To the Ends:

Interactive Story Games and Moral Agency

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Author Note

It is recommended to play the game *To the Ends* before reading this paper. This would prevent spoilers and biases regarding the game.

Introduction

As stated by Nguyen (2020), "[g]ames are the art form of agency, and it is in their use of agency where we will find both a great promise and a significant threat" (p. 22). This paper concerns video games and specifically those with an interactive story. Agency in video games can represent matters that go beyond ethical choices, such as the political standings of players (Schubert, 2021). Nonetheless, this creative research project (CRP) explores agency in an interactive story game when it comes to moral dilemmas, often consisting of making a choice that could gravely affect characters and events in games. Essentially, Nguyen (2020) discusses the concept of player agency and how it transforms the experience of storytelling within video games. This way, decisions are not merely plot devices; they are expressions of the players' values and moral compass. When faced with a life-or-death choice in a game, such moments serve to engage players more deeply, forcing them to reflect on their own beliefs and the consequences of their choices. At the same time, the moral choices are presented to players in the form of choices that allow the game to progress. Actually, interactive adventure stories such as The Walking Dead, Life is Strange, Until Dawn, Detroit: Become Human, Black Mirror: Bandersnatch, and As Dusk Falls provide players with difficult situations and tough choices to make, in order for the story to progress. As stated by Mukherjee (2023), "Interactive Fiction, in its broadest sense, refers to any genre or form of fiction, ranging from epic poetry to narrative-driven video games, that is interactive" (p. 102).

In the many years that I have been a consumer of Interactive Fiction, I have seen various names for it, such as interactive storytelling games (Lebowitz & Klug, 2011), interactive story games (Suznjevic et al., 2023) and adventure games (Wold, 2024). Indeed, these types of games have been explored extensively in academic literature. Key scholarship includes *The Art of Game Design: A Book of Lenses* (Schell, 2015), discussing how storytelling integrates with game design,

and *Narrative in Video Games* (Koenitz, 2018), exploring the relationship between video games and traditional narrative forms. These works provide an account of the scholarly debates at hand and an understanding of how interactive storytelling is crafted and experienced in gaming.

Though the nomenclature for this genre of entertainment may still be a work in progress, this type of entertainment is "[f]requently advertised with slogans like 'Choose your own story' [because] the emphasis is placed on the user's ability to influence the outcome of the stories" (Suznjevic et al., 2023, p. 451). As an avid player of video games and interactive stories, I enjoy watching other players' choices in different interactive adventure games through YouTube. Many times—especially when confronted with a countdown—I notice that players pause the game in order to reflect on their imminent choices and the potential consequences of those choices on the characters and the game.

This prompted me to explore what kinds of choices would cause players to pause and reflect on the decisions they should make. These choices would be related to the moral or ethical choices that players believe are the best, such as the moral modules outlined by Holl and Melzer (2022). Hence, this CRP comprises a game, *To the Ends*, that is meant to be used as a tool to observe the choices made by players when confronted with difficult moral choices. *To the Ends* explores the beauty of having choices in a story and how those choices affect the story's progression. Indeed, "our own actions, choices, and decisions can also have their own kind of beauty" (Nguyen, 2020, p. 22). Through an auto-ethnographical process, this CRP observes and analyzes my own reflections while making *To the Ends* and the potential reflections from players of this game, in relation to moral choices in video games. Hence, the objective of this CRP was to make a game that reflects the current state of interactive story games during the last decade and to conduct an auto-ethnography of my experience making this game.

Literature Review

If you saw a train that was heading towards an infant, but you had a lever that allowed you to change the course of the train to go towards an elderly couple, would you push that lever? This is an example of the Trolley Problem. As explained by Butt and Dunne (2019):

The original 1967 Trolley Problem by Philippa Foot is presented as a trolley hurtling towards a group of five individuals fallen on a track; however, an agent is able to pull a lever to save the five but condemn an individual on the adjacent track to die. (p. 432)

How would your actions or lack thereof affect your life and the life of others moving forward? Would you be incarcerated for changing the course of the train? Would first-time parents blame you for not saving the life of their child? If you had the option to turn back time after these repercussions occurred, would you perform a different action than your initial one?

In a study on the true nature of interactive fiction in terms of narrative agency and choice, Mukherjee (2023) notes that menu-based (also known as choice-based) interfaces in interactive games create pauses that can hinder the immersion of players in terms of flow of the game. Nonetheless, Mukherjee (2023) also argues that the sense of choice makes the player believe that they are more than a passive observer of a story, but that they instead have an active role in it. However, the author argues that this agency has limitations as it cannot contain all of the possible options that the player could perhaps want to do (Mukherjee, 2023). Considering these observations, the author asks why audiences choose to interact with this genre of storytelling even if they may know that their agency within it is limited (Mukherjee, 2023). To do this, the author looks at interactive cinema (also known as post-cinema), notably, the 2018 interactive film *Black Mirror: Bandersnatch* (Mukherjee, 2023). While the genre of *Black Mirror: Bandersnatch* is contested by different critics, Mukherjee (2023) notes that it is unique in that it combines elements from cinema and television, while also giving viewers control over the story—a power that is usually reserved for the author. The choices in *Black Mirror: Bandersnatch* start off with more paradigmatic choices, that is to say choices that have fewer repercussions on the story and more to do with establishing the viewer as having authority on the story's happenings (Mukherjee, 2023). Such an example of a paradigmatic choice includes choosing the main character's breakfast (Mukherjee, 2023).

Conversely, syntagmatic choices have much more importance on the story as they can result in the end of a storyline and a return to a previous checkpoint (Mukherjee, 2023). Such an example in Black Mirror: Bandersnatch is when the audience must decide whether the main character chooses to develop their own video game with a company or independently (Mukherjee, 2023). While the viewer is presented with a choice in this situation, Mukherjee (2023) notes that this freedom of option is a hoax, as only one option allows the story to move forward, while the other eventually returns the viewer to the checkpoint where they make the decision concerning the character's video game development. Although the interactive nature of Black Mirror: Bandersnatch is strongly influenced by the path that the creators of the film wish the viewer to follow—any other path being rebuked by the storylines themselves—I believe the film is a great example of the importance of certain choices and the depth of thought that the viewer exercises. As Mukherjee (2023) concludes, while interactive fiction has disadvantages (notably because it is still a fairly new type of media), it still entices audiences due to its benefits, such as the illusion of choice it provides and the enhanced empathy that it encourages in viewers towards the story's characters.

Moreover, in their study, Butt and Dunne (2019) take the cases of two interactive adventure games: *Life is Strange* and *The Walking Dead: Season Two*. Their article focuses on the feminist

ethical considerations of these games as both games have a female main character who is accompanied by a secondary female character. These secondary female characters are the subject of crucial choices to the storylines of their respective game. *Life is Strange* is an interactive story game that explores how a teenage girl, Max, with the power to rewind time uses that power to help those around her and how her actions influence her environment. This game gives the possibility to undo choices (more often than not) by rewinding time, which might affect the depth of thought that a player gives to their choices—it certainly affected my own. This is unlike the subsequent games in the *Life is Strange* universe, which do not have an option to rewind time and undo choices. Thus, the subsequent games obligate players to accept their choices until the end of the game—or unless they choose to go into the game settings and restart at the last checkpoint. Butt and Dunne (2019) observe that the ultimate choice in *Life is Strange* can be seen as a utilitarian one since it prompts the player to choose between sacrificing the life of a dear friend—a childhood friend that the player gets to know throughout the game—or sacrificing a whole populated town in order to save the aforementioned dear friend.

Similarly, *The Walking Dead: Season Two* is an interactive adventure game that follows Clementine, a young girl in a post-apocalyptic world, and the events that unfold around her and happen to her as she tries to continue to survive in a world that is out to kill humans. Congruent with the Trolley Problem but in a different manner than *Life is Strange*, the ending choice in *The Walking Dead: Season Two* prompts audiences to choose between killing Clementine's father figure, Kenny, whom the player has the opportunity to know from the first season of *The Walking Dead*, or letting Kenny kill Jane, a character that is introduced in season two but that has taught Clementine many survival skills and formed a close bond with her. The choice ultimately comes down to the player of the game and determines the ending sequence that they get. Nonetheless,

Butt and Dunne (2019) remark that at the end of this story the player must either choose to act or do nothing and let events take their course. This is very similar to the Trolley Problem as it forces the player to act or not act. It is based on the player's preference.

On another note, Holl and Melzer (2022) explore the interactive adventure game *Detroit: Become Human* (DBH) and the narrative choices of players in relation to morality. DBH explores a world where humans and humanlike androids co-exist, but the latter lack basic rights that the humans have and thus find themselves constantly fighting for their freedom. Holl and Melzer (2022) note that in DBH players are more likely to choose options that conform to moral standards when faced with different circumstances. Actually, the authors look at how players of DBH maintain or go against the Moral Foundations Theory (MFT) through the choices they make in the game (Holl and Melzer, 2022). They explain that MFT involves morality as a construct that implicates different moral modules (Holl & Melzer, 2022). These moral modules are:

[*H*]*arm/care*, which is related to suffering, empathy and compassion; *fairness/reciprocity*, which describes situations dealing with honesty and justice; *ingroup/loyalty*, which refers to situations where your in-group is threatened; *authority/respect*, which relates to settings of hierarchy violation; and *purity/sanctity*, which is related to disgust, bodily contamination, or sexually deviant behaviour [; as well as] *liberty/oppression*, that is, freedom of choice. (Holl & Melzer, 2022, p. 288)

Holl and Melzer (2022) found that players of DBH are more likely to make choices that conform to moral standards and they are even more likely to do so when faced with factors such as time constraints.

