with the West here meaning North-America and Western-Europe. These areas saw the inception of text-based videogames and have remained highly influential in the videogame landscape. The second part will focus on the historical developments in Japan. As the birthplace of the visual novel genre, it can be insightful how the genre came to be and what cultural influences affected its design. Lastly this chapter will discuss how these two regions came together in the era of web 2.0 and the current gaming landscape in which the visual novel is present.

The West: 1976 to 2010

Many of the first videogames were, by technical limitation, text-based games. Displaying static text required significantly less processing power from the computer than moving and interactive pixel-based objects, such as those found in early games like *Pong.*[48] Text-based games were able to run on most of the computer systems owned at home or at universities in the nineteen-seventies and -eighties. Universally seen as the first of these titles is *Colossal Cave Adventure*, developed by programmer Will Crowther over 1975 and 1976.[49] The game has the player explore a cave rumoured to be full of riches by inputting text commands into the text-parser (figure 7).[50] The parser allowed the player-reader to enter any command they wished and while the game naturally only recognized the commands it was programmed to do, it provided players with a great variety of options.[51] This meant that the player-reader was interacting with a text in a completely new way: they were no longer

---

[48] E.J. Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore, MD: Johns Hopkins University Press, 1997) pp. 100-101; Atari, *Pong* (Atari, 1972).

[49] Crowther and Woods, *Colossal Cave Adventure* (1977); Fernández-Vara, 'Adventure', pp. 258-266.

[50] D. Ackerman, 'Explore the groundbreaking Colossal Cave Adventure, 41 years on', *Cnet,* 30 May, 2017. <https://www.cnet.com/tech/computing/a-groundbreaking-computer-game-returns-41-years-later/> 09 July 2021.

[51] N. Montfort, *Twisty Little Passages: An Approach to Interactive Fiction* (Cambridge, MA: The MIT Press, 2003) pp. vii-x.

passive observer, but instead had to become an active participant in the text if they wanted to continue reading.[52]

Figure 7: Opening screen of Colossal Cave Adventure. Via CNET.[53]

The concept of using a text-parser to let a user interact with a work of fiction was not entirely new; an earlier example exists in the form of primitive chatbot *ELIZA/DOCTOR*, programmed in 1964-1966.[54] *ELIZA/DOCTOR*, allowed the user to ask it questions or give it statements, to which the program would try to respond to. However *Colossal Cave Adventure* is the first title to couple this input function with a written story that has a beginning and an end.[55] The work set the tone for a variety of other titles that followed in its footsteps such as *Zork* (1980) and *The Hobbit* (1982).[56] These featured similar adventures narrated to the player through text, and played by typing textual commands into the parser. In the same year as *The Hobbit* was released, *Zork* developer Infocom released the game *Deadline*, noteworthy for not featuring fantasy exploration but instead being a murder-mystery game in which the player takes on the role of a detective.[57] Collectively, these types of software became known as 'interactive fiction', a moniker that illustrates both its relation

---

[52] Murray, *Hamlet on the Holodeck,* pp. 68-83.
[53] Ackerman, 'Colossal Cave Adventure'.
[54] Montfort, *Twisty Little Passages*, pp. 81-83.
[55] Ibidem, pp. 85-93.
[56] Infocom, Zork; Beam Software, *The Hobbit* (Melbourne House, 1982).
[57] Infocom, *Deadline* (Infocom, 1982); Aarseth, *Cybertext,* pp. 115-127.

with traditional, printed fiction and its discerning trait of interactivity.

Interactive fiction was followed with interest by literary scholars of the time. During the late eighties and early nineties the narrative potential of the new digital text formats was met with a certain euphoric optimism by researchers. The possibilities seemed endless and many a publication prophesised the end of narrative as we knew it.[58] Literary theory was applied to the new medium and found wanting, which opened up exciting new avenues of research for narrative scholars. Two major publications were released in 1997: *Hamlet on the Holodeck* by Janet H. Murray and *Cybertext* by Espen J. Aarseth. Both were monographs on interactive fiction, discussing what it was, how it worked and, most importantly, what it meant for fiction as a whole. Aarseth argued that what had emerged was a new concept, something he at the time dubbed 'ergodic literature'. It was not a solely passive experience according to Aarseth, but required active participation on the side of the player-reader to completely read and experience the story.[59]

Aarseth also brought up the concept of Multi-User Dungeons, or MUDs for short. Inspired by the format of interactive fiction games, MUDs were programs with a similar layout and input scheme as IF games such as *Colossal Cave Adventure*. Their discerning attribute were that these were online experiences in which multiple users could exist in the same world at the same time. Not only could players interact with the pre-existing virtual world, many servers allowed users to write and add their own content as well. The system was originally used for scenarios involving the exploration of fantasy dungeons in a similar vein to the tabletop game *Dungeons & Dragons* (hence the term 'Dungeon' in their moniker). However users soon started adopting the system for all sorts of other settings, such as space ships and tropical resorts.[60] What made MUDs unique from a textual standpoint is that users were readers and writers simultaneously. Someone could be reading lines of text written by someone else the one moment, and be writing their own addition the very next. While these actions were naturally never occurring at exactly the same time, the separation between these two activities was blurrier than it is when reading or writing a book. In this sense, MUDs illustrate a reader-author relationship we have commonly come to

---

[58] R.A. Grusin, 'What Is an Electronic Author?: Theory and the Technological Fallacy', *Configurations,* 2(3) (1994) pp. 469-483; T. Laquintano, *Mass Authorship and the Rise of Self-Publishing* (Iowa City: University of Iowa Press, 2016) p. 4.
[59] Aarseth, *Cybertext*, pp. 1-23.
[60] Ibidem, pp. 142-161.

attribute to the much later introduced web 2.0: that of two-way communication between the author of a work and its reader.[61]

This system illustrated to Aarseth and others the idea that the web would democratize authorship, and that the masses would collectively start putting forward their own texts and ideas.[62] Murray similarly gave her own view on digital text, as she described what she believed to be the four essential properties of a digital text environment. Namely that it is procedural, participatory, spatial and encyclopaedic. By this she means that, firstly, they are brought to life by the procedural power of the computer. Because the computer can execute a series of pre-programmed rules, it can provide an interactive environment. *ELIZA/DOCTOR* gives the illusion that the computer is replying, because it can apply its ruleset to every line fed to it.[63] By participatory Murray means that player-reader assumes an active part in progressing the program. The procedural nature of *ELIZA/DOCTOR* only shows because of the user's input after every line, just as *Zork* will not progress if the player-reader does not state what they want to do.[64] These two aspects make up the interactive part of the medium. With spatial, Murray refers to the navigable space of the digital world. *Zork* represents a physical world of interconnected spaces, that the player-reader navigates through.[65] Lastly, encyclopaedic refers to the computer's immense storage capability for text. Murray writes that due to this, authors have the possibility of creating massive worlds with equally extensive storylines. These last two aspects form the immersive aspect of the medium.[66] Murray's framework posits some interesting questions regarding the nature of digital text, as it assumes that because it is on a computer, it is fundamentally different in nature from printed text and that as such, it should do different things (her four requirements). This framework will be revisited in chapter five, to see how it relates to modern text-based games.

While the publications by Murray and Aarseth raised thought-provoking discussions on the nature of digital text, it was not long after their publications that cracks started to form within the scholarly community around digital text. A variety of researchers studying

---

[61] A. van der Weel, 'Appropriation: Towards a Sociotechnical History of Authorship', *Authorship,* 4(2) (2015) <https://doi.org/10.21825/aj.v4i2.1438> p. 3.
[62] Aarseth, *Cybertext*, pp. 142-161.
[63] Murray, *Hamlet on the Holodeck*, pp. 71-74.
[64] Ibidem, pp. 74-79.
[65] Ibidem, pp. 79-83.
[66] Ibidem, pp. 83-90.

games argued that these works were a uniquely new medium that should not be analysed with the existing theoretical frameworks of media and literary studies.[67] The latter two were accused of trying to 'colonise' this new field, which according to the critics should have its own theories, methods and approaches.[68] In the early two-thousands, proponents of games as a unique medium felt that in order to protect and receive acknowledgement for their new field, they needed their own game studies departments at universities. These were subsequently formed and continue to proliferate to this day.[69]

We do not see many reactionary pieces by those in the fields of media and literary studies (if they do exist, they do not appear to be available any longer). Instead, they appear to have accepted the claim staked by those who now saw themselves as game researchers instead of broader media theorists and left these works to them. When looking at the games released at the time, one can see good cause for that. Games were moving away from text-based systems rapidly. Already in 1989 *Prince of Persia* managed to display relatively fluent action-adventure gameplay in 2D graphics.[70] Not long after in 1993 followed *Doom*, generally seen as the first first-person shooter, to great acclaim, and it went on to inspire a variety of similar games.[71] When 1996 saw the successful release of 3D games like *Quake* and *Super Mario 64* it was clear to contemporaries that the future of videogames was not in text, but in increasingly better graphics to create a more immersive digital world.[72] Text-based games were thought to be dying out, only to continue as a niche genre for enthusiastic hobbyists.[73] Interactive fiction titles continued to be released but not in any commercial capacity, as most commercial developers had already shut their doors by 1992.

---

[67] M. Eskelinen, 'Toward Computer Game Studies, in *First Person: New Media as Story, Performance and Game,* ed. by N. Wardrip-Fruin and P. Harrigan (Cambridge (MA): The MIT Press, 2004) pp. 36-45.

[68] Ibidem, p. 36.

[69] J. Juul, 'The definitive history of games and stories, ludology and narratology', *The Ludologist,* 22 February, 2004. <https://www.jesperjuul.net/ludologist/2004/02/22/the-definitive-history-of-games-and-stories-ludology-and-narratology/> (09 July 2021).

[70] Broderbund, *Prince of Persia* (Broderbund, 1989); Ars Technica, 'How Prince of Persia Defeated Apple II's Memory Limitations', Youtube, 17 March 2020 <https://www.youtube.com/watch?v=sw0VfmXKq54> (09 July 2021).

[71] id Software, *Doom* (id Software, 1993); D. Arsenault, 'Video Game Genre, Evolution and Innovation', *Eludamos, Journal for Computer Game Culture,* 3(2) (2009) pp. 149-176, pp. 164-166.

[72] J.D. Ivory, 'A Brief History of Video Games', in *The Video Game Debate: unravelling the physical, social and psychological effects of digital games*, ed. by R. Kowert and T. Quandt (New York, Routledge, 2016) pp. 1-21.

[73] E. Short, 'The Past, Present and Future of Interactive Fiction', Youtube, 4 December 2016 <https://www.youtube.com/watch?v=bx5ZLGBZAWs&list=PLORIzLj-Y2kAemrf16W0fq8AISAEoL1pa&index=6> (09 July 2021).

From the perspective of the nineties, videogames had less and less to do with text, and had indeed become their own thing unrelated to traditional reading.

Japan: 1988 to 2010

While western authors of text-based games produced games virtually exclusively for (home) computers, we see a different development in Japan. Dedicated videogame consoles had been introduced worldwide in the late seventies, with machines like the Atari 2600. These were dedicated gaming systems and differed fundamentally from home computers in terms of user input: they did not feature a keyboard but instead had their users input commands through a gamepad with a limited number of buttons. Japanese developer Nintendo had released their first home entertainment system, the NES, in 1983 and its successor, the SNES, saw release a decade later in 1993.[74] While these also successfully landed in overseas areas such as the US and Europe, a certain type of game did not get localised along with their systems: the text-based visual novel.

Titles such as *Famicom Detective Club: The Missing Heir* (1988) and *YU-NO: A Girl Who Chants Love at the Bound of this World* (1996) were released for the NES and SNES respectively.[75] These works differed in numerous ways from western text-based games. Firstly, the limited amount of input options available on the NES (four buttons and a directional movement pad) meant that these games could not work with an open-ended text-parser such as featured in *Zork*. Instead, it provided players with a set number of options they could select with the directional movement pad and confirm with the A-button. On the one hand this reduced player agency, as player-readers could not try every action that came to mind, but on the other hand it did allow developers to construct a more structured narrative as they could control exactly what a player might do at any given moment.

The second way these titles differed was presentation: they did not only display text and the available commands, but also a background image of the room the player was in and a portrait of whoever the player was talking to at that moment (figure 8). Additionally, both

---

[74] Nintendo, 'Nintendo History' <https://www.nintendo.co.uk/Corporate/Nintendo-History/Nintendo-History-625945.html> 9 July 2021.

[75] Nintendo R&D1, *Famicom Tantei Kurabu Keita Koukeisha* (Nintendo, 1988); ELF Corporation, *Kono Yo no Hate de Koi o Utau Shōjo YU-NO* (ELF Corporation, 1996). In the above text the later English translation titles are included for easy legibility and findability. Titles stated in this footnote are the Romanised version of their original Japanese titles.

had background music playing and *YU-NO* also featured voice-overs for the spoken dialogue. While these titles presented the player with other stimuli than text, text was still the predominant medium for their gameplay. *YU-NO* counts over 1.3 million words (as a comparison: the *Lord of the Rings* trilogy contains a little over 450,000) and gameplay mostly consisted of reading dialogue and making choices.[76]

Figure 8: typical scene from Yu-No: A Girl Who Chants Love at the Bounds of this World. Via Youtube.[77]

The titles had a great reception in Japan, justifying sequels and inspiring many other developers to create similar works.[78] While they were originally marketed as adventure games (an already-existing genre that was also prevalent in the Western market with games such as *The Secret of Monkey Island*) their favour of text-reading over exploration gameplay resulted in a separate genre descriptor: that of the visual novel.[79]

So the text-driven game did not decline in Japan as it did in the West. In fact, its successes only grew after the nineties, as will be expanded on further down below. But their

---

[76] Gamicus, 'List of longest video game scripts'
<https://gamicus.fandom.com/wiki/List_of_longest_video_game_scripts#> (24 January 2022).
[77] はるを，[WIN98]この世の果てで恋を唄う少女YU-NO Prologue, YouTube, 2 April 2018
<https://www.youtube.com/watch?v=8XppwtUBlo4> (18 February 2022).
[78] M. Picard, 'The foundation of geemu: A brief history of early Japanese video games', *Game Studies,* 13(2) (2013).
[79] Lucasfilm Games, *The Secret of Monkey Island* (Lucasfilm Games, 1990).

extensive scripts also meant that it was virtually impossible to export these titles to the overseas market. Nintendo had localised their consoles in the West where they sold in great numbers, but they did not localise all their games. Localisation was decided on a game-by-game basis by Japanese developers, and where a platforming game like *Super Mario Bros.* (1985) required very little translating, the same was not true for games with incredibly large wordcounts such as *Famicom Detective Club*.[80] Translators were expensive, and with no guarantee that such games would be successful in the West, the sensible decision was to hold off on translating these types of games.[81] With no official releases and with the World Wide Web still in its infancy, the existence of these text-driven games remained obscure in the West throughout the eighties and nineties and into the late zeroes. Conversely, the same applies to the western interactive fiction format in Japan. Even the most commercially successful games such as *Zork* did not get a localisation. There seem to be no instances of the format ever catching on in Japan, which might also be because PC-gaming as a whole had a comparably much smaller audience in Japan. The Japanese consumer market preferred playing on consoles and continues to do so until this day.[82] The demands of the home audience and the lack of Western text-driven games being published in Japan might explain the different approach Japanese developers took to text-driven games compared to their Western counterparts.

