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**HUMANITIES RESEARCH PAPER 2021**

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**Declaration**

I declare that this assignment is my own work and does not involve plagiarism or collusion. The sources of other people's work have been appropriately referenced, failing which I am willing to accept the necessary disciplinary action(s) to be taken against me.

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## **1 Introduction**

### **1.1 Background**

Nick Montfort (2005), one of the most vocal and active theorists of interactive fiction (IF) describes IF as “computer programmes that display text, accept textual responses from the reader, before displaying additional text in response”. It is a piece of electronic literature that relies on typological user input to tell a story, one where user interaction has significant ramifications. A user can choose which texts to be read, and in what order, and even change the conclusion of the story. Therefore, these components serve to tell interactive and exploratory tales, which bring to light the importance of topics such as reader agency, which will be discussed further in the literature review.

*Photopia*, an interactive fiction piece published in 1998 and written by Adam Cadre, falls into this young genre. Published in 1994-2004, a period characterized by the move away from commercialized pieces to more “serious literature” (Stevens, 2004), *Photopia* is one of the most well-renowned IF pieces in history, overshadowing many of the author’s other pieces. Public perception of this text is summed up in this quote by Emily Short (n.d.), another well-known author and theorist: “This is a work so hugely influential to IF development that anyone interested in the history of the form should try it.” Thus, the piece’s innate importance is clear.

*Photopia* itself centres on the life of a bright young girl named Alley, gradually revealing more details about her and her untimely death in a car accident. In the story, we take on the perspective of different characters, and see snippets of her life, from her infant years to her adolescence, and even the moment of the accident. Another major component of the story is the various dream-sequences, bedtime stories told by Alley to Wendy, where we take the perspective of Wendy Mackay, a brave astronaut and a fantasized version of Wendy herself.

## **1.2 Rationale**

The IF genre, despite its relative obscurity, is a suitable candidate for analysis due to its potential as a medium. Espen Aarseth (1997), one of the earliest theorists of IF, points out that digital computing was “potentially more flexible and powerful than any preceding medium”.

Furthermore, the advancement of technology is exponential (Kurzweil, 1999). The IF genre’s inherent connection with computing, an increasingly available and swiftly progressing system, is indicative of the genre’s intrinsic potential to grow. A potential, drastic increase in reader count would lead to a proliferation of authors, pieces, ideas, theories and the like, pointing to the genre’s potential literary significance.

The purpose of analysing *Photopia* specifically is twofold. It has clinched the 1998 XYZZY award for Best Interactive Fiction, considered to the Grammy of the IF world, as well as being voted Best Interactive Fiction of All Time in 2015 (Intfiction.org, 2015). While its hallowed stature has made it a target for criticism by more sceptical readers, there is no doubt that it is an “extraordinary” IF piece (Intfiction.org, 2015). Moreover, *Photopia*’s unique approach to reader agency illustrates the illusory nature of free will (Silcox, n.d.), and emphasises its individuality, and hence significance to the study of electronic literature.

In addition, academic discussion on *Photopia* has been limited. While numerous theorists and researchers have listed *Photopia* as an intriguing example of the removal of reader agency, such as Short (2014) in *Interactive Fiction*, Silcox (2014) in *not that you may remember time*, and O’Brian (2011) in *Landscape and Character in IF*, no legitimate study on *Photopia* has been made, only fleeting comments. Hence, this paper hopes to shed light on the many facets of *Photopia* and contribute to the limited existing literature.

## **1.3 Research Questions**

1. Aarseth’s theory defines “scriptons,” “textons,” “transversals,” and utilizes these terms to form 7 variables, which allow us to describe a text according to its method of transversal.

With reference to this, how does *Photopia* represent fate as pre-determined?

2. What is the significance of space in *Photopia*, and to what effect is it utilized?
3. What is the significance of the illusion of reader agency in *Photopia*?

#### **1.4 Thesis Statement**

By manipulating user agency and removing user control, *Photopia* defies IF convention, typically centred on a high level of interactivity. Along with its use of space, “Scriptons”, “Textons”, and “Transversals” (Aarseth, 1997), *Photopia* forces us to rethink our position as autonomous beings; masters of our own fate.

#### **1.5 Scope of Research / Delimitations**

This paper makes use of Aarseth’s theory on IF, as well as the typology provided, in order to conduct a structured analysis of *Photopia*. Ryan’s (2004) nomenclature and categorization of the different types of spaces in IF will also be used, albeit more extensively in “Discussion and Analysis”. Furthermore, the fourth category of space, Space, which focuses on the digital code from which the programme is created as well as the user’s computer hard drive, will not be utilised, the reasons for which will be discussed in the “Limitations” section.