The Game: To the Ends

The Plot

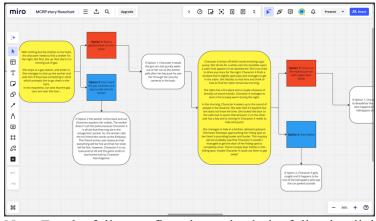
To give a short summary of *To the Ends*, it is an interactive story game in which the protagonist finds out that her sister has been kidnapped. Consequently, she goes on a journey to find her sister in Central America. During this journey, players must make choices for the protagonist that will allow for the story to progress and will test how far players will go in order for the protagonist to find her sister. Hence, the players of this game will need to make choices that could be as simple as choosing what is eaten for breakfast, or as crucial as saving someone's life. The choices by the players of this game will impact the fate of the story and its characters. The following section describes in detail, through an auto-ethnography, the process of making *To the Ends*, from writing the story, to developing the game and adding visual elements.

Making the Game

At the start of making *To the Ends*, I had to find a way to visually display the story that I wanted to make. This was not only for me—as visual information is easier for me to understand but also to allow my CRP supervisor to provide feedback on the story that I planned to make, before I concretely started making this interactive story game. To be clear, I previously mentioned that there are multiple names for video games based on interactive fiction, but I will be using the term interactive story game or interactive storytelling game (ISG) to discuss this CRP moving forward. Within ISGs, *To the Ends* would be in the category of visual novels. Visual novels started in Japan in the 1980s and eventually gained fame globally, to now being a successful part of the gaming industry (Ciesla, 2019). That being said, I decided to make this game on Twine, a free open-source game engine that allows anyone—even those with no experience in programming—to make nonlinear games (Ciesla, 2019). Specifically, Twine is a software that allows users to make hypertext stories, which, compared to linear stories, this type of story or game "allows the reader to have some measure of control" and "some ability over what they interact with next" (Twine Cookbook, n.d.a, para. 2). I was introduced to Twine by a professor in my master's program which then influenced to me to do some research on the software over the course of a few months.

Now that I had determined how my ISG was going to be delivered, I had to plan its storylines. To do this, I used the platform Miro which allowed me to visually present the storylines in my ISG (see Figure 1). In the Miro flowchart, I wrote the ideas for the story in separate blocks. When making this story, many discussions were had with my supervisor to tailor the narrative ideas that I had for it. One of the important first choices that I made in relation to narration was to write the choices in the story mostly as to act or not to act. I only rarely added a third option, which was to act in a different manner. This is because, adding another action creates a new storyline in the flowchart and this complexifies the process of making an ISG within the few months that I had to complete this CRP. By having most choices in this ISG be to do or not to do, it is less complex because if the player chooses for the protagonist to not act, the story reaches an ending. In addition, studies suggest that, when it comes to morality, an action that causes harm is seen as worse than an inaction that causes the same harm (Navarrete et al., 2012). Thus, by having the choices in *To the Ends* be choices of action or inaction, this CRP can contribute to discussions on the topic of moral choices, specifically in video games.

Figure 1



Part of the story flowchart on the Miro platform

Note. For the full story flowchart, check the following link:

https://miro.com/app/board/uXjVKGS84Ts=/?share link id=517337691535

I chose to name this game *To the Ends*, because the player is trying to get to the end of the game, but while playing the game, their moral agency will be tested, and they might pause to reflect on their own choices. In addition, there is more than one ending in this game and there are multiple early ends. On another note, the game is mostly written in an informal way, with offensive terms mentioned by the characters and contractions used instead of full words. This is to correspond with the age of the protagonist (25 years old) and also because this game is meant to be geared towards players in their teenage years or older. The length of this story was an unconscious choice as I wanted the story to be long enough to build a relationship between the player and the protagonist, but also not too long that it would become too complex to make this game. The fact that the game has nine endings was also unintentional. I simply wanted each syntagmatic choice to have an option that would lead to a premature ending as that would show how far the player would go to accomplish the goal of finding the protagonist's loved one.

Writing the Choices

In relation to agency, morality and ethical choices, we can observe the idea of utilitarianism, which is "founded on the idea that decisions are based on deliberate reasoning, where benefits and costs are weighed against each other and individuals choose the course of action that brings the most favorable consequences overall" (Tinghog et al., 2016, p. 2). Thus, when playing *To the Ends*, it is to be presumed that players will make the choices that appear to be the most utilitarian given the context of the different situations that the protagonist finds herself in.

The addition of a countdown for certain choices in the game is meant to test this idea of utilitarianism. At first, I did not want to add a countdown for certain choices because I thought that forcing a countdown on a player for choices that consist of acting or not acting would be forcing the player into an ending. Actually, in Tinghog et al.'s (2016) study on factors affecting altruism, one of the factors they studied was time pressure on problems resembling the trolley problem. They found that time pressure did not change the intuitive choices taken by people concerning moral choices.

Nonetheless, future players of this game will (presumably) not be actually living what the protagonist is going through. Hence, no matter how much I tried to make this game feel personal (so that players can relate to the protagonist), there may always be a sense in players that their choices do not matter. This is because a) they can restart the game, and b) there are probably other choices that they would have made but that are not among the choices that I put in the game. Indeed "[j]ust as novels let us experiences lives we have not lived, games let us experience forms of agency we might not have discovered on our own" (Nguyen, 2020, p. 2).

In the Miro flowchart, I was able to map out the choices that I wanted to add in the story as I wrote it. This flowchart was shared with my CRP supervisor, who could see my progress in real time. As aforementioned, I tried to not make this CRP game too complex because, as a master's student in a one-year program, I could only completely focus on this project from the months of May to August 2024. I did not have the resources of a company such as Sony Interactive Entertainment—who has products that broke sales records (Sony Interactive Entertainment, 2023a, 2023b)—in order to make a video game that is at the calibre of a high budget game. Nevertheless, I think that the format of most choices being action or inaction is a good method of observing players' moral agency. This is because, if players choose to not act, for most of the options this choice leads to a premature ending. Hence, the further along in the story the players get, the more it demonstrates how far they would go, in the shoes of the protagonist, in order to save a loved one, even if it goes against their morals.

When I was writing the different events and choices in the story, I wanted these choices to be in relation to the moral modules of Holl and Melzer (2022). Since I wrote the story as I was imagining it, I knew that I would make adjustments to the choices and the events that led to them, in order for most of the choices to be in relation to these moral modules. Perhaps they are not related to all the modules as it might be complicated to make a story that encapsulates them all within a short time. However, even just representing one moral module can contribute to the study of ISGs and player agency.

Once I had the draft of my story written, I shifted my focus to generative artificial intelligence (genAI) for the production of visual elements. GenAI can be defined as "a class of artificial intelligence systems designed to generate content or data, such as text, images, video, music, computer code, or even complex combinations of these media, that closely resemble

human-created content" (Farrelly & Baker, 2023, p. 2). To be clear, the use of genAI in this CRP is strictly as a tool to demonstrate what is happening in the story within each passage. In Twine, passages are "blocks of dialogue, sections of code, or simply ways to break up a complicated project into more easily understood parts" (Twine Cookbook, n.d.b, para. 1). I am in no way declaring authority on these images. That said, I wanted to try a few genAI software that generate images. Thus, I did some research and started exploring software such as Gemini AI, Microsoft Designer, DeepAI, but I saw that the number of images that I could generate for free was very limited. After this number of free credits—credits are coins that can be used to have the image generator generate an image—I would need to pay for a subscription or pay for more credits. For example, Microsoft Designer provided 15 free credits. Consequently, I did more research and found Canva to be a good option, as it has many different genAI image generator applications with varying numbers of credits. For instance, the genAI applications on Canva can have from two credits to 48 credits. I also saw that Canva contained applications that could generate music, but after discussions with my supervisor, I made the decision to not include music in To the Ends for this CRP. The reason for this was that the process of adding music to a Twine game is very complex for a beginner (such as myself) and within the amount of time that I had for this CRP. Ultimately, when it came to a genAI image generator, I decided to use Mojo AI, a "text-to-image" genAI platform (Mojo AI, n.d., para. 1). I chose Mojo AI because I liked the images that it generated and it has a version with no credit limit—however there were other limits that I will discuss later.

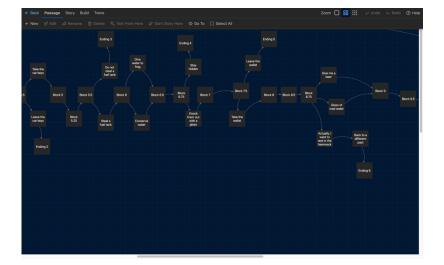
When choosing the name of the protagonist of *To the Ends*, I decided to name her "Thea" because it is derived from the word *Aletheia* which means truth in the Greek language (Woleński, 2004, p. 341). I wanted the protagonist's name to represent truth because at the end of the story, depending on the player's choice, the protagonist has the possibility of discovering the truth about

herself. I decided that the twin sister that Thea is looking for in the story would be named Delia. This name is a taken from the term *Delian* which represents something or someone related to the Greek island Delos (Collins Dictionary, n.d.). In Greek mythology, the island Delos is the birthplace of twin gods Apollo and Artemis (brother and sister) (The Editors of Encyclopaedia Britannica, 2024). I thought this would be a good fit for the characters of *To the Ends* as the game revolves around the protagonist looking for her twin sibling.