Convergence: 2006 until present

Before the new millennium, Western and Japanese text-driven games went through parallel but different developments. By the early 2000s, Western interest in text-driven games seemed to have been a thing of the past for both consumers and textual researchers. As internationalisation progressed however, a shift occurred in localisation practices that revitalised Western interest in the text-driven format. This is observable in several ways. Firstly, the increase of localisations of Japanese visual novels. Nintendo released their handheld console the *Nintendo DS* in 2006 which was a tremendous hit among consumers,

[80] Nintendo R&D4, *Super Mario Bros.* (Nintendo, 1985).

[81] I. Sahdev, 'Siliconera Sounds Off: Why Some Visual Novels Never get Localized', *Siliconera,* 10 January 2010 <https://www.siliconera.com/siliconera-sounds-off-why-some-visual-novels-never-get-localized/> (9 July, 2021).

[82] Picard, 'The foundation of geemu'.

selling 150 million units over its lifespan.[83] The DS is noteworthy here because it featured the release of two major visual novels: *Phoenix Wright: Ace Attorney* (2006) and *999: Nine Persons, Nine Hours, Nine Doors* (2010).[84] Especially *Ace Attorney* was not just a critical but also financial success, opening the door for its sequels.[85]

While *Ace Attorney* did well, the visual novel format did not really pick up among consumers until the new decade was well underway. In 2011 Sony released their own handheld the *Playstation Vita*, a successor to the *Playstation Portable* (PSP) they had released in 2004. While the PSP had seen a couple of visual novel releases, the Vita would go on to feature almost two hundred of them.[86] Its Nintendo counterpart, the *Nintendo 3DS*, similarly saw an increase of visual novels released compared to its predecessor.[87] On personal computers, visual novels started to see official releases around 2007-2008, although these were mostly only available as downloads, with no accompanying physical release.[88] Even so, official releases on PC become more and more common from 2008 onwards. The first half of the twenty-tens saw staggered visual novel releases, with a couple of dozen per year not being uncommon. This showed that there was some sort of market for them in the West, but the visual novel genre did not take off fully until around 2014, as can be seen in the graph chart on the following page (figure 9).

---

[83] D. McFerran, 'Retrospective: The Awkward Birth of the DS, Nintendo's Most Successful System', *Nintendo Life*, 19 May, 2017. <https://www.nintendolife.com/news/2017/05/retrospective_the_awkward_birth_of_the_ds_nintendos_most_successful_system> (09 July, 2021).

[84] Capcom Production Studio 4, *Ace Attorney*; Chunsoft, *999: Nine Hours, Nine Persons, Nine Doors* (Aksys Games, 2010).

[85] Metacritic, 'Phoenix Wright: Ace Attorney' <https://www.metacritic.com/game/ds/phoenix-wright-ace-attorney> (09 July 2021); J. Ransom-Wiley, 'Phoenix Wright: still hot, still rare', *Engadget,* 21 June, 2006. <https://www.engadget.com/2006-06-21-phoenix-wright-still-hot-still-rare.html> (09 July, 2021).

[86] Based on the Visual Novel Database (vndb.org), by filtering on PlayStation Vita English releases.

[87] Ibidem, by filtering on Nintendo 3DS English releases.

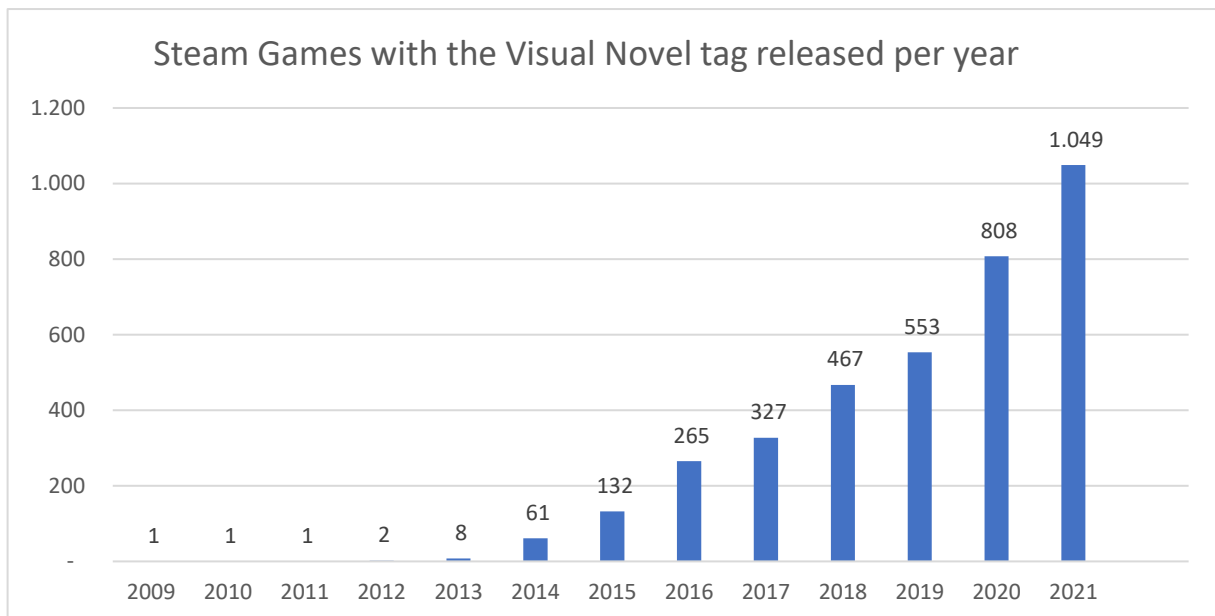[88] Ibidem, by filtering on PC English releases.

Figure 9: Steam games with the Visual Novel tag released per year. Data via SteamDB.[89]

This chart shows the number of visual novels released per year on the largest digital videogame platform, Steam.[90] Important to note is that the bars are not cumulative, but that every year has seen an increase of the number of visual novels published. While this shows impressive growth over the last seven years, it does need to be nuanced slightly. The graph is made by filtering Steam's database for the 'tag' visual novel. Tags are labels Steam users can attach to games, such as genre descriptors, i.e. 'adventure' or 'racing', but also more general terms such as 'story-rich', 'atmospheric' or 'great soundtrack'. In determining what is or is not a visual novel it was therefore necessary to rely on what Steam users thought of as a visual novel and thus deserved the tag. This might not completely line up with the definition of a visual novel as given in chapter one. Nevertheless, the approximation provided suffices in showing increased interest from the publisher's side to release more and more visual novels on Steam's platform.

Just releasing games does not mean that they are also bought, but thankfully we also have some numbers from the consumer's perspective. Steam Spy, a popular API, gathers user data from the platform, allowing us to see how many copies have been acquired (not necessarily bought, as it also includes free games and giveaways) by users in total.[91] It provides the following figures:

---

[89] Steam database, by filtering for the Visual Novel tag per year <https://steamdb.info> (9 July 2021).

[90] W. Yin-Poole, 'The Epic Games Store is getting a lot more popular, but it's still nowhere near as popular as Steam', *Eurogamer,* 28 January 2021 <https://www.eurogamer.net/articles/2021-01-28-the-epic-games-store-is-getting-a-lot-more-popular> (9 July 2021).

[91] Steam Spy, by filtering for the Visual Novel tag <https://steamspy.com/tag/Visual+Novel> (6 January 2021).

Games with this tag:	2922
Total copies owned:	133.126.000
Average price:	$8.51

The numbers do not entirely add up to the graph provided by SteamDB, this might be due to the aforementioned issue with tags and the specific algorithm SteamSpy uses to generate its data.[92] Regardless, these figures show that games with the visual novel tag are not only released in great numbers, but also that the sales keep up to warrant such increased publishing. Another interesting metric for the visual novel tag is the average rating they receive. Steam users can give a game they played a thumbs up or thumbs down, which eventually generates a percentage rating of how well a game is received. On average games on Steam receive a score of 81.25% according to Steam Spy.[93] Games with the visual novel tag do better on average, with a score of 86%.[94] While it is difficult to extrapolate any nuance from these statistics, it does make clear that on average users are positive about the experience they receive when playing a game that has the visual novel tag attached to it.

Several factors have contributed to this surge in visual novels. Firstly, from about 2005 onwards improvements in internet technology and accessibility had made it possible for consumers to purchase and download games directly from several online storefronts such as the aforementioned Steam.[95] An added benefit of this was that developers could get their game listed on the platform, and thus in the hands of consumers, without having to rely on a publisher.[96] In a comparable way to how the Web and e-books have made it possible for many aspiring authors to self-publish their works, so did this development make it possible for independent game developers to market their works to the general public.[97] This has proven beneficial to more niche genres such as visual novels, interactive fiction and other expressions of text-driven games. Games that would previously never reach store shelves now have a platform where they can be listed relatively easily, without the need for

---

[92] Steam Spy, 'About', *Steam Spy* <https://steamspy.com/about> (9 July 2021).
[93] Steam Spy, by looking at all tags <https://steamspy.com/tag/> (6 January 2021).
[94] Steam Spy, by looking at the visual novel tag <https://steamspy.com/tag/Visual+Novel> (6 January 2021).
[95] T. Baker, 'The Complete History of Indie Games', *The Indie Game Website,* 19 October 2018. <https://www.indiegamewebsite.com/2018/10/19/the-complete-history-of-indie-games/> (09 July 2021).
[96] Ibidem.
[97] M. Hviid, S. Izqueierdo-Sanchez and S. Jacques, 'From Publishers to Self-Publishing: Disruptive Effects in the Book Industry', *International Journal of Economics of Business*, 26:3 (2019) pp. 355-381, p. 358-359.

a big budget. [98]

These so called 'indie' developers released all manner of games over the years and there are a variety of interactive fiction titles amongst them. Games like the aforementioned *80 Days* (2014), *Emily is Away* (2015) and *Orwell's Animal Farm* (2020) managed to reach audiences of a size much beyond what interactive fiction had managed to do in the previous decade. [99] Especially the first two did well from a userbase perspective. *80 Days* sales are estimated to be somewhere between 200,000 and 1.5 million*, and Emily is Away* managed to get over one million unique downloads. [100] While these games are the exception and not the rule for the interactive fiction genre, they do show that interactive fiction can be successful again in the modern marketplace. In contrast with its lacking popularity in the zeroes, the interactive fiction genre is no longer only found on niche web fora but can be, and is, found by users on easily accessible storefronts.

As the visual novel genre grew in popularity, its game design also began being copied by developers situated outside of Japan. Titles such as *VA-11 Hall-A* (2016) and *Doki Doki Literature Club* (2017) apply the visual novel genre conventions, resulting in the design philosophy no longer being used exclusively by Japanese developers. [101] With the release of visual novel *Eliza* (2019) we have effectively come full-circle, as it applies the genre format to a story inspired by the aforementioned *ELIZA/DOCTOR*, one of the earliest examples of Western interactive fiction. [102] This adoption of Japanese game design principles by non-Japanese developers signals a shift towards the visual novel being a predominant expression of the text-driven videogame.

As a consequence of the decline of interactive fiction as a genre and the academic split regarding videogames, Western text and literary scholars understandably lost interest in the videogame medium in the nineties. However, due to the increased communication

---

[98] F. Parker, 'Indie Game Studies Year Eleven', *Proceedings of DiGRA 2013: DeFragging Game Studies* (2013) p. 3.

[99] Inkle, *80 Days*; Seeley, *Emily is Away*; Nerial, *Orwell's Animal Farm* (The Dairymen, 2020).

[100] Steam Database, 'Emily is Away' <https://steamdb.info/app/417860/graphs/>; Figure estimated by combining the Steam Database, '80 Days' <https://steamdb.info/app/381780/> information with figures from Apple Store, '80 Days' <https://apps.apple.com/us/app/80-days/id892812659> and the Nintendo e-shop <https://www.nintendo.nl/Games/Nintendo-Switch-download-software/80-DAYS-1636807.html#gameDetails>. Even so the estimate is incredibly broad, as none of these storefronts actively share sales data.

[101] Sukeban Games, *VA-11 Hall-A: Cyberpunk Bartender Action* (Ysbryd Games, 2016); Team Salvato, *Doki Doki Literature Club!* (Team Salvato, 2017).

[102] Zachtronics, *Eliza* (Zachtronics, 2019).

between regions and the ease of online sale facilitated by the Web 2.0, the visual novel has been able to see its introduction in the Western market, to great success. Paired with the gains made by interactive fiction through the same factors, it is fair to say that the text-based game is once again popular among readers. Scholarly interest however has lagged behind. Videogames are still the domain of game studies departments. As a form of reading with millions of active readers, it seems relevant to analyse what makes the visual novel tick and how it differs from our regular reading. A first foray will be made in the following chapter, where the inherent properties of the medium are discussed in comparison to other forms of digital text. Even so, the sizable readership of visual novels and other text-based games warrants further research into the medium. Over two decades have passed since Aarseth and Murray published their books, and analysing the intermediate developments in text-based videogames could prove to change the ways we think about digital reading.

4 - Salient Properties and Material Features of the Visual Novel

One of the lessons we have learned from comparing the reading of printed text with that of digital text is that the substrate on which you read matters.[103] Digital text has brought with it several factors intrinsic to the medium. Examples include the computer's ability to network, perform a variety of other tasks and the lossless copying of a digital text. In his book *Changing our Textual Minds* Adriaan van der Weel calls these attributes 'salient properties', or properties that come with the medium due to its design, whether we intended them or not.[104] These properties become apparent when we contrast digital text with printed text, and similarly the emergence of digital text has allowed us to realize many of the properties of print, which before then have been seen as self-evident.[105] A list of these properties of printed and digital text might look as follows:

Printed Text	Digital Text
Material and tangible	Immaterial and intangible (virtual)[106]
Fixed, Stable, Permanent	Fluid, unstable, impermanent[107]
Offline/stand-alone	Networked (hyperlinks)[108]
Text and substrate inseparable	Substrate takes any text[109]
One-way, author-reader hierarchy	Reciprocal author/reader relations, flat architecture[110]
Duo-modal	Multimodal[111]

---

[103] T. Lauterman and R. Ackerman, 'Overcoming screen inferiority in learning and calibration', *Computer in Human Behavior*, 35 (2014) pp. 455-463; Delgado et al., 'Don't throw away your printed books'; Mangen, 'Digitisation and Reading'.

[104] Van der Weel, *Changing our Textual Minds*, pp. 142-143.

