# Interactive Horror Story and the Narratives Implementation: Case Study on Interactive Story Games Developed by Supermassive Games

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*Abstract*—**Video game is one of many media designed to provide entertainment to its targeted users. In response to that, narrative that presents story to engage the users in many ways, such as through interactive story that responds to the actions taken by the players during the gameplay. To understand how the narrative is brought in the games, there is analytical framework specifically presented to break down the elements included in the games like storyworld, character, emotion, narrative interface and micro-narrative. In this research, the analytical framework is used to analyze the interactive horror story games developed by Supermassive Games, taking deeper look on the elements brought by each game. There are various implementations on each of the games, from the storyworld resembling numerous popular horror thriller media, presence of multiple playable characters, emergence of emotions like Fear and Anxiety among others, and the existence of micro-narratives to supplement the main story.**

*Keywords*—*interactive story, narrative design, game design, analytical framework*

## I. INTRODUCTION

Video game is one of many interactive media exist nowadays. Although it can be used for many different purposes, video games are mostly presented as a media designed to entertain their targeted users. In order to fulfil the entertainment aspects, most video game titles provide story to engage the players as form of narrative [1]. Narrative itself can be pointed out in many different ways depending on the games' story. It can either be implemented through subjective experience designed by the story author of the game, or just by experience retelling included in the game itself [2]. There are also numerous narrative techniques presented, such as branching narrative. The narrative technique itself is different from traditional linear one due to the presence of branches which correspond with the choices presented and can be taken by the players. The choice taken will then impact the feedback to the players, which made the game narrative experience felt unique among the players and even driving them to replay the game to receive other feedback through their choices [3].

Furthermore, video game comes with many kinds of features along its existence in the present industry. One such example is interactive story games, where the players have impact on how the narratives are presented during the gameplay. Due to that, every actions taken by the players have importance, even if the players decided not to take any actions [1]. Nowadays, there are some game developer companies implementing this element in their games, such as Quantic Dream in Heavy Rain [4], Beyond: Two Souls [5], and Detroit: Become Human [6]; Life is Strange [7] series from Dontnod Entertainment in collaboration with Square Enix; and Annapurna Interactive from Twelve Minutes [8].

Although garnering success along the release, there is still not much research in accordance with the interactive story brought by those game titles. In [9], the publication specifically discussed about the narrative structure and technique implemented in Heavy Rain. Using the theme of crime-drama, the implementation of multi-person narration, three-act plot structure, along with its cinematic space made the gameplay felt immersive, engaging, and thrilling. Another research is presented in [10], with the focus of choice design found on Detroit: Become Human. From the publication, it is implied that the game's usage of quick-time events and the presence of multi-choice segments along with the existence of alternate future of Android-dominated Detroit gave the players the experience of being meaningful.

On the other hand, Supermassive Games used interactive story as the defining trait of its newly-released game titles, such as Until Dawn [11] released exclusively for PlayStation 4, The Dark Pictures Anthology [12] games spanning from Man of Medan [13] until The Devil in Me [14], and The Quarry [15] as the latest title to date. Although each title's difference in the main story and game sequences, they provide branching narrative which take notes on the players' action in the gameplay, making each gameplay sequence intended into immersive and replay-able experience.

Narrative in video games contains many elements during the release. In order to do analysis on the narrative implemented in various game titles, there is analytical

framework [16] specifically intended on the analysis of narrative of video games. The analytical framework is divided into five main parameters like storyworld, character, emotion, narrative interface, and micro-narrative. The parameters represent different things, where storyworld provides the overall world presented in the game, characters which serve to enact the game and its story, emotion that revolves around the feelings felt by the characters and elicited to the players, narrative interface in response to the narrative and its design translation in the game, and micro-narrative that is included to elaborate the main narrative along the gameplay.

In this research, we would like to analyze the implementation of interactive story put in the games developed by Supermassive Games, such as Until Dawn [11], The Dark Pictures Anthology [12] games, and The Quarry [15] using analytical framework [16] to break down the games' elements. From the analysis, we hope that the results and discussion can help researchers in doing similar research in the future, while also benefiting any game developers wanted to bring interactive story as one of the elements in their games.

## II. METHODOLOGY

This section provides the theory regarding the analytical framework used in this research. Aside from that, the actions and constraints regarding the experiment procedure are elaborated to provide understanding to the readers, with the actions (see Figure 1) starting from the selection of games to the game analysis that focuses on narrative elements from the games. This section also covers the theories regarding the analytical framework used to analyze the games, which can be found in the next subsections.
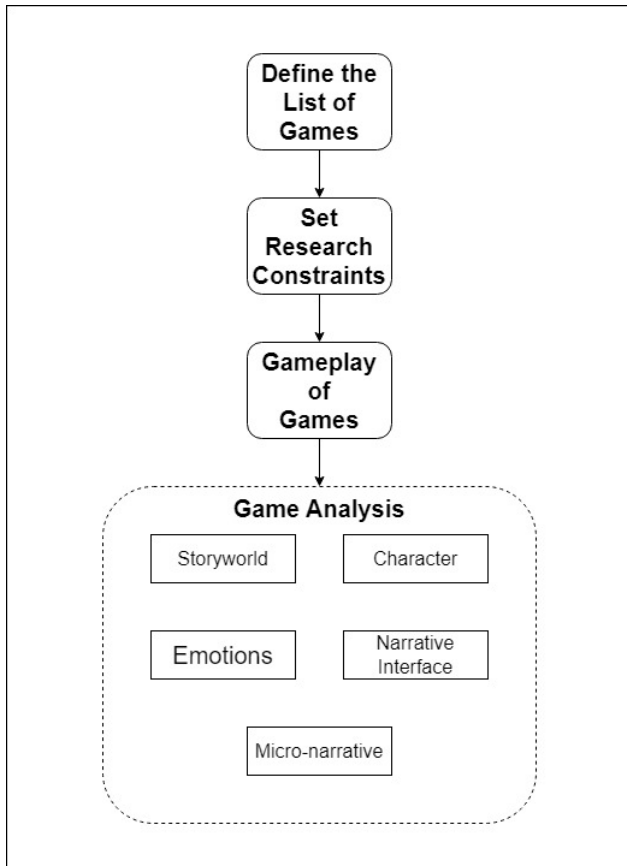


Fig. 1.     Research Flow

### A. Analytucal Framework

The framework is presented to break down the narrative elements found in many game titles existed in the market. The framework itself focused in limited yet fundamental parameters in accordance to the representation of narratives, such as storyworld, character, emotion, narrative interface, and micro-narrative [16]. Storyworld revolves around the environment where the game story unfolds. It is also connected how the narrative settings put and provide resources to the players in each gameplay of the game. This parameter is said to have impact on the gaming experience felt by the players, either directly or indirectly [16].