Another decision that I had to make when finalizing the story of this game was which point of view (POV) it would be in. When initially writing the game in the Miro flowchart, I wrote the story in the third-person POV. However, this was to make it easier to understand the story for myself and my supervisor. Once, I was writing the final story on Twine, I decided that I would change the third-person POV to a first-person POV. The reason for that was that I believe that the latter would provide a more personal experience for players of this game, in that they may feel more empathetic towards the protagonist and the events that she goes through. I believe this because in all the video games that I have played in my life, so far, the games that triggered the most emotions from my part were the ones that were in a first-person POV. I think that this is because I was seeing through the eyes of the protagonist. So, whenever a non-playable character (NPC) would speak to the protagonist or something would happen to the protagonist (such as being shot), it felt like I was being spoken to directly or the event was actually happening to me. Therefore, when writing To the Ends in Twine, I needed to make changes to the story such as changing "The protagonist needs to make a choice" to "I need to make a choice." This made me realize that I was responsible for the protagonist's voice as I would be writing what she would be thinking and what choices the players would have to make for her. Although Thea is a fictional character, this put some pressure on my shoulders because I wanted good outcomes for her story.

A factor that I tried to consider throughout the whole process of developing the game on Twine is that I wanted to avoid having too much text in each passage. This was to prevent players from thinking that the content takes too long to read and, consequently, skipping to the next passage or to the end of the text to make a choice. This is known as "too long; didn't read," meaning that it "would require too much time to read" (Merriam-Webster, n.d., para. 1). Ergo, although I started with a few passages that contained a lot of text, I shortened each passage by separating the story's text between different passages. The way I decided what went into each passage was by reading the story and deciding whether the last phrase that I read was a good place to take a break and add the following text in the next passage. Ultimately, *To the Ends* contains a little over 60 passages (see Figure 2).

Figure 2



Part of the passages in the Twine game

As I was focusing progressively more on the addition of genAI images in the story, I wanted to test adding an image in the Twine game before I had the final images that I would use. This would allow me to see how images would look like in the game, by pressing the button "Test From Here" (see Figure 3), and if it would be possible for me to add images in this game. I used the "Test From Here" button continuously throughout the development of *To the Ends* because I wanted to make sure that the commands that I put in the game (such as countdowns) functioned properly.

Figure 3

Some of the options when developing a game on Twine



While working on generating genAI images for this game, I was still making changes to the actual story because after reading certain parts where there are syntagmatic choices, I decided to make certain narrative changes that I believed made more sense with the story and were perhaps more realistic. For instance, one of the endings of the story was changed from the protagonist travelling clandestinely in a truck to the protagonist ending up at a police station. I also refined some of the events so that the choices would appear more important in the progression—or not— of the lives of the characters. After multiple frustrating failed attempts at adding an image in the game on Twine, and much online research on how exactly to add images in Twine 2 (which is the version of Twine that I used for this game), I finally managed to add an image to the game (see Figure 4 and Figure 5). This was a test image, but it was still to my relief as it proved that I could add the images that I would generate later on with genAI.

Figure 4

Failed attempt at adding an image to a game in Twine

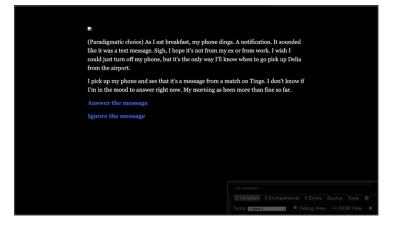
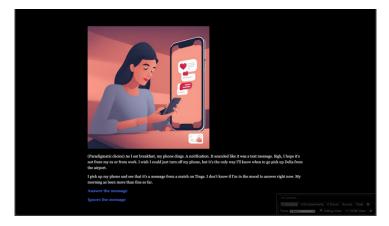


Figure 5

Successful attempt at adding an image in a Twine game



The method that worked to add an image to the game was by using a base64 image encoder named Base64 image (see Figure 6). The way that I found this method was by following a tutorial on the Twine forum which explained how base64 encoding can be used to add images in a Twine 2 game (Sharpe, 2015). Base64 encoding essentially translates images by coding them into text that can then be decoded and thus retranslated as an image (Singh, n.d.). However, a significant disadvantage of using base64 encoding to insert images in my Twine game was that the image was translated into a very long text. During game development, this long text took up most of the space in a Twine passage and would take a while to scroll to the bottom of in order to get to the text of the story (which I always put under the image so that it would appear under the image in the game) (see Figure 7). Nonetheless, these images appear when I export the Twine game. Actually, when a Twine game is exported, it exports as an HTLM file, which means that it opens with a Web browser. *To the Ends* can be played without internet connection but must be downloaded first. That said, now that I had successfully inserted an image in this Twine game, I was confident in generating images that would accurately represent what was happening in the story.

Figure 6

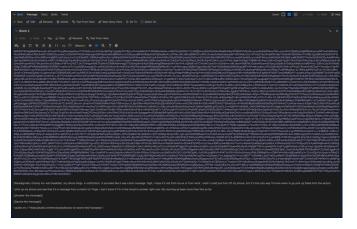
The base64 image encoder used for this CRP



Note. The link to this base64 encoder is the following: <u>https://www.base64-image.de/</u>

Figure 7

Part of the text for a base64 encoded image in the development of a Twine passage



The Choices

When writing the syntagmatic choices of *To the Ends*, I was reflecting on which options I would choose as a first-time player of this game. Thus, in this section of the paper, I will be explaining the choices that I would make if I were a first-time player of *To the Ends*. Since the prevalence of decisions in this ISG are based on Mukherjee's (2023) notion of syntagmatic versus paradigmatic choices, I will focus on the syntagmatic choices that I would make. This is simply because the paradigmatic ones have no impact on the story and are just there to give the player a break from making more intense choices.

The first syntagmatic choice that I wrote in this story, is whether to call the police or to go look for the protagonist's sister. In this case, although in real life I would call the police, I would choose to go look for the sister. This is because it is so early in the game that I would be afraid of the game ending prematurely—as it does—if I chose to call the police. My experience with previous choice-based games also influenced this hypothetical decision. In real life, calling the police in the event of an emergency is an act of seeking assistance and relying on established systems for protection and resolution. However, in video games, embarking on a personal adventure—such as searching for a lost sister—allows players to take direct action and assume responsibility for the outcome. This shift emphasizes not only the agency the player possesses in the game world but also reflects a desire for personal involvement and narrative impact that transcends passive observation. This, I believe, is a large attractive point of interactive fiction. Ultimately, it is only by choosing the option that is less likely to be chosen in real-life that the video game challenges its players to navigate morally complex environments, experience emotional stakes, and engage with the story in a way that is both interactive and immersive. The next syntagmatic choice is when the protagonist is in the antagonists' cabin—the antagonists in this story are a group of kidnappers—and she has the option to steal keys to escape by car or escape on foot. Here, I would definitely choose the option of taking the car keys. Not only because the protagonist is in a dangerous situation and she needs to get as far away from it as quickly as possible, but also because she would be stealing from her kidnappers, in which case I see no need for consideration of morality in this choice. And again, Nguyen (2020) writes about how, in video games, the concept of player agency reflects the tension between moral decisions and survival instincts. For instance, in *To the Ends*, the protagonist's choice to steal the car keys aligns with the notion that in critical moments, the drive for self-preservation overrides ethical considerations. Nguyen argues that games often place players in morally ambiguous situations, where the choices, albeit questionable, become a means of asserting agency. By opting to take the car keys, the protagonist not only seizes an opportunity to escape but also embodies the game's exploration of how high-stake scenarios can shift values and priorities, emphasizing that survival often demands morally grey decisions.

The following syntagmatic choice in the story involves stealing a fuel tank or not at a gas station. When I first wrote this part of the story, I made a note in my journal that I would choose to steal the gasoline. My logic was that, since the protagonist is in a foreign country and she is trying to find her loved one, it would be morally justified to steal something, such as gasoline, that is necessary in order to find her loved one. That said, after further consideration—now months after written that part of the story—I do not think that I would steal the gasoline because I feel that there could be another way that the protagonist could find her sister without shoplifting. For example, perhaps the protagonist could find a group of hitchhikers at a public place and manage to travel with them. Nguyen's (2020) exploration of player agency extends to the notion that choices in gaming narratives are not just about the immediate consequences, but also about the underlying philosophies those choices illuminate. Indeed, Nguyen (2020) posits that actions taken by players (like the decision to steal gasoline) reflect broader themes of morality and justifiable means in survival contexts. This can be observed with the choice of stealing gasoline or not. He suggests that every choice, even one that might initially seem unethical, can be understood through the lens of personal necessity and character development. The protagonist's pivot from considering theft to seeking alternative solutions, such as hitchhiking, reinforces this idea by showcasing a growth in ethical reasoning and ultimately a deeper exploration of agency. By framing these decisions within a narrative context, Nguyen (2020) highlights how games challenge players to engage with complex moral landscapes, reflecting real-world dilemmas about survival, responsibility, and the meaning of agency itself.