[105] A. van der Weel and J. Kircz, 'The Book Unbinding', in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 7-17, pp. 8-9.

[106] Van der Weel, *Changing our Textual Minds*, pp. 145-147; Baron, *Words Onscreen,* pp. 131-156.

[107] Van der Weel, *Changing our Textual Minds*, pp. 149-150.

[108] Ibidem, pp. 147; 168-184; Baron, *Words Onscreen,* pp. 40-41; Birkerts, *The Gutenberg Elegies*, p. 122.

[109] Van der Weel, *Changing our Textual Minds*, pp. 145-147; Birkerts, *The Gutenberg Elegies*, pp. 154-158.

[110] Van der Weel, *Changing our Textual Minds*, pp. 151-152; 161-164; Baron, *Words Onscreen,* pp. 115-130.

[111] Van der Weel, *Changing our Textual Minds*, pp. 143-145; 168-169; Mangen, 'Digitisation and Reading', p. 95; Baron, *Words Onscreen,* pp. 37-38.

While the emergence of digital text made it possible to establish the inherent properties of printed text, much of the research on digital text has also been formed by our conceptual basis of print. Because print is relatively homogenous, it is tempting to contrast it directly with digital text. Digital text however, can manifest itself in a variety of ways, from the e-book to an html page and from a smartphone app to a videogame. That the perceived salient properties of digital text do not always neatly line up with a certain expression of digital text can be made clear with the following list, in which the salient properties of digital text in general are compared to how these manifest themselves in a visual novel:

Digital Text	Visual Novel
Immaterial and intangible (virtual)	Immaterial and intangible (virtual)
Fluid, unstable, impermanent	Fixed, stable, semi-permanent
Networked (hyperlinks)	Offline/stand-alone
Substrate takes any text	Substrate takes any text
Reciprocal author/reader relations, flat architecture	One-way, author-reader hierarchy
Multimodal	Multimodal
Linear	Procedural

In the above comparison it becomes clear that while some properties overlap, many others do not. Additionally, the procedural nature of the visual novel, as a videogame, contrasts with the linearity with which most other digital texts are read. This raises the question of whether the perceived salient properties of digital text are indeed inherent to the substrate, or whether they are only so in certain expressions of digital text, such as the e-book or an html-page, that are perceived as representative of the all digital text. The rest of this chapter will be spent thoroughly explaining the properties in the above model, and their effect on the user's reading experience, in order to find an answer to that question.

Materiality

From a material standpoint, a printed book consists out of sheets of paper that are impressed with ink in a specific pattern, bound together at the spine and held within two

covers of usually paper or cardboard. The book exists in the physical world and we confer the meaning of book to an object with the above characteristics.[112] An e-book, on the other hand, exists entirely in the virtual space. At its core it's made up out of ones and zeros, that the computer translates into an image on the screen we then identify as an e-book. To make the e-book appear we need more than just its physical carrier (either a memory stick, the internal memory of the device or the datacentre that houses the cloud storage it is in), we also need electricity and a compatible device with the software to run it.[113]

At first glance, videogames appear very similar to e-books. These too consist of ones and zeros to be read by a machine and then translated into the product we recognize. However, a technological observation has to be made that objects to this direct comparison. E-books are files that are read by a program. The user is required to first install a compatible program, such as Kindle, which can then read the e-book file and display it as legible, formatted text to the user. From then on it does not matter which e-book you want to read, all can be displayed if they are in a compatible file format. In contrast, a videogame is (usually) a program unto itself, being some form of an executable file. If your computer is running game Y, you cannot put in game X and play it without first having to install it on your computer. And simply because your machine has the capacity to run game Y, it does not mean it also as the capacity to run game X. The computer might have an insufficient processor or graphics processing unit, for example. This means that while both an e-book and a visual novel are expressions of digital text, they are not constructed in the same way. This will become relevant when discussing the stability of the work and their dependence on certain substrates further down.

When discussing older games, the game's physical carrier is also of importance. While virtually all games are now released digitally, in the first decades of the medium they were sold almost exclusively in physical format. The physical format differed per device and over time. For the home console market, from its inception in 1972 until the adoption of the CD-ROM format in the late nineties, these physical carriers existed out of cartridges: printed circuit boards protected by a plastic cover. What differentiates these from, for example, a digital text stored on a floppy disc, is that not every game had the same circuit board. In fact, most varied wildly. They could contain additional RAM memory, batteries to maintain a save

---

[112] Baron, *Words Onscreen,* p. 131.
[113] Van der Weel, *Changing our Textual Minds*, pp. 145-147.

state and other additional hardware. Due to this, the digital code to be read by the machine and the hardware it was carried on were inseparable. Simply the code was not enough to make it run on the intended machine and conversely, a cartridge could not be overwritten to contain a different game's code and be expected to work. A SNES cartridge of *Yuno* would only ever run *Yuno*, and only on a SNES. While the contents were still digital, and thus immaterial and intangible, these games relied on the physical manifestation of the cartridge to be read and played.

One of the consequences of the virtuality of digital text, as argued by Van der Weel, is the end of the copy. A PDF can be copied and disseminated limitlessly, without deterioration and without significant cost. These are so perfect compared to their original, that the distinction between the two is no longer relevant. [114] This, Van der Weel argues, poses a threat to the conventions of copyright. With the SNES cartridge however, that does not seem to be the case. Not only did they have significant production and dissemination costs, due to the physical carrier, it was not possible to effortlessly copy and paste the contents once the game was produced. While there definitely was a market for illegally reproduced cartridges as well as hobbyists making their own alterations to the products, they required significantly back-engineering and reproductions were often far from perfect, resulting in crashes or unfinishable games.[115] This brings to mind more the illegal book trade of early modern Europe, with its attempts at recreating official publications, than it does the illegal distribution of e-books or the way files are shared online.

In addition to illegal reproductions, official reproductions can also be problematic. In the past two decades, many older games have been reformatted to be released digitally and/or have been polished up using new game development tools and concepts for newer systems. The development of these so called re-releases can be hampered by the loss of the source code, the original code that was used to produce the game during its original development. Without it, developers often have to resort to back-engineering the game

---

[114] Van der Weel, *Changing our textual minds,* pp. 150-151.
[115] J. Conley et al., 'Use of a Game Over; Emulation and the Video Game Industry, A White Paper', *Northwestern Journal of Technology and Intellectual Property*, 2:2 (2004) pp. 4-6; Modern Vintage Gamer, 'Clever Anti Piracy on the Super Nintendo', Youtube, 20 August 2019 <https://www.youtube.com/watch?v=KLyK1FMwc8Q> (10 February 2022).

themselves, or producing the same content from scratch.[116] The results can be as equally mixed as with the illegal reproductions, leading to fans preferring the original game over the modern reproduction.[117]

All in all, the above means that for physically based games, there can indeed still be spoken of a copy, in the similar vein that term is intended when discussing physical books. For the most part, videogames have moved on to complete digital releases and physical carriers that are easier to modify, such as CD and Blu-Ray. However, the notion that videogame materiality at one point behaved differently from how it is perceived in digital text in general means that this property is not inherent to all digital text, but only to certain expressions of it.

Stability, permanence and fluidity

One point that is regularly raised when discussing digital text versus print is that a digital work is a lot less stable than its printed counterpart. This is because you cannot effortlessly change the dried ink of a printed book, while you can put your editor program to work and change the contents of a digital file.[118] In the case of digital text that is accessed online, such as a webpage, the contents might even be changed between visits, or disappear entirely.[119] Unlike a printed book that can always be accessed and will never change — at worst someone scribbles over the book's contents — digital text appears impermanent and unstable.[120] In addition, while a printed book will always have the same words in the same place, text on screen is never fixed in that position. As readers scroll, click or tap the words move, resulting in the text being spatially unstable.[121]

While this spatial instability is also present in visual novels, they behave differently when it comes to the textual stability and the permanence of its contents. In the previous segment it was stated that the visual novel differs from most other expressions of digital text because it is a program and not a file. As a program, the visual novel relies on a code base

---

[116] D. Tarason, 'Lost source code is holding up Square Enix's preservation plans', *Rock Paper Shotgun*, 13 June 2019 <https://www.rockpapershotgun.com/square-enix-digital-preservation-plans-slowed-by-lost-code> (17 February 2022).

[117] For a recent, high-profile example, see: J. Schreier, 'Blizzard Botched Warcraft III Remake After Internal Fights, Pressure Over Costs', *Bloomberg*, 22 July 2021 <https://www.bloomberg.com/news/articles/2021-07-22/inside-activision-blizzard-s-botched-warcraft-iii-reforged-game> (17 February 2022).

[118] Van der Weel, *Changing our Textual Minds*, pp. 149-150.

[119] Van der Weel, 'Behind the Screen', p. 6.

[120] Birkerts, *The Gutenberg Elegies*, pp. 154-158.

[121] Mangen, Walgermo and Brønnick, 'Reading linear texts', p. 65.

and pre-installed files to operate properly. These can in principle be modified by the user, making the visual novel less stable than a printed work. However, in order to modify the text within the game, or any other aspects of it, the editor would have to have knowledge of the way the program is coded and make their edits accordingly. If improperly edited, the game will have technical difficulties such as crashes, glitches or refusing to boot altogether. As such, most users cannot easily edit the game's text without issue. To a certain degree this is similar to more protected file formats such as the e-Pub, but the difference remains between editing a file and editing a program. In most cases, the latter will be far more complicated. Regarding its textual stability then, it appears the visual novel needs to be placed somewhere between the printed book and more editable expressions of digital text, such as a PDF. Its contents are more easily altered than the former, as a visual novel is still in essence a digital work and lacks the absolute fixity of an analogue text, but enjoys more stability than the latter due to its format as a program.

In regards to permanence, the degree to which a visual novel can be revisited depends on whether or not it is present on a physical carrier. A 1991 SNES cartridge is still accessible thirty years later and will display the same contents as it did back then, unaltered. The same goes for a game stored on a modern Blu-ray disc, provided one is not interested in the updates that can be offered through online services.[122] The same cannot be said for purely digital copies. There, a user is reliant on keeping the necessary data on their hardware, similar to a PDF-file. If the contents are deleted, the user would have to rely on the continued availability of the distributor in order to redownload the required content.

A factor that appears to be the same between visual novels and other expressions of digital media is the spatial instability of their text. When reading a paper book, a reader physically leaves through the book, working their way from page to page. It has been found that readers can remember approximately where on a page they read something, and where in the book that page is. This has been shown to increase the reader's grip on where in the book a section happened, helping them place it in the books narrative or argumentative order.[123] The same is not present in webpages or PDFs, causing readers of those texts to have more difficulty with this. Pagination is present in e-books, meaning a reader can

---

[122] These updates can include everything from minor fixes to the text or other elements, to completely new content. For some more information on how these updates work, see: A. Truelove, E. Santana de Almeida and I. Ahmed, 'We'll Fix it in Post: What Do Bug Fixes in Video Game Update Notes Tell Us?' (2021).
[123] Mangen, 'The digitisation of narrative reading', pp. 94-96.

remember roughly where on the page they read something. However, the lack of a physical book that shows the number of pages turned means they still have more difficulty finding where something happened in the book as a whole.[124]

The same is present in visual novels, perhaps even more so. As text is presented in a continuous stream of small segments, it is most likely even more difficult for readers to remember where something happened in the game, as there are no pages to refer to. This might be slightly alleviated by chapter titles or other segmentation of the game, but this is not present in all titles and still would not go a long way in remedying this issue.

Whereas the book provided a stable, long-term way to store knowledge and reflect upon it, digital texts can often be changed or have disappeared entirely by the time one returns to them.[125] It has been found that due to this instability of digital text, readers take it less seriously than its printed counterpart.[126] Because readers approach digital text less seriously, they are more likely to read only parts of the text or read them less thoroughly, resulting in reduced information retention.[127] This has been raised as one of the unintended consequences of the shift to digital text.[128] Taking the above into account however, it appears this is not so much a characteristic of digital text as a whole, but is instead inherent to digital text on the web or in formats that are easily altered. Physical carriers are still accessible years later with their contents unchanged. Additionally these contents are incredibly difficult to alter, due to the nature of the visual novel as a program. These two factors make that for physical visual novel releases, we can indeed speak of a copy more akin to the printed book. The visual novel can therefore be regarded as a fixed work of text, albeit a virtual one. Its fixity may render the visual novel less susceptible to the diminished seriousness with which readers tend to approach other digital text types; their attitude may resemble that towards books more.

---

[124] Baron, *Words Onscreen*, p. 137;

[125] Van der Weel, *Changing our Textual Minds,* pp. 149-150; p. 180.

[126] R. Ackerman and M. Goldsmith, 'Metacognitive Regulation of Text Learning: On Screen Versus on Paper', *Journal of Experimental Psychology: Applied*, 17:1 (2011) pp. 18-32, p. 29.

[127] A. van der Weel, 'Behind the Screen Looms a New Gutenberg Revolution', in *TXT 2020: Diving into Digital*, ed. by H. Schöb et al. (Leiden: Brill, 2020), pp. 1-8, p. 6; V. Clinton, 'Reading from paper compared to screens: A systematic review and meta-analysis', *Journal of Research in Reading*, 42:2 (2019) pp. 288-325, p. 318.

[128] Van der Weel, 'Behind the Screen', p. 6; Van der Weel, *Changing our Textual Minds*, pp. 179-182.

The network

Analogue texts might reference one another, but are inherently stand alone. A book contains only its own contents and if one wants to follow up on a source mentioned in the text, they will have to hunt down that specific text in their local library, if it is even available at all. A key difference in digital texts is that these can be put online and hyperlinked, allowing the reader to find what the author is referring to with the click of a button.[129] While it increases the ease with which readers can find what they are looking for, this placement of text in a network is also believed to have a myriad of downsides. These include the speed at which readers flit from one text to the next, without fully reading them, the information overload that arises from all these available sources and quality control issues.[130]

The ease with which readers switch between digital texts is present because hyperlinking enables it. Turning again to the visual novel, we see that different design choices can lead to different reading experiences. When booting a visual novel, the program usually defaults to full-screen mode. This means that the computer is only presenting the user with the game itself and no other programs. While these may be running, they are usually not able to invade the space of the visual novel, resulting in reduced distractions. This full-screen mode may be disabled, but in that case the user is making a deliberate choice to allow other programs to take up their time while play-reading through the visual novel. The visual novel program itself is not networked. If hyperlinks are included in the game (which they very rarely are, at most to a publisher's website) clicking on them will open up the user's browser, forming a very clear distinction between the two reads.