The analysis will be conducted on the Windows version of *Photopia*, version 2.01. While the difference between versions is superficial, utilising the Windows version instead of the Mac or Android versions is an attempt at experiencing the text in the way the author intended.

#### **1.6 Significance of Research / Usefulness**

Little to no studies have been made on *Photopia*, despite its universal acclaim, possibly due to its overwhelming popularity. Furthermore, analysis of the use of space in this piece is non-existent. Hence, this paper aims to use Aarseth’s theory in order to contribute to the field of IF study and demonstrate the unique methods in which *Photopia* exploits reader agency.

## **1.7 Limitations**

It is important to note that, due to IF's affinity with technological advancements and the ever-changing nature of software, the conclusions made in this paper may not be relevant in the future. Hence, we should not impose a sense of finality on our conclusions and accept that they will be rebutted and refuted in the future (Aarseth, 1997). Furthermore, *Photopia* is a departure from stereotypical interactive fiction works in many ways, moving away from the preconceived notion that more interactivity makes for a better story, and therefore cannot be regarded as representative of the whole IF genre.

Marie-Laure Ryan's existing theory of "Cyberspace, Cybertext, and Cybermaps" also includes another type of space, "Space", identified as the vessel to the text, or the piece's source code. However, its uses and applications are relatively limited, and instances of its use are rare. Hence, it will not be covered in this paper.

## **2 Literature Review**

### **2.1 Interactivity in IF**

The addition of interactivity to stereotypical fiction, defined as prose that describes imaginary events and characters, has been lauded as the next big leap forward in literature. This praise arises from the belief that a reader's enjoyment of storytelling will rise to a higher power if instead of passively listening or watching, we are involved in the story world, and able to determine the development of the plot (Ryan, 2014). The validation one gets from effecting action in the simulated world produces pleasure in the user. Hence, the first part of this literature review aims to cover this cardinal topic, encapsulating aspects such as interactivity's implementation in IF, in order to more thoroughly understand the genre, and make for a more easily digestible discussion and analysis.

#### **2.1.1 Implementation of Interactivity**

The hotly contested topic of interactivity falls into two categories, with a distinction between "open" and "closed" interactivity (Mechant and Van Looy, 2014). The prior view sees the user as not being a passive reader, but a writer as well. Landow (1992) is a strong advocate of this perspective, frequently referring to the user as a "reader-author" who helps to "tell the tale we read." In other words, he believes that the user inherits artistic control over the piece, having equal amounts of control as the author of the narrative of the piece. Montfort (2005) concurs, labelling the user as a "co-author" with the ability to "choose which texts he/she wants to read, or which outcome he/she deems most suitable." However, these claims are not completely founded, as they neglect factors such as authorial reticence, or the reluctance of an author to give up control over their text.

The second point is described as "closed" interactivity, where the user has little control over the creation of the text. Ziegfeld, an early theorist on interactive fiction, states that "authors might give readers random bits of dialogue to assign to characters...the author could determine the order of the dialogue." He believes, in layman's terms, that the author held control over the

creation of the text, whilst the user remained a spectator. While a semblance of control is given, the user is sidelined, with overall artistic control lying with the author himself. Ryan (2002) labels the implementation of interactivity as “exploratory”, hence suggesting that the user had no power over the fictional world; instead, they were simply navigating it. This paper chooses to side with this perspective, due to its consideration of the author’s control over the creation of text seen as being more realistic. The former view is a tad ambitious and ignores the human factor in a text’s creation.

While there are differing views on the nature of interactivity, there has been a consensus on the effects of interactivity on the user. Theorists and researchers alike celebrate the merits of interactivity, both in “closed” and “open” forms. In *Do Technologies Make Us Smarter?* Salomon and Perkins (2005) state that IF “enhance[s] cognitive functioning through directly affording cognitive support rather than as a side effect,” implying that the affordances of IF and the interactivity which it offers are bound to have positive and far-reaching implications for the processes underlying human attention, perception, and cognition. However, there is a gap in research regarding the effects of interactivity on the reader, with a large majority of theorists, including Montfort, using more general terms such as “deep and broad” and “satisfying” (Ziegfeld, 1989; Murray 1997). While the observations made by these theorists make evident the profound impact of interaction, more in-depth and nuanced scientific studies can be made in this field.

Hence, while a semblance of control over the text is given to the user, allowing for interactivity to be felt, overall artistic control of the text still lies with the author, as he/she is responsible for the creation of the different paths a user can access to reach the ending of their choice.

