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PRINCIPLES OF THE VISUAL NOVEL GENRE AND THEIR PRACTICAL EXECUTION

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Abstract

The objective of this thesis was the video game genre of "visual novels" as well as how their principles are learned and put into practice. Extensive research of the genre was used through articles, studies and the games themselves for the purpose of analytically separating visual novels from other video game genres and studying their differences for assistance during the development of said visual novels.

After the research was finished, the author then worked together with his classmates Samneang Peo and Nam-Anh Lê to design, draft and develop a playable build of an original visual novel which used knowledge about the aforementioned principles to create an experience that is authentic as possible and that would function as intended. The game engine Construct 2 was used for the project partition of the study.

This then led into a short discussion about whether or not the process was as difficult as expected and why / why not as well as anything that the author learned throughout the study that is worth recognizing. The author was confident that the information offered in the study as well as the showcase of its practical results would help other developers to get familiar with the visual novel genre and learn the basics of how they are designed and built.

Keywords
Game design, visual novel, storytelling, character writing, game development, gameplay

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1   INTRODUCTION

As the focus on narrative design in video games has evolved from being an afterthought to staying as a regular element of many games today, many new possibilities have risen for creators, giving them several opportunities to express their creative ideas in the form of interactive media. However, not one factor has been quite the massive development for stories in games than an entire genre coming gradually into existence and revolving mostly around storytelling and dialogue. This was the visual novel genre, originating from Japan.

The author's familiarity with this genre of games is nearly as vast as their affection with game design itself, which is why this thesis approaches the subject by analysing the genre extensively and then eventually putting this research into practice in the form of a joint project with his classmates Samneang Peo, who is in charge of the majority of the project's graphical assets, as well as Nam-Anh Lê, who will be designing the user interface. The project will be a playable "prologue" build of an original visual novel designed by the three of them and will make use of the principles, techniques and philosophies that would be learnt throughout their research.

2   WHAT IS THE VISUAL NOVEL GENRE?

Visual novels are a genre of video games originating from and still primarily produced in Japan (Lebowitz and Klug 2011), referred to as such due to their usually limited audio-visual presentation which in turn shifts their nature to be closer to that of an interactive e-book. Despite that, they are still regularly categorized as video games by publishers, salesmen and playerbases alike. The core gameplay of these games usually consists of storytelling through text strings on top of simple, static backgrounds and with supporting characters being presented through different non-moving sprites. Many of these elements have been used liberally in different visual novels over the years through several exceptions to the rule with the most important aspects still defining them as a part of the genre.

2.1 Examples of visual novels

While the genre technically has its furthest roots in popular western point-and-click games such as *King's Quest*, the visual novel genre as we know it was popularized in Japan beginning from Chunsoft's wildly popular *Portopia Renzoku Satsujin Jiken* (Crimmins 2016) as pictured in Figure 1. Portopia is a murder mystery adventure created with the intention of introducing a massively popular western genre of games to overseas with great success, selling over 700,000 copies on Nintendo's Famicom alone (IT-Media 2005). In a similar vein, the *J.B. Harold Murder Club* continued the trend of publishing highly popular murder-mystery visual novels in Japan, with sales exceeding 20 million by 2011. This was also later seen in Hideo Kojima's *Snatcher* which combined cyberpunk and noir in hopes of finding a new audience from the increasingly popular genre (Diver 2017).

Figure 1. The visual novel genre as we know it was popularized in Japan beginning from Chunsoft's wildly popular *Portopia Renzoku Satsujin Jiken.* (Portopia Renzoku Satsujin Jiken 1983)

The genre had seen some changes by the mid-nineties as the currently more familiar formula of visual novels had been defined due to titles such Konami's *Tokimeki Memorial* (Crimmins 2016) which centered its focus on a more on-rails style of storytelling without the free exploration and investigative mechanics seen in earlier titles like Portopia. This is not to say that Portopia's influence had been lost on the genre, as proven by the much-selling franchises *Ace Attorney*, *Danganronpa* and *Zero Escape* which all allow the player to explore the game world by giving them the choice to move from one area to another, Danganronpa being the most notable example due to its locations being rendered in 3D, going against the typical visual novel design choice of not letting the player fully interact with the environment.

2.2 The gameplay of visual novels

The gameplay portion of a standard visual novel is usually considered restricted by the genre's nature. Environments are almost exclusively presented through static images and are created to be unexplorable by the player, only serving as location backdrops for different scenes that will take place during the game. These restrictions, however, are obviously absent in any game that bears resemblance to *Portopia*, such as Capcom's *Ace Attorney*. The component of detective-work in this kind of story format usually outright requires for the player to search for clues hidden in the backdrops at their own order and pace, even if the backdrops themselves are still immobile and two-dimensional.

Many times the usual gameplay is also accompanied by Computer Graphics or CG's, referring to static full-screen drawings that are used to tell major scenes of a story through more detailed and specific visuals than what character sprites can get across. In the context of visual novels, Computer Graphics are mainly a Japanese loanword to describe these images rather than referring to any kind of rendered computer graphics (Galbraith 2009). Sometimes a visual novel might not even contain visuals at all, such as in the case of WARP Inc.'s *Kaze No Regret* (Uchikoshi 2018).

The sense of progress in a visual novel differs greatly regardless of the franchise. While there are some titles such as *Danganronpa*, *Higurashi no Naku Koro Ni* or *Hotel Dusk* where the story is, for the most part, entirely linear and forces every player to always arrive in an identical story conclusion, other acclaimed titles take advantage of a common visual novel principle known as 'routes', which are achieved through the operation of 'branching'. (Cavallaro 2010) This has the player's actions, mainly dialogue choices in most cases, to affect which direction the story is going to take (Uchikoshi 2018), a perfect example being found in *Steins;Gate*, a game that makes its branching story seem natural and believable.

During the game, the main character gets several phone calls and text messages from other characters, which they can then select to either ignore or respond to. Depending on which interactions are ignored and which are replied to, the other characters will act and respond accordingly, changing the story's structure in subtle way, eventually bringing the player to an ending most fitting to their choices. (Galizio 2019.)

Type-Moon's visual novels, namely the *Tsukihime* franchise and the *Fate* franchise have coined the term of a "dead end" to indicate a conclusive development in a visual novel. A dead end in a visual novel leads the player to an unavoidable early conclusion, usually presented in the story as the protagonist losing their lives, as seen in Figure 2.
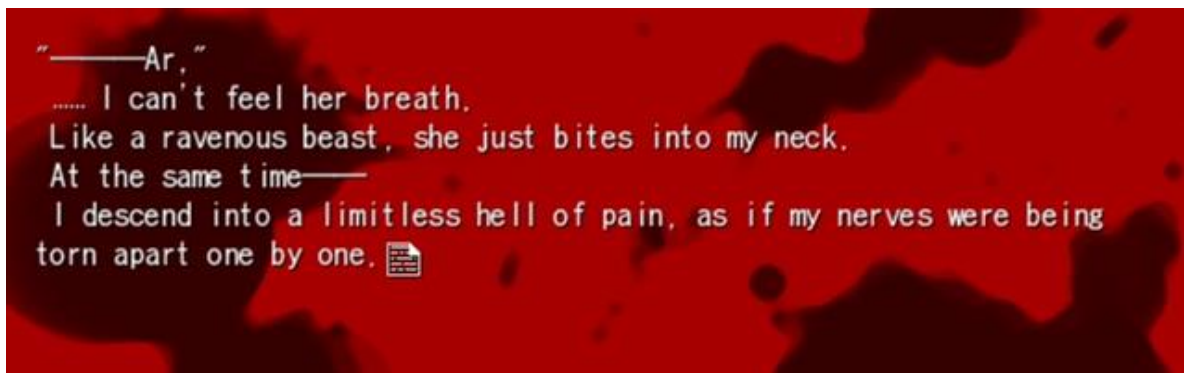

Figure 2. A dead end in a visual novel. (Tsukihime 2000)

3 STORIES IN VIDEO GAMES AND VISUAL NOVELS

3.1 Storytelling and writing in video games

Stories and writing have come a long way in the video game industry. Some of the very early known titles such as *Tennis for Two, Pong* and *Tetris* had entirely non-existent stories which also naturally applied to digital adaptations of any classic games such as chess or shogi. Video games were rarely developed, published or played for their stories during the early console generations, even earning quip from revolutionary programmer John Carmack who compared video game plotlines to adult entertainment writing in terms of how much importance they allegedly served (Kushner 2003). Carmack had years later lightly denounced his own quote on Twitter by saying that while he still believes that gameplay should be prioritized, stories have gotten more pre-eminent and respected in the industry since his first comment (Carmack 2018).

It was Nintendo's highly successful arcade title *Donkey Kong* that earned the title of the first video game with a complete story according to Guinness World Records. Yet the story of Donkey Kong still remains relatively simple – a gigantic simian captures Mario's girlfriend, whom he must then rescue by climbing up a construction site and eventually dropping the big ape to its doom. A similar format was seen a console generation later in *Super Mario Bros* where the princess is captured by an evil, fire-breathing turtle, who Mario once again saves after reaching the big bad's fortress and emerging victorious. It was only three years later when *Ninja Gaiden* released on the same system and helped popularize the element of using "cutscenes" to introduce characters and develop a story, something that used to be done either through only a few screens full of strings or through the game's physical manual (Cross 2015).

As of now, stories in video games still greatly vary depending on the genre and the type of game. Some games such as Naughty Dog's highly successful *The Last of Us* is directly focused on storytelling as well as a narrative cinematic experience, whereas late adaptations of the classic game of *Tetris* such as *Tetris*

Effect and *Tetris 99* still lack any resemblance of a story, and for an understandable reason. These types of match puzzle games, which also include titles such as Sega's *Columns* and Compile's *Puyo Puyo* have proven time and time again not to gain much from a narrative, thus usually leaving that aspect out of the product. Rare exceptions, such as Capcom's *Puzzle Fighter* series feature fairly primitive cutscenes for its arcade mode characters – alas, those parts of the games were never met with any particularly positive criticism or any attention at all. In fact, the crossover game *Puyo Puyo Tetris* was heavily criticized for its outlandish and worth skipping through story (Wright 2017).

Many aspects exclusive to video games help to differentiate the storytelling seen in them from other industries, namely film and literature. Firstly, many games depend on player interactivity to tell a story - this means that the player's interaction has an effect on how the story might go or how much of the game's world the player experiences, whether it is through optional dialogue, secret scenes or just a downright different direction in the story affected by actions taken. Naturally, this type of storytelling is unusual for any mediums other than games. Capcom's *Ace Attorney* presents this in the form of hundreds if not thousands of lines of optional dialogue spawned from interacting with the environment. (Figure 3)

Figure 3. Capcom's *Ace Attorney* presents this in the form of hundreds if not thousands of lines of optional dialogue spawned from interacting with the environment. (Phoenix Wright: Ace Attorney 2001)

However, some exceptions include a Netflix film titled *Black Mirror: Bandersnatch* as well as several literature works categorized under the genre of "Choose-your-own-adventure". What makes these products unique is that they are not linear in nature like nearly any other work of fiction but instead have an applied gimmick which lets the viewer or reader decide the direction in which the story should go.

Another noteworthy difference between video games and film namely is pacing. Both of them are audio-visual forms of entertainment, but games give their audience a chance to control the pace of the storytelling by means such as exploration or any other reason not to feel pressured into immediately moving onto the next section of the story.

3.2   Exploring visual novel stories

The visual novel genre generally offers a highly varied selection of premises and narratives to choose from, although there are several of highly reoccurring themes and formulas and a general exclusion of some types of stories that other video games as well as the film industry handles at a larger scale.

One of the aforementioned reoccurring themes is romance, which is a staple in a visual novel sub-genre of sorts commonly referred to as "dating simulators" (Cavallaro 2010). These types of visual novels are more than often focused on an ordinary suburban setting, with the cast of characters usually being around high school age (Galbraith 2011). The stories themselves revolve around character interaction and relationship drama that the player can affect through choices, with these choices determining which supporting character the protagonist becomes intimate with.

However, many of the most popular visual novels are good at setting an example about how much variety the genre offers in terms of storytelling. 5pb's *Steins;Gate* is a story about time travel and the potential tragedy that it may induce. Spike Chunsoft's Danganronpa, on the other hand, is a title heavily inspired by Koushun Takami's *Battle Royale* novel, making it a story that

combines elements of murder together with psychological manipulation and kidnapping. Similarly, the same studio's *Zero Escape* franchise is a locked-room styled survival story done in the vein of the *Saw* film series.

As for the exclusion of certain themes, one common element that visual novels have difficulties expressing is action. This is highly likely due to the fact that the genre's core format does not compliment elements of fighting and combat well due to its very nature of having emphasis on static sprites, CG's and character dialogue. One could argue that Type-Moon's highly popular *Fate* franchise subverts this seeing that the premise is built around a war where summonable historical legends known as 'servants' must engage in life-and-death fights in order to emerge victorious – the same applies to another Type-Moon title, *Tsukihime*. In both of these cases, however, the majority of the story is still built around character drama, interaction and even erotic material, while the battles themselves are presented through brief and yet dramatic CG's.

3.3 Exploring visual novel character writing

3.3.1 The protagonist

The character archetypes seen in these characters are usually indistinguishable from those seen in Japanese animation due to the close relations between the two mediums (Cavallaro 2010). A visual novel always features a protagonist as the central character of the story whose perspective is the most important to the player in terms of storytelling. Typically, the protagonist is presented with a monotonous personality and not too many defining features during the prologue of the story. This is done for the purpose of letting players self-insert into the main character before any choices are made that could potentially have the protagonist differentiate from what kind of a character they were at the beginning.

And that is one of the most essential facets of writing a character – namely the protagonist – deciding whether they are going to be a predefined person with already existing characterization and a personality of their own or if the

character's entire existence is dictated by the player's preferences or choices, with the latter being usually more prominent in role-playing games (Welsh 2017). There are a few advantages and disadvantages to either method of creating a protagonist, but regardless of the type, a strong and well-written point of view can heavily dictate whether or not the protagonist successfully delivers feelings of empathy or feels completely disconnected from the player in the worst-case scenario (Noyle 2016).