The subsequent syntagmatic choice in the story is an easy decision for me. This choice is one in which the protagonist is hiding from an antagonist and the latter is approaching her hiding spot. The protagonist then must choose if she will attack the antagonist or keep hiding and hope to not be found. This choice is easy for me as I would attack the antagonist, because I consider it to be a kill or be killed situation. If the protagonist happens to be killed, she cannot find her sister. Hence, the antagonist must be incapacitated and potentially killed for the protagonist to achieve her goal of finding her sister. The choice faced by the protagonist of either attacking the antagonist or remaining hidden encapsulates the concept of moral agency in a profound way. This scenario not only demands a quick judgment but also underscores the weight of ethical decision-making in life-threatening circumstances. By opting to engage the antagonists, the protagonist exercises her moral agency by prioritizing her sister's safety over her own instinct for self-preservation. This deliberate choice may initially appear driven by desperation, yet it reveals a deeper understanding of responsibility and the ethical implications of survival. In this case, the protagonist's willingness to confront the antagonists reflects her recognition that, in certain situations, the moral imperative to protect loved ones may necessitate actions that society deems as violent or excessive because they are unorthodox. Nguyen's (2020) exploration of agency helps me again highlight the intricate relationship between personal ethics and the decisions we make when faced with dire consequences, placing the protagonist's choice within the broader context of moral philosophy and human values.

The following important choice in the story involves a theme that is always hard for me to decide in choice-based games. This is the choice of stealing money. I vividly remember having to make the decision of whether or not to steal money in the game Life is Strange. I remember it being so difficult that after I made my choice, I watched other players' choices on YouTube to compare the consequences of stealing and not stealing the money. That said, in To the Ends, since it is a fictional story, I would choose for the protagonist to take the money. This would be so that the protagonist has the most chances of surviving in an environment that she has never been in before. If this were real-life and I was in the situation of the protagonist, my moral judgments would be too strong in that I could not force myself to take the money. Nonetheless, this choice would definitely cause me to pause and reflect on my imminent choice. Just thinking about what choice I would make caused me to pause and reflect. Hence, I also believe that many players of this game would pause before making their decision at this point. The choice between stealing and ensuring one's survival is a poignant example of the moral dilemmas that many players encounter in choice-based games. This dilemma not only emphasizes the complex interplay between personal survival instincts and societal moral standards, but it also serves as a reflection of the broader themes of agency and consequence. In games like *Life is Strange* and *To the Ends*, players are

often thrust into scenarios where the pressure to survive supersedes ethical considerations, forcing them to weigh immediate needs against long-term values. *To the Ends* sought to represent this type of scenario by having choices directly related to the morality of stealing for self-preservation or not stealing to stay within the boundaries of one's morality, even if it could cost one's survival. In navigating these decisions, players engage in a form of moral agency where they must confront their beliefs and the potential repercussions of their actions. The tension lies in the conflict between instinctual choices for survival and the deeply ingrained moral compass that dictates what is right or wrong. Such moments are pivotal, inviting players to reflect on their values and the impact of their decisions not only within the game but also in the context of real-life situations. Ultimately, these games create a space for introspection, allowing players to explore the consequences of their choices and the nuances of morality in a safe environment, meaning without the real-life consequences.

The penultimate choice in this game is another very difficult choice where I would find myself pausing and thinking about what the best choice would be. In this case, the best choice is to shoot the kidnapper to save the deuteragonist (Christina) and have the story progress—the best choice because it allows the story to progress. However, since the protagonist mentions that she has never shot a gun before, I would be worried that in picking the option to shoot the antagonist, the protagonist would miss and instead shoot or injure the person that she is trying to save (the deuteragonist). Still, I believe that in this case, the moral advantages outweigh the moral disadvantages because if the protagonist does not shoot the antagonist, the antagonist will kill the deuteragonist and then presumably come after the protagonist. Thus, I would choose the option of shooting the antagonist. The penultimate choice in this game serves as a critical examination of moral agency, demonstrating how gaming environments can simulate ethical dilemmas that mirror

real-life situations. Players are thrust into a scenario where they must weigh their instinct for survival and finding their loved one against the moral implications of their actions. In this context, the decision to shoot the kidnapper embodies a complex interplay of immediate threat and long-term consequences, highlighting the player's ability to navigate ethical considerations under pressure. This choice challenges the player to confront their beliefs about justice and protection, challenging them to consider not only the outcome of their choices but also their own moral integrity within a faithfully constructed narrative. Such moments deepen the player's engagement, transforming gameplay from mere entertainment to a reflective journey where choices reflect personal values and ethical reasoning.

The ending choice was an easy decision for me, and I do not think that I would take a pause before deciding. Actually, I think that I would look badly at the other decision as it does not even appear as a sound option for me. This decision involves saving the deuteragonist or not risking it and saving the protagonist's own life. I would choose to save the deuteragonist in a heartbeat because not only did the protagonist become friends with the deuteragonist but having a sidekick could make survival and finding her sister more probable. In fact, I consider the ending where the protagonist saves the deuteragonist to be the true ending of the story because it is in this ending that the protagonist makes an important discovery. By opting to save the deuteragonist, the protagonist exercises their moral autonomy, prioritizing the value of friendship and solidarity over pure self-preservation. This decision underscores the importance of considering the implications of one's actions on others, showcasing a commitment to collective resilience rather than individual survival. Furthermore, it invites players to reflect on the consequences of their choices, reinforcing the idea that moral agency is not just about making decisions but also about taking responsibility for those decisions in the context of shared humanity.

Although the whole game is a representation of Holl and Melzer's moral module of liberty/oppression—due to the fact that the protagonist is put in a situation where the player's choice will decide is she maintains her liberty by calling the police or confronts herself to oppression by meeting the kidnappers-the last two choices in the game are more related to Holl and Melzer's moral module on harm/care (2022). This is evident in the fact that the protagonist must make choices that concern someone else other than herself, a person whom she has no strong attachment to. Thus, the protagonist—specifically the player—must put themselves in the other person's shoes and empathize with them in order to make the choices to help them, even if it means sacrificing their own objectives. Moreover, Nguyen's (2020) exploration of agency complements the moral complexities highlighted in Holl and Melzer's (2020) framework by illustrating how individual choices resonate within broader societal contexts. Agency is not merely about exercising personal freedom; it also encompasses the responsibility of acknowledging how our actions affect others (Nguyen, 2020). This aligns with the protagonist's journey in To the Ends, where the player's decisions concerning aiding another, despite their own objective of finding the twin sister, reflect a deeper understanding of relational ethics. Just as Nguyen (2020) suggests that true agency involves a conscious engagement with one's environment and community. The protagonist's choices serve as a powerful reminder of how human experiences are interconnected. By prioritizing care over self-interest, players of *To the Ends* are encouraged to navigate moral landscapes that demand empathy and consideration for the well-being of others, reinforcing the notion that agency exists within a web of relational dynamics rather than as an isolated struggle for personal autonomy.

All in all, albeit these are the choices that I would make as a person who is playing *To the Ends* for the first time, if I reached a premature ending, I would retrace my steps in order to make the decisions that would lead me to the completion of the game.

Issues Completing the Game

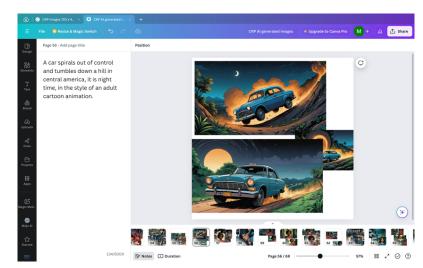
Although genAI images are not the focus of this CRP, they are used as a tool in the delivery of the story in *To the Ends*. Consequently, much time was spent writing good prompts and generating images with the same prompts until the image generated was accurate to what I had in mind (which I would repeatedly try to represent through prompts). To explain it in a few words, a prompt is information given to genAI in order to "prompt" it to generate content. In the context of my CRP, I wrote many textual prompts for Mojo AI in order to produce images that I had in mind. It has been noted that writing good prompts is hard to do (Jamieson, 2022). After completing the game *To the Ends*, I can attest to this.

During the months that I spent working on this game, I often contemplated leaving the use of genAI in favour of more generic and vague stock images—such as a photo of a clock on a nightstand for the first scene where the protagonist wakes up. Additionally, I thought of feeding a genAI software photos of my face so that it could generate images with my face instead of feeding off different sources. However, I did not want to add my face to a genAI software for fear that it would somehow be used in products for commercial purposes, such as advertisements. I also considered focusing on small elements (such as the clock on the nightstand) while still using genAI as I believed that it would make it easier on Mojo AI. Ultimately, I wanted the images to show the protagonist and other characters in the story, so I went with the generation of consistent characters, even if it was a much more arduous task. This doubt that I possessed on the use of genAI was partly because it was difficult to generate a consistent character in different images. It was also because halfway through the development of this game, I received peer feedback that was criticizing the use of AI to generate images. This was in relation to ongoing conversations about whether AI plagiarizes art and art styles from artists in order to turn prompts into images (De Cremer et al., 2023; Thompson, 2024). While I respect these ongoing debates, my goal in this CRP is to use the AI-generated images as ambient aesthetics, afforded by the current potential of technology. In this, my understanding about art and AI is closer to what Lev Manovich argues is a convergence of computational creativity and philosophical-cultural analysis (Manovich & Arielli, 2024). Manovich's book *AI Aesthetic* (2019), for example, provides an elaborate argument that AI is not just a tool for artistic production, but also a cultural and philosophical catalyst that challenges our understanding of creativity in the digital age. Thus, I must insist that the use of AI images in *To the Ends* is to reinforce the story in the mind of players as they are playing this game. It is a tool to make this game a video (or visual) game instead of simply being a textual game.

I would also like to reiterate that the research focus of this CRP is not on the AI images but on the moral agency of audiences who will play this game and make different choices that may lead them to premature ends or lead them to the completion of the game, as well as my own moral agency in this context. In fact, McMaster University (2023) has—as of making this CRP provisional guidelines for using AI in student work. These guidelines note that when using genAI, discussions should be had with the appropriate professor on the purpose of its use and whether it is acceptable. Likewise, transparency should be given in that it should be clearly identified and cited where genAI content has been used (McMaster University, n.d.). I also contacted the McMaster REB Ethics Board on this matter, and they encouraged me to decide with my supervisor whether the use of AI is appropriate for my CRP, as well as read the provisional guidelines from the university.