## **2.2 Spaces in IF**

Numerous attempts have been made to address the element of spatiality in interactive fiction and digital media. After all, it is the interactive process of exploration and navigation (Murray, 1997) that sets interactive fiction apart from traditional print media. Ryan (2004) identifies four different types of space: “Cyberspace”, “Cybertext”, “Cybermaps”, and lastly “Space”.

Cyberspace, as Ryan describes is the “temporary two-dimensional visual display on the screen”, or the physical space taken up by the text on a computer screen. She continues, claiming that “the image on the screen may mimic spaces with different numbers of dimensions, just as a flat two-dimensional painting may mimic three-dimensional space through the use of perspective.” In other words, it is through animation, visuals, and colour, or “the exploitation of their temporal dimension” (Ryan, 2004), that physical texts transcend the spatiality of their inscription.

Cybertext, as defined by Ryan, is the “textual architecture”, the architecture and framing of the text's different portions and the links between them. It is not a “literally spatial phenomenon”, but an arrangement of objects.

Cybermaps is the represented world, the story-world created by the author. Ryan elaborates on this, mentioning that “ rather than apprehending them all at once, we discover them region by region, from the perspective of a moving body.” While this is synonymous with almost all forms of literature, this notion yields unique results when applied to *Photopia's* fragmented and non-linear storyline. Since we never encounter the same space twice and are instead continuously exposed to new locations, the sense of exploration is increased, and the uncovering of Alley's past, gradual and painful.

The final type of space, “Space”, is identified as the vessel to the text. The space mentioned here is the digital space occupied by the system's code in the computer hard drive or the executable code. However, its use and application are relatively limited, and instances of its use are rare. Hence, it will not be covered in this paper.

### **2.3 Theory in IF**

Theory in IF has been a well-discussed topic, with countless researchers providing their opinion and suggesting potential methods to analyse IF. However, due to the idiosyncratic nature of IF, this task has proven daunting. This section of the “Literature Review” aims to encapsulate these attempts, and provide a possible explanation for their shortcomings.

One attempt at doing so is *Towards a Theory of Narrative in Interactive Fiction* (Smith and Bates, 1989). This study utilises cinematographic terms in an attempt to define IF, suggesting methods for reading and analysing interactive fiction, inspired by film theory. The “collection of standard film techniques” was “taken at random from the shelves at CMU’s library,” with applications of the usage of cinematographic terms mentioned “quickly” (Smith and Bates, 1989). As one of the earliest attempts at theorizing IF, this study makes a concerted effort to develop a suitable theoretical framework and sets the stage for other researchers. However, as the methods used were rather unorthodox and unsystematic, the study fails to provide an appropriate theoretical lens.

Another example is *What’s IF?* (Short, 2001). In this study, Short aims to define IF puzzles and their solutions. She makes several notable observations, such as the concept of “the benchmark”, or a unique action that makes progress towards an ending and contributes to the advancement of the plot (Short, 2001). However, the definition of a “benchmark” is made in reference to subjective factors, such as user expectation. This is a misstep that brings to light the importance of separating objective concepts from subjective variables in IF theory. While Short was ultimately unsuccessful in providing a universal theory, she paves the way for future researchers and theories.

The two attempts made to theorize IF, along with most models for reading digital literature, fall into the “implicit” category (Wardrip-Fruin, 2014). This perspective foregrounds the user’s experience, assuming that the ways in which the user may interact with the piece to be primary. This prioritizes the text visible to the user while neglecting the inner machinations of the piece. Hence, an alternative to this “implicit” method is Espen Aarseth’s (1997) “explicit” model,

covered in *Cybertext: Perspectives on Ergodic Literature*. He provides the following typology for discussing digital media: “Scriptons”, strings of texts as they appear to users, “Textons”, strings of text as they exist in the piece itself, and “Transversals”, the method by which Scriptons are revealed or generated by Textons. Furthermore, he identifies certain variables which can be used to describe a piece of IF’s transversal function, including: “Dynamics”, whether or not a work’s surface and data can vary - “intratextronic dynamics” refers to when the number of visible Scriptons vary, “textonic dynamics” referring to when there is variability in the number of textual data in the system, and “static,” when both of these factors remain unchanged. Other variables include “Determinability”, if the piece in question produce the same textual output in every playthrough (e.g. randomness), “Transiency”, if the passing of time causes Scriptons to appear independently, “Perspective”, if the piece allows the reader to control a character and affect the events of the story - “Impersonal” if the story does not allow the reader to do so, and “Personal” if it does. “Access”, if a piece allows the user to access all of its access at a given time, “Linking”, describing if a user has to visit certain scriptons to gain access to another scripton, or if all links are simultaneously available, and “User Functions”, the final variable. User function can be described as “explorative” when the user must decide which path to take, “configurative” where a user can choose from or create scriptons, and “textonic” when the user is allowed to permanently add textons or transversal functions. By utilizing these variables, a profile of the text can be created. The breadth of both variables and possible values make for 576 possible unique profiles. Discrepancies or unorthodox combinations of possible values could shed new light on a scene, increasing the depth of analysis. For example, a scene that is static, determinable, transient, impersonal, etc. could imply that a user is powerless, and a bystander to the events that unfold.