Sometimes the protagonist is simple all-around with minimal personality traits, such as *Keiichi Maebara* from *Higurashi no Naku Koro Ni*. In rare cases, the protagonist actually has their own traits to isolate themselves from the other characters. For example, *Okabe Rintaro* from *Steins;Gate* is handled as a *chuunibyou*-type character, a Japanese term referring to teenagers and young adults who have developed traits from overly dramatic fictional characters for the purpose of standing out and looking unique. Another example of such a character is *Gundham Tanaka* from *Danganronpa 2: Goodbye Despair*, seen in Figure 4, who believes that he holds dormant mystical powers and refers to his pet hamsters as the "Four Dark Devas of Destruction".

Figure 4. Gundham Tanaka. (Danganronpa 2: Goodbye Despair 2012)

3.3.2 The supporting cast

The supporting cast is equally important, if not more important for a visual novel whereas they have a more noticeable amount of literal "screen time" compared to the main character. As such, supporting characters are usually the ones to hold slightly more colourful characteristics and gimmicks. The terms *tsundere* and *kuudere* are two well-known ones that almost exclusively apply to female characters, with the former referring to characters that act aggressive and intense in order to mask a warmer, friendlier side to themselves from others, and the latter referring to ones that instead act cold and apathetic for similar reasons (Eisenbeis 2013). Another term that is regularly seen in female characters is *genki*. A "genki girl" (Figure 5) refers to a highly energetic girl with perhaps a tendency to be slightly erratic and to act on gut instinct as opposed to logic (Brakke 2015).

These archetypes and shifts in personality are also often used in important character chemistry and contrast, with one example being Danganronpa V3's *Shuichi Saihara* and *Akamatsu Kaede*. The former is very intelligent but has low self-confidence and does not excel at presenting himself, while the latter is his more optimistic friend who is able to see the positives of Shuichi and wants him to believe in himself more often and break out of his shell.
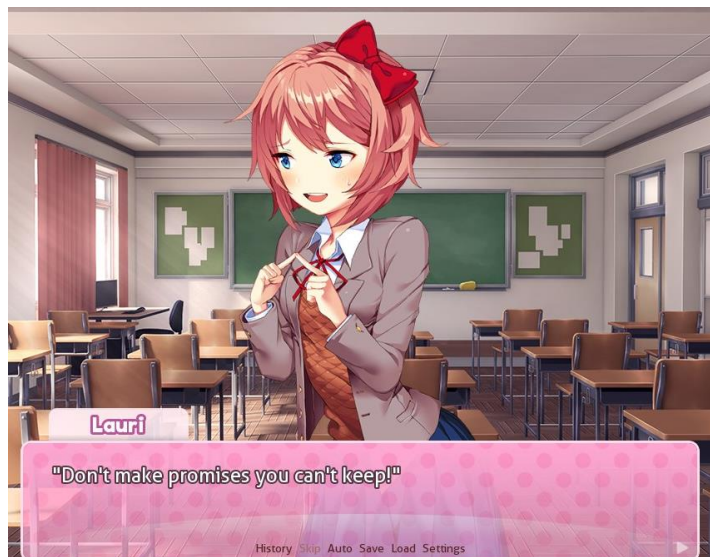

Figure 5. A genki girl. (Doki Doki Literature Club 2017)

Another similar and more comical example is the duo of *Phoenix Wright* and *Maya Fey* from the Ace Attorney series – Phoenix is seen as more collected, stoic and dense, while Maya is much more childish, energetic and ditzy, often resulting in Phoenix having to look after her almost like she was his own child.

Many of these character tropes can be seen repeatedly in different titles regardless of gender. This raises the question of whether it is simply an effective method of writing an enjoyable character to such a storytelling format or if it is rather a way of avoiding proper characterization by using stale clichés and one-dimensional personality quirks.

Regardless, even a tropey supporting cast holds massive significance to a story, primarily since their roles are usually not only to help the protagonist with characterization and story development but to also generally make the surrounding world feel alive. This element has even proven to cause issues in adapting visual novels into animation due to the difficulty of translating multiple character perspectives into a shorter, more linear experience (Clements and McCarthy 2001). Some players may not even feel any concern towards the character development of the main character due to the effect of being immersed into the story as that character, making it crucial to expand the cast of side characters that they will be meeting along the way and paying attention to.

4   THE GAME PROJECT

The next step for the author was to use the gathered information and research to put studies into practice and design a playable, functional and story-driven visual novel from scratch. This practice was done in collaboration with students Nam-Anh Lê and Samneang Peo who were in charge of the game's graphics and visual character designs.

The game engine used for the project was *Construct 2*, and while it is not an engine strictly meant for visual novels such as *Ren'py* or *Visual Novel Maker*, the

software was selected with the intention of being able to feature more complex and custom gameplay mechanics in the event that they are implemented into the project. The initial plan is to finish developing the prologue of the game by the time this thesis will go public. The project will be developed exclusively to run on the PC.

4.1 Writing the premise

The very first step took into designing the game was to decide on its very premise and what kind of a story it is going to tell since the major elements naturally featured alongside the storytelling, such as action or romance, would eventually have a major effect to the gameplay. Romance ended up being dismissed as an idea fairly early into the development due to that particular subgenre of visual novels feeling too unoriginal by today's standards and not allowing much brainstorming in order to make the story stand out from similar titles.

The author would in time take interest in a story focused around "characters who are strangers to each other that takes place in a life-threatening situation". The reasoning for this is because both of these aspects would allow extensive building, potential chemistry and development through bonding and a story that forces tenacious emotional reactions from its characters, making it ideal for trying out a varied cast that would essentially start all of their stories from square one, with the player being able to follow each one nearly from the very beginning. This would also indicate that each characters' background stories would be unrelated and superfluous to the story. The idea would develop into a concept of a closed, mysterious location that the characters would find themselves in involuntarily.

The initial premise was more or less set, and what followed was the inclusion of important details. While the chronological set of events followed by the player would be decided to invoke a sense of mystery and alienation, the big picture was written down in order to explain the nature of the story in an eventual game design document. For this depiction, the theme of "death" was decided on, something that is not uncommon to be seen in games, especially those rated only

for adults, but the intention was to explore this idea in a way where death would be a uniformly shared concept for the game's entire cast.

A "death game" type of story was heavily considered for this reason, but this was also a short-lived idea due to the saturation of these types of series' in the Japanese video game -and comic industries, not to mention that death would not be a "uniformly shared concept" as intended unless all characters would eventually lose their lives. Instead, this idea spun into another approach about "life after death", meaning that all characters in the cast would unknowingly already be dead, which would then be saved as a plot twist later to be revealed for the players.

This idea still needed a purpose, however. There had to be a reason why any of the characters in the game would be experiencing a surreal life-after-death experience that is shared in unison. Since it was already decided that the story takes place in a closed off space, it was also established that location to be a trial ground, to a degree. For the purpose of giving out a sense of cosmic mystery, similarly to works of H.P. Lovecraft where humans are not supposed to visualize or understand some of the features that materialize around them, the purpose of the trial is left up to interpretation for players or heavily implied to be a twisted work of God that would be a waste of time to interrogate.

We now had a concept of people who have unknowingly passed on finding themselves in a closed off location somewhere that might not even be on Earth or any physical realm. Characters would have to proceed around the location, find clues and discuss amongst themselves in order to find out what is going on and what to do in order to get out. The premise still needed two major features – a reason for gameplay as well as stakes. This reason for gameplay was not considered for long until it was voted to be a bunch of puzzles spread around the game area that the player would have to solve in order to make progress.

Since the characters are already dead, death itself would have been a tasteless stake. Because of this, the author had to consider something different. Instead,

the stakes would be that any mortal injuries suffered within this location would physically heal but drive that characters' mental state into a worse and worse spiral every time. Because of time constraints, this would be entirely scripted and linear – the player would not have any control over whether a certain character would become insane during the story or not. This detail about the game's premise would also eventually serve as the reason why the main cast finds out about the true nature of their setting.

While any specific naming would not be done at this point in development, especially for the characters, the name of the game's setting was decided as "The Great South" in reference to the Angel of Death, Azrael, and his association with the South. Similarly, regardless of the cast's importance, not a single character design was prioritized over the premise itself due to the location and initial story assisting the early writing process more (McDevitt, 2010).

4.2   Writing the characters

The cast of characters would be heavily focused on due to their importance in terms of carrying the story in a visual novel. The writing began with the protagonist, who would simultaneously be the central character of the story yet the least amount of work, as it was determined that this main character would work best as a blank slate with only hints of personality. The protagonist was established to be female and would have a personality trait related to the game's puzzles in the form of being fascinated by detective -and crime-related fiction. This combination would give the protagonist a sort of "normal girl" feel which would be a pursued contrast to the grim truth of The Great South's backstory. As Samneang Peo was in charge of visual character design, the author also bestowed him the opportunity to name the three central characters, including the protagonist. The protagonist was eventually named *Zoe*.

As the essentials of the protagonist were being written down, a secondary main character – or a *deuteragonist* - was already being considered in order to make the most out of the visual novel format as well as give the protagonist a chance to

build proper chemistry with another character throughout the game. This secondary main character started out being referred to as "sidekick" when their concepts began being written down. Contrast seeped into the writing of this character immediately as well as the author wanted their personality to be the very opposite of the protagonist, being very outspoken and energetic instead of being anywhere near a blank slate.

Some of the author's personal encounters and relationships also inspired the personality of this character to develop. They almost naturally became a female as well while being written and was developed slightly with the *tsundere* character archetype in mind, having a cold and commanding attitude against the protagonist at first but starting to act more like a friend as the story progresses. Similarly to the protagonist, Peo was in charge of naming her as well, and she got the name of *Fae*.

Next up was the tertiary central character, or the *tritagonist*. He was idealized as male from the very start to make the main character trilogy slightly more varied and was intended to be the most complex out of them in general. This character would be introduced more suspiciously, almost like an antagonist in waiting, and his development witnessed by the player would also comply that. However, as the story would reach a certain point, it would be made clear that he is on the side of the main characters and had simply tried to act like an inspiring, serious leader to other characters in the middle of a dire situation. Nevertheless, most of the time that the player would have discourse with him would still make him seem cold and apathetic. He was the last character to be named by Peo and was named *Solomon*.

The next two characters were the last ones necessary for the prologue. They were intended to be introduced as a duo to spin some innovation into the debut scenes of the characters. And similarly to the main character duo of Zoe and Fae, they would also have vast character design contrast – the first of them is a young-looking girl who is fairly quiet, reserved, simple and speaks in a very airheaded manner. The other character is a large-framed man who is carelessly

optimistic, loud and overly friendly to people he has barely ever met. These two characters would serve to stir the pot of the plot after their introduction, as the players would be made to doubt their goodwill very soon after Zoe and Fae would start co-operating with them. The author took the opportunity to name these characters and named them only with the basis of wanting diversity in the cast of characters, thus deciding that these two characters would obviously originate from a different background than the others. Thus the girl became to be known as *Jenny* and the man as *Taro*.

Many other characters were also written down to complement the full plotline beyond the prologue but were not fleshed out for the thesis. These included a female companion of Solomon who would bare a similar personality to him, an artificial intelligence that would run The Great South from the shadows as well as a nervous, injured man who would continuously threaten to end his life for an escape opportunity. All of these characters have been temporarily left on the cutting room floor in hopes of perhaps getting the opportunity to be featured in the game at a later date.

The author put Peo in the charge of designing the characters visually right after characters bios were finished, which were then received and set in stone as the characters' final designs (Figure 6). Having the character designs ready at this point would also help them during scriptwriting due to being able to visualize the characters and their facial features during dialogue.

Figure 6. Final designs of the characters. (Peo 2019)

4.3 Writing the script

As the author started writing the script, they used other visual novels' scriptwriting styles and formats as reference. Lines had to be kept relatively short due to the size limit of the in-game dialogue box and lengthy words had to be kept to a minimum in case of possible string alignment issues that would arise during build development. (Figure 7)

> (But what about the rest? This thing in the middle is like, one of those things you use to pay at the supermarket.)
> (That means there's definitely a way to get out from inside!)
> Surely it won't hurt to try, right?
> 4 numbers... How many possible combinations was that again?
> Wait, no. There should definitely be a solution here somewhere.
>
> Upon completion of Puzzle 1
>
> Yeesss! Victory!
> (I shouted with adrenaline flowing through my veins, and yet I had no idea what I would be meeting on the other side.)
> Whatever I'll see next can't be any worse than sitting inside a claustrophobic little box, right?
> Right. Deep breaths. After that, I'll dwell inside.
> Oh man... I really wish I was home petting Dax right now.
> (I followed my own instructions and dived right in.)
>
> Location: Room 800
>
> (The room beyond the window - this is it.)
> (This one looked much more manmade compared to the cube I had just come from.)
> (It looked like a combination between some sort of basement and a boring office space.)
> Not especially filthy, but it could use a housekeeper. Has that plant in the corner even been watered in a while?
> (Now, regarding any new signs of life...)
> (After standing in total silence for way too long, I was expecting to hear at least something else other than ambience for a change.)
> (But what ended up greeting me right away was only something that I could call a... ball of lightning.)
>
> Zoe
> Oh!
> Hey, are you also-

Figure 7. Lines had to be kept relatively short.

The script was not written in a standard screenplay format due to it evidently being further work for a script that exists only for the purpose of transferring line-by-line dialogue to a game. Even the time of the day and differentiating between interiors and exteriors was deemed as unnecessary due to the entire game taking place in an interior location with no concept of moving time.

Instead, locations are highlighted in yellow to indicate where this particular conversation and/or scene takes place. Similar highlights of different colours were also used for character names as well was comments that announce interaction, puzzle completion and other actions taken by the player. Each individual line is written on top of each other with no line breaks. The main character, Zoe, has a large quantity of her dialogue written between brackets – this is a very regular if not universal technique with visual novel protagonists that indicates inner thoughts. (Figure 8)

In the middle of the writing process, the author asked help from two individual assistants who would proofread the work so far and provide some commentary and feedback on the work. This helped weed out several grammatical errors, potential plot holes and illogical character behaviour. The sheer amount of work that had to be redone after the criticism helped them further understand how even such simple-looking work can make its creator lose objectivity while carrying out the task.

Jenny
But Taro said to break the glass.