Another issue in the completion of *To the Ends* is the technicality of generating images via genAI. For instance, finding an adequate software to generate images of the protagonist with the prompt that I made was complicated. As previously mentioned, I experimented with multiple different genAI software to generate images for *To the Ends*. In the end, I decided to stick with Mojo AI, especially through the Canva platform. Mojo AI has multiple tiers for image generation. On Canva, I was able to keep track of the prompts that generated specific images by noting the initial and final versions of prompts in the notes section (see Figure 8). On the Mojo AI website, where I would use the Infinity version of the software, the prompts would automatically appear in the notes of the generated image and could be copied automatically by clicking the prompt (see Figure 9).

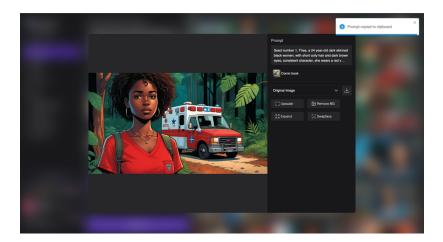
Figure 8



Prompt in the notes section of a Canva page

Figure 9

AI-generated image on the Mojo AI online platform



For *To the Ends*, I used the free tier, named Mojo AI Express, and the second tier, named, Mojo AI Infinity. I mostly used Mojo AI Express because I enjoyed the art style that it would generate, and there were no worries about a limit of image generation—or so I thought. However, after generating 20 or so images with Mojo AI Express, the application would cease to generate images as if there was a glitch, and I could only generate more images the following day. Usually when this glitch happened, I would switch to using Mojo AI Infinity online. I also tried to use the Mojo AI Express app, but the interface is not very large (due to the fact that it is meant for a smartphone screen) which makes it hard to navigate. That said, only a few images in *To the Ends* are from Mojo AI Infinity. This is because I often did not like the art style that it would produce the images in—even though I selected the "comic book" art style for both Express and Infinity. Moreover, Mojo AI Infinity gave 75 credits to generate images and each image cost two credits. Hence, it was quite stressful seeing the number of credits decrease as I was working on the project and trying to generate good images by tailoring prompts multiple times.

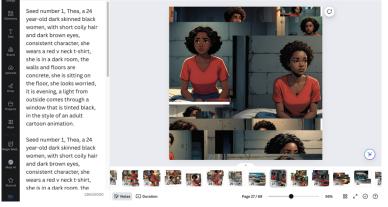
On another note, since the images that are used in this game are generated by AI, the art style was often drastically different (see Figure 10), and this was a phenomenon that would happen

randomly. The only way to manage this was to keep generating images. Perhaps if I had used the name of a known artist or a famous art style, such as that of *The Simpsons*, the software would have given me a more consistent art style more frequently. I did not do this because—at the risk of sounding like a broken record—the AI images were not the focus of this CRP, meaning that the art style was not very important.

Figure 10

📽 Upgrade to Canva Pro 🛛 M + 🏦 🗘 Share Position ed number 1, Thea, a 24 year-old dark skinned black en, with short coily hai nd dark brown eyes onsistent character, she ears a red v neck t-shirt she is in a dark room, the walls and floors are concrete, she is sitting or

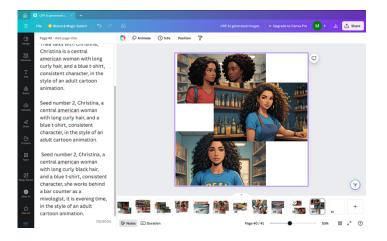
AI-generated images with the same prompt but different art styles



After doing much research on how to generate consistent characters, I learned that I should use the terms "seed" and "consistent character" in my prompts. Actually, many times, when writing the prompts for my images and generating them, I would forget to add "consistent character" in my prompt. This would result in frustration on my part towards the software because it would not generate the same character that it was previously generating. To explain, "a 'seed' is a starting point for generating content. It acts like a unique identifier or code that determines the initial conditions for the AI's generation process" (Inspace, 2024, para. 2). That is why I had a specific seed number in every prompt that was supposed to generate an image of a character in To the Ends (see Figure 11).

Figure 11

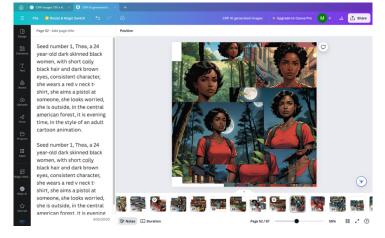
Examples of a seed number in prompts for image generation



I found that on some days when I would use the same prompt, a different consistent character would be generated by Mojo AI. The distinction was often noticeable because of the difference in hairstyles and jewellery (see Figure 12). This was not fixed by changing the characteristics of the character's hair from "coily" to "curly." Instead, I had to keep generating the prompts on different occasions—some days the character was more accurate to my prompt than other days.

Figure 12

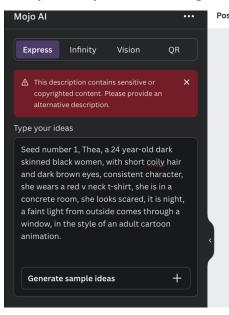
Images generated on different days showing different characters



On another note, I often ran into the issue that Mojo AI would deem my prompt to contain sensitive or copyrighted content (see Figure 13). This was frustrating because it was difficult to determine which words in the prompt were sensitive or copyrighted. I already had an idea that words such as "blood" and "wound" may be the culprits. Through trial and error, I learned that "scared" was also a word that Mojo AI deemed as sensitive. This meant that I had to replace the word "scared" with "worried" in all the concerned prompts. It still worked out because using the word "worried" still generated a protagonist that often has an expression matching that of a scared expression. I tried to make it so that the character in the genAI image of a passage had an expression that mirrored the character's emotion in the text of the passage.

Figure 13

Alert from Mojo AI concerning sensitive and copyrighted content



Furthermore, Mojo AI would often produce images with warped human features. For instance, many images would come out with characters that have extra fingers (see Figure 14) or that have warped faces (see Figure 15). This was a current occurrence and, consequently, some images in *To the Ends* have images with these faults. However, I did my best to choose images for

the game in which these faults are not very noticeable at first glance, especially if the genAI software generated the same faults multiple times. Likewise, it was often difficult to control the lighting in a photo if I wanted it to represent an event taking place during the nighttime (see Figure 16). I often had to specify in the prompt that the moon should be visible (such as in Figure 14).

Figure 14

AI-generated image where character has additional fingers



Note. Image generated with the prompt "Seed number 1, Thea, a 24 year-old dark skinned black women, with short coily hair and dark brown eyes, consistent character, she wears a red v neck t-shirt, she holds a filled plastic water bottle, she looks down, it is in the central american forest, it is during night time," by Innoria Solution, Mojo AI, 2024 (<u>https://mojo.vn/</u>). Copyright 2023 by Innoria Solution. The wrong colour was generated for the t-shirt.

Figure 15

AI-generated image with warped faces



Note. Image generated with the prompt "Inside a police station in central america, it is during night time," by Innoria Solution, Mojo AI, 2024 (<u>https://mojo.vn/</u>). Copyright 2023 by Innoria Solution. **Figure 16**

AI-generated image where the lighting does not match the time of day indicated in the prompt



Note. Image generated with the prompt "Seed number 1, Thea, a 24 year-old dark skinned black women, with short coily hair and dark brown eyes, consistent character, she wears a red v neck t-shirt, she is existing a house, it is in an isolated environment, it is evening, she is running, she looks behind her worried," by Innoria Solution, Mojo AI, 2024 (<u>https://mojo.vn/</u>). Copyright 2023 by Innoria Solution.

Unfortunately, Mojo AI would be stubborn and often not generate key elements that were in the prompt, such as the character holding a smartphone or a pistol (see Figure 17). This was fixed by refining prompts or waiting to generate the prompt the following day. I also noticed that if the prompt had a specific colour, such as to describe the shirt of the character, other elements in the generated image (such as the walls) would be of the same colour. There were also other elements in the generated images that were hard to control because it seemed as if the more details were in a prompt, the more likely Mojo AI was to get confused and remove key elements (such as a smartphone in the characters hands). Examples of such elements that were hard to control were the consistent environments in the story, like the protagonist's kitchen. This made it strange as there are some images, especially at the beginning of the game, where the character's background changes significantly during the same event.

Figure 17

AI-generated image where the character holds a pistol

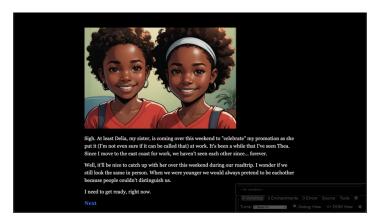


Note. Image generated with the prompt "Seed number 1, Thea, a 24 year-old dark skinned black women, with short curly black hair and dark brown eyes, consistent character, she wears a red v neck t-shirt, she aims a pistol," by Innoria Solution, Mojo AI, 2024 (<u>https://mojo.vn/</u>). Copyright 2023 by Innoria Solution.

Close to the completion of developing *To the Ends*, I started adding the final genAI images in the game. Originally, the images had an aspect ratio of 16:9, but this was too large as the player would need to zoom out to see the whole image. Therefore, I had to resize and even regenerate new images, so that the aspect ratio was 3:2, which fits well in this Twine game without needing to zoom out (see Figure 18). On the other hand, I did not add an image in the early endings. I only added "Game over" to reinforce to the player that they have reached an early end. One ending has the message "Alternate ending" because it is just that: an alternate ending. At the end of the game, I added a passage for the credits and that acknowledgments of all the help and feedback that I have received in making this CRP. I also acknowledge the many ISGs that I have played or watched in the past and the innumerable amount of fiction, such as films, television series, books, that I have consumed in my life which have influenced *To the Ends*.