Character is said to be the enactment of the game and its story, either the protagonist or even antagonists. Furthermore, character is specifically seen as a tool to identify on what is actually happening in the game world [16]. Emotion is also another parameter present in the framework, said to be a complicated phenomenon in games. To immerse the players in the games, there will always be emotion presented in the characters, such as sadness, pride, fear, and even humor. These kinds of emotion will then be elicited to the players, enhancing the immersive and fun aspect felt in each gameplay [16]. Narrative interface is a parameter that represents how the players interact with the narrative shown in the games. This parameter focuses on certain aspects, such as the usage of hardware platform and the gameplay mechanics brought by the games. These aspects is then incorporated to the flow of narrative included in the games being analyzed [16].

Aside from main narrative, game developers often put micro-narrative in the games. Micro-narrative is related to the smaller moments included in the main narrative, where the existence can provide coherence on the occurrence within a broader context on gameplay of the games. This micro-narrative can also serve as a mean in building the overall narrative, eventually found and done to reach the intended endgame [16].

### B. Research Actions

The actions done during this research (see Figure 1), mainly involve experiment and analysis of the interactive story games developed by Supermassive Games, with the details of each game are put in Table 1. The experiment spans around playing those games, with the gameplay is done on PlayStation 4 [17] and Xbox Series S [18]. This is due to Until Dawn being exclusively released on the Sony video game console, while the other titles are also available on one of the latest video game consoles released by Microsoft.

TABLE II.     LIST OF INTERACTIVE HORROR STORY GAMES FROM SUPERMASSIVE GAMES

| Game Series | Game Title | Release Year | Platform |
|---|---|---|---|
| *Until Dawn* | [11] | 2015 | Sony PlayStation 4 |
| *The Dark Pictures Anthology* | [13] | 2019 | Microsoft Windows, |
| | [19] | 2020 | Sony PlayStation 4, |
| | [20] | 2021 | Sony PlayStation 5, |
| | [14] | 2022 | Microsoft Xbox One, |
| *The Quarry* | [15] | 2022 | Microsoft Xbox Series X/S |

As the experiment revolves around playing the games entirely, there is also certain constraints put during the experiments below:

1. The games are played from the prologue until the epilogue once, without skipping any sequences.
2. The games are played in single player mode, regardless of the existence of multiplayer support. Due to that, the multiplayer mode is excluded from the analysis.
3. The gameplay is focused on main story mode, regardless of the presence of additional downloadable content in the games.
4. Specifically on *The Dark Pictures Anthology* games, the difficulty of gameplay is Forgiving (similar to Normal difficulty).

When the experiment concluded, the analysis process is done using analytical framework [16] mentioned in the last subsection. The analysis includes the five parameters like storyworld, character, emotion, narrative interface, and micronarrative, and will be explained thoroughly in the next section.

## III. RESULT AND DISCUSSION

This section will cover the findings regarding the narratives implementation of the games analyzed during the research. The game narratives analysis is covered based on its chronological release, putting parameters like storyworld, character, emotion, narrative interface, and micro-narrative found in each game.

### A. Until Dawn

Until Dawn [11] serves as the first game analyzed in this research. Released as the first game from Supermassive Games [21] which is presented as a PlayStation 4 [17] exclusive game, the game is known from its use of interactive horror story as the main element in gameplay. Aside from taking notable references on cult-classic horror movies like Evil Dead II [22] and popular game with branching narrative like Heavy Rain [4], the characters featuring ensemble Hollywood cast made the game got popular among both gamers and game critics [22, 23]. This game has been played by the authors and uploaded in a YouTube channel, where the gameplay videos are organized in a playlist [25].

The storyworld in Until Dawn [11] revolves around Blackwood Mountain, or popularly known in-game as Mount Washington, a fictional landmark in Canada. The gameplay itself is set on different spots of Blackwood Mountain, such as Washington Lodge, mountain outskirts, all the way to sanatorium and mines of the mountain. Each of the spots provides importance during the gameplay, with lore regarding the spots and relations to the main story presented later on. The slight representation of each of the spots featured in the game (see Figure 2).