Fae
So why haven't you!?

Jenny
Eeeeeh. Jenny's not very strong. Jenny would cut her fingers.

Zoe
(This Taro person sure got himself a solid insurance before locking himself in there.)
(Anyways, I need to get this incubator, or whatever, open right away.)
(I hope to God he's okay...)

Upon completion: Incubator Puzzle

Fae
You did it, Ribby! It's opening!

???
Ha-ha-ha-ha-ha!

Zoe
(As the lid opened, we were immediately greeted to roaring laughter - the last thing we would have expected.)
(While we were taken aback, a leg emerged from amongst the smoke.)

???
Why, you have my gratitude for that one, Jenny!
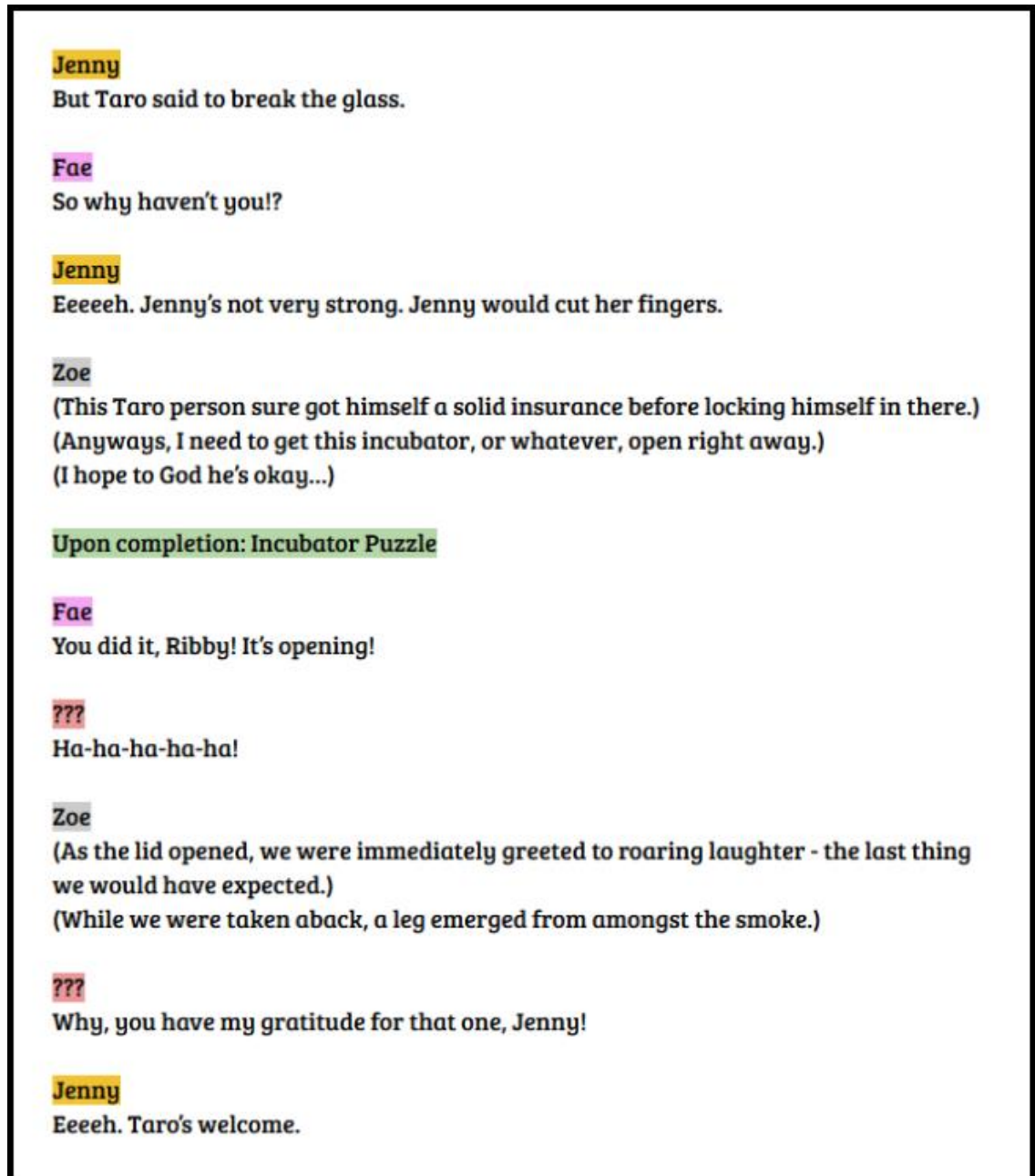
Jenny
Eeeeh. Taro's welcome.

Figure 8. Each individual line is written on top of each other with no line breaks.

Character chemistry and development was defined, changed and set into stone during the scriptwriting process. When Zoe's dialogue started being written down, the author realized that multiple of her lines were dependant on audible observations or completely fluctuating line of thought that gets lost besides the point a lot of time. Because of this, her character was kept completely alone for as little time as possible so that conversation and interaction would flesh her out more.

Fae, on the other hand, was written down as slightly cruder and nastier than originally intended. Her new direction was a success at aggravating Zoe's character enough for her to talk back, resulting in more character dialogue exchanges between them than simple one-way insults and bursts of rage. The author still wanted her character to have hint of cuteness which is why her personal insults were kept on a very kindergarten level and the nicknames she gives to others are also much immature in nature. Additionally, her initial dialogue was modified a lot to either change or straight-out erase some heavy swearwords that were eventually replaced with lighter curses such as "hell" or "damn" to make her character a bit less impure.

Jenny and Taro's roles in the prologue's script turned out having quite a few differences to their pre-script personalities as well. Jenny turned out not only to be airheaded, but her speech patterns are extremely simple, almost primal, and the amount of words she uses in general are meager. Her dialogue was also later rewritten to make Jenny refer to herself in third person in order to create as much contrast as possible between the characters who are talking, especially since her introduction scene includes four people in total at the same time. Taro, on the other hand, did not change as much, but was still tinkered with. He was originally intended to be a slow-witted beefhead who enjoys life despite the circumstances, but the author realized that Zoe should meet at least one character during the prologue who is useful to their situation, and thus Taro was changed to be frighteningly optimistic yet determined whenever the scene calls for so.

The script was finished at a reasonable time before the planned game project development and is very optimistic about the pacing of the story regardless of no previous writing experience. Despite that, his views on his own writing and the quality of the dialogue remains fairly self-critical and cautious. The writing process presented many observations about the practice of writing a visual novel as well as the most common issues faced while doing so.

One of the most common oversights encountered while writing this particular game was related to pacing and how important it is to measure the amount of relevant and irrelevant chatter during scenes where characters talk for a longer period of time. While some optional dialogue and shorter, snappier scenes are a good fit for characters to argue about points insignificant to the plot, lengthier, story-carrying scenes can easily suffer from it by having the atmosphere fluctuate too much and for too long. A player is easily capable of realizing whenever the characters are speaking in circles and going through the same topics over and over all for the purpose of dragging the story out and this should be avoided at all costs.

Some other issues were born from personality-related inconsistencies as well as carelessness, specifically failure to translate ideas into text by focusing on one objective to write about and forgetting to give it the context it needed. This resulted in some characters, namely Fae, to act in incoherent ways during some scenes where she would be unessentially impolite towards some characters simply because the author forgot to define the reason for that behaviour. These mistakes repeated themselves a few times and were observed as fairly problematic due to the fact that the author's own proofreading would still fail to detect these irregularities since his own head would fill in the gaps on the unwritten details of each scene.

Regardless of the issues faced during the writing process, a lot was learned through practice. This chapter of development was concluded by also naming the game itself as *All Equal*, a subtle way to describe the game's reoccurring theme of 'death' and how it is the great equalizer of all the characters. It was time to move onto writing the Game Design Document before the eventual playable build development.

4.4   Writing the game design document

The Game Design Document, or the GDD, was written after the script was finished to make certain that its contents were consistent and would need later

adjustments as little as possible. Its initial purpose in addition to being an industrial standard was to give a well summarized abstract of the game project as a point of reference to the graphic designers Peo and Lê.

The GDD's overview describes All Equal as an adventure game / visual novel with a plotline shrouded in mystery, featuring several characters that the player interacts with as well as puzzles which are necessary to solve in order to progress.

The setting is described as being "fairly grimdark" much like an American splatter film, but with less grit, and points out a necessary contrast between the colourful and quirky characters who meet despair-inducing consequences and experience traumatic events during the story.

The story as it is in the GDD is as follows: All Equal starts off without giving out too much of its story, only revealing it gradually to the player. The full image is as such: the story takes place in a location known as The Great South, which is treated as sort of an error in existence itself, existing approximately between life and death.

The Great South is not created for any meaningful purpose, although it does work as a multi-dimensional station between the deceased and the lifeforms that they are going to be reborn as, effectively meaning that half of the souls trapped in it are recently deceased and the other half are respectively who they are reborn as later on. The Great South takes the form of an apartment block consisting of 10 numbered floors as well as a bottom floor, with the front door in the bottom leading into a black void of nothingness without an edge and a huge, red door at floor number 10 leading into a chamber that lets the living souls be reborn and the deceased to finally pass on.

The story is told from the perspective of a young lady named Zoe, who awakens in the Great South without any idea on where she is at and what has happened to her. She soon meets another girl her age named Fae, whom she teams up with.

Zoe and Fae then go on a journey to discovering the truth about The Great South, eventually finding out that Fae has died in real life and that Zoe is her reincarnation. They eventually make it to the end, letting Zoe be reborn as a baby while Fae peacefully passes on to the afterlife.

The rest of the information in the GDD states the game's development platform to be exclusively on the PC and finally lists the author, Peo and Lê to be its development team.

4.5 Developing a playable build

4.5.1 Preparation for the development

Construct 2 was chosen as the game engine to make the implementation of puzzles easier and overall actually possible.

Construct 2 is a game development software that works through "events", which are essentially a simplified interface with a coding language set behind it, but only requiring for the developer to specify the cause and the effect.

After the project file was created some essential aspects were set and altered on onset. The resolution of the game was settled as 1920 by 1080, which is a regular standard for nearly all monitors and television displays today (Wasson, 2013). As of this thesis project, the game will not have any particular settings related to either the resolution, graphics nor sound due to time constraints and prioritization.

4.5.2 Overviewing artistic work

Before delving into the game engine itself, the author overviewed work by Samneang Peo, the game's background -and sprite artist. Some essential backgrounds for the game's earliest locations had been already finished and

uploaded (Figure 9) as well as the most prominent character, Fae's sprites were ready to be used in the project (Figure 10).

Figure 9. Some essential backgrounds for the game's earliest locations had been already finished and uploaded[…] (Peo 2019)
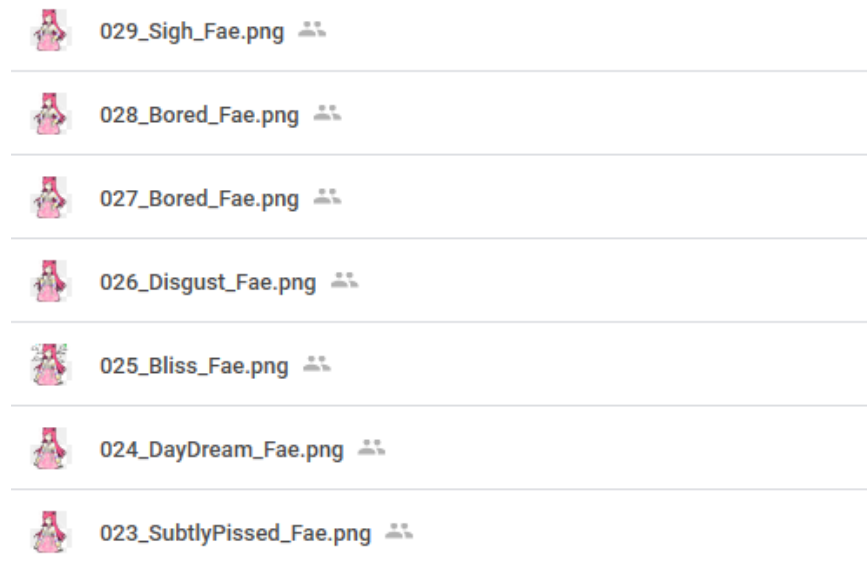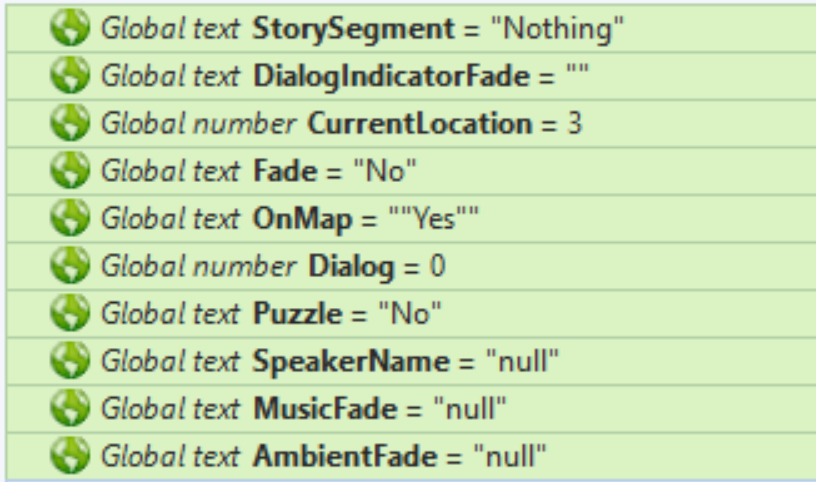

Figure 10. […]as well as the most prominent character, Fae's sprites were ready to be used in the project. (Peo 2019)

4.5.3 Essential events of the development

The development began with several fundamental events being defined from the start. The most notable of these were global values that would be mandatory for some non-liner progress such as changing rooms without every single element

resetting or making sure that character dialogue changes according to scene and time (Figure 11). Other values would make it clear to the engine whether or not the player is engaging in a puzzle or how the game's sounds should be behaving at a given time.

Figure 11. The most notable of these were global values that would be mandatory for some non-liner progress such as changing rooms without every single element resetting or making sure that character dialogue changes according to scene and time.