Figure 18

A 3:2 image in To the Ends



According to the frameworks established by Holl and Melzer (2022), moral agency encompasses the capacity to make ethical decisions that impact oneself and others. Utilizing AIgenerated images, even when these visuals are not central to the gameplay, can be viewed as an exercise of this agency, prompting creators to reflect on the authenticity and originality of their work, while also considering how such decisions may affect the gaming community and its values. Thus, even peripheral decisions regarding the incorporation of AI imagery necessitate a conscientious examination of ethical responsibilities, ultimately influencing the broader discourse around agency and creativity in the gaming landscape. More broadly, the integration of AI-generated images in game development introduces a significant learning curve that enhances technical skills critical to video game creation. As I experimented with these tools, I also deepened my understanding of image manipulation and design, which are essential facets of the creative process. Furthermore, when AI imaging is employed as a reflective pause within an interactive narrative, it fosters a unique opportunity for players to engage with the medium on a more profound level. This interlude not only enriches the storytelling experience but also encourages a dialogue about the evolving dynamics between game creators, gamers, and the technology that shapes their interactions. Such exploration ultimately blurs the lines of traditional roles, prompting a reevaluation of creativity and agency in the digital realm.

Conclusion

This CRP's objective was to make a video game with an interactive story in order to explore the agency that players have when it comes to moral choices in these games. For this reason, I made an ISG with Twine, a software that allows anyone to make nonlinear games, and I added images generated by genAI to better display the game.

Throughout *To the Ends*, players control actions of the protagonist while hopefully discovering the limits of their own morality. They can enable the protagonist to perform morally questionable actions or prevent her from performing these actions, with the consequence often being the end of the game. This displays the sardonic duality of ISGs as sometimes, like in *To the Ends*, not acting or doing the morally acceptable action leads to punishment such as the early end to a game. This reinforces the idea that these games also explore the notion that no good deed goes unpunished.

Writing this story gave me the opportunity to reflect on the choices that I would make something that I have always enjoyed doing when playing ISGs in the past. Likewise, making this story and developing it on Twine has made me have a greater appreciation for storytellers and programmers. Through completing this CRP, I have learned that the use of genAI is much more complicated than it may seem. Notably, the making of effective prompts for genAI. I especially think that concretizing an idea from one's mind into an image generated by genAI is a skill that needs to be practised. Nonetheless, I am glad that I was able to acquire and develop these skills of programming and writing prompts for AI. Everything can be improved, and I believe that this game could be improved in the future according to feedback from players. *To the Ends* is a story about finding oneself and helping others along the way, but I believe that, like all art, it can be interpreted in many ways. I hope that this CRP is a step forward in the advancement of the study of audiences' agency in interactive fiction. The next step would be to study people playing this game, their behaviour (i.e., pauses or lack thereof) and choices in the game. This would allow the continued study of this topic and could remove some bias limitations that I have as the author.

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To the Ends – Text Version

Title block

To the Ends

An interactive story game by Mélina Nzeza

Made as part of a creative research project for the Master of Arts in Communication and New Media

McMaster University

August 31, 2024

Disclaimer: The images in this game are generated by generative artificial intelligence software. The author reserves no right or authorship over them.

Block 0

"Thea! Thea! Come play! The snow is going to melt soon!"

"Girls, don't go too far! Make sure to stay where I can see you."

"Okay, mom!"

I wake up with a jolt. My phone's alarm is ringing very loudly to make sure that I woke up on time. Gosh, I need to change the sound of that thing. I check the time. Responsibilities are calling. There's a work meeting in an hour and people depend on me now. I've been at this company for a year now and they finally promoted me to an indeterminate position. Perhaps once they saw that I could actually work without burning the place to the ground. Finding a permanent job is hard nowadays...

It's not that I don't like my hybrid 9 to 5 job. It's just that, having spent 25 years around the sun, I thought that my life would be more exciting. Maybe I'd participate in month-long African safaris, or I'd be backpacking around Asia. At the very least, I thought that I would be in a relationship and not constantly deleting my dating profiles.

Block 0.5

At least Delia is coming over this weekend to "celebrate" my promotion as she put it. Whether or not it can be called a promotion is up for debate. According to my new contract, it's a permanent version of my previous contract.

It's been a while that I've spent time with Delia. Ever since I moved to the east coast for work, we haven't made plans to meet.

Well, it'll be nice to catch up during our trip. I wonder if we still look the same in person. When we were younger, we would always pretend to be each other because people couldn't distinguish us.

Block 1

Apart from I'm lying in bed before sleep, my morning shower is the part of the day when I can let go of my worries. I sometimes wish that I could stay in here infinitely.

Ooh. That shower was definitely needed. I feel like I can go to this meeting with my eyes open.

Now, what do I make for breakfast?

French toast

I'll go with French Toast. My sweet tooth is craving something sweet. The dentist might not like this, but hey! I deserve this. Yes. I do!

Eggs and toast

I'll go with something healthy. It may not be the healthiest breakfast, but it'll do.

Block 2

My food is barely touched when my phone dings. It's the notification sound. Gosh. Please don't let it be a message from my ex or from work. The urge to just turn off my phone is strong, but it's the only way I'll know when to up Delia from the airport.

Checking my phone, I see that it's a message from a match on Tinge. Perhaps now is not the time to answer it... My morning has been more than fine so far. It would be a shame to have it be ruined by some lewd introductory message.

Answer the message

"Hey, you're hot. Wanna be friends with benefits?"

This is my reward for still believing in chivalry.

Ignore the message

The mental energy spent on that app would be a waste. I should save my energy for work and for when Delia arrives. I love my family. But family is still family, and that means fights and all that comes with spending time together.

Block 2.5

Half an hour later, my stomach is full and the dishes are washed. I just need to get my things ready for work and join the online meeting.

Another ping sounds from my phone. I wonder if in the future, smartphones will be integrated into humans. Maybe with chips in our brain that'll allow us to access our phones through telekinesis?

The notification is a message from an unknown number. Probably spam. Opening the message, a video appears. This is spam ... right? Should I play it? It doesn't appear to be from a spam number. How could I even know that since this is the first message that this number has sent me? The number doesn't seem like spam thought... If it were spam, my overpriced smartphone would probably have flagged this as spam. My finger presses the play button before I can think of whether I'll die in seven days.

Block 3

At first, the video remains as a black screen. Suddenly, a person appears on the floor. The room is dark. There's no sound in the clip but the room appears to be old and unkept. The camera gets closer to the person on the floor. It looks like it's a woman. Her hair reminds me of Delia's hair in her recent Facegram photo.

As the camera gets closer, it looks more and more like it could actually be Delia. That's insane. It would mean that she's been ... taken? It ... can't be. We just had a phone call last night as she was getting ready to fly here. The person filming gets closer and turns the person's body. Even with the darkness of the room, I notice my twin sister's face immediately. She's unconscious. This can't be. I need to call the police.

Block 3.5

As my finger hovers over the close button, ready to call the police, another message comes from the same number. It's a photo of Delia. This time, her face is clearly shown by the flash of the camera and she's holding a journal, her finger on the date. It's today.

Oh, Delia. What have they done to you? The anger that fills me is inexplicable when I see Delia's face roughed up and her matted hair. How long has she been in there? The photo has a message with it: "Go to the following address at 7 p.m. Don't call the police."

What. The. Fuck. What the fuck!? Maybe I can contact the police some other way? They did say to not call the police, but they never said that I couldn't text them or get someone else to call the police for me! Okay, this is not the time to be messing around like this brain!

Call the police

My instinct says to call the police. They arrive within 5 minutes. Wow, that was quick. As they enter my apartment, they try to calm me down and they assure me that they'll find my sister.

In tears about the situation that my sister is in and with police officers by my side, I hear another notification coming from my phone. It's another message from the mysterious number. This time, it reads, "I told you not to contact the police."

→ Ending 1/9

Go look for sister

I answer the number:

"What do you want?"

"Go to the following location at 7 p.m. tonight. A car will be there to pick you up. I won't repeat myself."

That's it? No explanation whatsoever?! I'm just supposed to go with what this person says? This might be a death wish but that was Delia in the video holding today's newspaper... I need to go find her.

Block 4

At 7 p.m., I arrive at the location. It's a sketchy mall parking lot. No one is present but me. The sound of the wind fills the silence. I always hated coming to these places at night... Too many movies have shown someone being kidnapped in a place like this.

Lost in my thoughts, a black van approaches me. The licence plate corresponds with the one provided by the unknown number. The van door opens. Two people with black masks on appear in the darkness. I think about how I was always told as a child to not enter strangers' cars. They never did say anything doing it to save your sister. So, my feet enter the car. I don't know when I fall asleep but the last memory I remember is calm music playing and a butterfly neck tattoos.

Block 4.5

I wake up on a mattress. The room is dark. There's a window but it looks like it's been painted black. I go to the side of the mattress expecting for my feet to hang, but they already touch the concrete ground. The ground is cold, but the room is muggy.

Where am I? How did I get here? My last memory is of getting in that damn van to ... find Delia! I still need to find her. How the hell am I going to get out of here? Suddenly, voices sound outside the room. It doesn't appear to be English.

"...las otras chicas... a Peñas Blancas."