On dedicated gaming consoles, the amount of distractions is reduced even more. In the case of older machines, they can only run the game and nothing else. It is therefore impossible for a user to be interrupted in their reading because of external stimuli available on the machine. Newer consoles are capable of running other programs, such as Spotify or Youtube, but they cannot do this while running a game. If the user chooses to boot up a visual novel on such a system, these other programs are put on hold. Dedicated gaming systems therefore provide a relatively distraction-free environment, where no other content is jockeying for the reader's attention. This might mean that reading in such an environment

---

[129] Van der Weel, *Changing our Textual Minds,* p. 154; Birkerts, *The Gutenberg Elegies,* pp. 154-164.
[130] Van der Weel, *Changing our textual minds,* pp. 168-181; Clinton, 'Reading from paper compared to screens', p. 318.

increases the rate at which readers can keep their attention to the text. Networkability is thus not inherent to digital text, but merely a feature available to those writing on online platforms.

Text and substrate

In the analogue world text, the symbols we decodify as language, and substrate, the material they are written on, are inseparable. The printing press indents the paper with ink, and after drying it is impossible to separate the two.[131] With digital text the substrate, be that computer, tablet or game console, is completely separate from the text. A computer can be made to display any work at the one moment, and another at the next.[132] This has proven beneficial in terms of storage space and accessibility; you only need one machine to store virtually all your digital texts on.[133] However it also means that the physicality of the object is lost: the text can no longer be touched, leaved through or annotated. The downsides of this have already been discussed under the sections of materiality and stability, so they will not be dwelled upon here.

In regards to the relation between text and substrate, the visual novel behaves in the same way other digital expressions of text do. One game can be switched for the next, provided it is compatible with the system (this is no different than a Kindle reading only supported formats). Once a game is played, it is by no means bound to the machine and can be taken elsewhere to be played on another compatible device. Here then, might be a property inherent to all digital text, created by its reliance on a fixed screen. The display necessitates that text can be moved to be economically viable — you cannot have one screen for every one text after all — and thus in the current state of affairs, all expressions of digital text appear to conform to this notion.

Author-reader relationships

The introduction of digital text, and more specifically the introduction of Web 2.0, has brought with it a changing attitude towards authorship. During the age of print, a potential author had to find a willing publisher to distribute their work if they wanted to reach a large

---

[131] M. Kovač, 'What a book was and what remains: Thoughts about the future of trade publishing', in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 32-43, pp. 33-34.

[132] Van der Weel, *Changing our Textual Minds*, pp. 145-147.

[133] Baron, *Words Onscreen* pp. 209-210.

audience.[134] Today, any would-be novelist can simply get their work published on Amazon, in both physical and digital formats, potentially reaching massive audiences.[135] This has led to a democratisation of authorship, in which the author is no longer a distant figure of authority and everyone can become one.[136] The ease of access to the book market has also proven a sharp decline in the prices offered there with books of a dollar or less not being uncommon. While these works are produced very differently from the books published by the still-existing publishing houses, it has contributed to the public valuing digital books as less than their physical counterparts.[137]

When we turn to the visual novel, the authorship landscape is remarkably different. To produce a visual novel there are added requirements besides the writing of text in the forms of programming, game design, art direction and sound design, to name just a few. This means that in many cases a team is needed to produce these titles, often working under the employment of a studio that in turn has a deal with a publisher. When it comes to the production process of these kind of releases, the parallels are more easily drawn with the pre-internet book market or even the film industry than they are with the Amazon e-book market. Author selection happens at the door by the production team and oftentimes writers need to have some sort of existing commercial writing experience.[138]

That is not to say that the only way to write visual novels is through a position within a game development team. As mentioned previously, independent creators have made a great variety of visual novels. The earlier mentioned *VA-11 Hall-A* for example was made by a team of just two people. Similarly, *Doki Doki Literature Club*'s writing, game design and music were all done by the game's concept creator, Dan Salvato. Additionally, tools like *Visual Novel Maker* or *Ink* allow less tech-savvy writers to produce their works in a visual novel format.[139] Even so, the barrier of entry to creating and distributing a visual novel are still significantly higher than they are with e-books or blog posts.

---

[134] Laquintano, *Mass Authorship,* pp. 36-37.
[135] Ibidem, pp. 47-48; Hviid, Izquieerdo-Sanchez and Jacques, 'From Publishers to Self-Publishing', pp. 358-359.
[136] Van der Weel, 'Behind the Screen', p. 6.
[137] Ibidem.
[138] D. Gaider, 'Do you want to write video games?', *Polygon*, 15 August 2016 <https://www.polygon.com/2016/8/15/12455728/how-to-get-a-job-writing-games-maybe> (17 February 2022).
[139] Degica, 'Visual Novel Maker', <https://visualnovelmaker.com/> (11 February 2022); Inkle, 'Ink', <https://www.inklestudios.com/ink/> (11 February 2022).

Modality

Printed books allow for two modalities, namely text and images. An inherent property of digital text is that the universality of the computer allows for virtually all imaginable modalities, such as sound and video, to be present within the text as well.[140] In this, the visual novel is not inherently different. There too sound and (moving) pictures are used to add to the textual experience. One reported issue with the multi-modality of the computer is that these other modalities can distract from the textual reading.[141] For example, a news article might feature a YouTube video related to the story, but clicking on it might lead to continuing down the YouTube rabbit hole, forgetting the original text.

Where the visual novel does differ from most expressions of digital text is the way it uses these modalities. Continuing with the embedded video example, that video does not relate directly to the text being read, it merely serves to illustrate or expand on a point being made in the text. The two are not experienced simultaneously: a reader watching the video is not reading the text at the same time. That this works differently in the visual novel will be explained in the following paragraphs, where the modalities of haptic-feedback, sound and visuals (images, both still and moving) will be discussed.

It has been mentioned that there is a large variety of gaming consoles available, in addition to the computer and smartphone. Aside from internal differences that require different ways of programming the videogame, there are several outward, material differences that affect the way users play-read on these devices. Since their inception in the 1970's, home consoles have virtually always existed out of a machine, the console itself, plus an input device, commonly referred to as a controller. These controllers come in a large variety of shapes and sizes, although the last two decades has seen them converge on a more or less similar boomerang-like design. What all have in common is that they feature buttons to be pressed — a feature also prevalent in the once-prevalent arcade cabinets and all handheld devices yet released.

As mentioned in chapter three, visual novels were first and foremost designed for the videogame console market. The fact that all dedicated gaming devices work with a limited set of button presses therefore greatly shapes the way these games are designed. Instead of

---

[140] Van der Weel, *Changing our Textual Minds*, pp. 143-145; 168-169; Mangen, 'Digitisation and Reading', p. 95; Baron, *Words Onscreen,* pp. 37-38.
[141] Van der Weel, 'Behind the Screen, p. 6.

scrolling like one would do with a mouse, player-readers on these devices usually have to button-press their way through the text the author wants to present them. This has two major consequences: the first being that the text cannot be presented in one long document like the way it is on a webpage or in a PDF. Text has to be cut off at deliberate intervals, to be chosen by the designer, to allow for the player-reader's button press to trigger the next section. In practice, the choice is often made to display smaller sections of text at a time; three to four lines or a paragraph at most. This means that the player-reader is pressing a button on their controller once every couple of seconds (depending on amount of text and reading speed). This button-press additionally presents the player-reader with haptic-feedback. You feel the spring of the button slightly resisting your finger and have to apply some, albeit very light, pressure to push it down, after which it veers up again. These short text sections combined with the haptic feedback of the controller might go some ways in explaining why a game can hold the attention of a player-reader longer than a web based text can. The player-reader's mind is given less chance to wander mentally due to the shortness of the text and is physically kept at attention through the continual button pressing. And even if they are eventually distracted, it does not take them long to find where they left off as there is only a small amount of text to consider at one given time.

Sound also plays a role in keeping the player-reader's attention focused on the visual novel in front of them. Virtually every release, from small indie-game to big budget publisher title, features a form of background music. This background is specifically designed to be unobtrusive: it is meant to fade to the background of the users' mind. Simultaneously, the music is composed to fit the mood and tone of the scene being displayed on screen. This raises the question of whether or not such music would be helpful in aiding the player-reader in their reading of the text. Several studies have been done regarding the effect of background music while reading.[142] These have shown that there is either little effect, or that it is detrimental to the reading experience, especially when the music played features lyrics, is loud or up-tempo.[143] What is crucially different is that the tracks that were played in

---

[142] See: S. Dobbs, A. Furnham and A. McClelland, 'The effect of background noise on the cognitive test performance of introverts and extraverts', *Applied Cognitive Psychology,* 25:2 (March/April 2011) pp. 307-313; P. Tze and M. Chou, 'Attention drainage effect: How background music effects concentration in Taiwanese college students', *Journal of the Scholarship of Teaching and Learning*, 10:1 (January 2010) pp. 36-46; S.A. Anderson and G.B. Fuller, 'Effect of Music on Reading Comprehension of Junior High School Students', *School Psychology Quarterly,* 25:3 (2010) pp. 178-187.
[143] Anderson and Fuller, 'Effect of Music on Reading Comprehension', p. 183.

these studies had no direct relation to the text being read. In some cases they might be appropriate, but none were specifically designed to be listened to while reading the text that was part of the study.[144] Perhaps the addition of the specifically designed music such as found in visual novels can aid readers that are otherwise easily distracted by other noises while reading, but more research would have to be done on this topic.

Besides background music, more ambitious visual novels also feature voice acting of the spoken lines. These are usually voiced in (the original) Japanese or (dubbed) English. While this is done to create a richer, more immersive environment in the game, it — perhaps unintentionally — creates an environment of audio-assisted reading. Several studies have shown that listening while reading can increase text-comprehension.[145] The effect is found to be even greater when the text moves along with audio, which is usually how the text appears in a visual novel until the player-reader hits a button to speed the text up.[146] A player-reader would benefit most from this feature if it the audio language matches the text language, but even if these two are out of sync they might aid in the understanding of the intended tone and pace of the text displayed. This might be especially helpful to less experienced readers, who are not used to long-form text.[147]

The visual novel thus has access to the same modalities as other expressions of digital text, but uses these differently than most other forms. Haptic-feedback, sound and visuals are designed to directly relate to the text being read. Through this, the visual novel might solve some of the attention-span issues that are normally associated with digital text. It also serves to illustrate that even though the computer has made additional modalities available to text, combining them in a way that enriches the text and not distract from it is perhaps not as simple as the web has made it out to be.

---

[144] In the cited studies they used Billboard Top 20 hits (Anderson and Fuller, 'Effect of Music on Reading Comprehension, p. 182), classical and hip hop (Tze and Chou, 'Attention drainage effect', p. 41), background noise and garage style music (Dobbs, Furnham and McClelland, 'The effect of background noise', pp. 308-309).

[145] See: E. Gerbier, G. Bailly and M. Bosse, 'Audio-visual synchronization in reading while listening to texts: Effects on visual behavior and verbal learning', *Computer Speech and Language,* 47 (January 2018) pp. 79-92; R. Patel and W. Furr, 'ReadN'Karaoke: Visualizing Prosody in Children's Books for Expressive Oral Reading', *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (May 2011) pp. 3203-3206; E. Godde et al., 'Improving fluency of young readers: introducing a Karaoke to learn how to breath during a Reading-while-Listening task', *SLaTE 2017-7th ISCA Workshop on Speech and Language Technology in Education* (2017) pp. 127-131.

[146] Gerbier, Bailly and Bosse, 'Audio-visual synchronization in reading', p. 76.

[147] Ibidem, pp. 75-76.

Procedurality and linearity

Lastly, there is a property that appears to be present in the visual novel, as a subgenre of videogames, that does not seem to be present in other expressions of digital text: procedurality, or in other words the reaction of the text to user input. Earlier the visual novel's nature as an executable file was discussed, and how that effects textual instability. Visual novels have to be programs in order for them to display text, sound and visuals simultaneously. They also have to be programs for them to allow the very thing that sees them classified as videogames: player interaction. Throughout a visual novel, the player-reader is presented with options that allow them to shape the story. To a certain extent a similar phenomenon is present in another expression of digital text: hypertext-novels. There, readers can click through words on screen to navigate through the textual world. A key difference is that a visual novel, as a program, can remember choices made by the user and respond to them at later stages in the story. Making a choice can result in a variable being stored in the game's directory, allowing it to be recalled both at a later stage and in a later session. A hypertext-novel can create the illusion of this by creatively managing how its html-pages follow one another, but as a browser based system it cannot make any changes to its directory to reflect user input. Because a visual novel can remember choices and act upon them, they can provide a more immersive reading experience in which the reader can feel like their decisions have actual weight to them and influence the outcome of the story.[148]

Chapter conclusion

As has been shown in this chapter, many of the properties that are seen as inherent to digital media are in fact not present in visual novels, despite them being expressions of digital text. Many of these properties appear not to be inherent to digital text, but are simply shared between the most common expressions: webpages, PDFs and ePubs. As a form of digital text designed specifically for the digital medium, visual novels invite us to question whether the way we present digital text now is truly the the most efficient if we want to have readers remain focussed and invested in what they read. Is the e-book not actually a horseless carriage, designed only in the way it is because of the paper book that preceded it? The comparison to paper has shaped the way we think about both printed and digital media,

---

[148] S. Domsch, *Storyplaying: Agency and Narrative in Video Games* (Berlin/Boston: De Gruyter, 2013) p. 115.

but it has also narrowed the scope to expressions of digital text that closely resemble the printed word. By looking beyond the realm of ePubs and the internet and into new media that utilise digital text such as the visual novel, we may yet gain a larger understanding of the nature of digital text and how it can be shaped going forward.

5 - Case Studies

So far three frameworks have been discussed regarding digital reading: Murray's framework regarding the reading of digital fiction, Haggis-Burridge's framework regarding immersion and Van der Weel's adapted framework on salient properties of media. The first and latter of these frameworks where not designed with visual novels in mind, but by applying them to the medium regardless it can become clear where they indeed touch upon the fundamentals of digital text and where they instead focus on certain expressions of the medium. This chapter will therefore apply these frameworks to three different visual novels, which are used as case studies. The three visual novels in question are *Phoenix Wright: Ace Attorney* (2006), *Danganronpa: Trigger Happy Havoc* (2014) and *Zero Escape: Virtue's Last Reward* (2012).[149] These were chosen because they were both critical and commercial successes.[150] There is something to be said for analysing works that are not widely read or exemplify the worst a genre has to offer, but as this thesis is set up as a text-researcher's early foray into the realm of videogames, it seemed prudent to start with titles that represent the genre well in form, content and reception.

To provide some context, each case study will feature a short introduction about the time it was released and on what platform, as well as a brief overview of its narrative. I will then discuss the games within the content of the frameworks, working our way down the listed criteria. To avoid redundancy the framework by Murray will be discussed in the section on *Ace Attorney,* Haggis-Burridge's framework will be discussed in the section on *Danganronpa* and the inherent properties will be discussed through *Virtue's Last Reward*.

Phoenix Wright: Ace Attorney

In *Phoenix Wright: Ace Attorney*, player-readers assume the role of fledgling defence attorney Phoenix Wright. Starting with his first case, player-readers work their way through five increasingly complex courtroom dramas. The game was originally released on the Gameboy Advance in 2001, exclusively in Japan.[151] As stated in chapter 3, the 2005/2006

---

[149] Capcom, *Phoenix Wright*; Spike, *Danganronpa*; Chunsoft, *Virtue's Last Reward*.