Fig. 2. Washington Lodge, (b) mountain outskirts, (c) sanatorium, and (d) mines

Until Dawn [11] itself presented multi-perspective story to the players. In order to accommodate that, this game provides multiple playable characters according to the narrative segment. Each of those characters has certain traits, which can be changed in line with the actions taken by the player. The playable characters in this game is shown (see Figure 3 and Figure 4).
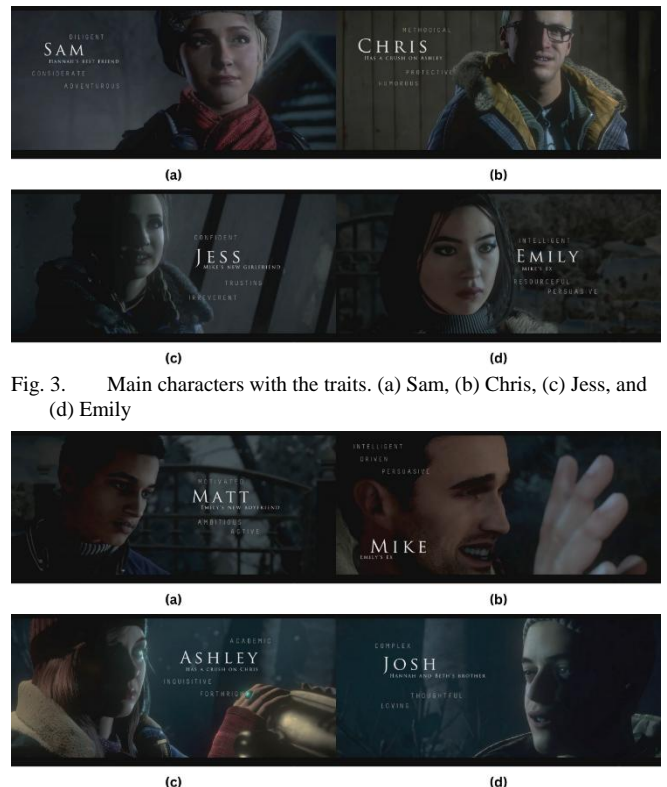


Fig. 3. Main characters with the traits. (a) Sam, (b) Chris, (c) Jess, and (d) Emily



Fig. 4. Main characters with the traits. (a) Matt, (b) Mike, (c) Ashley, and (d) Josh

Alongside the playable main characters, Until Dawn [11] also presented various supporting characters to contribute on the main story. There is The Analyst (later known as Dr. Hill) which appeared in bridging the chapters of the game, commenting on the players regarding their actions in the previous chapter. Other characters such as Flamethrower Guy, The Psycho, and creatures called Wendigo are presented in unveiling the mysteries surrounding the plot while also existed to tense the suspense and thrill of the overall game representation. As a story-heavy game, Until Dawn [11] is intended to brought emotions in line with the drama presented to the players. Due to its nature in providing thriller and suspense, the emotions surrounding the players are either fear,

anxiety, or curiosity. The 'fear' one usually appeared in the sequence involving scary moments, particularly when the characters are in danger of certain threats. On the other hand, 'anxiety' appeared when the players are forced to choose one of the provided decisions which has the possibility of putting the characters in danger, either directly or not. Alongside the other two emotions, the 'curiosity' appeared during the gameplay, especially due to the larger mystery surrounding the characters found throughout the in-game items such as documents, pictures, and even decaying bodies.

Until Dawn [11] itself existed to present interactive story for the players. Due to that, the narrative interface of the game is meant to be interactive through the usage of numerous technologies found in DualShock 4 [26] as the main controller of PlayStation 4. There are several interfaces put in accordance with the narratives, ranging from simple button push, analog stick-moving and turning, touchpad-sliding, until the motion sensor during Don't Move segments with each of the implementations (see Figure 5).

Fig. 5.    Button push in quick-time events, (b) Analog stick-turning to choose actions, (c) touchpad-sliding to turn the book pages, and (d) motion sensor in Don't Move segments

In line with the main story, Until Dawn [11] provided micro-narratives during the gameplay. The micro-narrative elements are found throughout the game world in form of various in-game items. The micro-narrative in the game is divided into three groups, named 'The Twins', '1952', and 'Mystery Man' (see Figure 6). 'The Twins' covered the story behind the disappearance of Josh's twin sisters, '1952' presented the events surrounding the Blackwood Mountain premises, and 'Mystery Man' involves the facts regarding the existence of The Psycho and Flamethrower Guy. Collecting the in-game items will gradually provide context on what truly is going on in the game along with the backstory.
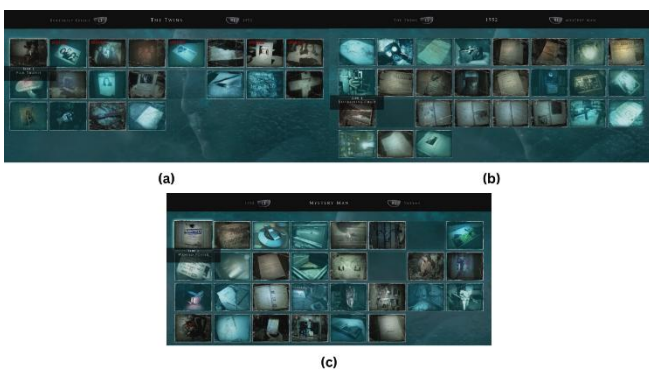
Fig. 6.    Micro-narratives in the game. (a) The Twins, (b) 1952, and (c) Mystery Man

## B. *The Dark Pictures Anthology*

Due to the success of Until Dawn [22, 23], Supermassive Games garnered popularity and tried to present the successor of the interactive story game. Thus, there comes The Dark Pictures Anthology [12] series which presented multiple games with different stories in each installment. Despite the difference of narrative elements, the series mainly featured the same gameplay mechanics such as branching narrative, quick-time events, exploration, and the usage of five main playable characters. Currently, the series has four main titles, starting from Man of Medan [13], continued with Little Hope [19], going forward to House of Ashes [20], and up until The Devil in Me [14] to conclude the first season of the series. The narratives brought in the series are based on the stories present in real-life, such as SS Ourang Medan [27], American witch trials [28], Mesopotamian folklore [29], and Henry Howard Holmes along with his famous Murder Castle [30].