The rest of the essential events consisted of the behaviour of simple user interface elements, such as how the cursor should react with the environment and how some assets should be hidden as soon as a layout begins (Figure 12).

Cursor	Is overlapping 🐀 Exit	🐀 Exit	Set animation to "Highlighted" (play from beginning)
🐀 Exit	Opacity = 100	Add action	
➡ 🖱 Mouse	On Left button Clicked	ExitShadow	Set Visible
Cursor	Is overlapping 🐀 Exit	ExitShadow	LiteTween Start from the beginning
🐀 Exit	Opacity = 100	ExitShadow	LiteTween2 Start from the beginning
ExitShadow	✖ Is visible	⚙ System	Set OnMap to 'No'
		⚙ System	Wait 0.5 seconds
		⚙ System	Set Fade to 'Yes'
		⚙ System	Wait 0.8 seconds
		⚙ System	Go to WorldMap
		⚙ System	Set Fade to 'No'
		Add action	
Cursor	✖ Is overlapping 🐀 Exit	🐀 Exit	Set animation to "Default" (play from beginning)
		Add action	
➡ ⚙ System	On start of layout	DialogContinueIndicator	Set opacity to 0
		Add action	

Figure 12. The rest of the essential events consisted of the behaviour of simple user interface elements.

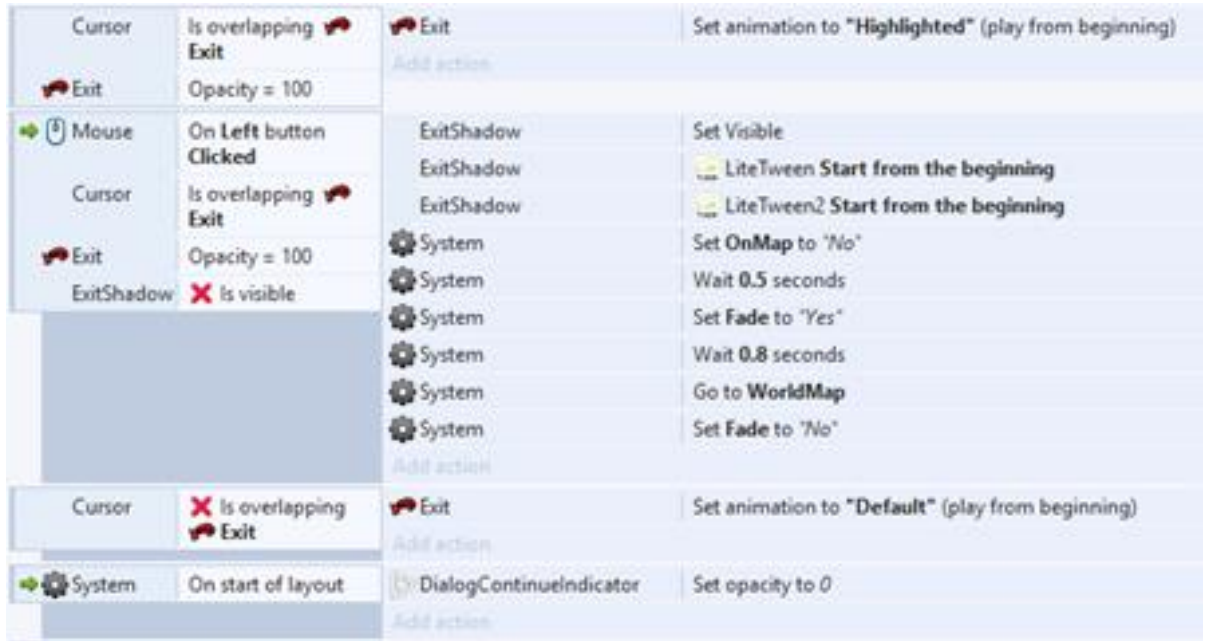The rest of the pre-emptive basics were related to functional location interaction (Figure 13). The details of its effects would be delved into next, but it was extremely important to first make sure that all the assets and objects would behave as intended.
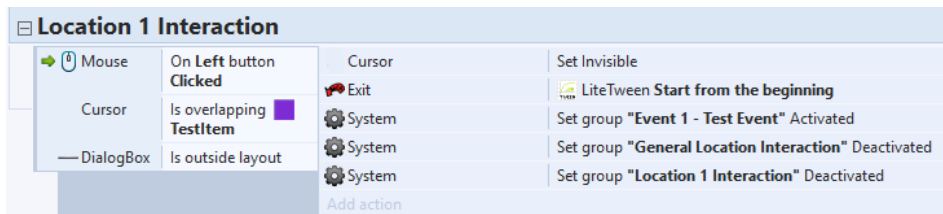
Location 1 Interaction

➡ 🖱 Mouse	On Left button Clicked	Cursor	Set Invisible
Cursor	Is overlapping ▪ TestItem	🐀 Exit	LiteTween Start from the beginning
— DialogBox	Is outside layout	⚙ System	Set group "Event 1 - Test Event" Activated
		⚙ System	Set group "General Location Interaction" Deactivated
		⚙ System	Set group "Location 1 Interaction" Deactivated
		Add action	

Figure 13. The rest of the pre-emptive basics were related to functional location interaction.

Next up and last was to implement the current character sprites into the game to prepare for creating dialogue events as well as testing their sizes and functionality in general. Fae was the only character with finished sprites at this point in development and was a good fit nonetheless due to her sprites being the first ones displayed in during the game. Fae's different expressions were soon usable for dialogue events (Figure 14).

Figure 14. Fae's different expressions were soon usable for dialogue events.

4.5.4 Managing the dialogue

Character dialogue was next in line of operations not only due to it being closely related to the specific testing of location interaction earlier but because of it being the backbone of a visual novel as well.

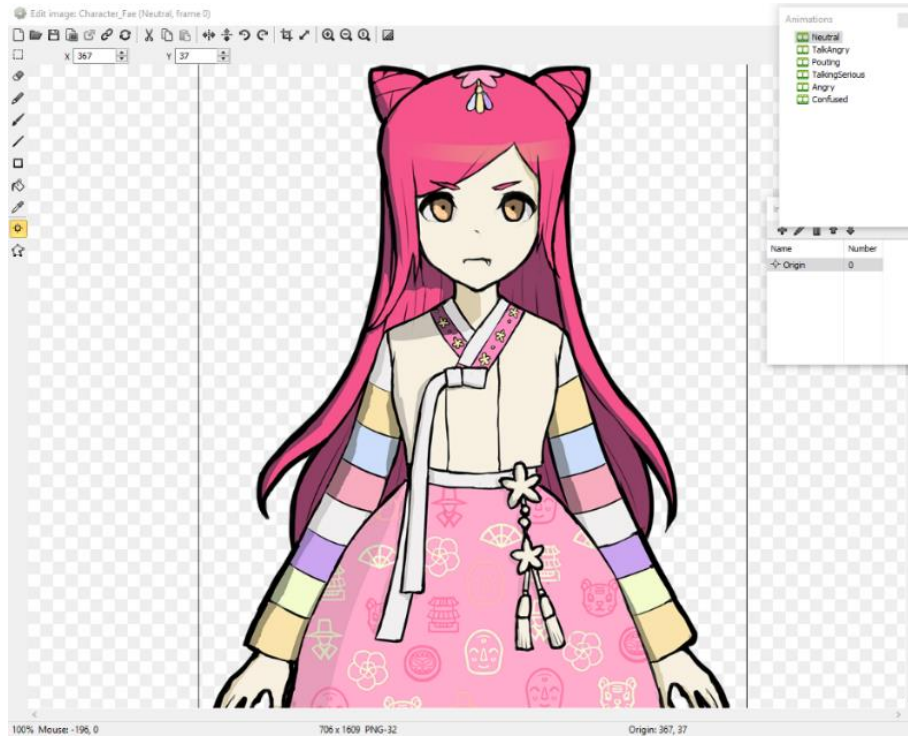After the player interacts with an asset or does anything that would initiate a conversation with themselves or with another character, all elements related to location interaction would need to cease and everything necessary for dialogue would start operating. This includes the dialogue box appearing on the screen with a tween animation, character sprites fading in as well as an AJAX object making sure that a text string would perform as commanded and would display the right amount of text at the right time (Figure 15). The AJAX object would also need to make sure that it is properly reading the dialogue-dependant .txt file line by line without skipping any over or inadvertently repeating any retorts.

Another very important element to the dialogue would be its letter-by-letter display speed. As there were virtually no reports on what speed is a standard for

visual novels, the games *Danganronpa V3: Killing Harmony* and *Corpse Party* were used as direct, observational reference. After some practical testing, the display speed was decided to be one letter per 0.04 seconds.
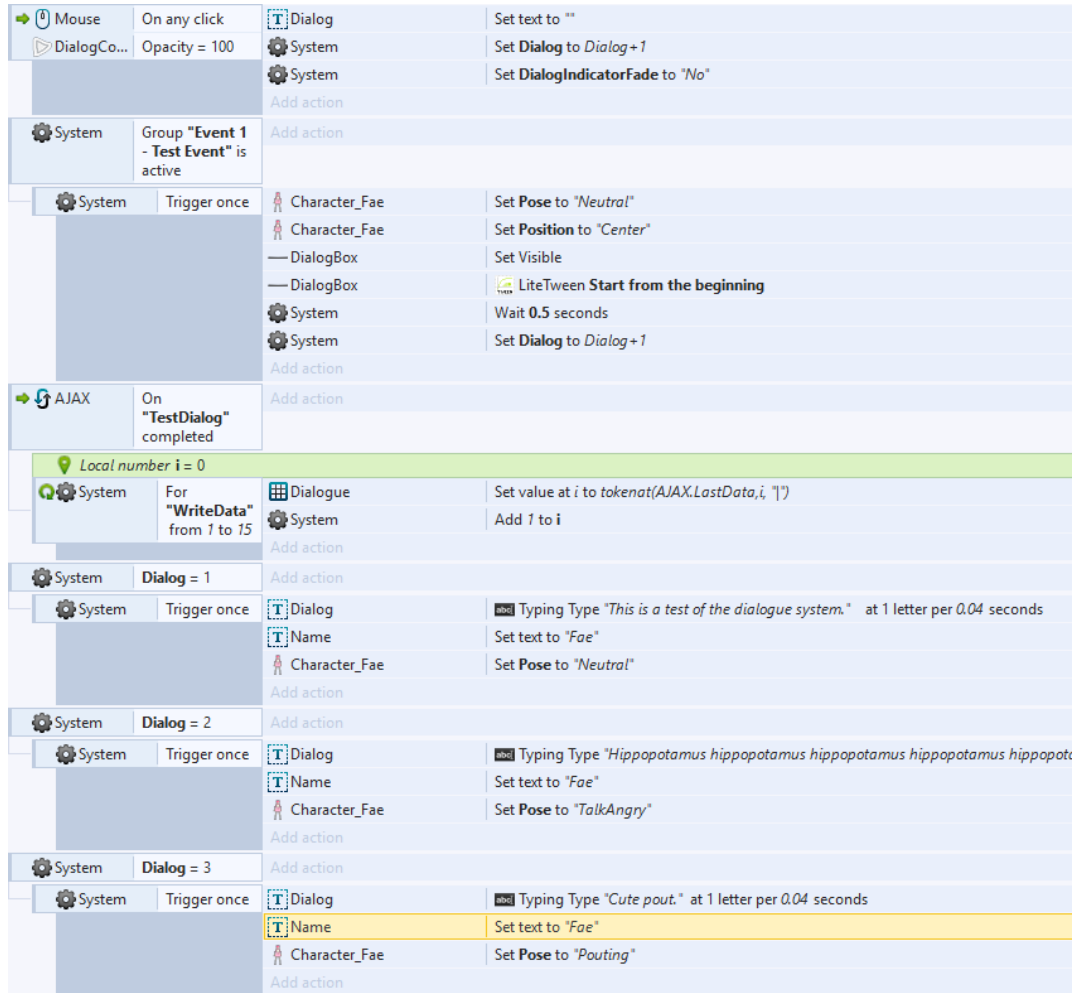
Figure 15. This includes the dialogue box appearing on the screen with a tween animation, character sprites fading in as well as an AJAX object making sure that a text string would perform as commanded and would display the right amount of text at the right time.

The next important step was typesetting the text string into a dialogue box. A placeholder asset was used and seen in Figure 16 to make the dialogue box and the text string used for the dialogue compatible. The string's font was chosen to be Share due to its readability as well as it being consistent enough with the rest of the game's current art style. While the dialogue box is intended to horizontally fit the entire screen, the text string was cropped to be approximately 350 pixels

away from each side of the screen in order for all text to be at a decisive and coherent area for the eyes instead of spreading out.

Figure 16. A placeholder asset was used to make the dialogue box and the text string used for the dialogue compatible. The string's font was chosen to be Share due to its readability as well as it being consistent enough with the rest of the game's current art style.

One last detail for the dialogue system was the make a variable that would check a speaking character's name. This was preparation for what was to come as the placeholder dialogue box does not feature a nameplate for the speaking character, but the finished asset eventually would. It was important to make this variable in time so that it can be easily implemented later on. The dialogue system was now refined enough to put into practice by inserting the lines from the game's script into the .txt file read by the AJAX object, as seen in Figure 17.
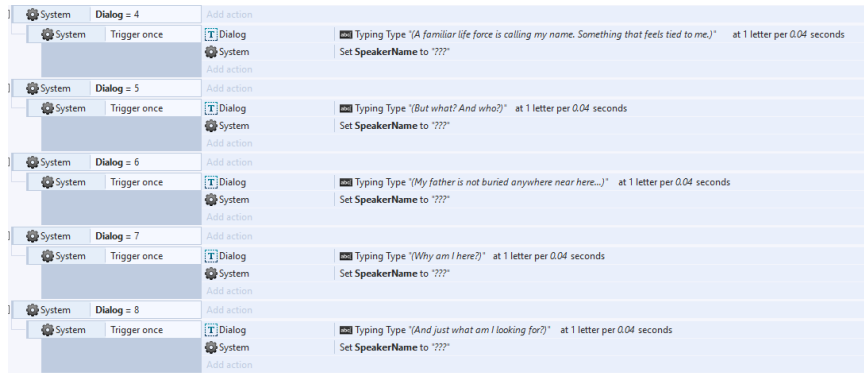
Figure 17. The dialogue system was now refined enough to put into practice by inserting the lines from the game's script into the .txt file read by the AJAX object.