[150] Metacritic, 'Phoenix Wright: Ace Attorney'; Metacritic, 'Danganronpa: Trigger Happy Havoc', *Metacritic* <https://www.metacritic.com/game/playstation-vita/danganronpa-trigger-happy-havoc> (25 January 2022); Metacritic, 'Zero Escape: Virtue's Last Reward', *Metacritic* <https://www.metacritic.com/game/playstation-vita/zero-escape-virtues-last-reward>.

[151] Chunsoft, *Virtue's Last Reward* (Chunsoft, February 16 2012); Chunsoft, *Virtue's Last Reward* (Aksys Games, 23 October 2012); Chunsoft, *Virtue's Last Reward* (Rising Star Games, 23 November 2012).

Nintendo DS re-release of the game made its way West, where it was very well received. The game predominantly takes place in the courtroom, where the player-reader is tasked with cross-examining witnesses, presenting evidence and arguing against the prosecution. In the build-up towards the trial, the player-reader is put in more open, adventure game-like environments where they need to gather evidence relating to the crime and talk to potential witnesses.

Let's then examine the oldest framework in this chapter, Murray's four essential properties of a digital text environment. Murray argues that a digital text is procedural and participatory (the two interactive elements) as well as spatial and encyclopaedic (the immersive elements). Upon initial application, this framework quickly shows to be a product of its era, limited to the text-based videogames available at the time. *Ace Attorney* features no command input line as found in *ELIZA/DOCTOR* or *Zork,* and thus the procedural output as Murray describes is absent from the game. *Ace Attorney* does not feature an extensive ruleset it needs to apply to each player-input, because it does not allow for a wide variety of player-inputs. However if one takes a slightly broader perspective to procedural, some elements of this can still be found. While the game does not allow for open-ended user inputs, it does oftentimes put the player-reader at liberty in what order to investigate areas and talk to people. The game will respond accordingly by, for example, removing characters from the scene after they have been spoken to a sufficient number of times. If the player-reader interacts with the same object enough times without finding what they are supposed to, they might be given a helping hand from a supporting character. *Ace Attorney* is procedural in that it can recognize the steps made by the player and change the game world accordingly.

With regards to participation, Murray similarly shaped her argument around the input console. According to her, 'the key to compelling storytelling in a participatory medium lies in scripting the interactor'.[152] *Ace Attorney* lacks an interactor in Murray's narrow sense of the word, however it would be hard to argue that the game is not interactive. The player-reader themself has to navigate throughout the available areas, find the clues and present the right evidence at the right time during the court trial. Failure to do so will either result in a standstill or, in case of the courtroom sections, a game-over screen. The player-reader has

---

[152] Murray, *Hamlet on the Holodeck*, p. 79.

to become an active participant, but on a more narrowly set out path than was possible in games like *Zork*. This does not mean that the latter is participatory and the other is not: both offer interactivity to the player within a text-based narrative context. What does differ is the degree of freedom given to the player-reader, but even *Zork* had its limits to what the player could do, confined by the keywords that the developers had thought of when constructing the game.

As the third property of digital fiction, Murray puts forward their spatiality, or the ability to move through these digital worlds yourself as a reader. This is in contrast to the linear experience of a book, where the reader can only move forward in the world, and only at the direction of the author.[153] In *Ace Attorney,* the player-reader cannot move around freely in the court room, but they can explore several areas in the sections where they have to gather evidence. These present themselves through still images, where the player-reader can click on a variety of places to gather information or to take a closer look (figure 10). This exploration is rather rigidly controlled by the game, as the player-reader will often be forced to move forward or is denied an opportunity to go back to places, once they meet certain thresholds in the progression of the plot. *Ace Attorney* therefore approaches the criterium as put forward by Murray, but cannot be said to completely embody it as envisioned in the model.

Figure 10: exploration scene of *Phoenix Wright: Ace Attorney.* The different scenes in the top and bottom half of the image reflect what is displayed on the Nintendo DS' top and bottom screens. Via Youtube.[154]

---

[153] Murray, *Hamlet on the Holodeck*, pp. 79-81.
[154] Slyzer, 'Phoenix Wright: Ace Attorney #16 – Turnabout Goodbyes ~ Day 3, Investigation, Youtube, 28 February 2014 <https://www.youtube.com/watch?v=v1i7ftXcrD8&t=778s> (18 February 2022).

Murray's concept of the encyclopaedic nature of digital fiction is again a product of the time it was written in. The concept of virtually limitless storage space to work with gave rise to the notion that equally large worlds and storylines could be created. Over two decades of digital storytelling have shown that digital fiction has moved in a different direction. Such massive textual works as envisioned by Murray are theoretically possible, but they are limited by the number of hours an author can reasonably put into any one work. Furthermore, visual novels have used that storage space and processing power to complement the text with sound and visuals. A picture can say a thousand words and in the case of creating navigable virtual space, visual novel developers have chosen to replace environment descriptions with images of that environment. In line with this, *Ace Attorney* does not offer a limitless world of exploration. The game's main story can be completed in about 20 hours.[155] In this sense, Murray's vision on the encyclopaedic nature of digital fiction does not seem to apply to the visual novel.

Ace Attorney matches the four properties of digital text as outlined by Murray in some regards, but in others it does not. The game can be seen as procedural, participatory and spatial, but not as encyclopaedic. Even so, it matches these first three criteria in a much smaller sense than Murray had anticipated when she wrote on how digital fiction would develop.[156] In comparing Murray's essential properties to a modern work of digital fiction, it becomes apparent that Murray's framework was heavily influenced by the works that were popular at the time (text-based adventure games like *Zork* and online user-spaces such as MUDs). *Ace Attorney* is equally a work of textual digital fiction, but does not rely on the four properties in the same way that works from the eighties and nineties did.

Danganronpa: Trigger Happy Havoc

Danganronpa: Trigger Happy Havoc is a murder-mystery visual novel with adventure game elements, originally released by developer Spike for Sony's PlayStation Portable in 2010, exclusively in Japan. The game only made its way west in 2014 with its PlayStation Vita release, which is the version discussed here.[157] In it, the player-reader assumes the role of Makoto Naegi, a high school student newly enrolled in Hope's Peak Academy. Soon the

---

[155] How Long to Beat, 'Phoenix Wright: Ace Attorney', <https://howlongtobeat.com/game?id=7026> (14 February 2022).

[156] Murray, *Hamlet on the Holodeck*, pp. 73-74; p. 79; p. 83; p. 90; p. 125.

[157] Spike*, Danganronpa*.

player-reader finds themselves trapped inside the school with fifteen other students. Their captor, the series' talking-bear mascot Monokuma, explains that the only way they are allowed to leave is by killing one of their fellow students and then surviving the class trial: a roundtable discussion in which the remaining students try to find out who committed the murder and deciding upon it by majority vote. This sets up the main narrative loop of the *Danganronpa* games: player-readers spend their time exploring the school and interacting with the rest of the cast, the so called 'daily life' sections, until inevitably a murder takes place. They then enter the 'deadly life' portions of the game where they have to analyse the murder scene and gather evidence, before putting their findings forward at the class trial.

As established on pages twenty to twenty-one, Haggis-Burridge's model for immersion in videogames identifies four kinds of immersion, namely narrative-, systems-, spatial- and empathic immersion. The rest of this section will be spent analysing the way *Danganronpa*'s uses these four types of immersion to increase the player-reader's engagement with the text.

Narrative immersion stems from the player-reader's compulsion to see how the game progresses, both in terms of story and the exploration of new spaces and game mechanics. In this, *Danganronpa* ties its story and game progression neatly together. The player-reader is naturally propelled to continue reading through the suspense of the murder-mystery narrative. After each chapter climaxes in a class trial, a new chapter starts. Besides a continuation of the story, these new chapters always unlock new areas of the school building to explore. Additionally, every class trial gets progressively more complex. Featuring more elaborate murder set-ups and an added difficulty to the gameplay mechanics. In this way, the player-reader is continuously challenged both by the plot and the game mechanics around it.

Systems immersion is similar to participation as described by Murray, but it is not quite the same. Whereas Murray's participation asks involvement by the player-reader, Haggis-Burridge means the interaction with the game's gameplay mechanics. The first necessitates that the player-reader adds to the story through the interaction, while the second only demands interaction itself. While there are a variety of ways *Danganronpa* facilitates participation, it is perhaps best illustrated by the aforementioned class trials. These discussions, in which the characters try to find out the murder culprit, partly follow the established visual novel conventions: three to four lines of text at a time, accentuated

with character portraits, colourful backgrounds and an accompanying soundtrack. There are however also times when the textual part of this composition is completely upended. During what the game calls 'non-stop debates', the text is no longer confined to the rectangular box in the bottom section of the screen but instead floats around throughout the entire screen. The speed at which the text moves is dependant on the talking speed of the speaker and will similarly vibrate and increase in font size when the speaker is making loud or bombastic statements. In addition to this, purple text representing the voices of other characters in the room talking at the same time as the primary speaker will overlap with the main text (figure 11). By doing so the game tries to mimic the audio sensation of multiple people talking through one another, making it harder to hear the person you are listening to. The end result is a dialogue sequence that can be hectic and confusing, similar to an actual large group of people arguing, achieved through textual means.[158]

Figure 11: Non-stop debate section of *Danganronpa: Trigger Happy Havoc*. Via Youtube.[159]

In addition to the way it presents its text, the nonstop debate sections also change the function of the text in a gameplay sense. Virtually everywhere else in the game the point of

---

[158] Although this section describes a use of textual elements, it might be more illustrative to see the nonstop debates in action. The following video displays a complete class trial section of the game, but nonstop debates can be specifically found at 3:00, 23:05, 31:30 and 36:25, among others. Randompl0x, '[PS Vita] Danganronpa: Trigger Happy Havoc - Chapter 3: A Next Generation Legend! (Class Trial)', Youtube, 28 March 2014. <https://www.youtube.com/watch?v=8vxuFeZ_aFQ> (24 January 2022).
[159] Ibidem.

text is to convey information to the player and nothing else. The player-reader reads the text and, as explained above, has to internalise its meaning to progress to the game. During the nonstop debate sections this still holds true but another layer of interactivity is added. Player-readers get access to a cursor in these sections, visualised as a set of yellow crosshairs. With it they can shoot the purple text of other speakers to remove the clutter they present. Primarily however, it is used to fire 'truth bullets', which represent pieces of evidence, at statements in yellow that contradict that evidence. This is the primary way in which the player-reader has to show that they understand both the events that have transpired and that they comprehend that the character in front of them is either mistaken or lying to them. The game's text is elevated from a passive role to one of the main ways the player-reader interacts with the game. This is perhaps the most unique design element that *Danganronpa* puts forward, something the developers appeared to be aware of when they named their game bullet (Dangan 弾丸) refutation (Ronpa 論破).[160]

This use of text shows that it can be utilised in other ways than conveying information, while still maintaining that as its primary function. In this way it is reminiscent of poems that convey additional meanings through the positioning of their text, such as those written by Guillaume Apollinaire. By making the text interactive, narratively relevant and part of the environment, *Danganronpa* makes the player-reader feel like they are in the middle of these round-table discussions, instead of a passive observer.

In regards to spatial immersion, *Danganronpa* deliberately facilitates this by giving the player-reader an explorable 3D map of the school to walk through, in a first-person perspective (figure 12). The player-reader can therefore spend a good deal of time wandering the corridors of Hope's Peak Academy themselves, getting a feel for both its layout and atmosphere. This function is not necessary for anything other than immersing the player in the game's environment. Getting from point A to B could similarly be achieved by choosing a destination on a map. In fact, that very same function is present in the game. If a player-reader so desired they could skip about 95% of the walking by using this feature, that is only inaccessible during certain story sections. Player-readers are however incentivised to walk due to collectible coins being present on the map, that can be exchanged for optional rewards. In doing so *Danganronpa* creates a feeling of exploration while traveling around

---

[160] Jisho, '弾丸', <https://jisho.org/word/%E5%BC%BE%E4%B8%B8>; Jisho, '論破', <https://jisho.org/word/%E8%AB%96%E7%A0%B4>.

the school. Because the fast-travel function of the map is also present, the exploration does
not feel like a chore, incentivising the player-reader to only make use of it when they are

Figure 12: School exploration segment of *Danganronpa: Trigger Happy Havoc*. Screenshot provided by author.

mentally willing to immerse themselves in the environment.

Empathic or social immersion describes the connection a player-reader may develop
towards the characters (AI or human) and the social context of the game. As *Danganronpa* is
a single-player title, as most visual novels are, only AI characters are applicable. The player-
reader might develop certain sentiments towards the characters during the linear story, but
these segments can only invoke empathetic feelings in the same way a regular novel can.
While the story is completely linear, the daily life segments of the game do provide a way for
the player-reader to feel a sense of agency. During a subsection of these segments called
'free time', the main story is virtually put on hold and the player-reader gets to interact with
the cast in a more laid-back and intimate way. They get to choose who they want to spend
their time with, resulting in some small talk with the chosen character and often a view into
their backstory and motivations. By itself this is a narrative device to allow the story some
time to breathe, but what makes these sections all the more effective as an empathic
immersion device is that player-readers get to make their own choice on how they spend the
limited time available to them. They can choose to ignore the characters they dislike, or in
fact learn more about them to find out why they are so dislikeable in the first place.

The murder-mystery nature of the narrative greatly heightens the weight these

decisions seem to carry for the player-reader. While there are no narrative consequences whatsoever from these decisions (in fact, the free time portions can be completely skipped if so desired) the player-reader is aware that sometime in the future, another murder is going to take place. This means that every time they interact with a character it could be the last time they do so, either because that potential friend is murdered in the next story segment or did the murdering themselves. Choosing to interact with a character becomes a weighted decision: do you spread out your time amongst multiple characters to see more of them before one of them is inevitably written out, or do you focus on one character so as to completely see their story before they meet their end? Allowing the player-reader a choice in this matter can increase the investment they have in the text they are reading, as evidenced by the many forum posts made on the topic.[161] It also shows that narrative by itself can be a powerful motivator in influencing player-reader gaming behaviour. Rewards do not always have to manifest themselves as power-ups or profile achievements, but can also be a new scene with a favourite character.

By effectively utilising all four types of immersion as identified by Haggis-Burridge, *Danganronpa* intends to increase the player-reader's engagement with the text. This emphasis on immersion implies that a player-reader would have an easier time achieving the state of immersive reading, as described in chapter two, which in turn aides focus and reading comprehension.