Taking Spanish courses during my undergrad worked out because I can understand that they're talking about other girls. Maybe about Delia? I need to find a way out of this room.

"Vamos ya."

The sound of doors opening and closing announce that they're leaving. I look around the room for something, anything, to help me get out. There's a landline phone on the wall, but the cables have been pulled out. I put the phone to my ear but there is no sound. It didn't hurt to try.

My hands sweep the floor trying to find something that can help me get out. I find some rusty bobby pins. How many girls were in here before me?

After multiple tries, I manage to unlock the doorknob with a bobby pin. Those life hack videos have finally come in handy.

Cautiously exiting the room, I'm met by a shabby living room. If the blacked-out window in the previous room gave me doubts on whether it was nighttime, the clear windows in this room confirm it.

I look outside the windows carefully and see a parked car. The people seemed to have left in another car, but I don't know if someone stuck around. I need to be extra careful. As I look around the living room, keys on a table capture my attention. The keys are the same brand as the car outside. I could take it and get far away from this place quickly, but it would probably make a lot of noise...

Leave the car keys

The car engine would make too much noise. Tip toeing to the door, I exit the house as calmly as possible. I try to stay calm but my feet betray me and start to run.

"Ay!" I hear someone yell behind me as I'm running for my life. My brain doesn't have time to process what is happening when a person appears in front of me and knocks me out.

\rightarrow Ending 2/9

Take the car keys

Taking the car keys as gently as I can, I engulf them in my hands as to not make a noise. I make my way outside and although the floor creaks beneath my feet, no one seems to be alerted by my presence.

I get in the car and see that it has manual transmission. It's a good thing that Dad would only pay for driving lessons if they were for manual transmission. As I turn on the engine, the people are alerted, and silhouettes start moving in the cabin. I don't stick around and speed away from this damn place. Driving away, I see shadows in the rear-view mirror. I put a hand on my chest as my lungs can finally breathe.

Block 5

I drive with no destination mind. I just need to get away from that place. When other cars start to appear, the licence plates read, "Costa Rica." That is when start to notice advertisements that mention "Pura Vida," and display the red, white and blue national flag.

After about 15 minutes of driving, a sound comes from the car dashboard. A light is blinking. Damn, I'm low on gas. I see signs for a gas station nearby and follow the directions until I reach the station.

Block 5.25

It's a small gas station, probably family-owned, with a few gas pumps and a medium-sized convenience store.

My stomach rumbles. I should get something to eat ... but I don't have any money on me. I look around the driver's seat in the car and find a bit of cash. I'll only be able to fill a bit of gas and maybe get a snack with this.

Block 5.5

Inside the gas station, I go to the counter to pay for my gas and buy a few snacks, water, and a map. The cashier rings me up and asks if I want more gas. I politely decline. It may not get me far, but that's all I can afford. After I pay for my things, the cashier's phone rings, and they take their conversation to the back of the store.

I take this time to look around the store when my eyes land on the gas cans that are on a shelf near the door. That's much more gas than what I paid for... But with that much gas, I probably wouldn't have to fill up for a while...

My eyes wander and notice that the security camera behind the cashier's counter. It is facing the door. It would record me, but it would be worth it for the amount of gas I would get. I could probably get to the place the kidnappers mentioned, Peñas Blancas, and find Delia.

Do not steal a fuel tank

No, I can't do that. I couldn't even take more than one candy from bowls outsides of houses on Halloween when I was kid.

The cashier comes back and I decide to tell him about the people that are after me. He looks skeptical at first but then calls the police, despite my being worried about how much I can trust the authorities.

A police officer arrives and reassures me that I have nothing to worry about anymore.

"You are safe, now," he says. As I sit in the back of his cruiser, en route for the police station, he scratches his neck. That's when I notice the butterfly tattoo adorning his neck.

\rightarrow Ending 3/9

Steal a fuel tank

I hurriedly walk toward the shelf and grab a tank as I exit the convenience store. I enter my car and throw everything on the passenger seat and drive away quickly. The car nearly hits a gas pump as I drive off.

I hope this won't come back to haunt me. I mean, it's just a gas can, right? It's nothing that could get me put in jail... Right?

Block 6

I drive for a while and notice that I'm starting to doze off. I turn on a hidden road ready to sleep in this car (although this humid weather would probably kill me) when I spot a cabin that appears to be abandoned. This might be the best shelter I get tonight.

The cabin has a window that is slightly ajar. As I approach it, a frog appears on the front porch. There's no pond nearby. It might be thirsty. I remember seeing a video where someone offered water in a bottle cap to a tiny frog and it went in. It is quite hot... Poor frog, maybe I could give it some of the water that I bought at the gas station?

Give water to the frog

I fill the bottle cap with water and set it in front of the frog. After a little hesitation, it starts to drink to water.

I'm glad I could help you out little guy.

Conserve water

I should probably conserve water. I don't know when's the next time that I'll have access to drinkable water.

Sorry little guy. I'm sure that in this tropical climate it'll rain soon enough...

Block 6.5

I manage to get inside the cabin through the open window. There's no electricity or running water, but there are a few candles and matches. Once the candles are lit, the glow provides a bit

of light. This is all right. I can sleep here and get back on the road tomorrow. I'm coming for you, Delia.

Block 6.75

I wake up to the sound of car doors slamming and voices in the distance. It's daytime but I have no idea what time it is. The only clock that I've had access to is the one in the car. I locked the door to the cabin but it seems that whoever is on the other side has the key. I need to hide and quick!

Hiding in a kitchen cabinet, my heart pounds. I've already stolen. Being caught for entering and squatting in this cabin would just cause more legal troubles.

The footsteps approach my hiding spot. I couldn't completely fit in here without leaving the cabinet door a bit opened. This mystery person passes by with their neck fully on display. On its side is tattooed the same butterfly as the men that I have being trying to escape. How did they find me?

My thoughts are interrupted as the kidnapper gets dangerously closer to my hiding spot. This feels like the more dangerous version of hide and seek. If he finds me, I'll probably go back to that cabin... I look beside me and see a few empty beer bottles. These are the only weapon I have right now.

Stay hidden

I stay hidden and hold my breath. As he passes by again, I exhale. I wait until I no longer hear movement. I slowly open the cabinet door to take a peek. My relief vanishes when I am met with the end of a pistol pointed straight at my face.

\rightarrow Ending 4/9

Knock them out with a glass bottle

I grab two empty beer bottles and slowly open the cabinet door. I throw one bottle far from my location in the hopes of distracting this man. It works. He is surprised by the sound of shattering glass and goes to investigate.

I take this as my chance to get out from the cabinet and sneak up behind him. I have never knocked someone out before. I guess I just need to hit him with this bottle like my life depends on it. It does depend on it.

As I stand behind him, the floorboard creeks beneath my feet. Before he can turn around, I break the bottle on the side of the head. He doesn't pass out, but he looks destabilized. I don't

stick around to see what happen and run out to the car. As I drive away, I see him stumbling out of the cabin in the distance.

Block 7

Whew. This has been a long day. I'm surprised when I look at the clock on the dashboard. It's only 11 a.m.! At least my gas level is good. However, my hunger level is not good as my stomach is growling strongly. I still have a bit of cash, maybe I can stop somewhere.

I pass by a farmers' market filled with couples, families and children. There are also some food stands and picnic tables. Surely, the food here won't break the bank.

Once I check the food prices, I realize that's not the case as I barely have the amount needed to buy one taco.

Block 7.5

So, I walk aimlessly around the market. I notice a picnic table with some leftover food and approach it. This is desperate but not as bad as going in a dumpster for food. I check my map from the gas station and see that Peñas Blancas is over 500 km away. Goodness. It would probably take me a whole day to get there and that's if I have enough gas.

As I eat a bit of the leftover food, I notice a brown wallet to my left, on the seat of the picnic table. The colour is nearly identical to the picnic table, so the wallet does not stand out much. I probably wouldn't have noticed it had I not sat down here.

I look around to see if anyone is paying attention to me and I check the wallet discreetly. It has a decent amount of cash. I'm not sure how much, but it looks like it could really help me right now. I could probably get closer to Peñas Blancas. Maybe not all the way there but close enough.

But is it right to take this wallet? It's probably only a matter of time before the owner of this wallet realizes that they've misplaced it...

Leave the wallet

As I hold the wallet deciding whether to take the wallet, a man with a shirt that says "Seguridad" approaches me. Oh gosh, security. I wonder what he wants.

"Hello, we've received complaints that you're loitering. We're going to need to ask you to leave."

What? Loitering. Does he mean eating the leftovers?

"What? What loitering?"

"Ma'am, is that yours?" He asks while pointing to the wallet in my hands.

"Uh..."

He takes the wallet from my hands before I have time to answer. He checks the inside, probably looking for an identification card.

"Ma'am, you're going to have to come with me."

Shit. I could try to make a run for it, but he'd probably catch me. As I follow him to the security post, I notice the butterfly tattoo on his neck. Oh my gosh. How many of these people are there?

I see my car in the distance and decide to make a run for it.

"Hey!" The security guard yells behind me.

As I approach the car, the security guard slams me on the ground and restrains my hands.

"Ow! Watch it!"

 \rightarrow Ending 5/9

Take the wallet

I decide to put the wallet in my pocket before I look too suspicious. If you act like you know what you're doing, no one should question it... I think.

I deterministically walk to my car and drive away get back on the road for Peñas Blancas.

Block 8

After a few hours of driving and making progress in the direction of Peñas Blancas, my car signals that it needs gas again.

I stumble across a diner-style restaurant beside a gas station. It wouldn't hurt to get something to eat, especially now that I have money...