4.5.5 Creating a scene

At this point in development, most essential aspects were done in order to finish developing the game using previously created events and groups as guidance. The following task was to make a complete scene out of dialogue, interactivity and proper changing of graphical assets. The very first scene in the game would serve as an example for all following scenes due to the simplicity of the game genre.

First up, several quick assets and variables were created to assist in creating scenes. One of these was an object named "fade" which would be nothing but a black sprite covering the entire screen. This sprite's purpose is to change its opacity value gradually according to command either from zero to one hundred or the other way around, making it an object that helps in covering transitions from one room or scene to another. The fade object had to be reset to its default values at the beginning of the layout amongst other assets including the dialogue box and the value determining state of current dialogue (Figure 18).

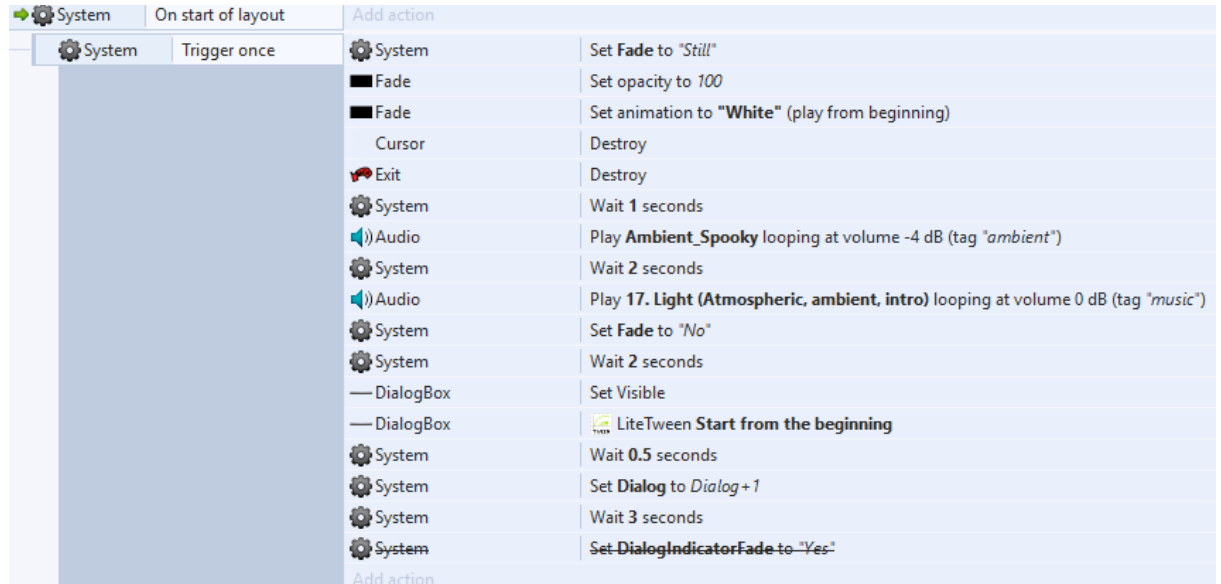| System	On start of layout	Add action	
System	Trigger once	System	Set **Fade** to *"Still"*
		Fade	Set opacity to *100*
		Fade	Set animation to **"White"** (play from beginning)
		Cursor	Destroy
		Exit	Destroy
		System	Wait **1** seconds
		Audio	Play **Ambient_Spooky** looping at volume -4 dB (tag *"ambient"*)
		System	Wait **2** seconds
		Audio	Play **17. Light (Atmospheric, ambient, intro)** looping at volume 0 dB (tag *"music"*)
		System	Set **Fade** to *"No"*
		System	Wait **2** seconds
		DialogBox	Set Visible
		DialogBox	LiteTween **Start from the beginning**
		System	Wait **0.5** seconds
		System	Set **Dialog** to *Dialog + 1*
		System	Wait **3** seconds
		System	Set **DialogIndicatorFade** to *"Yes"*
		Add action	

Figure 18. The fade object had to be reset to its default values at the beginning of the layout amongst other assets including the dialogue box and the value determining state of current dialogue.

From these events, the first scene was created (Figure 19). And inverse effect was also added into the fade object after it became clear that a white-coloured fade would sometimes be more fitting to certain scenes, with the intro being a good example of that seeing that the very first scene is a dream-like sequence. Placeholder assets were used for the missing CG's that were yet to be finished and the dialogue box from had not been received from Lê either, but success resulted regardless. The AJAX object was reading the right lines from the correct .txt files as intended and the scenery managed to change as planned.

Some work, however, had to be directed at the speed of certain transitions and fades. Many of these little details that were finally put into practice in the form of a readable, functional visual novel were crucial to the game's design in order to regain pleasurable user interactivity and pacing. Audio and ambience also gained a variable that would let them fade in and out separately.

ZOE AT GRAVEYARD

(My father is not buried anywhere near here...)

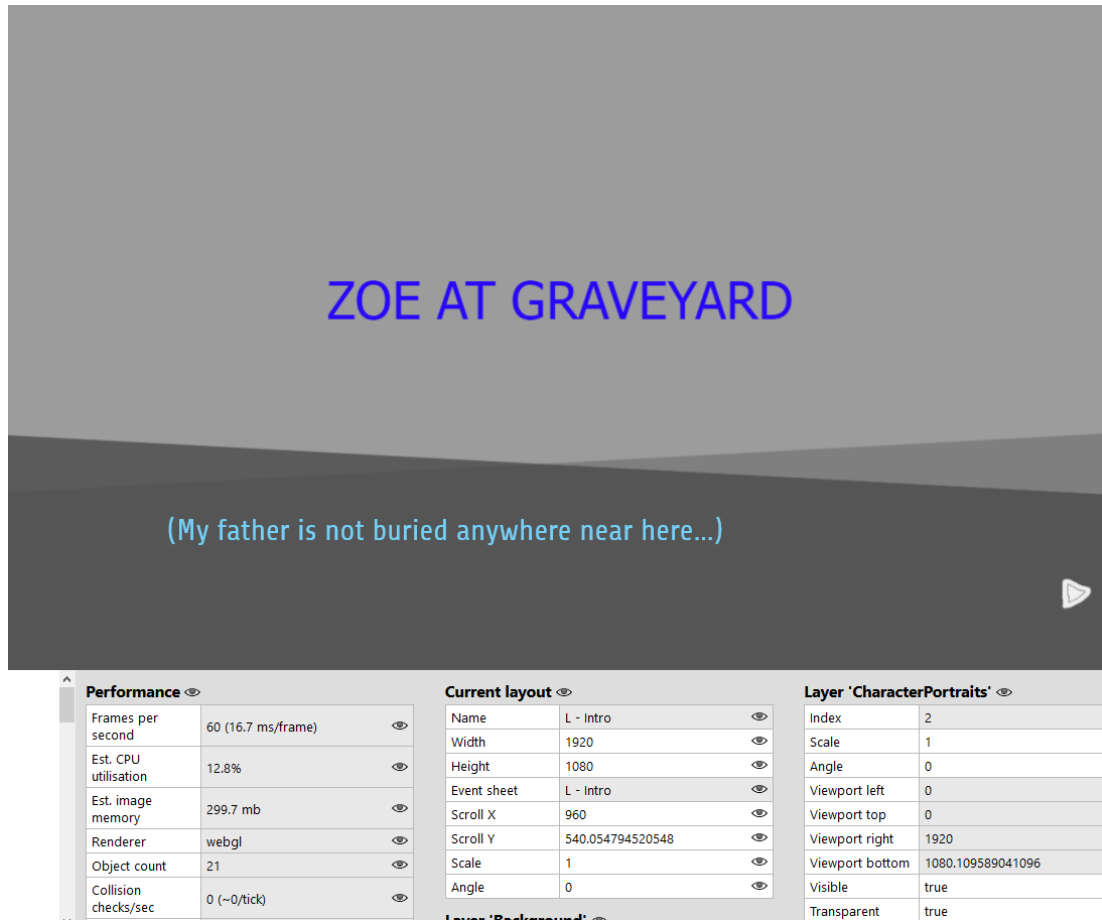| Performance 👁				Current layout 👁				Layer 'CharacterPortraits' 👁	
Frames per second	60 (16.7 ms/frame)	👁		Name	L - Intro	👁		Index	2
				Width	1920	👁		Scale	1
Est. CPU utilisation	12.8%	👁		Height	1080	👁		Angle	0
				Event sheet	L - Intro	👁		Viewport left	0
Est. image memory	299.7 mb	👁		Scroll X	960	👁		Viewport top	0
Renderer	webgl	👁		Scroll Y	540.054794520548	👁		Viewport right	1920
Object count	21	👁		Scale	1	👁		Viewport bottom	1080.109589041096
Collision checks/sec	0 (~0/tick)	👁		Angle	0	👁		Visible	true
				Layer 'Background' 👁				Transparent	true

Figure 19. From these events, the first scene was created.

Due to the functional location interaction that was implemented earlier in chapter 4.5.3, these types of scenes could also easily be triggered by interacting with certain parts of the environment. The only issue that had to be kept in mind was that certain events should not repeat later in the game if revisiting areas, which is why these optional text events would have to be tied to a variable concerning game progress to make sure certain subjects are not brought up at nonsensical times.

4.5.6 Creating the puzzles

Only two puzzles would be created for the prologue chapter and would have to be kept relatively simple due to this part of the game taking place at the beginning. The author did not feel the need to do extensive research on video game puzzles for this reason, as the ideas were more or less already thought up

by using some other games as reference, namely ones where puzzles are mechanically simple and relatively fast to figure out.

The first puzzle was designed to be a simplistic test of being able to discover a numeric clue from the environment and serves as the very first puzzle that the player must solve before being able to venture forth at all. It takes the form of a four-numbered padlock which only accepts a certain sequence of numbers as the right solution before letting the player proceed. Two stickers are physically attached to the padlock, with the left one being right above the two first digits and the right one respectively being above the last two digits. The left sticker pictures a pink panda while the right one pictures a blue bunny. The solution to this puzzle is a single note on the floor which depicts 23 individual pink pandas and 6 blue bunnies, which heavily hints at the right combination being 2306 (Figure 20).
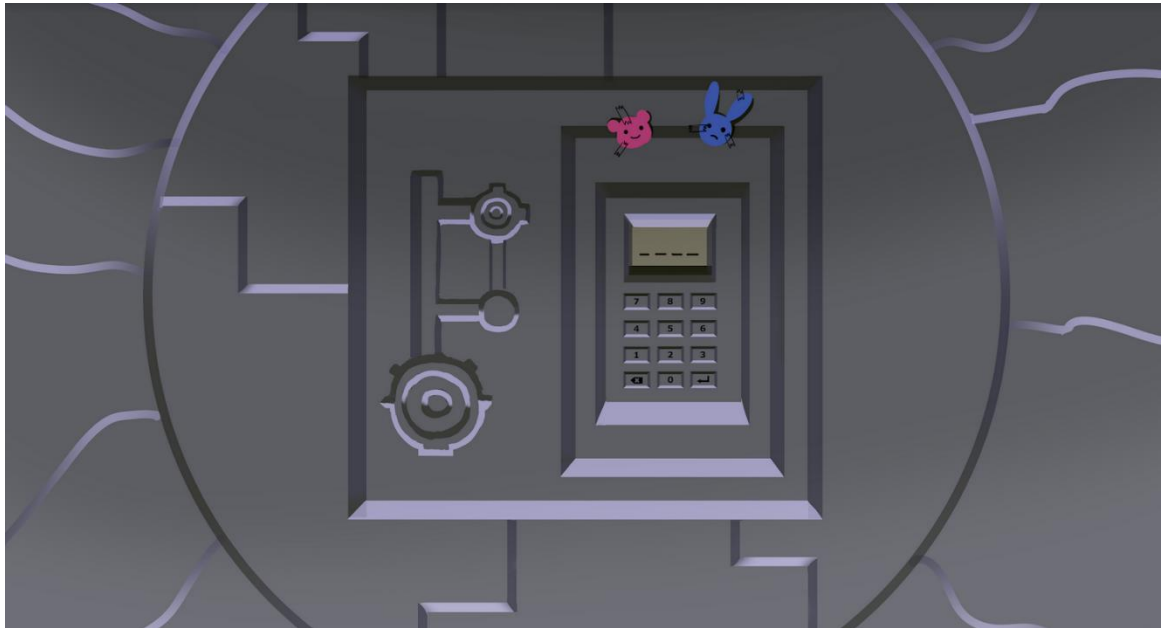

Figure 20. Two stickers are physically attached to the padlock. (Peo 2019)

The second and only other prologue puzzle was decided to be something slightly more interactive and time-consuming as opposed to the first one. The puzzle took heavy inspiration from a puzzle portrayed in Insomniac Games' *Spyro 2: Gateway to Glimmer*, a game that features a puzzle in which the player needs to step on different parts of a three-to-three grid which then causes the different tiles

on the grid to either light up or turn off depending on which ones the player steps on (Figure 21).

Figure 21. A puzzle portrayed in Insomniac Games' *Spyro 2: Gateway to Glimmer*. (Spyro 2: Gateway to Glimmer 1999)

In the game project's version of this particular puzzle, some singularity had to be found. This is why it was decided that instead of having the tiles change from on to off, they would vary between three different colors which would then feature three whole images depending on the color. The red color would feature a rat, the blue color would feature a string of DNA while the third and green one would feature a hand. The green image depicting a hand is what the player should strife for, as hinted by a scribbling on the puzzle room's wall which states that "I am five by myself, but ten when I am with my sibling". This brought an air of departure from the usual format of these kinds of puzzles due to having several layers as well as a solution that has to be deciphered from a clue outside the actual puzzle itself.

A reasonably effective technique was used in creating the puzzle's starting position. Similarly to how you might scramble a Rubik's Cube to allow yourself to put it back together, the puzzle was initially put into a state of completion and then intentionally complicated into a disarray that must be solved in reverse. This makes the solution complicated yet entirely possible.