Zero Escape: Virtue's Last Reward

Released by Chunsoft in 2012, *Virtue's Last Reward (VLR)* is the second instalment of the *Zero Escape* series (the first being 2010's *999: Nine Persons, Nine Hours, Nine Doors,* mentioned in chapter three). In it, the player-reader assumes the role of Sigma, a college undergraduate student. Sigma, along with eight others, is abducted and forced to play a game in an underground facility to earn his freedom. The setting is not that far removed from *Danganronpa*'s, but instead of exploration in a murder-mystery setting, *VLR* intersperses its visual novel sections with digital escape rooms.[162] While certainly a mystery

---

[161] Steam, 'Danganronpa: Trigger Happy Havoc – Discussions',
<https://steamcommunity.com/app/413410/discussions/> (25 January 2022).
[162] For those unfamiliar with the concept: an escape room is a room in which players are locked in and have to solve a variety of puzzles to escape. For some more info on the subject, see: S. Nicholson, 'Peeking behind the locked door: A survey of escape room facilities' (2015) pp. 1-35, pp. 1-2
<https://scottnicholson.com/pubs/erfacwhite.pdf> (25 January 2022).

story, the genre also leans a lot more into science fiction than *Danganronpa* does. Listed below are the salient properties of a visual novel as discussed in the previous chapter, and the way these express themselves within *VLR*.

Materiality

In chapter four it was argued that with physically released visual novels it is still possible to talk about a copy, in a similar way to how we perceive printed books. This in contrast to the way other expressions of digital text are often perceived. On its original release *VLR* was made available for the Nintendo 3DS and Playstation Vita systems, in Japan, the US and Europe, in both physical and digital format. That these releases differ from one another can be made clear through two examples; one regarding localisation and another regarding a necessary patch.

Due to licensing issues, the European release of *VLR* did not feature the English audio track its American counterpart had, instead playing Japanese audio only.[163] If European Playstation Vita users wanted English audio, they needed to import an American copy of the game. Nintendo 3DS users were even more out of luck, as the 3DS is a region-locked system, preventing games from other regions being played on a European device. This meant that they could not experience the English audio, unless they bought an American 3DS to go with the game. Both systems also have built-in piracy protection that was regularly patched, making it difficult (although not impossible) to run pirated copies of the game with English audio. Secondly, the 3DS version of the game also shipped with a software bug. If player-readers saved their game in certain escape-room sections, the game could accidentally erase the user's data, forcing them to start over. This issue was eventually resolved, but the update was only released for digital copies, with no patch being made available for physical ones.[164]

With audio and stability differences, it thus mattered whether a player-reader was experiencing the game on a Playstation Vita or 3DS, and in which region. These issues could not be easily remedied due to the visual novel's inherent complexity as a program. As such

[163] I. Sahdev, 'Zero Escape: Virtue's Last Reward Only Has Japanese Audio in Europe', *Siliconera*, 4 October 2012 <https://www.siliconera.com/zero-escape-virtues-last-reward-only-has-japanese-audio-in-europe/> (25 January 2022).
[164] T. Latshaw, 'Virtue's Last Reward Glitch Resolved in eShop Version, Maybe', *NintendoLife*, 27 August 2013 <https://www.nintendolife.com/news/2013/08/virtues_last_reward_glitch_resolved_in_eshop_version_maybe> (14 February 2022).

there exists a noticeable difference in the way visual novels are disseminated and experienced in comparison to other expressions of digital text, that can be made easily available to readers across regions and platforms.

Fluidity, stability and permanence

One of the key differences between printed and digital text is the latter's virtual nature. Due to this the words are never fixed in one place, they may be altered and the text might not be available anymore if one wishes to go back to it. How do these traits manifest themselves in *VLR?* Like most visual novels, *VLR* presents its text primarily in a box at the bottom of the screen, a few lines at a time (figure 13). If the player-reader presses the A button, the textbox is cleared and a new set of lines is displayed.
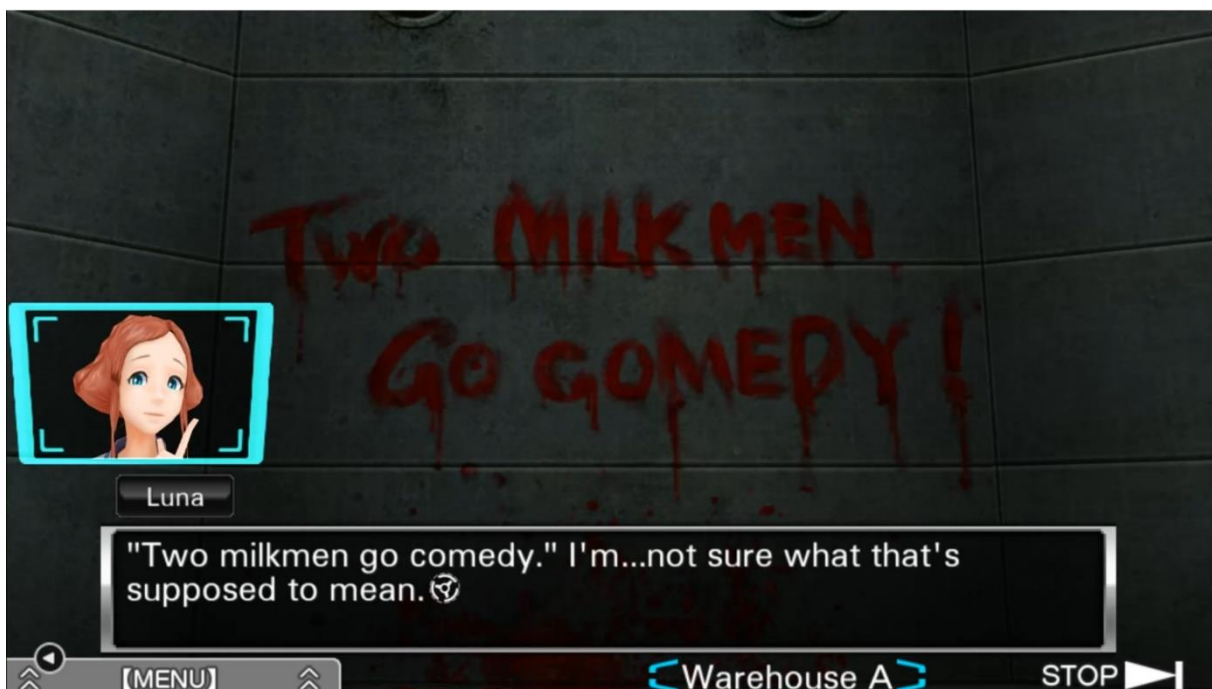

Figure 13: Scene from Zero Escape: Virtue's Last Reward. Via Youtube.[165]

The textbox always remains in the same place, and thus the reader always reads their text in the same place on the screen. One cannot tell if they are halfway through the story, or just a quarter in. The flowchart function that will be discussed below provides some alleviation to this, but as the flowchart is expanded and changed as the story progresses, this provides no secure footing for the player-reader either. Another function that addresses the issue of spatial instability is the backlog. At any time, a player-reader can open the menu and select

---

[165] Noire Blue, 'Zero Escape: Virtue's Last Reward Walkthrough Part 3 No Commentary', Youtube, 15 April 2017 <https://youtu.be/qF3wE9TiiEg?t=260> (24 January 2022).

'log', to show a list of the last displayed lines from new to old. In this way, if a player-reader wants to re-read something they read a little while ago they can, similar to flicking back to the previous page in a printed book to re-read a sentence. Even so, the small text-window provides even less spatial stability than that which is found in other expressions of digital text, like the ePub or PDF, where at least sections can be returned to at will through the use of scrolling.

In regards to textual stability, *VLR* works comparable to a PDF if all a user intends to do is read it. Once obtained, the text will never be changed, unlike a webpage that might differ between visits. When it comes to making changes to the text, *VLR* works differently than the PDF. A PDF can be easily run through a converter to an editable file format, and then back to a PDF once the changes have been made. If a user wants to make changes to *VLR* they will need to find a compatible coding program (if there is one available, otherwise the user would have to develop this tool themselves) and figure out where the text is stored, how it is called and how to successfully edit this. Altering games is not unheard of, but the barrier to doing so is significantly higher than with many other expressions of digital text, resulting in increased textual stability.[166]

In terms of permanence, the continued availability of the work depends on whether users get a physical or digital copy. Physical cartridges can be shelved in their packaging and returned to decades later, with no change to its contents. If a digital copy is acquired, it will remain on the system indefinitely. Provided a user maintains the device, the visual novel can be read for years to come. Even so, hardware failure is not uncommon, and if the user loses access to the device, or deletes the game from the system, they are dependant on the continued support of the system's operator. As Nintendo has recently announced that it will end support for the Nintendo 3DS store and that Sony, the company behind the Playstation Vita, has already once considered doing the same with the Playstation Vita store, it is doubtful digital copies will remain accessible for decades longer.[167]

---

[166] Game alteration, commonly referred to as 'modding', is a rather sizeable hobbyist community within gaming culture. For some more information on the topic, see: O. Sotamaa, 'When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture', *Games and Culture*, 5:3 (2010) pp. 239-255.

[167] Nintendo, 'Wii U & Nintendo 3DS eShop Discontinuation' <https://en-americas-support.nintendo.com/app/answers/detail/a_id/57847> (17 February 2022); J. Ryan, 'PlayStation Store on PS3 and PS Vita Will Continue Operations', *Playstation Blog,* 19 April 2021 <https://blog.playstation.com/2021/04/19/playstation-store-on-ps3-and-ps-vita-will-continue-operations/> (14 February 2022).

The Network

Similar to other visual novels, *VLR* has no network features. While the Playstation Vita and Nintendo 3DS systems feature modern connectivity functionality such as a web-browser, accessing these puts the game on hold. While playing the game, the only thing happening on screen is the game itself. Minor distractions might happen if the user has enabled friend notifications on the Playstation Vita system, that can pop-up in the top-right corner of the screen. The overall lack of other options on these gaming systems means that the user is most likely less inclined to engage with other activities while play-reading, resulting in faster reading and increased comprehension.

Substrate and text

The relation between substrate and text in *VLR* is comparable to the way it was explained for all visual novels in the pervious chapter. As long as the copy is compatible with the used device (i.e. a 3DS cartridge with a 3DS system) the game will run, regardless of which specific instance of the device is used. One could argue that the relationship between text and substrate matters more than with other expressions of digital text, as the visual novel is more tightly bound to the platform its developed for. However the text is still not as connected to its substrate as it is with print. Furthermore, the same relationship can be found with other expressions of digital text, such as a Kindle reading only certain file formats, or older browsers not supporting modern webpages.

Authorship

Similar to the explanation on authorship in chapter four, *VLR* was made by a team of developers. Chunsoft is large enough that it was able to publish the title themselves in Japan, but it needed other publishers for the release in Europe and the US. The game's primary writer, Kotaro Uchikoshi, was also an experienced writer. With these factors, *VLR* exemplifies the higher barrier of entry that is present when creating visual novels, and the lessened extend to which authorship is democratised in the medium.

Modality

One of the differentiating factors between a visual novel and a regular one is the presentation of the former. By featuring visuals and sound, the visual novel adds to its text with other media, and *VLR* is no different. By taking a look at the following segment

(https://youtu.be/qF3wE9TiiEg?t=260, up until 6:10), one can discern how these might add to the reading experience.[168] In it, part of the cast explains an anagram to the player-reader. Firstly, all non-player characters are voiced. This gives the player-reader a sense of the tone with which they need to read the lines, while also allowing them to completely grasp the sentence if their mind wanders for a bit, as explained in chapter four. Noticeably, the main character of Sigma is not voiced. This is so the player-reader can better project themselves unto him, harkening back to the concept of immersion as explained in the *Danganronpa* section, even if this might be to the detriment of the assisted reading provided by the voice overs.

Secondly, the background music is tense, signalling to the player-reader that the current mood is not one of relaxation, but wariness and tension. As music can induce certain moods in the listener, this could further help immerse the reader in the setting of the visual novel.[169] Additionally, the presence of background sound could impede distraction, compared to those reading in silence that might be distracted by background noises. The music in these sections could prove to be more beneficial than other white noise, as it contributes to the setting of the game.

Lastly, the graphics aid the text in a few ways. By displaying both the speaker's name and the speaker themselves, the player-reader might be less confused about who's talking, especially if the player-reader normally has more difficulty remembering names. The character models can also display the mood of a character, aiding understanding of the sentiment with which lines are said. Furthermore, in the anagram segment, the background visual that shows which letter goes where can quickly convey to the player-reader exactly how it works. This is beneficial because doing so allows it to skip a lengthier explanation that those familiar with the subject might not want to bother with, while also ensuring that other readers are caught up. As a different anagram comes up later in the game (without aid by the other characters) this ensures player-readers can attempt to solve that on their own.

Haptic-feedback is more difficult to display through an example like *VLR*, as captured footage simply cannot show the vibrating controller or the button presses necessary. In the clip however, every time the encircled triangle appears at the end of a line, the player-reader

---

[168] Noire Blue, 'Zero Escape: Virtue's Last Reward Walkthrough'.
[169] D. Västfjäll, 'Emotion induction through music: a review of the musical mood induction procedure', *Musicae Scientiae* (2001-2002) pp. 173-211.

has to provide an input. In the clip, these are necessary every 1 to 5 seconds, continuously asking the player-reader to keep on reading. This exemplifies the continuous low cognitive input the game demands that does not distract from the reading (as it is in fact, directly related to the line of text) but does prevent the player-reader's mind from wandering.

By providing these audio and visual stimuli and continuously asking the player-reader to press a physical button, *VLR* both eases the demand on the player-reader when it comes to the reading itself, and provides them with an environment that prevents distraction and tries to keep them invested in the play-reading of the game.