Putting emphasis on its narrative aspects, The Dark Pictures Anthology [12] is meant to draw emotions through its characters and the ambience. Mainly providing horror and thriller alongside the drama, the emotions amplified in the game are mostly fear, anxiety, and curiosity. 'Fear' is induced through the presence of quick-time events, especially when the sequence involved threats chasing the characters. 'Anxiety' is present in the Keep calm segment, where the characters have to stay calm, inducing anxiety if the player failed the sequence. On the other hand, 'curiosity' can be found when the player entered exploration phase, triggering the player to explore for newer information to elaborate the current situation. The Dark Pictures Anthology is a game series that is available on various platforms like PlayStation, Xbox, PC, and even Nintendo Switch. Due to its multi-platform nature, the control is made simpler compared to Until Dawn [11] involving push of button and analog stick turning during the sequences, particularly in quick-time events and multi-decision portions of the games. Aside from that, The Devil in Me [14] added the button-hold to perform an action as the narrative interface along the gameplay session (see Figure 7).
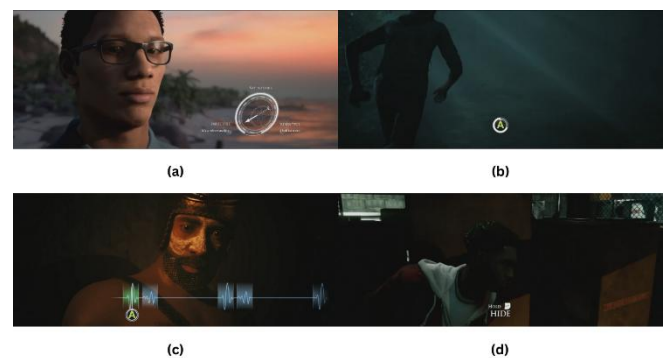
Fig. 7.    Narrative interface in The Dark Pictures Anthology. (a) Multi-decision in Man of Medan, (b) Quick-time event in Little Hope, (c) Keep Calm segment in House of Ashes, and (d) Hide segment in The Devil in Me

Similar to Until Dawn, each installment in The Dark Pictures Anthology included micro-narrative in line with the main story. Albeit presented different materials across the games, this element is brought in every installment, giving the players better context to the story, and even serving as easter egg to other installments in the series. On the other hand, the anthology also presented The Curator, a supporting character that appeared during the intermissions of the games (see

Figure 8). This special character appeared in every installment, commenting on the story and the player's actions during his appearances.
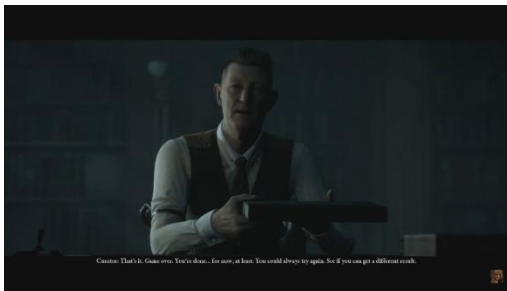


Fig. 8.    The Curator in The Dark Pictures Anthology

The discussion below will present the storyworld, character, and micro-narrative shown to the players in each of The Dark Pictures Anthology games. Each of the subsections will cover each game, further pointing out the difference of presentation on every subsequent release. Similar to Until Dawn, the games from the anthology have been played and uploaded on a YouTube channel, with each of the games' playthrough are organized in series of playlist [30-33].

*1) Man of Medan*

Man of Medan [13] is the very first entry of The Dark Pictures Anthology [12], which featured Shawn Ashmore as one of the main cast's likeness. Different from Until Dawn [11], this one provides slightly less representation with shorter playtime around the event of a group of young adults stumbled upon a ghost ship containing dark secrets. Being the first entry of the game series, this game garnered mixed receptions, praising its horror representation [35] or even criticizing its flawed and repetitive gameplay nature [36].

The storyworld brought in Man of Medan [13] is situated in French Polynesian sea as the main location. The game itself is focused on three places, such as Duke of Milan and the sea for the prologue and first act of the game, with the subsequent parts until the epilogue is centered around the ghost ship (later known as SS Ourang Medan) (see Figure 9). Similar to Until Dawn, the information regarding the story is scattered in those spots, further elaborating the situation faced by the characters.



Fig. 9.    Storyworld featured in Man of Medan. (a) Duke of Milan, (b) deep sea of French Polynesia, and (c, d) parts of Ourang Medan ship

The main difference between The Dark Pictures Anthology [12] games and the other two games from Supermassive Games [21] is the usage of only five playable characters. Albeit putting a smaller number of characters, each character has their own traits that can be altered according to the actions chosen by the player along the story. The

characters featured in Man of Medan is shown (see Figure 10 and Figure 11).



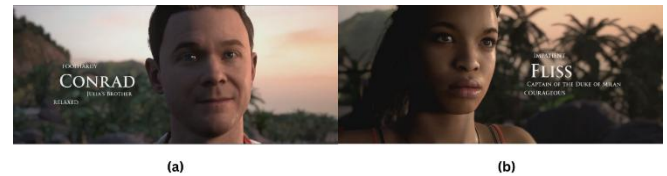Fig. 10.    Main characters with the traits. (a) Brad, (b) Alex, and (c) Julia



Fig. 11.    Main characters with the traits. (a) Conrad and (b) Fliss

Along with the main protagonists, Man of Medan [13] also presented several supporting characters in the game. This is marked through the appearance of Charlie and Joe which are also playable during the prologue segment of the game. On the other hand, a group of assailants comprised of Olson, Junior, and Danny is presented as the antagonist, threatening the player during the course of the game.

As a trademark in The Dark Pictures Anthology [12], Man of Medan [13] presented micro-narratives to provide clarity in the vicinity of the characters. This game mainly showed the micro-narratives through interaction with various in-game items, such as books, papers, photograph, and anything else, which can be found and unlockable across the environments. In this game, the micro-narrative revolved around the condition of the soldiers aboard SS Ourang Medan in the past and the mystery of the ship itself. The micro-narrative elements found in this game are listed in Secrets menu, with the full mapping (see Figure 12) that shows the connections of each item with the others.
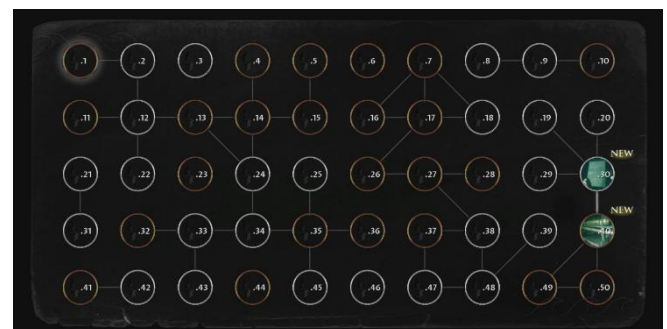


Fig. 12.    Mapping of Secrets as micro-narrative in Man of Medan on early gameplay phase

*2) Little Hope*

A year after Man of Medan [13], Little Hope [19] is released as the second entry in The Dark Pictures Anthology [12]. Featuring Will Poulter as one of the main cast members, this game presented the story of five people getting stranded in a quiet town called Little Hope, covering the dark witchcraft secrets lie in the town while being hunted by the ghost from the past. Bringing similar gameplay with the previous installment but differing its narrative plot, this game presented more cohesive story [37] but the appearance of locked trait mechanism made the game less interactive [38].