I enter the restaurant and look around. It's a nice little place. There aren't many people but there's Latin music playing. There's also a hammock in what appears to be a relaxation corner and a TV behind the bar.

I go up to the bar and take a seat. I look at the TV and the news is playing. It talks about "Crimen internacional." It seems that there were over 10 disappearances in this region of the world over the last few months. They show a photo of Delia with... my name? Why would they show my name instead of Delia's? They probably made a mistake since we're identical twins. Even mom and dad used to get us mixed up when we were kids.

My stomach gurgles. I need to eat. So, I order food with the money that I have.

Block 8.5

As I finish my food, I overhear a group of people mentioning Peñas Blancas. I don't think I'll be able to make it too far in my car, especially since I barely manage to get enough money to eat, let alone for gas.

I usually wouldn't go up to strangers, especially in a foreign country, but I've been through so much that I don't care anymore.

"Disculpe, habla inglés?" I ask with the minimal Spanish that I've retained.

"Yes, I do." One of the women says.

"Okay, nice. I overheard you mentioning Peñas Blancas. Would it be in any way possible to hitch a ride with you? I'm willing to pay."

The group discusses among themselves in Spanish and gives me a price. I explain that I don't have enough but that I'm in a dire situation. After a lot of convincing, and pleading, they agree to give me a ride but insist that I need to meet them at a specific location tonight.

"Thank you so much!"

They give me all the information I need.

Woo. Okay, I've got a ride to Peñas Blancas. One step closer to finding Delia.

Block 8.75

"Hey, you look like you could use a drink. What would you like? On the house." The bartender offers me.

"Wow, thank you!" I reply.

I could probably use a drink after these last few days.

Actually, I want to rest in the hammock.

"Actually, I've been eyeing that hammock since I entered this place. I think I'll go rest there for a bit."

"Okay, suit yourself."

I feel like I fall asleep as soon as I manage to lay down on the hammock.

•••

"Let's go on a trip, we'd have so much fun!"

"Okay, I think I can take some time off work!"

•••

"That guy is suspicious. You just met him today. I don't think you should go with him.

"No, it's fine! I'll text you if anything feels off."

"Okay..."

••••

"I don't feel so good... I think I should call my friend."

"No, don't worry. Everything is okay."

"Hey! Let go of her!"

Back to a different past

I wake up in a cold sweat. There are bright white lights. I look down and see that I have a needle in my arm. It leads to an intravenous drip. What? I'm in a hospital? What happened?

"You're awake!"

"Delia? What are you doing here? I've been searching for you for days!"

"What are you talking about, Thea? We've been on our trip for the last few days. We went out yesterday and you passed out at the night club."

"Huh?" I express.

"I'm sure that guy you were dancing with had something to do with it..." she mumbles. "The doctor said that you should be fine to leave the hospital today. We should probably rest at the hotel for the rest of the nights we have booked and then make our way back home."

"Okay."

Did I really dream all of that when I was out? Delia is here and she's not missing? Is this a dream? I slap my cheek to see if it hurts.

The sting is definitely real.

"Hey! What are you doing?" Delia asks.

"Just checking." I answer.

\rightarrow Ending 6/9

Glass of iced water

"I'll just take a glass of cold water, please."

"Okay, coming right up."

Give me a beer

"Give me a beer please. Whichever one you recommend."

"Okay, one beer coming right up."

Block 9

As I get to know the bartender, Christina, time passes by so quickly. Christina is the owner of this restaurant. This small business has been doing well in the last few years and it helps her take care of her family.

As we continue chatting, a man enters the restaurant and comes take a seat beside me at the bar. I think nothing of it until I see the butterfly tattoo on his neck. Oh, no. How do they keep finding me? Has word spread that fast?

"Hi," he calmly says.

I don't answer.

"I know where Delia is," he whispers.

What? I try not to display any shock, but my face betrays me.

"You're probably wondering how I found you. There's tracker on the car," he says.

Block 9.5

Damn. How did I not think of that? Within a second the butterfly man takes out a pistol and aims it at my leg telling me to get up slowly. Standing on my feet, I make a saltshaker fall over and catch Christina's attention. I try to tell her with my eyes that something is wrong.

The situation escalates quickly as Christina asks the butterfly man to leave but he doesn't oblige and instead points the gun to the side of my head. Christina pulls out a shotgun from underneath the counter and loads it. The butterfly man doesn't budge and still holds the gun to my head. I hope this isn't the end. People start to notice the situation and rush out of the restaurant. A chair falls over and this startles the butterfly man. I take the chance to escape from his grasp. He shoots in my direction but thankfully misses.

This triggers a gunfight. The butterfly man's pistol jams, but he throws it to the floor and pulls out another gun.

When I see an opening, I run for the door while crouching. On the way out, I pick up the gun that the butterfly man dropped.

Block 9.75

The gunfight ends up outside of the establishment. If the police weren't alerted by now, this will definitely alert them.

Christina and the butterfly man are both injured. They're already in bad conditions, but the butterfly man ends up getting the upper hand. I watch in worry as Christina tries to crawl away from the kidnapper.

That's when I feel the gun in my hand. I could prevent the butterfly man from killing Christina... I've never shot a gun before, but I can't just stand here and watch someone die!

But... the butterfly man said that he knows where Delia is. He might be lying but he could really know where she is...

So, I aim the gun.

Do not shoot

I freeze. My finger refuses to pull the trigger. The butterfly man shoots Christina through the skull, and I look away in shock.

I stand in shock. I feel as if my soul has left my body. The dangerous situation only settles in when the butterfly man puts a black bag over my head and manhandles me over his shoulder.

"Help!" I scream.

\rightarrow Ending 7/9

Shoot

I take a deep breath and pull the trigger. The butterfly man falls to the ground.

I see that Christina's arm is bleeding, so I run to help her stand up. As I put her uninjured arm around my shoulders, I look at the butterfly man. He's in a puddle of blood. His open eyes signal that he's dead. I might throw up.

Christina seems to understand what's happening and she rubs my shoulder.

"You had to do it. It's okay," she says.

Is it okay? It was kill or be killed but the guilt of removing someone's life is very present.

I help Christina to my car and let her know that I will bring her to a hospital. She refuses as she does not want to involve the authorities.

She agrees to at least stop at a pharmacy, so that we can get supplies to patch her up.

Block 10

As we're driving to the nearest pharmacy (which is not close by any means), we see headlights in the rear-view mirror. Damn, I forgot that this car still has a tracker on it.

We continue driving while observing the car's behaviour. Any thought that this might just be a coincidence is thrown out of the window when the car starts to aggressively bump into our car.

Block 10.5

There are two people in the car. One person driving and the other person ... has a gun?! Why do people have such easy access to guns?

All this hitting of our car is aggravating Christina's injury as she tries to mend her arm.

I manage to get ahead of the other car with some speed, but, suddenly, a pop is heard and our car spirals out of control. I fail to control the steering wheel before our car tumbles down the hill. Everything goes black.

Ending choice

Waking up and I can see that it got darker out. My head feels heavy. All the blood in my body has rushed to my head since I'm upside-down. The car is not working and there is smoke coming from the engine. I look to my right and notice that Christina is still passed out. I try to wake her up but to no avail.

I hear footsteps approaching our car. It's probably the butterfly men. I need to get out of here before they arrive!

But Christina isn't waking up. I shake her forcefully, but she still doesn't wake up. I could try to drag her out and hide with her, but it's uncertain if I'll be able to do it in time before they arrive. Even if I do manage to get her out, then what? I check Christina's pockets and find a phone but there's no service. How could we get help? If I try to save her, I'd most likely miss my ride to Peñas Blancas. And how would I find Delia then? Especially if the butterfly men kill us before we can get out of this car?

I did just save Christina at the restaurant, though. Why would I leave her now?

I need to decide, quickly.

Run and find your sister

I start to panic as I hear the footsteps approaching. I look to Christina and silently apologize for leaving her like this. I crawl out of the car and run for my life.

I must have alerted the people as I hear them running.

"Hey! Come back!" They shout in the distance.

I run as fast as I can until I reach a cliff. It's a waterfall. I look down and then look back.

"There's nowhere to go!" They shout again.

I'd rather take my chances with this waterfall than be in the hands of the butterfly men again.

So, I jump down the waterfall.

\rightarrow Ending 8/9

Save the owner

I can't leave her to die. I manage to crawl out of the car and go to the passenger side. With some force, I'm able to pull out Christina. I find a pile of leaves that have fallen from the trees and camouflage Christina and myself under them. It is not the most comfortable situation, especially with the rainforest's humidity, but it'll have to do. The darkness of the night also helps to camouflage us.

Through the leaves covering my face, I can see the two figures passing by with flashlights. They search the car and start looking around. My heart beats so quickly that and I can barely breathe. Eventually, they pass us.

I must wait at least an hour to listen for sound of footsteps before I decide to come out of hiding.

Christina finally wakes up and I quickly explain to her what just happened. I help her walk as we search for a signal with her smartphone.

We finally get reception and decide that it's best to call the authorities at this point since we are in the middle of nowhere, with no way to get to civilization.

The ambulance arrives and brings us to a hospital. Once there, Christina and I are separated while the police ask me some questions. I tell them that I have been looking for my sister Delia for the last few days.

I am brought to a police station for further questioning. The officers look confused once they investigate the missing persons' case of my sister. They see Delia's information, but they look perplexed.

I ask what's wrong and they show me their computer screen. In the document it is written that I have been missing for two years.

 \rightarrow Ending 9/9

Ending credits

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