Linearity and procedurality

Choice and non-linearity can be exemplified in two different ways in *VLR*, but for both it might be beneficial to first explain the game's narrative structure. A text-based game can feature a great variety of branching paths when it offers narrative choices to its player-readers. To make sure player-readers can keep making sense of what choice affects the narrative and how, even after putting the game away for a while, many visual novels offer what is called a flowchart. These usually start at the beginning of the game and display the narrative as a branching line, diverging at points where decisions affect the story and reconverging if the plot has points that are the same regardless of certain earlier choices. On the next page is the complete flowchart for *VLR* (figure 14):
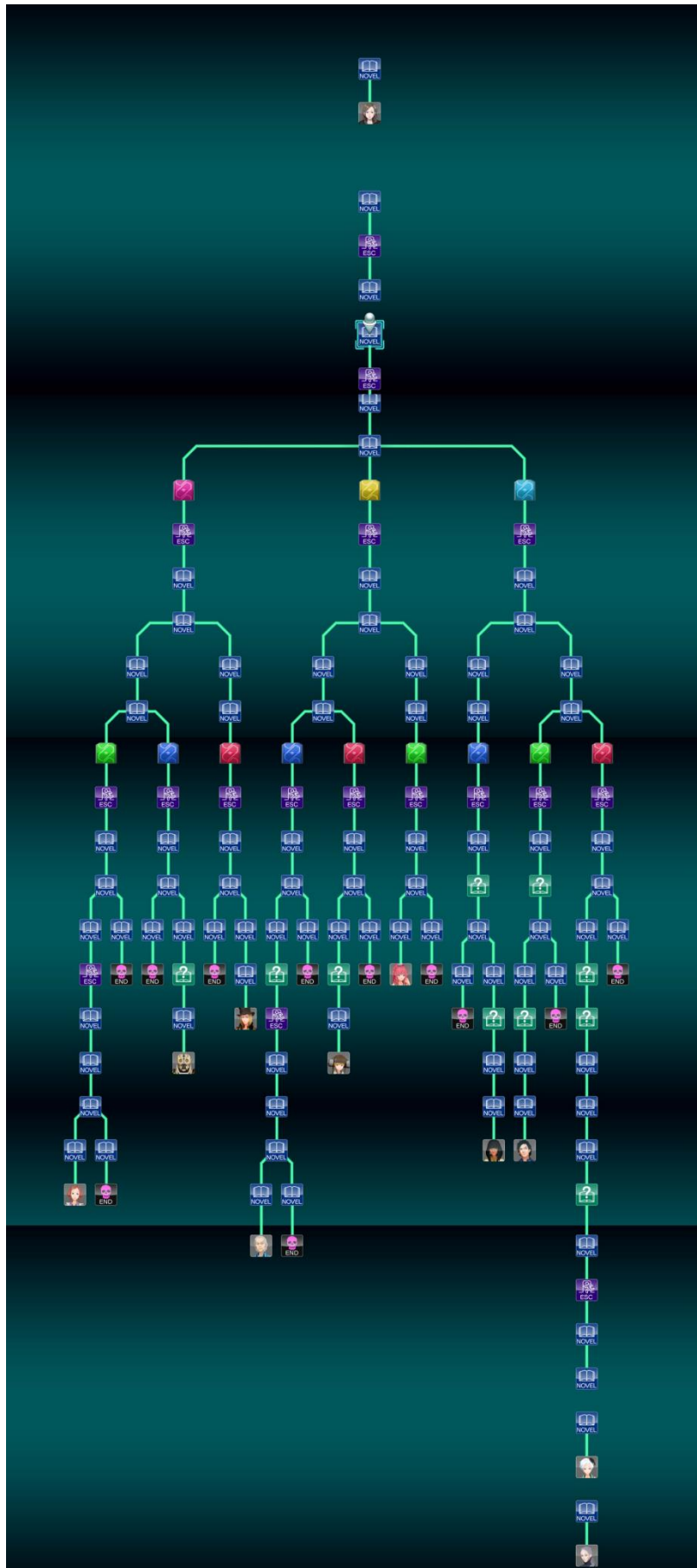
Figure 14: Completed Flowchart from Zero Escape: Virtue's Last Reward.
Image created by author by combining screenshots.

In the flowchart above, the blue novel icons represent visual novel sections and the purple 'esc' icons represent escape rooms. The skull icons and the character faces represent endings (game over-screens and character endings, respectively). Lastly, the green question marks represent story moments that could not be solved immediately when initially encountered. For example, a door in route A might be password protected, but the password can only be found in route C. The flowchart itself already displays some of the game's non-linearity through the different branches, that can be experienced by the player-reader in varying orders. Even so, the complete non-linearity is hard to capture in a two dimensional image. Player-readers can — and often have to — switch between story branches, cutting horizontally or diagonally across the flowchart. Furthermore, the flowchart is displayed in chronological order of events, not in the order the player encounters them. For example, the section at the top of the flowchart is in fact read by the player-reader at the end of the game.

As discussed in the previous chapter, one of the unique properties of videogames is that they can be programmed to remember certain choices and act on them. *VLR* does this in a relatively overt manner. One of the primary themes of *VLR* is the prisoner's dilemma, an example of game theory in which two prisoners are asked to cooperate or betray one another. There is a lot to be said about the psychological mechanics behind the concept, but what matters here is that within *VLR* the player-reader is routinely asked to betray or ally with other characters. The player-reader is completely free in this choice, as each option simply leads to a different branch in the narrative. After making their choice however, the player-reader might not be entirely happy with their decision. They might have picked ally, while their opponent picked betray. In that case it would be better for them to have picked betray is well. In many games the player is accustomed to reverting to an earlier save state if an outcome is unfavourable to them.

It is when the player-reader goes back to that decision that the affordance of *VLR* as a program shows itself: the character of Sigma picks betray the second time around, and the player-reader expects that the end result will now display betrayal on both sides. Instead however, the game has recognized that the ally option has already been shown and instead loads a different scene: one where the opponent picks ally. This does not only confuse the player, it confuses the character as well, as Sigma says 'but you picked betray the last time!'. Visibly confused, Sigma's opponent asks 'what last time?'. In doing so, the game makes its

procedurality part of the narrative itself, merging medium and text. The use of this concept forces the player-reader to approach the text differently. They cannot passively hang back and watch the narrative unfold. Solutions to the green question mark sections are given at certain points, and the player-reader has to actively remember them or write them down. Through this, the player-reader becomes an active part of seeing the story resolved and feel like their choices have weight to them. This in turn can result in an increased sense of immersion in the narrative and the game-world.

Chapter conclusion

In this chapter the frameworks of Murray and Van der Weel have been applied to an expression of digital text that was not originally considered: the visual novel. In doing so it has become clear that in the creation of these frameworks, there seems to have been a bias towards the the most prevalent forms of digital text available: parser-based and user generated digital fiction for Murray, and online text in the case of Van der Weel's salient properties. The visual novel case exemplifies the heterogeneity of the digital medium, and it is precisely this heterogeneity of digital text that makes it difficult, if at all possible, to formulate a single framework that is both accurate and all-encompassing.

The application of Haggis-Burridge's framework on immersion has shown that *Danganronpa* deliberately utilises several game aspects to heighten the player-reader's immersion in the work. The combination of these immersive elements and the salient properties of the medium, as discussed in the *VLR* section, illustrate how the visual novel can provide an excellent environment for long-form digital reading.

The digital medium is heterogenic, with a great variety of ways digital text might present itself and with an equally large number of ways it can be read. By extending our scope beyond the traditionally accepted forms of digital text and into expressions that present their text dissimilarly to the printed book, such as the visual novel, we can get a more comprehensive understanding of the medium as it stand now and where it might be headed.

Conclusion

This thesis departed from the question what visual novels mean for our held conceptions on (digital) reading. After analysing the medium's historical context, both commercially and in the academic debate, its salient properties and the practical examples, two conclusions can be drawn. The first is in regard to the visual novel's practical implications for reading, the second on what the medium can mean for the academic discourse.

As stated in the introduction, deep-reading is becoming an increasingly threatened activity, especially amongst children and young adults. One cannot learn the required skills to examine a text critically or engage with its deeper themes overnight. Would-be readers must first find their footing with simpler texts and more immersive styles of reading, enabling their growth as a reader into evermore complex texts from there. The visual novel could be a great tool to stimulate lesser experienced readers to pick up reading and stick with it. The visual novel's short text segments, its audio-visual aides and its interactivity could go a long way into engaging (young) readers that struggle with reading in general, or with that struggle with regular long-form text. By doing so it could kickstart the upward spiral of increasing reading comprehension, that eventually leads to the ability to deep-read texts and experiencing joy while doing so.

The above forms a contrast with how games are currently utilised in the reading sphere. Incentives such as the readification project helmed by Ubisoft and De Leescoalitie use games to promote reading, but still consider the two as distinctly separate activities. Would-be readers are given a text related to —but outside of —the game, presented in the conventional long-form text format. With visual novels, the reading *is* the game. Would-be readers could be gaining valuable reading skills while experiencing a side activity they already enjoy. Although further research would be necessary to see if readers interact with visual novels as theorised in this thesis, the potential to create engaging works with a low barrier of entry seems to be there.

Moving from the practical to the theoretical, comparing conventional expressions of digital texts with the visual novel has made a few things apparent about our held notions of digital text. Firstly, many of the attributes commonly ascribed to digital text, such as instability, ephemerality and connectivity, do not appear to be inherent to the medium, but are in fact consequences of the way we format the most common expressions of digital text, such as the webpage and PDF. The visual novel presents its text very differently to these

other expressions, using short text bracket and actively utilising other modalities such as sound and visuals in conjunction with its text. These modalities are used in direct relation with the text that is currently being read, rather than intersecting it. This raises the question about whether the way we currently format digital text has been too deeply informed by the way we think about printed text. Is the electronic book not secretly a horseless carriage? The electronic medium is incredibly versatile, allowing for a great many varieties of textual presentation. Analysing the visual novel has shown that there are other ways we can read on-screen, and that there are unique affordances in doing so.

The unique textual presentation of the visual novel invites us to look more broadly at digital text. While it made sense in the nineties for game studies to become its separate field, the last two decades of developments in the videogame medium have been largely ignored by textual scholars. This has led to a fixation on conventional forms of digital text, resulting in extrapolated conclusions on the whole medium, that in fact only apply to certain expressions of it. We did not end up reading hypertext novels, but we did start reading visual ones. By ignoring the latter we may be missing valuable insight in both the digital medium and reader habits. It therefore seems prudent to extend our scope as textual researchers to once again include the reading being done in videogames into our analysis. The videogame medium is large, varied and continuously evolving. The heterogeneity of videogames and digital text in general encourages a wide perspective. Approaching digital text in all of its expressions, without necessarily relying on the world of print, can give us valuable and needed insight in our changing textual minds.

Bibliography

Databases

Visual Novel Database <vndb.org>.

Steam Spy <https://steamspy.com>.

Steam database <https://steamdb.info>.

Literature

Aarseth, E.J., *Cybertext: Perspectives on Ergodic Literature* (Baltimore, MD: Johns Hopkins University Press, 1997).

Ackerman, R. and M. Goldsmith, 'Metacognitive Regulation of Text Learning: On Screen Versus on Paper', *Journal of Experimental Psychology: Applied*, 17:1 (2011) pp. 18-32.

Alberti, J., 'The Game of Reading and Writing: How Video Games Reframe Our Understanding of Literacy', *Computers and Composition,* 25 (2008) pp. 258-269.

Anderson, M., and S. Iversen, 'Immersion and Defamiliarization: Experiencing Literature and World', *Poetics Today*, 39:3 (September 2018) pp. 569-595.

Anderson, S.A. and G.B. Fuller, 'Effect of Music on Reading Comprehension of Junior High School Students', *School Psychology Quarterly,* 25:3 (2010) pp. 178-187.

Arsenault, D., 'Video Game Genre, Evolution and Innovation', *Eludamos, Journal for Computer Game Culture,* 3(2) (2009) pp. 149-176.

Baron, N.S., *Words Onscreen: The Fate of Reading in a Digital World* (New York: Oxford University Press, 2015).

Bell, A., et al., 'Immersion in Digital Fiction: A Cognitive, Empirical Approach', *Literary Linguistics*, 7:1 (January 2018) pp. 1-22.

Birkerts, S., *The Gutenberg Elegies: The Fate of Reading in an Electronic Age* (New York: Ballantine Books, 1994).

Clinton, V., 'Reading from paper compared to screens: A systematic review and meta-analysis', *Journal of Research in Reading*, 42:2 (2019) pp. 288-325.

Conley, J., et al., 'Use of a Game Over; Emulation and the Video Game Industry, A White Paper', *Northwestern Journal of Technology and Intellectual Property*, 2:2 (2004).

Delgado, P., et al., 'Don't throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension', *Educational Research Review, Vol. 25* (November 2018), pp. 23-28.

Dobbs, S., A. Furnham and A. McClelland, 'The effect of background noise on the cognitive test performance of introverts and extraverts', *Applied Cognitive Psychology,* 25:2 (March/April 2011) pp. 307-313.

Domsch, S., *Storyplaying: Agency and Narrative in Video Games* (Berlin/Boston: De Gruyter, 2013).

Douglas, K., et al., 'Building reading resilience: re-thinking reading for the literary studies classroom', *Higher Education Research & Development*, 35:2 (2016) pp. 254-266.

Eskelinen, M., 'Toward Computer Game Studies, in *First Person: New Media as Story, Performance and Game,* ed. by N. Wardrip-Fruin and P. Harrigan (Cambridge (MA): The MIT Press, 2004) pp. 36-45.

Fernández-Vara, C., 'Adventure', in *The Routledge Companion to Video Game Studies*, ed. by M.J.P. Wolf and B. Perron (New York: Routledge, 2014) pp. 258-266.

Gerbier, E., G. Bailly and M. Bosse, 'Audio-visual synchronization in reading while listening to texts: Effects on visual behavior and verbal learning', *Computer Speech and Language,* 47 (January 2018) pp. 79-92.

Godde, E., et al., 'Improving fluency of young readers: introducing a Karaoke to learn how to breath during a Reading-while-Listening task', *SLaTE 2017-7th ISCA Workshop on Speech and Language Technology in Education* (2017) pp. 127-131.

Grusin, R.A., 'What Is an Electronic Author?: Theory and the Technological Fallacy', *Configurations,* 2(3) (1994) pp. 469-483.

Guardiola, E., 'The Gameplay Loop: a Player Activity Model for Game Design and Analysis', *ACE '16: Proceedings of the 13th International Conference on Advances in Computer Entertainment Technology* (New York: Association for Computing Machinery, 2016) pp. 1-7.

Haggis-Burridge, M., 'Four categories for meaningful discussion of immersion in video games', *Published on Researchgate* (2020) pp. 1-14.

Hisgen, R., and A. Van der Weel, *De Lezende Mens: De betekenis van het boek voor ons bestaan* (Amsterdam: Atlas Contact, 2022).

Hviid, M., S. Izqueierdo-Sanchez and S. Jacques, 'From Publishers to Self-Publishing: Disruptive Effects in the Book Industry', *International Journal of Economics of Business*, 26:3 (2019) pp. 355-381.

Ivory, J.D., 'A Brief History of Video Games', in *The Video Game Debate: unravelling the physical, social and psychological effects of digital games*, ed. by R. Kowert and T. Quandt (New York, Routledge, 2016) pp. 1-21.

Jacobs, A.M., and J. Lüdtke, 'Immersion into narrative and poetic worlds: A neurocognitive poetics perspective', in *Narrative Absorption*, ed. by F. Hakemulder et al. (Amsterdam/Philadelphia: John Benjamins, 2017).

Jerrim, J. and G. Moss, 'The link between fiction and teenagers' reading skills: International evidence from the OECD PISA study, *British Educational Research Journal*, 45(1) (February 2019) pp. 181-200.

Kiss, G.Z., 'Iteration and Procedurality in Game Studies', in *Cultural Perspectives of Video Games: From Designer to Player*, ed. by A.L. Brackin and N. Guyot (Brill 25 September 2020) pp. 81-89.

Koenitz, H., 'Narrative in Video Games', in *Encyclopedia of Computer Graphics and Games*, ed. by N. Lee (Springer, 2018) pp. 1-9 <https://doi.org/10.1007/978-3-319-08234-9_154-1>.