As an installment to the anthology game series, Little Hope [19] presented different story than its predecessor and subsequent successors. One difference found is through its storyworld, where this game is focused entirely on Little Hope town, with places like Black Cat Bar, police station, graveyard, and even the main road of the town (see Figure 13). Some of the spots provided various in-game items which serve as elements to better elaborate the main story or just give out the facts of those places.



Fig. 13. Notable places in Little Hope. (a) Black Cat Bar, (b) police station, (c) graveyard, and (d) main road

As a tradition of The Dark Pictures Anthology [12] itself, Little Hope [19] also presented five main playable characters during the gameplay. Similar to Man of Medan [13], the characters had certain traits, which can be altered in line with the actions chosen by the player. The main characters featured in this game is shown (see Figure 14 and Figure 15).



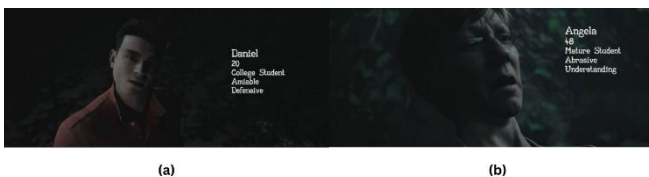Fig. 14. Main characters with the traits. (a) Andrew, (b) Taylor, and (c) John



Fig. 15. Main characters with the traits. (a) Daniel and (b) Angela

Alongside The Curator who is already present since the first entry, Little Hope presented different set of characters, such as The Priest, Judge Wyman, the stranger in Black Cat Bar, and various versions with the likeness of main characters from different eras as the supporting characters. This game only presented an antagonist in form of Simon Carver, an influential priest in town. Those characters altogether collaborated on the revelations of the mystery surrounding Little Hope town.

Like every other title in the anthology, Little Hope also implemented smaller micro-narratives put along with the main story. The micro-narratives can be seen on the in-game items

found by the player, such as newspaper clipping, diaries, and even the names in the gravestone scattered around the places in game to bring the mystery of Little Hope and its past to the surface. The items found also have connection with other items that is listed in Secrets menu, with the full mapping of the game (see Figure 16).



Fig. 16. Mapping of Secrets as micro-narrative in Little Hope on late gameplay phase

*3) House of Ashes*

After the release of Little Hope [19], The Dark Pictures Anthology [12] is continued with the release of House of Ashes [20] as its third installment. Putting Ashley Tisdale as one of the main playable casts, this game revolves around the story of American military army in war with Iraqi force. While also seeking the chemical buried underneath enemy territory, the members of both forces are faced with deadlier threat from underground, demanding them to survive and put aside their rivalry. Notably more action-oriented than the previous two titles, this game displayed more intense quick-time events [39] with more real menace to impede the characters [40], calling it as the best title in the anthology to date [41].

House of Ashes [20] is situated around Baghdad, Iraq, making some portions of the city as the storyworld in the game. This game presented various locations, spanning from Camp Slayer as the base camp of American army, underground catacombs, until the premise around alien ship below the mainland (see Figure 17). Similar to the previous titles of the anthology, in-game items are also scattered around the places in the game, providing elaboration on the context of the situation faced by the characters.
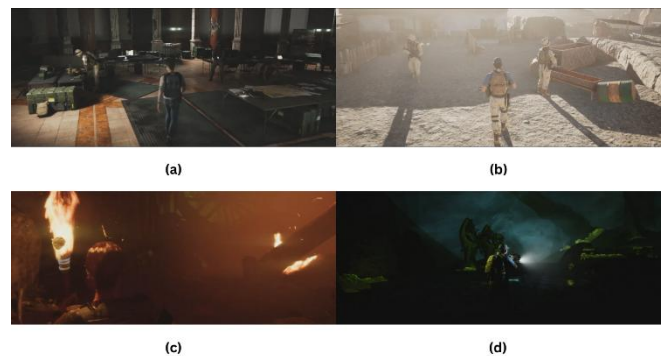


Fig. 17. Storyworld featured in House of Ashes. (a) Camp Slayer, (b) Baghdad outskirts, (c) a part of underground catacomb, and (d) a portion of alien ship

Continuing the tradition in The Dark Pictures Anthology, House of Ashes presented five main playable characters with varying traits. Similar to the previous entries, the traits can be altered across the gameplay through the actions taken by the player, making the character development felt more

interactive. The main characters featured in the game are shown (see Figure 18 and Figure 19).



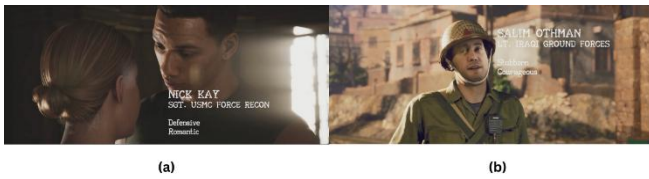Fig. 18.    Main characters with the base traits. (a) Jason, (b) Eric, and (c) Rachel



Fig. 19.    Main characters with their base traits. (a) Nick and (b) Salim

As in the previous titles of The Dark Pictures Anthology, House of Ashes also features several supporting characters in the game, with the possibilities of them becoming the antagonists. Characters such as Lance Corporal Joey, Dr. Clarice Stokes, Captain Dar Basri, along with other characters have importance to the main plot. On the other hand, the pure antagonists are the Sumerian monsters from the underground, hunting the characters during the gameplay. Those characters also serve to impede the characters' movement, which can be crucial to the storyline.