4.5.7 Finishing touches

After the author was finished creating everything that required original and thoughtful work put behind it, the rest of the project would require nothing but uninterrupted pasting of script lines onto the events combined with changing character sprites and backgrounds. Every element that holds this material together was now finished and working properly to allow liberal creation of further story and scenes. The game was further developed up to the point where Jenny and Fae meet Taro and Jenny, which is where the prologue also ends. All of this was done in a relatively short time frame due to previous work making the rest of the project less of a problem-solving process from a development standpoint.

This temporarily concluded the work on the game *All Equal*. The project files and ideas left on the cutting room floor were stashed with the intention of returning to the project at a later date, with consent from Peo.

5   CONCLUSION AND DISCUSSION

The author ultimately felt that the project as well as its preceding research was rewarding in terms of productivity and very useful in increasing objective sources for any other developers who would be interested in developing a visual novel themselves. The initial goal of being able to satisfyingly inquire into developing a game from a genre that was an entirely inexperienced field for the author's skills also winded up being a worthwhile decision. Many aspects from the genre were opened up extensively through having to develop them in practice and brought a fresh perspective on how much thought has to be put even into a category of games with such simple ideas and interfaces.

The project and report did not come without their complications, however. Firstly, the author realized that naturally being a niche genre of games in the western market (Marques, 2015), the amount of helpful and practical research and analysis' on the subject of visual novels were few and far between. A lot of these articles and studies tended to handle the exact same subjects and sometimes

offer the same solutions to issues and obstacles as well. In the end, directly analysing games in the genre themselves and using observed techniques as forthright reference tended to be more beneficial.

The project itself did not meet many problems worth mentioning with the exception of the usual and expected bugs and absurdities that could be figured out within hours, if not minutes. Construct 2 ended up being a good platform for the job and was more than favourable for the game despite not being a dedicated visual novel engine.

The author felt that there could have been improvements in the field of character writing. The research half of the report offered some thoughts on how simplistic and tropey visual novel characters tend to be, yet the observatory experience from those kinds of characters ended up making the cast exactly that despite the critical commentary on said subject. While the author didn't feel that the characters they created were an afterthought by any means and had amazing opportunities to gain more character growth through the full story, the effort put into learning how to make them seem human did not get to demonstrate itself due to the short length of the prologue.

REFERENCES

Battle Royale. 1999. [Novel]. Koushun Takami. Japan: Ohta Publishing.

Black Mirror: Bandersnatch. 2018. [Film]. David Slave. dir. USA: Netflix.

Brakke, D. 2015. MN Otaku: Adoring anime archetypes overused. Online article.
SC Times. Available at:
https://eu.sctimes.com/story/entertainment/2015/04/15/mn-otaku-adoring-anime-
archetypes-overused/25842569/ [Accessed 3 April 2019].

Carmack, J. 2018. (@ID_AA_Carmack) "This old quote still pops up, but I caveat
it today -- there are undeniably lots of games where the story is the entire point,
and they can be done well. I do still hold that the most important games have
been all about the play, not the story." Tweet. Available at:
https://twitter.com/id_aa_carmack/status/1030511549688016899?lang=en
[Accessed 19 February 2019].

Cavallaro, D. 2010. Anime and the visual novel: narrative structure, design and
play at the crossroads of animation and computer games. Book. McFarland &
Company.

Clements, J. McCarthy, H. 2001. The Anime Encyclopedia, 3rd Revised Edition:
A Century of Japanese Animation. Book. Stone Bridge Press.

Columns. 1989. [Video game]. Jay Geertsen. Japan: Sega.

Corpse Party. 1996. [Video game]. Team GrisGris. Japan: Kenix Soft.

Crimmins, B. 2016. A Brief History of Visual Novels. Online article. Medium.com.
Available at: https://medium.com/mammon-machine-zeal/a-brief-history-of-visual-
novels-641a2e6b1acb [Accessed 5 February 2019]

Cross, K. 2015. Opinion: Instruction manuals are game mechanics. Online article. Gamasutra. Available at: https://www.gamasutra.com/view/news/243196/Opinion_Instruction_manuals_are_game_mechanics.php [Accessed 4 March 2019].

Danganronpa 2: Goodbye Despair. 2012. [Video game]. Spike Chunsoft. Japan: Spike Chunsoft.

Danganronpa V3: Killing Harmony. 2017. [Video game]. Spike Chunsoft. Japan: Spike Chunsoft.

Diver, M. 2017. Inside 'Snatcher', Hideo Kojima's Iconic Cyberpunk Game. Online video. Waypoint. Available at: https://www.youtube.com/watch?v=002T9eKIZps [Accessed 5 February 2019].

Doki Doki Literature Club. 2017. [Video game]. Team Salvato. USA: Team Salvato.

Donkey Kong. 1981. [Video game]. Nintendo Research & Development. Japan: Nintendo.

Eisenbeis, R. 2013. How to Identify Popular Japanese Character Types. Online article. Kotaku. Available at: https://kotaku.com/how-to-identify-popular-japanese-character-types-1169085239 [Accessed 10 February 2019].

Fate/Stay Night. 2004. [Video game]. Type-Moon. Japan: Type-Moon.

First use of cutscenes to tell a story in a videogame. Online Archive. Guinness World Records. Available at: http://www.guinnessworldrecords.com/world-records/first-use-of-cutscenes-to-tell-a-story-in-a-video-game [Accessed 15 February 2019].

Galbraith, P.W. 2009. The Otaku Encyclopedia: An Insider's Guide to the Subculture of Cool Japan. Book. Kodansha.

Galbraith, P.W. 2011. Bishojo Games: 'Techno-Intimacy' and the Virtually Human in Japan. Online article. Gamestudies.org. Available at: http://gamestudies.org/1102/articles/galbraith [Accessed 2 February 2019].

Galizio, J. 2019. Steins;Gate Elite review. Online review. RPGSite.net. Available at: https://www.rpgsite.net/review/8284-steins-gate-elite-review [Accessed 19 March 2019].

Higurashi no Naku Koro ni. 2002. [Video game]. 07th Expansion. Japan: 07th Expansion.

Hotel Dusk: Room 215. 2007. [Video game]. Cing. Japan: Nintendo.

IT-Media. 2005. 「ポートピア連続殺人事件」の舞台を巡る (Visit the stage of "Portopia Renzoku Satsujin JIKEN). Blog. IT-Media. Available at: http://www.itmedia.co.jp/games/articles/0509/06/news029.html [Accessed 5 February 2019].

J.B. Harold Murder Club. 1986. [Video game]. Riverhillsoft. Japan: Brøderbund.

Kaze No Regret. 1997. [Video game]. WARP Inc. Japan: Sega.

King's Quest. 1980. [Video game]. Sierra On-Line, The Odd Gentlemen. USA: Sierra Entertainment.

Kushner, D. 2003. Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture. Book. Random House.

Lebowitz, J. Klug, C. 2011. Interactive Storytelling for Video Games – A Player-Centered Approach to Creating Memorable Characters and Stories. Book. Focal press.

Marques, P. 2015. Possibilities for Innovative and Unique Writing in Visual Novels. Online Article. Gamasutra. Available at: https://www.gamasutra.com/blogs/PedroMarques/20150415/241215/Possibilities_for_Innovative_and_Unique_Writing_in_Visual_Novels.php [Accessed 27 March 2019].

McDevitt, D. 2010. A Practical Guide to Game Writing. Online Article. Gamasutra. Available at: https://www.gamasutra.com/view/feature/134542/a_practical_guide_to_game_writing.php?print=1 [Accessed 13 February 2019].

Ninja Gaiden. 1988. [Video game]. Tecmo. Japan: Tecmo.

Noyle, J. 2006. Techniques of Written Storytelling Applied to Game Design. Online Article. Gamasutra. Available at: https://www.gamasutra.com/view/feature/131086/techniques_of_written_storytelling_.php [Accessed 13 February 2019].

Phoenix Wright: Ace Attorney. 2001. [Video game]. Capcom. Japan: Capcom.

Pong. 1972. [Video game]. Atari. Japan: Atari.

Portopia Renzoku Satsujin Jiken. 1983. [Video game]. Chunsoft. Japan: Enix.

Puyo Puyo. 1991. [Video game]. Compile. Japan: Compile.

Snatcher. 1988. [Video game]. Konami. Japan: Konami.

Steins;Gate. 2009. [Video game]. 5pb. Nitroplus. Japan: 5pb.

Super Mario Bros. 1985. [Video game]. Nintendo Creative Department. Japan: Nintendo.

Super Puzzle Fighter 2 Turbo. 1996. [Video game]. Capcom. Japan: Capcom.
Tetris. 1989. [Video game]. Atari Games. Japan: Tengen.

Tennis for Two. 1958. [Video game]. William Higinbotham. USA: Brookhaven National Laboratory.
Tetris Effect. 2018. [Video game]. Monstars Inc. Resonair. Japan: Enhance Inc.
Tetris 99. 2019. [Video game]. Arika. Japan: Nintendo.

The Last of Us. 2013. [Video game]. Naughty Dog. USA: Sony Computer Entertainment.

Tokimeki Memorial. 1994. [Video game]. Konami. Japan: Konami.

Tsukihime. 2001. [Video game]. Type-Moon. Japan: Type-Moon.

Uchikoshi, K. 2018. Visual Novels: Narrative Design in Virtue's Last Reward. GDC Talk. Available at: https://www.youtube.com/watch?v=vrxz3s0L8F8 [Accessed 7 February 2019].

Wasson, S. 2013. Is 1920x1080 the new 1366x768? Online article. The Tech Report. Available at: https://techreport.com/news/24212/is-1920x1080-the-new-1366x768 [Accessed 20 March 2019].

Welsh, E.M. 2017. How to Write Video Game Characters. Blog. E.M. Welsh. Available at: https://www.emwelsh.com/blog/video-game-characters [Accessed 5 February 2019].

Nine Hours, Nine Persons, Nine Doors. 2009. [Video game]. Chunsoft. Japan: Spike.

Wright, S. 2017. Puyo Puyo Tetris Review: The familiar, (slightly) reimagined. Online review. Stevivor. Available at: https://stevivor.com/reviews/puyo-puyo-tetris-review-familiar-reimagined/ [Accessed 3 February 2019].

LIST OF FIGURES

Figure 1. The visual novel genre as we know it was popularized in Japan beginning from Chunsoft's wildly popular *Portopia Renzoku Satsujin Jiken.* Chunsoft. 1983. Portopia Renzoku Satsujin Jiken. video game. PC-8800. Enix. Retrieved February 25th, 2019, from https://vndb.org/v4511

Figure 2. A dead end in a visual novel. Type-Moon. 2000, Tsukihime. Video game. Microsoft Windows. Type-Moon. Screenshot by author.

Figure 3. Capcom's *Ace Attorney* presents this in the form of hundreds if not thousands of lines of optional dialogue spawned from interacting with the environment. Capcom. 2001. Phoenix Wright: Ace Attorney. Video game. Nintendo 3DS. Capcom. Screenshot by author.

Figure 4. Gundham Tanaka. Spike Chunsoft. 2012. Danganronpa 2: Goodbye Despair. video game. Playstation 4. NIS America. Screenshot by author.

Figure 5. Genki. Team Salvato. 2017. Doki Doki Literature Club. video game. PC. Team Salvato. Screenshot by author.

Figure 6. The author put Peo in the charge of designing the characters visually right after characters bios were finished, which were then received and set in stone as the characters' final designs. (Peo 2019)

Figure 7. Lines had to be kept relatively short due to the size limit of the in-game dialogue box and lengthy words had to be kept to a minimum in case of possible string alignment issues that would arise during build development.

Figure 8. Each individual line is written on top of each other with no line breaks. The main character, Zoe, has a large quantity of her dialogue written between brackets – this is a very regular if not universal technique with visual novel protagonists that indicates inner thoughts.

Figure 9. Some essential backgrounds for the game's earliest locations had been already finished and uploaded[…] (Peo 2019)

Figure 10. […]as well as the most prominent character, Fae's sprites were ready to be used in the project. (Peo 2019)

Figure 11. The most notable of these were global values that would be mandatory for some non-liner progress such as changing rooms without every single element resetting or making sure that character dialogue changes according to scene and time.

Figure 12. The rest of the essential events consisted of the behaviour of simple user interface elements.

Figure 13. The rest of the pre-emptive basics were related to functional location interaction.

Figure 14. Fae's different expressions were soon usable for dialogue events.

Figure 15. This includes the dialogue box appearing on the screen with a tween animation, character sprites fading in as well as an AJAX object making sure that a text string would perform as commanded and would display the right amount of text at the right time.

Figure 16. A placeholder asset was used to make the dialogue box and the text string used for the dialogue compatible. The string's font was chosen to be Share due to its readability as well as it being consistent enough with the rest of the game's current art style.

Figure 17. The dialogue system was now refined enough to put into practice by inserting the lines from the game's script into the .txt file read by the AJAX object.

Figure 18. The fade object had to be reset to its default values at the beginning of the layout amongst other assets including the dialogue box and the value determining state of current dialogue.

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Figure 20. Two stickers are physically attached to the padlock.

Figure 21. A puzzle portrayed in Insomniac Games' *Spyro 2: Gateway to Glimmer*. Insomniac Games, 1999, Spyro 2: Gateway to Glimmer, video game, Playstation 1, Sony Interactive Entertainment. Screenshot by author.

ALL·EQUAL

Overview

All Equal is an adventure game / visual novel with a plotline shrouded in mystery and features several characters that the player interacts with as well as puzzles which are necessary to solve for progress.

Genre

All Equal is mainly a visual novel, meaning that the majority of the game consists of storytelling as well as character interaction but mixed in with riddles and puzzles.

Gameplay

Being a visual novel, adventure game and a puzzle game at the same time, All Equal consists mostly of static background images that the player must inspect in order to trigger new interactions, find clues as well as solve actual puzzles that they may find in the environment. The story is linear, meaning that the narrative does not branch at any point and has only one set goal as the endgame.

Look and Feel

The overall premise and setting is fairly grimdark, with a feeling similar to that of something such as Saw, but with less grit. The characters are much more colorful and have loud personalities to give it a slightly silly contrast, but the fates of the characters and how the story treats them does not waver despite that.