Kovač, M., 'What a book was and what remains: Thoughts about the future of trade publishing', in in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 32-43.

Lai, K.K. and H.H. Chen, 'A comparative study on the effects of a VR and PC visual novel game on vocabulary learning', *Computer Assisted Language Learning* (07 June 2021) pp. 1–34.

Lauterman, T., and R. Ackerman, 'Overcoming screen inferiority in learning and calibration', *Computer in Human Behavior*, 35 (2014) pp. 455-463.

Laquintano, T., *Mass Authorship and the Rise of Self-Publishing* (Iowa City: University of Iowa Press, 2016).

Mangen, A., 'Digitisation and Reading: What Do We Know, and What Do We Need to Know More About?', in *TXT 2020: Diving into Digital*, ed. by H. Schöb et al. (Leiden: Brill, 2020), pp. 94-102.

Mangen, A., 'The digitisation of narrative reading: Theoretical considerations and empirical evidence', in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 91-107.

Mangen, A., B.R. Walgermo, K. Brønnick, 'Reading linear texts on paper versus computer screen: Effects on reading comprehension', *International Journal of Educational Research*, 58 (2013), pp. 61-68.

Mangen, A., and A. van der Weel, 'The evolution of reading in the age of digitisation: an integrative framework for reading research', *Literacy,* 50:3 (September 2016).

Montfort, N., *Twisty Little Passages: An Approach to Interactive Fiction* (Cambridge, MA: The MIT Press, 2003).

Murray, J.H., *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge, MA: The MIT Press, 1999).

Nicholson, S., 'Peeking behind the locked door: A survey of escape room facilities' (2015) pp. 1-35 <https://scottnicholson.com/pubs/erfacwhite.pdf> (25 January 2022).

Øygardslia, K., C.L. Weitze and J. Shin, 'The Educational Potential of Visual Novel Games: Principles for Design', *Replaying Japan*, 2 (2020) pp. 123-134.

Pak, S.S., and A.J. Weseley, 'The Effect of Mandatory Reading Logs on Children's Motivation to Read', *Journal of Research in Education,* 22:1 (Spring 2012) pp. 251-265.

Parker, F., 'Indie Game Studies Year Eleven', *Proceedings of DiGRA 2013: DeFragging Game Studies* (2013).

Patel, R., and W. Furr, 'ReadN'Karaoke: Visualizing Prosody in Children's Books for Expressive Oral Reading', *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (May 2011) pp. 3203-3206.

Picard, M., 'The foundation of geemu: A brief history of early Japanese video games', *Game Studies,* 13(2) (2013).

Ransom-Wiley, J., 'Phoenix Wright: still hot, still rare', *Engadget,* 21 June, 2006. <https://www.engadget.com/2006-06-21-phoenix-wright-still-hot-still-rare.html> (09 July, 2021).

Sotamaa, O., 'When the Game Is Not Enough: Motivations and Practices Among Computer Game Modding Culture', *Games and Culture*, 5:3 (2010) pp. 239-255.

Truelove, A., E. Santana de Almeida and I. Ahmed, 'We'll Fix it in Post: What Do Bug Fixes in Video Game Update Notes Tell Us?' (2021).

Tze, P. and M. Chou, 'Attention drainage effect: How background music effects concentration in Taiwanese college students', *Journal of the Scholarship of Teaching and Learning*, 10:1 (January 2010) pp. 36-46.

Västfjäll, D., 'Emotion induction through music: a review of the musical mood induction procedure', *Musicae Scientiae* (2001-2002) pp. 173-211.

Weel, A. van der, 'Appropriation: Towards a Sociotechnical History of Authorship', *Authorship,* 4(2) (2015) <https://doi.org/10.21825/aj.v4i2.1438>.

Weel, A. van der, 'Behind the Screen Looms a New Gutenberg Revolution', in *TXT 2020: Diving into Digital*, ed. by H. Schöb et al. (Leiden: Brill, 2020), pp. 1-8.

Weel, A. van der, *Changing our Textual Minds* (Manchester: Manchester University Press, 2011).

Weel, A. van der, and J. Kircz, 'The Book Unbinding', in *The Unbound Book*, ed. by J. Kircz and A. van der Weel (Amsterdam: Amsterdam University Press, 2013) pp. 7-17.

Wolf, M., *Reader come home* (New York: Harper, 2019).

Websites

Aa, E. van der, 'Onderzoek: Games zetten jongeren aan tot lezen', *Algemeen Dagblad*, 24 September 2021. <https://www.ad.nl/gezin/onderzoek-games-zetten-jongeren-aan-tot-lezen~a0cfa927/> (17 January 2022).

Ackerman, D., 'Explore the groundbreaking Colossal Cave Adventure, 41 years on', *Cnet,* 30 May, 2017. <https://www.cnet.com/tech/computing/a-groundbreaking-computer-game-returns-41-years-later/> 09 July 2021.

Apple Store, '80 Days' <https://apps.apple.com/us/app/80-days/id892812659> (09 July 2021).

Baker, T., 'The Complete History of Indie Games', *The Indie Game Website,* 19 October 2018. <https://www.indiegamewebsite.com/2018/10/19/the-complete-history-of-indie-games/> (09 July 2021).

Degica, 'Visual Novel Maker', <https://visualnovelmaker.com/> (11 February 2022).

Gaider, D., 'Do you want to write video games?', *Polygon*, 15 August 2016. <https://www.polygon.com/2016/8/15/12455728/how-to-get-a-job-writing-games-maybe> (17 February 2022).

Gamicus, 'List of longest video game scripts' <https://gamicus.fandom.com/wiki/List_of_longest_video_game_scripts#> (24 January 2022).

How Long to Beat, 'Phoenix Wright: Ace Attorney', <https://howlongtobeat.com/game?id=7026> (14 February 2022).

Inkle, 'Ink', <https://www.inklestudios.com/ink/> (11 February 2022).

Jisho, '弾丸', <https://jisho.org/word/%E5%BC%BE%E4%B8%B8>.

Jisho, '論破', <https://jisho.org/word/%E8%AB%96%E7%A0%B4>.

Juul, J., 'The definitive history of games and stories, ludology and narratology', *The Ludologist,* 22 February, 2004. <https://www.jesperjuul.net/ludologist/2004/02/22/the-definitive-history-of-games-and-stories-ludology-and-narratology/> (09 July 2021).

T. Latshaw, 'Virtue's Last Reward Glitch Resolved in eShop Version, Maybe', *NintendoLife*, 27 August 2013. <https://www.nintendolife.com/news/2013/08/virtues_last_reward_glitch_resolved_in_eshop_version_maybe> (14 February 2022).

McFerran, D., 'Retrospective: The Awkward Birth of the DS, Nintendo's Most Successful System', *Nintendo Life*, 19 May, 2017. <https://www.nintendolife.com/news/2017/05/retrospective_the_awkward_birth_of_the_ds_nintendos_most_successful_system> (09 July, 2021).

Metacritic, 'Danganronpa: Trigger Happy Havoc', *Metacritic* <https://www.metacritic.com/game/playstation-vita/danganronpa-trigger-happy-havoc> (25 January 2022).

Metacritic, 'Phoenix Wright: Ace Attorney' <https://www.metacritic.com/game/ds/phoenix-wright-ace-attorney> (2 February 2022).

Metacritic, 'Zero Escape: Virtue's Last Reward', *Metacritic* <https://www.metacritic.com/game/playstation-vita/zero-escape-virtues-last-reward> (25 January 2022).

Nintendo, 'Nintendo History' <https://www.nintendo.co.uk/Corporate/Nintendo-History/Nintendo-History-625945.html> (9 July 2021).

Nintendo, 'Wii U & Nintendo 3DS eShop Discontinuation' <https://en-americas-support.nintendo.com/app/answers/detail/a_id/57847> (17 February 2022).

Nintendo, '80 Days' <https://www.nintendo.nl/Games/Nintendo-Switch-download-software/80-DAYS-1636807.html#gameDetails> (09 July 2021).

Peppelenbos, C., 'Slechts 29% van de jongeren leest een verhaal bij Readification, CPNB juicht', *Tzum,* 24 September 2021. <https://www.tzum.info/2021/09/nieuws-slechts-

29-van-de-jongeren-leest-een-verhaal-uit-bij-readification-cpnb-juicht/?highlight=readification> (17 January 2022).

Ryan, J., 'PlayStation Store on PS3 and PS Vita Will Continue Operations', *Playstation Blog,* 19 April 2021 <https://blog.playstation.com/2021/04/19/playstation-store-on-ps3-and-ps-vita-will-continue-operations/> (14 February 2022).

Sahdev, I., 'Siliconera Sounds Off: Why Some Visual Novels Never get Localized', *Siliconera,* 10 January 2010 <https://www.siliconera.com/siliconera-sounds-off-why-some-visual-novels-never-get-localized/> (9 July 2021).

Sahdev, I., 'Zero Escape: Virtue's Last Reward Only Has Japanese Audio in Europe', *Siliconera*, 4 October 2012 <https://www.siliconera.com/zero-escape-virtues-last-reward-only-has-japanese-audio-in-europe/> (25 January 2022).

Schreier, J., 'Blizzard Botched Warcraft III Remake After Internal Fights, Pressure Over Costs', *Bloomberg*, 22 July 2021 <https://www.bloomberg.com/news/articles/2021-07-22/inside-activision-blizzard-s-botched-warcraft-iii-reforged-game> (17 February 2022).

Steam, 'Danganronpa: Trigger Happy Havoc – Discussions', <https://steamcommunity.com/app/413410/discussions/> (25 January 2022).

Tarason, D., 'Lost source code is holding up Square Enix's preservation plans', *Rock Paper Shotgun*, 13 June 2019 <https://www.rockpapershotgun.com/square-enix-digital-preservation-plans-slowed-by-lost-code> (17 February 2022).

Yin-Poole, W., 'The Epic Games Store is getting a lot more popular, but it's still nowhere near as popular as Steam', *Eurogamer,* 28 January 2021. <https://www.eurogamer.net/articles/2021-01-28-the-epic-games-store-is-getting-a-lot-more-popular> (09 July 2021).

Videogames

5pb and Nitroplus, *Steins;Gate* (Spike Chunsoft, 9 September 2016).

Atari, *Pong* (Atari, 1972).

Aquaplus, *Utawarerumono: Mask of Deception* (Deep Silver, 23 May 2017).

Beam Software, *The Hobbit* (Melbourne House, 1982).

Broderbund, *Prince of Persia* (Broderbund, 1989).

Capcom Production Studio 4, *Phoenix Wright: Ace Attorney* (Capcom, 2006).

Chime Corporation, *Re:ZERO -Starting Life in Another World- The Prophecy of the Throne* (Spike Chunsoft, 2021).

Chunsoft, *999: Nine Hours, Nine Persons, Nine Doors* (Aksys Games, 2010).

Chunsoft, *Virtue's Last Reward* (Chunsoft, February 16 2012).

Chunsoft, *Virtue's Last Reward* (Aksys Games, 23 October 2012).

Chunsoft, *Virtue's Last Reward* (Rising Star Games, 23 November 2012).

Crowther, W. and D. Woods, *Colossal Cave Adventure* (1977).

ELF Corporation, *Kono Yo no Hate de Koi o Utau Shōjo YU-NO* (ELF Corporation, 1996).

Game Freak, *Pokémon Red Version* (Nintendo, 27 February 1996).

Game Freak, *Pokémon Blue Version* (Nintendo, 27 February 1996).

id Software, *Doom* (id Software, 1993).

Infocom, *Zork* (Personal Software and Infocom, 1980).

Infocom, *Deadline* (Infocom, 1982).

Inkle, *80 Days* (Inkle, 2015).

Intelligent Systems and Koei Tecmo, *Fire Emblem: Three Houses* (Nintendo, July 26 2019).

Lucasfilm Games, *The Secret of Monkey Island* (Lucasfilm Games, 1990).

Nerial, *Orwell's Animal Farm* (The Dairymen, 2020).

Nintendo R&D4, *Super Mario Bros.* (Nintendo, 1985).

Nintendo R&D1, *Famicom Tantei Kurabu Keita Koukeisha* (Nintendo, 1988).

Seeley, K., *Emily is Away* (Kyle Seeley, 2015).

Spike*, Danganronpa: Trigger Happy Havoc* (NIS America, 2014).

Sukeban Games, *VA-11 Hall-A: Cyberpunk Bartender Action* (Ysbryd Games, 2016).

Team Salvato, *Doki Doki Literature Club!* (Team Salvato, 2017).

Zachtronics, *Eliza* (Zachtronics, 2019).

WARP Inc*., Real Sound: Kaze no Regret* (SEGA, 1997).

Video's

Abo, T., *Cycle*, audio recording, Youtube, 30 december 2011 <https://youtu.be/MQAMFihTvx0> (22 January 2022).

Abo, T., *Crossroads*, audio recording, Youtube, 27 July 2014 <https://youtu.be/Fr5bt8yYjMI> (22 January 2022).

Ars Technica, 'How Prince of Persia Defeated Apple II's Memory Limitations', Youtube, 17
March 2020 <https://www.youtube.com/watch?v=sw0VfmXKq54> (09 July 2021).

はるを，[WIN98]この世の果てで恋を唄う少女YU-NO Prologue, Youtube, 2 April 2018
<https://www.youtube.com/watch?v=8XppwtUBlo4> (18 February 2022).

Modern Vintage Gamer, 'Clever Anti Piracy on the Super Nintendo', Youtube, 20 August
2019 <https://www.youtube.com/watch?v=KLyK1FMwc8Q> (10 February 2022).

Noire Blue, 'Zero Escape: Virtue's Last Reward Walkthrough Part 3 No Commentary',
Youtube, 15 April 2017 <https://youtu.be/qF3wE9TiiEg?t=260> (24 January 2022).

Randompl0x, '[PS Vita] Danganronpa: Trigger Happy Havoc - Chapter 3: A Next Generation
Legend! (Class Trial)', Youtube, 28 March 2014.
<https://www.youtube.com/watch?v=8vxuFeZ_aFQ> (24 January 2022).

Short, E., 'The Past, Present and Future of Interactive Fiction', Youtube, 4 December 2016
<https://www.youtube.com/watch?v=bx5ZLGBZAWs&list=PLORIzLj-
Y2kAemrf16W0fq8AISAEoL1pa&index=6> (09 July 2021).

Slyzer, 'Phoenix Wright: Ace Attorney #16 – Turnabout Goodbyes ~ Day 3, Investigation,
Youtube, 28 February 2014
<https://www.youtube.com/watch?v=v1i7ftXcrD8&t=778s> (18 February 2022).

Uchikoshi, K., *Visual Novels: Narrative Design in Virtue's Last Reward*, presentation at the
2018 Game Developers Conference, Youtube, 1 July 2018,
<https://youtu.be/vrxz3s0L8F8> (03 January 2022).