Continuing the trademark of The Dark Pictures Anthology, House of Ashes implemented micro-narratives during the gameplay. The micro-narrative elements are found in any in-game items scattered around the game world, taking forms of documents, writings on the wall, and recordings, which serve to give little details on the situation faced by the characters, particularly involving the research notes regarding the dreadful monsters. Furthermore, those in-game items are listed in Secrets, also showing the connections of each item with the others see (Figure 20).



Fig. 20.    Mapping of Secrets as micro-narrative in House of Ashes on late gameplay phase

*4)   The Devil in Me*

The Dark Pictures Anthology [12] is presented in parts called as Seasons. In order to close the first season of the anthology, The Devil in Me [14] is released for that purpose. Featuring Jessie Buckley as one of the main cast members, this game tells the story of a media crew that got interested

with the phenomenon of H.H. Holmes and his Murder Castle, seeking to unearth the story even more. Instead, they got trapped in the deadly premises belonging to Granthem Du'Met and have to get out to save their lives. Serving as the first part's last entry, this game garnered mixed review, with one calling it less menacing [42] and the other one said that this is the best entry to date due to its sophisticated character work [43].

The storyworld in The Devil in Me is placed on Lake Michigan, centered around the fictional island belonging to Du'Met, the benefactor of the media crew featured in this game. The island itself featured various spots, ranging from the outskirts of the island, replica of World's Fair Hotel, Silver Ash Institute, Columbus Spa, and all other spots (see Figure 21). In the spots, there are many in-game items scattered around the places which the player can interact.



Fig. 21.    Storyworld featured in The Devil in Me. (a) outskirt of island, (b) bar in World's Fair Hotel replica, (c) Silver Ash Institute, and (d) Columbus Spa

As in the last three titles, The Devil in Me used five main playable characters in the game. The difference lies in the introduction of those characters, where this game does not show the base traits in the intro sequence, changing it with the role they take in the crew. Due to the lack of base traits shown in the intro, it made the player have to access the pause menu during the gameplay to see their base traits. The main characters featured in the game are shown (see Figure 22 and Figure 23).

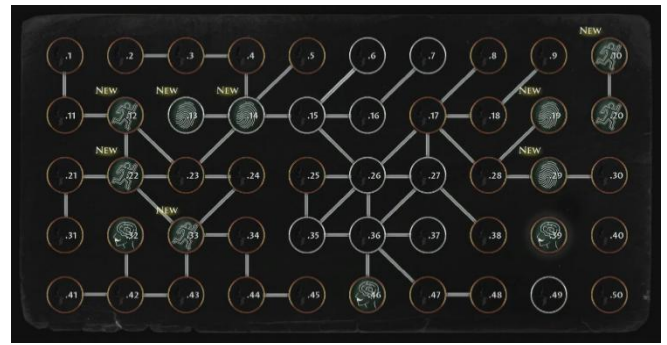Fig. 22.    Main characters with the roles. (a) Kate, (b) Mark, and (c) Jamie



Fig. 24.    Mapping of Secrets as micro-narrative in The Devil in Me on mid gameplay phase

TABLE II.        SUMMARY OF GAME ANALYSIS RESULT

| Game Title | Storyworld | Number of Playable Characters | Emotions | Narrative Interface | Micro-narrative |
|---|---|---|---|---|---|
| *Until Dawn* | Blackwood Mountains | 8 | | DualShock 4 (analog push, button push and hold, motion control) | The Twins, 1952, Mystery Man |
| *Man of Medan* | SS Ourang Medan | 5 | | | |
| *Little Hope* | Little Hope town | 5 | Fear, Anxiety, Curiosity | Various controllers (analog push, button push and hold) | Unspecified (smaller information regarding the surroundings) |
| *House of Ashes* | Baghdad, Iraq | 5 | | | |
| *The Devil in Me* | Du'Met Island | 5 | | | |
| *The Quarry* | Hackett's Quarry | 9 (8 main and 1 special) | | | Freakshow Fire, Hackett History, Camp History |
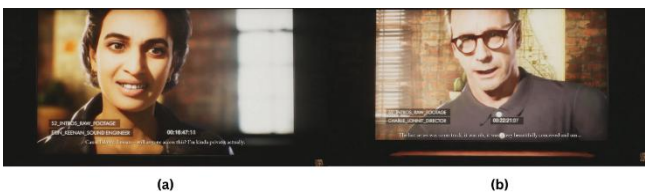


Fig. 23.    Main characters with the roles. (a) Erin and (b) Charlie

Similar to the previous entries of The Dark Pictures Anthology, The Devil in Me implemented micro-narratives in line with the main story. The micro-narratives can be found in the in-game items scattered around the game world, spanning from newspaper clipping, diaries, to the record regarding the Du'Met itself. These in-game items contain various stories, particularly pointing out what's going on with Du'Met and all his victims alongside their revelations. Furthermore, the in-game items found in the game are listed in Secrets menu, showing the connection of each item to the others in order to provide clarity for the player regarding the full story and with the full mapping (see Figure 24).

### C.  The Quarry

Since the release of Until Dawn [11] and The Dark Pictures Anthology [12], Supermassive Games got popular of developing interactive story games [44]. Aside from those titles, the game developer recently released The Quarry [15] as another interactive story game in collaboration with 2K as the publisher. This game tried to bring the story of teen horror flick, with the appearance of mythical creature as the threat to the characters. Similar to Until Dawn [11], this game features eight main playable characters, with the visual likeness of Hollywood movie actor and actresses such as Brenda Song and Justice Smith. Almost similar to the previous entries, this game got mixed reviews, calling this installment as a better movie but a worse game [45], the interactive elements are getting dull [46], and the horror theme is fun but struggling on the game representation [47]. This game is also recorded and uploaded in a YouTube channel, with the full playthrough of the game is put on a playlist [48].