Story and Narrative

All Equal starts off without giving out too much of it's story, only revealing it gradually to the player. The full image is as such: the story takes place in a location known as The Great South, which is treated as sort of an error in existence itself, existing approximately between life and death.

The Great South is not created for any meaningful purpose, although it does work as a multi-dimensional station between the deceased and the lifeforms that they are going to be reborn as, effectively meaning that half of the souls trapped in it are recently deceased and the other half are respectively who they are reborn as later on. The Great South takes the form of an apartment block consisting of 10 numbered floors as well as a bottom floor, with the front door in the bottom leading into a black void of nothingness without and edge and a huge, red door at floor number 10 leading into a chamber that lets the living souls be reborn and the deceased to finally pass on.

The story is told from the perspective of a young lady named Zoe, who awakens in the Great South without any idea on where she is at and what has happened to her. She soon meets another girl her age named Fae, whom she teams up with. Zoe and Fae then go on a journey to discovering the truth about The Great South, eventually finding out that Fae has died in real life and that Zoe is her reincarnation. They eventually make it to the end, letting Zoe be reborn as a baby while Fae peacefully passes on to the afterlife.

Platform

The game will be developed for PC.

Platform

Lauri Rinne - Writer, programmer, game designer, director
Sam Peo - Artist, character designer
Nam-Anh Lê - UI Artist

ALL•EQUAL

L.R.

Prologue: South

Image: Zoe is shown standing in a graveyard, with her back against the camera.

???
(I can't remember what lured me here.)
(One moment I was walking home from school… And then suddenly I just found myself in this place.)

Effect: There is a brief, gentle flash on the screen.

(I felt it again.)
(A familiar life force is calling my name. Something that feels tied to me.)
(But what? Who?)
(My father is not buried anywhere close to this town…)
(Why am I here?)
(What am I looking **for**?)

Image: All white

(…Who?…)

Image: Darkness.

???
(In that moment, it crossed my mind.)
(That in which we are all equal.)
(Without question, that was **it**.)

Image: A bright light enveloping in the darkness.

???
(I felt the weight of the darkness pressing on my entire body. I couldn't tell what direction I was facing or if what I was experiencing was even real.)
(My voice was gone and my eardrums felt like they were about to rupture even though I could barely hear anything in the first place.)
(There's only so long that I can lie down senseless without feeling a massive influx of despair crawl up on me…)
(And then, it finally got to me.)
Help…
Somebody, please…

(As if sent from above as a gift from God, I started to regain some of my senses, slowly but surely.)
(My eyes felt like they were ready to open. And thus, I embraced myself for...)

Image: Darkness.

???
(There they are.)
(These are definitely my senses. There's no mistaking it.)
(I can feel... The cold floor pressing against my shoulder blades.)
(I can hear... Suprisingly little, but there's definitely an atmosphere in here.)
(I can see... The roof. Or rather, a roof that I have never seen before in my life.)
Well, no use just staying on my back. Let's get up.

Location: Zoe's starting room.

???
(What is this?)
(It definitely is a room, but I've never seen one like this in my entire life.)
(The patterns on the walls... No, on the ceiling and the floor as well reminded me of, I don't know, some sort of space shuttle.)
(Or is that what you call 'em?)
(Whatever, it definitely wasn't somewhere I would imagine getting myself lost in on a regular basis.)
Speaking of which, I find it odd how relaxed I feel despite the circumstances.
...
(I spoke out loud to confirm that my voice was indeed not shaking. I found myself in a foreign space with no memory of how I got there...)
(...And yet, I felt entirely stress-free.)
Aaaaaah!
(I smacked my palms against my cheeks.)
Whether this is a dream or not, I won't achieve anything by just standing in place like a tree!
Let's see... My name is Zoe, I'm 20 years old, and I have a puppy named Dax.
Everything seems to add up - I definitely don't have amnesia, at least. So far so good.
Yesterday, while making rice with béarnaise sauce for dinner, when my mother chimed in with a lame bear pun.
I called it stupid but still giggled at it before falling asleep later that night.
I woke up to greet this day, went to school, and...
...
(Huh. It's definitely getting hazy at this point.)

(I felt dread going down my spine as I realized that it might have not been "today" anymore…)
(Did I get kidnapped? I wonder how many days have passed since then.)
(My skin doesn't show any signs of assault or resistance and I don't feel like I've been drugged.)
(I stood up and touched some of the walls to confirm that they were actually there as my mind was trying to wrap itself around the moment.)
(Before I knew it, I was exploring the entire room thoroughly like a curious cat.)

Interaction: Note on the floor

Zoe

It's a piece of paper. Is it mine? Definitely doesn't seem like anything out of my notebooks…
Not that I seem to have any of my school supplies with me in the first place.
(I carefully picked up the paper while staring at it's back and then flipped it over.)
(The contents surprised me a little bit. It was a large image consisting of bears and bunnies.)
What is this?
A riddle?
(There's definitely a good chance that this will make sense somehow, I think.)

Interaction: Window in the middle of the wall

Zoe

(It's the only window in the room, but I'm not sure if there's even anything on the other side.)
(The design is wild and I can't see anything beyond. Perhaps I'll try knocking on it.)

SOUND EFFECT
KNOCK *KNOCK*

Zoe
Huh?
I can absolutely tell from the knock that there's some space behind it!
But how am I supposed to crack this thing open - that is the real question.
(As I said that, I came to realize that the assumed window was full of odd contraptions of some kind.)
(Some of them resembled knobs. I tried turning them, but to no avail. They were more or less stuck in place.)
I'm guessing some of these parts were simply used to force the hatch shut.

But what about the rest? This thing in the middle is like, one of those things you use to pay at the supermarket.
That means there's definitely a way to get out from inside.
Surely it won't hurt to try, right?
4 numbers... How many possible combinations was that again?
Wait, no. There should definitely be a solution here somewhere.

Upon completion of Puzzle 1

Yeesss! Victory!
(I shouted with adrenaline flowing through my veins, and yet I had no idea what I would be meeting on the other side.)
(Whatever I'd see next can't be any worse than sitting inside a claustrophobic little box, right?)
Right. Deep breaths. After that, I'll dwell inside.
Oh man... I really wish I was home petting Dax right now.
(I followed my own instructions and dived right in.)

Location: Room 800

(The room beyond the window - this is it.)
(This one looked much more manmade compared to the cube I had just come from.)
(It looked like a combination between some sort of basement and a boring office space.)
Not especially filthy, but it could use a housekeeper. Has that plant in the corner even been watered in a while?
(Now, regarding any new signs of life...)
(After standing in total silence for way too long, I was expecting to hear at least something else other than ambience for a change.)
(But what ended up greeting me right away was only something that I could call a... ball of lightning.)

Zoe
Oh!
Hey, are you also-

???
Eeeeeek!

Zoe
H-Huh!?

(Try as I might, I could not believe I had run into another person in a situation like this.)
(And she didn't look very hostile either - if captors were involved in the case, she definitely wouldn't be one of them. Not at that age.)

???
W-What the hell!? Are you into startling people for no reason or something!?
What are you staring into space for? I asked you a question, ribbon head!

Zoe
R-Ribbon head?
(She was obviously trying to insult me, but coming from her it was just sort of cute.)

Zoe
Hey, listen. I, I just sort of haven't talked to another person in a while, so I was preparing myself to... Well, you see...

???
Ugh, speak clearly! You're not the only one who's totally lost right now, you know?
And does this look like a god damn social situation to you?

Zoe
(I sure wanted it to be one - but my momentary joy of having found somebody else was just now overshadowed by this kid's foul mouth and non-existent manners.)
(You're the senior here, Zoe! Show her who should be calling the shots!)

Zoe
Listen here, little lady. I'm n-

???
L-L-Little lady!? Shut your trap!
I'm twenty years old! Geez, you're no different from the rest! Dumbass!
That's it! Don't move a muscle.
Eat dirt!!

Zoe
Twenty!? No wait, that's-
(Her words were not a mere threat. She spun around and I felt her heel hit the back of my knee like a missile.)
Yowch!!

???
Be more selective with your words from now on.
You finally started using your voice, at least, so I'll forgive you for now.

Zoe
Fro... Ouch... From now on? Does that mean you want me to keep you company?
Aren't you scared of what's happening around us? Shouldn't you be more wary of
older p- I mean, other people right now?

???
Careful!
Pfft. As if I'd have to be wary of a wuss like you.
You give me an impression of the kind of loser who would cry over stepping on an
ant colony by accident.

Zoe
...
(She's totally right, too.)
(I stood up as soon as my left knee could bend again.)
I feel like we need to start over. With, you know, an introduction.

???
Whatever. Just spit it out.

Zoe
My name's Zoe. What's yours?

Fae
Fae.
Just call me that. No funny nicknames.

Zoe
I hope we get to know each other better then, Fae.
But, uhh, you're twenty years old, huh? We're the same age then.

Fae
Don't "same age" me, ribbonhead. What month?

Zoe
Huh?

Fae
There's kinda these twelve things that the year's divided into. Which one were you born in?

Zoe
Oh, uhh... December 13th.

Fae
Ohohohoho! I kinda feel bad for bullying a toddler now! What should I even do with myself?

Zoe
S-So what? What month were you born in, then!?

Fae
December 5th.

Zoe
(She's overjoyed by such a marginal difference, huh. I'll let her bask in it for the time being.)
Listen, should we really be bickering like this right now? There's so much we're both curious about, I'm sure.

Fae
Yeah, you're right about that. Like where in the world we are, for starters.
Hey, be useful for once. The hell was beyond that shaft you came in from?

Zoe
Oh, that? It was an odd cubicle-like room, nothing like I'd ever seen before! And then there was this note, and you wouldn't bel-

Fae
Geez, shut your mouth. I now know that it's no different from my side of the story, anyways.
See that door on the left? Beyond it lies another room. In that room, you can find a vault-looking thingie that leads to the room where I woke up.
My room was also filled to the brim with weird images on the walls, as well as valves, and all of this irritating problem-solving...
Ugh, I never want to solve another puzzle again in my entire life.

Zoe
(I almost feel sorry for her.)
Any idea who might have done this?

Fae
My guesses are as good as yours, Ribby.
Might be some sort of brave experiment to test out new escape room attractions or something.
But this goes beyond borderline illegal. I hope whoever came up with this crap gets sued to hell and back.
But what I do know for sure that there are other people in here besides us.

Zoe
There are!?
I mean, it makes sense. Why stop at two for such an elaborate scheme? But still!
Hey, what makes you so sure? Did you meet somebody else!?

Fae
Geez, stop shouting all of a sudden!
And nah, I haven't even been able to get outta this stupid room for hours now.
But every now and then I keep hearing things from beyond that red door behind me.
It's definitely somebody else's voice - I can tell.
Tried to open it once or twice, but it's no good, so I just dropped the idea.

Zoe
(I took a look at the red door. It looked like something that could never be forced open, much like the one that I managed to get through earlier.)
(Still, I wonder if there really is somebody in the next room? I hope they're okay...)
So, Fae. What do you think we should do next?

Fae
I think you mean what YOU should be doing next.

Zoe
What? How come?

Fae
I already told you that I ain't doing any dumb ass puzzles anymore. I'm satisfied for the time being.
You figure it out. I'll try to look out for something useful, I guess. Have fun.

Zoe

(She's actually slacking off at a time like this? Talk about irresponsible.)

(But I'm afraid to say it to her face - this girl's like a little landmine waiting to be stepped on.)

(But we've barely even met and she's already got an attitude going on - it's kind of disappointing to me.)

Well then, maybe I'll start looking around for anything that might help us with that red door.

Interaction: Fae

Zoe

So, uhh... You're really not going to help me with this door, now are you?

Fae

Nah. I'm way on edge right now.

I'll tell you if I find anything suspicious, so just trust me, and start sniffing around like the dog you are.

Zoe

(D-Dog!?)

Interaction: Plant

Zoe

At least that plant brings SOME life into this gloomy room.

Fae

Not to mention somebody's taking care of it right now.

Zoe

W-W-What? You can see g-g-g-ghosts!?

Fae

You're such a dummy, Ribby. I mean "right now" as in "it's been watered recently and most likely will be watered in the future".

Zoe

Oh. You sure do know a lot about plants.

Fae
You're observant, huh. I picked up a few hobbies, mostly due to boredom.
Wait, no. Anyone could have told that plant is in a fair condition. I take back that compliment.

Zoe
(Ouch.)

Interaction: Door on the left (too early)

Zoe
(I should search this room thoroughly before entering the room next to where Fae claims to have awoken.)
(Room room room room. It's starting to not sound like a real word anymore...)

Interaction: Red door (too early)

Zoe
(I can't make heads or tails out of the red door's mechanisms as of now.)
(Just this once I'll make an exception and investigate everything one-by-one before fiddling with this door at all.)

Interaction: Topmost cupboard

Zoe
(The topmost cupboard is mostly empty - but there are some leftover documents inside.)
(Though everything has been crossed over with a black marker. I can't make any sense off of it.)
(Or can I...? Maybe there's something I'm missing here.)

Interaction: Bottom cupboard

Zoe
(In the cupboard on the bottom... Whoah, what's this?)
(It's half of a note. That's funny.)
(Did somebody destroy it with the intention of making this riddle impossible to solve?)
(No, that can't be it. This one's "clues 101", Zoe!)

Interaction: Door on the left

Zoe
I think that's about it for this place.
How about the room on the left next? Or did you dig through it already, Fae?

Fae
Probably would have if I had any friggin' motivation left.
Not to mention there's barely anything to see there with the exception of some random junk on the floor.

Zoe
...Something tells me this "random junk" is worth investigating.

Fae
Surely you can't be serious.

Zoe
The name's Zoe! And I AM serious about it. Let's go!

Fae
Ugh.

Location: Room 820

Zoe
It looks pretty similar to the one we just came from, does it not?

Fae
Hey, I've spent the last decade staring at these god damn walls like I was outta my mind, whaddya think?

Zoe
W-Well, anyways, I got curious about this "random junk" you described, and I really want to check it out, first and foremost.

Fae
Be my guest.

Upon completion: Curious floor mechanism

Zoe
Aaaaand we're open!
(The lid in the center of the mechanism opened and I was greeted to something fairly familiar.)
Oh, look. It's a half of a note.