Main story of The Quarry takes place around the premises of Hackett's Quarry, making the place as the storyworld in this game. There are various segments explorable during the gameplay, such as camp lodge, camp store, the woods, scrapyard, and other spots (see Figure 25). In those spots, there are numerous items which can be interacted with the player, triggering a short scene of the characters commenting on the discoveries for most items.

Fig. 25.    Storyworld of The Quarry. (a) Camp lodge, (b) Camp store, (c) Hackett Woods, and (d) Hackett Scrap

Different from the interactive story games from the developer, The Quarry provided the list of locations featured in the game which can be accessed in pause menu on Camp tab. Furthermore, the tab also showed the characters currently in the highlighted locations to add the layers of information for the player (see Figure 26).
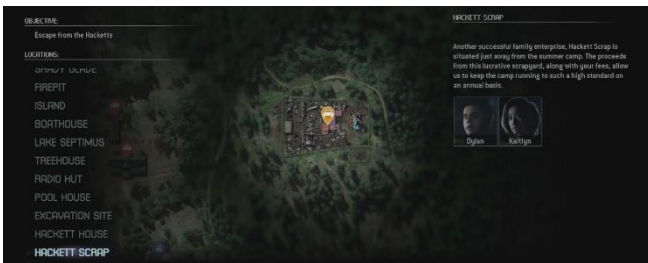


Fig. 26.    Interface of Camp tab, showing the list of locations and the characters in the highlighted location

Pretty similar to Until Dawn, The Quarry brought multiple main playable characters that can be controlled by the player. Taking notes from The Devil in Me, this game does not present the base traits of the characters, making the list of the characters' traits completely gone even in pause menu and also to make the player pay more care to the story presentation. The main playable characters (see Figure 27, Figure 28, and Figure 29), with the exception of Max being playable for the least segment in late game.
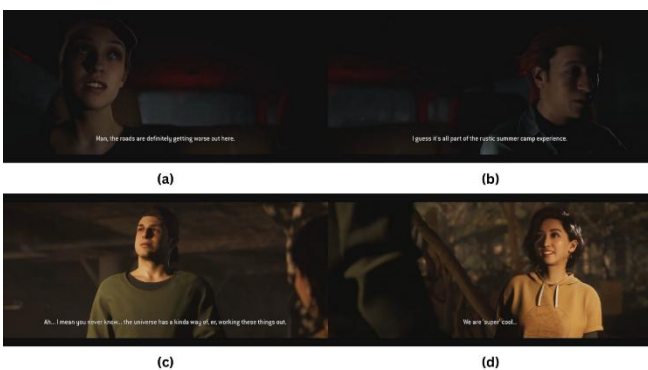


Fig. 27.    Main characters in The Quarry. (a) Laura, (b) Max, (c) Jacob, and (d) Kaitlyn
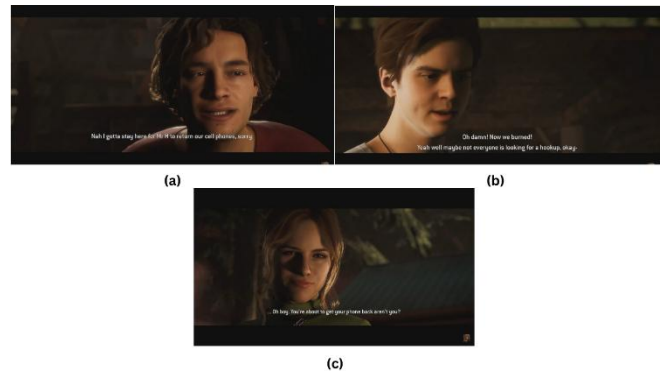


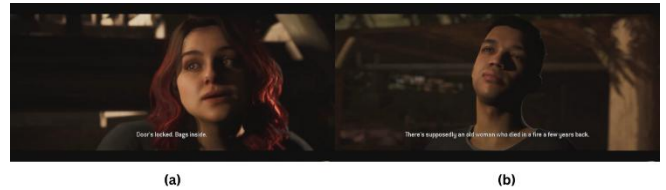Fig. 28.    Main characters in The Quarry. (a) Nick, (b) Dylan, and (c) Emma



Fig. 29.    Main characters in The Quarry. (a) Abigail and (b) Ryan

Similar to the previous titles of interactive story brought by Supermassive Games, The Quarry also presented various supporting characters to broaden the story of the game. The supporting characters ranging from the Hackett family members to the small Vorez family, also serving as the potential antagonists in the main story. Continuing the tradition from Until Dawn, this game presented The Fortune Teller (later revealed as Eliza Vorez) as the special character appearing in the intermissions of the game that comments on the actions chosen by the player. Furthermore, this special character is also able to present the player of possible future from one of the Tarot cards found by the player in the previous gameplay segment. One of The Fortune Teller's appearances (see Figure 30).
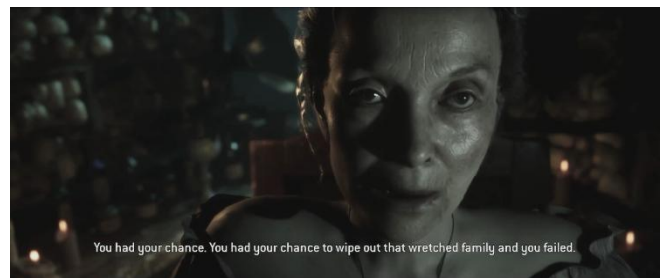


Fig. 30.    An appearance of The Fortune Teller in late game of The Quarry

Akin to the previous interactive story game titles from Supermassive Games, The Quarry brought emotions alongside its storytelling. From the gameplay, the emotions present is either 'Fear', 'Anxiety', and 'Curiosity'. 'Fear' particularly present during the quick-time events, when the player has to lose the threats chasing the controlled characters. 'Anxiety' itself surfaces in the Don't Breathe segments, forcing the player to not let go of the button to avoid the failure of those sequences. 'Curiosity' can be seen during the exploration sequence of the game, where it is driven from the desire of the player to uncover the mystery around the characters, especially regarding the impending threats.

Similar to The Dark Pictures Anthology, The Quarry is released on multiple platforms, spanning from PC, last-generation video game consoles like PlayStation 4 and Xbox

One, and the current-generation consoles such as PlayStation 5, Xbox Series X and Xbox Series S. Due to that, the narrative interfaces are made simpler, even compared to the previous titles. The controls only involve the push and hold of button and analog stick. The narrative interfaces are shown (see Figure 31).
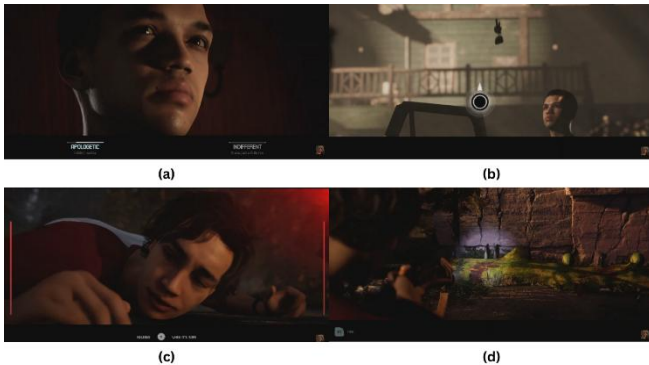


Fig. 31.    Narrative interfaces featured in The Quarry. (a) Multiple split-second decision, (b) Quick-time events, (c) Don't Breathe segment, and (d) Action sequence

Also similar with the previous interactive story games from the developer, The Quarry put micro-narratives during the gameplay. The element comes in various forms, ranging from campers' notes, signpost, to the recordings found by the player that can be updated alongside the player's discoveries, which can be seen on Clue and Evidence tab in pause menu. The micro-narratives are grouped into three categories, named Freakshow Fire, Hackett History, and Camp History, with a screenshot of micro-narrative (see Figure 32).
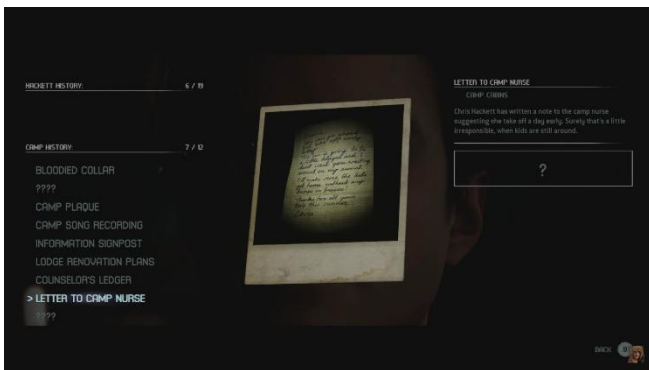


Fig. 32.    One of in-game items as micro-narrative elements in The Quarry

## D. Discussion

From the analysis from previous subsections, each game implements different narrative elements during the release, which can be summarized (see Table 2). The analysis showed that Until Dawn as the first title of interactive horror story game from Supermassive Games set the bar on the future games, spanning from the multiple main playable characters with the presence of various storyworld which induces emotions like Fear, Anxiety and Curiosity while bringing micro-narratives to supplement the main story. Aside from those things, the narrative interface spanning from Until Dawn to The Quarry felt downgraded due to the multi-platform release, which made the control seems simplified for the player.

## IV. CONCLUSION

Closing the analysis of interactive story games in this research, this section concludes the findings from the experiments. Since the release of Until Dawn [11] until The Quarry [15], the interactive story games developed by Supermassive Games provided various changes, particularly regarding the narrative aspect as the main element of gameplay. The storyworld presented in each game is different, ranging from the eerie ambience of mountains, the strangely quiet representation of a ghost town, to the threatening wilderness of fictional quarry, intended to put the stories into life which mostly based on horror or even real-life stories. In every subsequent release, the games brought multiple main characters which are playable during certain segments of those games, with the appearances of supporting characters and a special character who appears during the bridging of each chapter, commenting on the actions taken by the player and providing vague hints for the player.

Putting narrative as the heavy aspect in the games, there are emotions involved during the gameplay of those games. Taking notes of various horror and thriller media, the emotions mainly appear in the games are 'Fear', 'Anxiety', and 'Curiosity' in response to the threat and mystery surrounding the characters. Intended to be interactive, the games also presented multiple narrative interfaces, notably press of buttons and turning of analog stick to progress the main story. The narrative interfaces presented in the games are particularly lessening due to the release on multiple platforms, with Until Dawn implementing the features of DualShock 4, especially the motion control of the controller. In order to enhance the storyline, the games provide numerous micro-narratives which can be found during the discovery of in-game items.

Despite the in-depth analysis of the games, there are several limitations found during the process of this research. As the research is focused only on narrative elements from games made by a developer, the result gathered is limited and excluding the games from other developers despite there are games presenting narrative parts particularly similar with the games discussed here. Also, this research only involves people from Computer Science, which made the interdisciplinary analysis not presented properly despite the importance of narrative aspects from other disciplinary views. Furthermore, the gameplay only done by the authors, which made the empirical results of player experience should include people other than the contributors to better gauge the effectiveness of narrative representation of the games.

From this research, we hope that there is more analysis regarding interactive story games, either fully or on one of the game aspects. Also, this research serves as an example of game design analysis on narratives in order to enable similar research in the future, with the implementation of various game analysis framework is needed to help make the documentation more organized. Furthermore, interdisciplinary research regarding this topic is heavily encouraged, specifically involving contributors from psychological, literature, or even film studies in order to present better analysis on the findings from the games.

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