Fae
Uhh... You okay in the head, Ribby?

Zoe
What? What makes you say that?

Fae
Normal people don't mumble to themselves while inspecting other people's lost shopping lists, you know.

Zoe
Oh, give me a break! I like to... Observe, audibly.
Anything wrong with that?

Fae
Well, I guess not. Besides the fact that it makes you look like a total freak, but be my guest.

Zoe
And besides, this note is definitely not a shopping list. I've seen something very similar to it not long ago, and I'm pretty sure it's related to our escape.

Fae
Wait. Are you seriously implying that you've almost cracked the code to the red door? By groveling on the floor like a dog?

Zoe
...Just trust me, okay?
(Time to go back and put some pieces together.)

Upon completion: Red door puzzle

Zoe
(I turned around as soon as the lock of the red door clicked, if only to notify Fae...)
(...but before I could say anything, I was taken aback by her reaction.)

Fae
W-W-What?

Zoe
What's wrong, Fae? We can go through now. You don't have to be sitting around in this room anymore.

Fae
Y-Yeah, I can see that. However...
Did you really just solve all of that nonsense by yourself? And in such a short amount of time?
Wait, don't answer me - of course you did. Stupid question. Stupid me. What else could have just happened?

Zoe
I'm, uhh... I'm afraid to ask, but is there something wrong about what I did?

Fae
No, no. Ribby, you did good for now.
I guess I'll swallow my pride for this once and admit that I'm sort of impressed.

Zoe
Hee-hee-hee... It's not that big of a deal.
I'm just like, really obsessed with detective shows and mystery novels, and a lot of these puzzles are cereal box mazes in comparison.

Fae
...So, a total nerd. Color me surprised.
Whatever. All the riddles and whatnot from now on are completely up to you, Ribby.
I hereby declare you a pureblood Puzzle Wiz. So go nuts.

Zoe
W-WHAT!?
So you're not going to help me at all!?

Fae
Oh, please. My cute face will be your emotional support.
Besides, you seem to be waaaay into this nerdy problem-solving crap, so I'd just be in your way.
Now, if you could open the red door for us, Miss Puzzle Wiz.

Zoe
Stop calling me that!
(Wait. I don't think I ever accepted "Ribby" as a name either, so why am I only complaining now?)
(...Let's put that aside for the time being and enjoy the progress.)
Anyways, you ready?

Fae
Yep. Go ahead and open it up.

Zoe
(I put my hand on the door's handle. I could actually turn it now, just like I figured.)
(The handle turned, a click was heard, and...)
(The red door opened.)
(We ventured into the following room.)

Location: Room 810

Zoe
Oh!
H-Hello!
(Fae was right, there WERE people in here!)
...Helloooo?

???
...

Fae
Yahooooo? Everything right between the ears? We're kinda trying to talk to you here.

???
...
...Eeeeeeeeeh.
More funny-looking people are here.

Fae

Yo, you ever looked in a mirror before?

Zoe

Calm down, Fae! We've just met her.
Hello there! What's, uhh, who are you?

Jenny

...My name's Jenny.

Zoe

I'm Zoe. And this is Fae. Can you tell me what's going on in this place?

Jenny

...Eeeeeh. Well, first Jenny walked around with nothing to do, and then Jenny heard voices....
...And then, and then funny-looking people came from behind the blue door to greet Jenny...

Fae

That's not what she meant, Shorty! What the hell have you been doing your entire time in this... Whatever we're at?

Zoe

(Shorty? She's taller than you.)

Jenny

...Eeeeeh. Well, apparently Jenny woke up in a square room, but was fast asleep and couldn't see it...
...And then Jenny was in a hallway, and then Jenny was here.

Zoe

...I see.
(That makes zero sense. I really doubt she sleepwalked out of her cubicle.)

Fae

It makes me sick.

Zoe

Huh? What does?

Fae

Aren't you seeing a pattern here, Ribby? Whoever brought us here is clearly targeting nothing but young girls.

Jenny

…Eeeeeh. But Taro isn't a girl at all.

Zoe

Taro? What are you talking about?

Jenny

Taro is Jenny's friend. Jenny met Taro here, and has not met anyone else.
But he's in daaaanger right now.
"There could be no air, Jenny, so break the glass if I don't return in 10 minutes."
That's what Taro said to Jenny.
But, Jenny has nothing to break the glass with, so Taro is still there.

Zoe

W-What!? How long ago was this!?

Jenny

…Jenny thinks it's been around 3 hours now.

Zoe

W-W-WHAAAAAT!?
Jenny, where is Taro locked in!? Please, tell us! We need to get him out, now!
(Jenny didn't say anything, but instead pointed at a device in the room that looked like a human-sized incubator.)
(It was humming slightly and also lit up, but despite that I could not make out a human figure through the glass.)
(In fact, I couldn't see anything. The machine's insides were covered in smoke.)
(I tried to force it's lid open, but to no avail.)

Fae

Bust it open, Ribby! Use your gorilla strength!

Zoe

What gorilla strength!?
No, I'm… Pretty sure that there might be another way to open this thing.
I just need to think. Think, think, think.

Jenny

But Taro said to break the glass.

Fae

So why haven't you!?

Jenny

Eeeeeh. Jenny's not very strong. Jenny would cut her fingers.

Zoe

(This Taro person sure got himself a solid insurance before locking himself in there.)
(Anyways, I need to get this incubator, or whatever, open right away.)
(I hope to God he's okay...)

Upon completion: Incubator Puzzle

Fae

You did it, Ribby! It's opening!

???

Ha-ha-ha-ha-ha!

Zoe

(As the lid opened, we were immediately greeted to roaring laughter - the last thing we would have expected.)
(While we were taken aback, a leg emerged from amongst the smoke.)

???

Why, you have my gratitude for that one, Jenny!

Jenny

Eeeeh. Taro's welcome.

Fae

Hey, why are you thanking HER!? Ribby's the one who got you out!

Taro

Ha-ha! Oh, my apologies. It never crossed my mind that you young ladies could have helped. How rude of me!
As Jenny just said, the name's Taro. It's fantastic to see some fresh faces, I was afraid it was only going to be the two of us in here!

Zoe

Yes, I understand. It's the same for us, too. The name's Zoe, and she's Fae.

Taro

Ha-ha-ha! Pleased to meet you, Miss Zoe, Miss Fae!

Zoe

But what's really been bothering me for a while is...
How in the world did you get locked inside that contraption?

Taro

Oh, ha-ha! Well, it's a pretty long story. No, scratch that. It's relatively short, now that I think about it.
I climbed in out of pure curiosity. Nothing more!

Fae

...This guy has definitely hit his head real hard some point in time.

Taro

Wow, how mean! That's excellent, keep it up! Kids need to have spunk in order to survive in this harsh world, right?
Anyways, my little journey inside that chamber was not in vain, no no!
You see, there was a monitor inside. And since you were taking your time getting me out, I had quite a lot of time to inspect it!

Fae

Please be useful for once and tell us that it's a code that gets us out of this room or something.

Taro

Oh! Oh, no no. Absolutely nothing of the sort!
Not to mention, I've already figured out the way to get in and out of this room!
Hours ago, at that!

Zoe

R-Really? You have!?
Please, tell us!

Taro

All you have to do is twist the doorknob!

Zoe

...

Fae

...Ribby, I want to hit him.

Zoe

Resist, Fae. Please.
So what you're telling me is... The door's been open the entire time?
That's a great change of pace for a while.

Taro

Hahaha! I have got no idea what you mean. Very embarrassing!
But, regarding that information I discovered...
Ta-dah! It's a bunch of gibberish!

Zoe

...Huh.
(I keep running into a lot of things that seem to make no sense at first glance...)
(...So I'm taking that deduction with a grain of salt.)
Taro, could you please share this "information" with me?
I'm sure I can make sense of it to the best of my ability.

Taro

S-Sure, young lady! Right away! I wrote it down here in my notepad...
Or, was it in my old grocery list...? No worries, I shall find it in no time!

Fae

Hey, Ribby. While he's busy making up for his failures, I want to talk about
something.

Zoe

Huh? I, yeah, what's up?

Fae

I've been thinking about this for a while, and... Uhh...
I'm...
...
Actually, I'll leave it to another time.

Zoe

...Huh?

(Is Fae trying to... Open up to me about something?)
(No, wait. I must have simply irked her in some way earlier.)
Fae. If you want to talk about something, we-

SOUND EFFECT: ALARM

Zoe
Eeek!!

Fae
What the!?

Taro
Aww, shucks! I dropped it!

Jenny
Noooo. It's the thing that makes Jenny's ears ring.

Zoe
What is this!? A siren!?
(As soon as I said that, the alarm stopped.)
(And following the silence, a voice emerged.)

???
Hello? Testing, testing. Hello?

Zoe
(A voice? So there are even more peo-)
(...No. Could it be one of our captors?)

???
If you can hear this transmission, you're in luck.
I suggest you stop stressing over the current situation and calm down. We are here to help.
My name is Solomon, and from now on, I will be your leader.

Zoe
(Solomon...?)

Fae
The hell? "Leader"? Who the hell do you think you are!?

Zoe

I'm fairly sure he can't hear you from here, Fae.

Taro

Oh, it's Leader again!

Jenny

Jenny doesn't like Leader. Leader hurts Jenny's ears every time he speaks to Jenny.

Fae

Can you stop repeating your name over and over already like a friggin' collectible monster!?
...Wait, nevermind that. Do both of you actually know this guy?
Didn't the dwarf princess just claim that you haven't met anybody else!?

Zoe

Guys, you're talking over him... I can't hear what he's saying.

Taro

Oh, haha! We haven't met Leader at any point.
Every now and then, he simply repeats those words over the speakers.

Zoe

(Which was enough to convince him to be your leader...?)
(Also, I still can't hear what he's saying at all.)

Taro

Sssh! He's going to continue from this point on.

Fae

Huh!? How do you...

???

Me and my followers reside in floor 6, in the room 650.
Come see us, and as you do, put your hands into the air as soon as you walk in.
We are constantly on alert. You can probably understand why, assuming that you have seen what this place has to offer.
If you happen to find any colored keys during your exploration, use the elevator in the hallway and bring them to us.
I will not repeat myself any more - your co-operation with me is crucial to everybody's survival.

This automated message will repeat again in an hour.

Zoe
(So the message is automated. No wonder Taro could tell that this Solomon person was going to continue.)
(Such a shame that I had to miss parts of the message due to the commotion.)
(Well, whatever. I'll be able to hear the rest in another hour.)

Fae
Whaddya mean "will repeat again in an hour"?
I haven't been able to hear crap even once, and I've been out of that cubicle for way more than an hour now!

Zoe
You sure about that, Fae?

Fae
Huuuh!?

Zoe
Think about it. The rooms that we were previously in didn't have any speakers, unlike this room.
Maybe Solomon's message is the voice that you kept hearing through the door every now and then.

Fae
...

Jenny
Eeeeeh. Big sis Fae looks flustered.

Fae
Shaddup. Whenever did I agree to be your "big sis"?

Taro
Ha-ha-ha-ha! Oh, youth! Don't you agree, Miss Zoe?

Zoe
Yeah... They're impossible, aren't they?
(And consider yourself lucky that Fae is busy arguing with Jenny. If she heard you imply her to be younger than me... Oh boy.)

Taro

Ha-ha! And so...
Game plan.

Zoe

...Huh? Yeah!
(Taro suddenly sounded much more serious than before.)

Taro

Like we agreed, here's the information I got from inside the contraption!

Zoe

Well, you weren't kidding. Certainly doesn't seem sensical at first glance.

Taro

Right? But if Miss Zoe is confident about using it to get us out of here, I'll gladly do whatever I can to help!
However, for now...
I think we should split up.

Zoe

...Huh?
Wait, so soon!?

Taro

Well, we do have to find some of those keys mentioned in Leader's message, right?
So far, Jenny and I have found nothing but dust, moths and you two.
But now I am certain! If we work together as groups, our progress will be twice as rapid! Does that not make anything but sense?
Ha-ha-ha! I can feel it now - we'll definitely make it out of here in no time!

Zoe

(Taro's suggestion sure came from behind the corner - and so did his optimism.)
(Well, I guess the plan makes sense...)
(...Although I would have liked to feel the safety of a big group for a change.)

Taro

Oh, there is no reason to worry, Miss Zoe! Turn that frown upside down!

Zoe

O-Oh. Sorry about that. It's just-

Taro
We'll agree to meet up in this room at a later date! But since there aren't any regular clocks in here...
We shall use Leader's next message rerun as a point of reference! Is that okay with you?

Zoe
Yeah, that sounds good. And you, Fae?

Fae
What? Whatever.
But I won't be solving any riddles - not now, not later.
That's all I wanna make clear.

Jenny
But Jenny will help Taro with riddles.

Taro
H-Haha... That's, that's okay, Jenny.

Fae
Hey, I only got one question for you, bigface.

Taro
...A-Am I "bigface"?

Fae
What makes you so sure we'll be safe out there? You'd think a giant like you would be all about protecting women in a situation like this!

Taro
Oh, ha-ha! But I am certain that this place will pose no danger to us!
After all, if our... "captors" had any security in here, Leader wouldn't be able to hijack all the speakers for such a long period of time, now would he?

Fae
...
You better be right about that.
But you two put way too much trust into this Solomon guy. You call him "Leader" despite never even seeing him face-to-face.
I'm kinda convinced YOU'll be the one in danger with that naivety of yours.

Taro
Ha-ha-ha-ha! I'm flattered by the concern, Miss Fae!
But I can assure you we'll be alright!

Fae
What!? I wasn't conce-
...Whatever.

Zoe
(I can't believe we'll be splitting up so soon after joining together with more people...)
(But it's only for an hour. I'm sure we'll manage.)

Taro
Alright, Miss Zoe! I leave it up to you!
When you're ready to leave, the rest of us shall follow. And following that, we'll split.

Zoe
Right.
(I'll do as Taro says, then.)

Interaction: Door out of Room 810

Zoe
I'm ready. Let's go!

Image: Darkness.

Zoe
(So much had happened in such a short time. I never really had time to properly process it.)
(What I do know for sure, however...)
(Was that our actions that time were a huge mistake.)

TO BE CONTINUED IN CHAPTER 1