Variable	Possible Value(s)	Possible Value(s)	Possible Value(s)
<b>Dynamics</b>	Static (Scriptons are constant)	IDT (Scriptons vary, textons are constant)	TDT (Both scriptons and textons vary)
<b>Determinability</b> <sup>□</sup>	Determinable (System response is random)	Indeterminable (System response is fixed)	-
<b>Transiency</b>	Transient (Scriptons appear as time passes)	Intransient (No output unless activated by the user)	-
<b>Perspective</b>	Personal (User plays a strategic role as a character)	Impersonal (User does not play a strategic role as a character)	-
<b>Access</b>	Random (All scriptons are accessible at any given time)	Controlled (Not all scriptons are accessible at a given time)	-
<b>Linking</b>	Explicit (User can move from scripton to scripton freely)	Conditional (Conditions have to be met for user to progress)	No Linking (No links between scriptons)
<b>User Function</b>	Explorative (User navigates the author's world)	Configurative (User can choose or create scriptons)	Textonic (Users can permanently add textons along with transversal functions)

*Fig. 1. Table of Summary.*

Hence, Aarseth's (1997) theory of "scriptons", "textons", and "transversals," is taken to be a comprehensive and effective method to analyse IF. The identification of *Photopia's* transversal function will add depth to the analysis, with variables such as user function and linking yielding unique results when applied to *Photopia*, due to its constriction and illusion of user agency.

### **3 Methodology**

*Photopia* will be analysed with reference to Aarseth's theory of "scriptons," "textons," and "transversals" (1997). Commonly referred to as the "transversal model," it has been described as being "highly influential" and "a primary competitor" (Wardrip-Fruin, n.d.) to other, more implicit methods. These schemata and their associated variables, which have already been covered, will be used as the basis for this paper. I have deliberately chosen scenes that pertain to the concepts of agency for the purpose of this paper. The scenes in question will be arranged in accordance with Ryan's nomenclature of "Cyberspace," "Cybertext," and "Cybermaps". By following the above steps, this paper aims to answer its research questions in an effective and structured manner.

## **4 Discussion and Analysis**

*Photopia* uses a combination of two scenes in order to convey its theme. Due to the scene's inherent differences, it is of due importance to define them both.

The regular black-and-white scenes often take place in real life, and the user is able to take on the perspective of an array of different characters, most of whom are close to Alley. However, we never take on the role of Alley herself. Typically, in these scenes, we are confined to a single area, and have a set objective to complete in a given amount of time.

Opposed to this, the coloured scenes take place in a dream-state. Here, the user takes on the persona of Wendy Mackay, a fantasized astronaut version of Wendy, the girl Alley babysits. Here, the stories are meant to be narrated by Alley to Wendy in the form of a bedtime story. The text in dream-scenes are multicoloured on a black background, and the scenes in question are more explorative in nature, and the user is free to travel at their own pace.

### **4.1 Constriction of Reader Agency**

*Photopia* has drawn ire from academics and critics alike for its deprivation of reader agency, as it is incongruous with the classic IF notion that the more exploration, puzzles, and different endings you have, the more advanced and more adequate your piece will be. However, *Photopia* differs from this, instead limiting the available endings in a bid to present individuals as having no influence on one's future.

In one striking example, the user takes on the role of a teenager, who is riding shotgun as his very drunk and very hormonal friend Rob pilots the car. They speed down Montgomery Boulevard in the wee hours, in an attempt to socialize with two female acquaintances.

### Speeding down Montgomery Boulevard

The streetlights are bright. Unbearably bright. You have to squint as hard as you can to keep your retinas from bursting into flame.

"Welcome back to the land of the LIVING, bud," Rob says. "You planning to stick around for a while or you gonna pass out again? Cause one thing I've learned about chicks is that they actually DON'T LIKE IT when you pass out on them in the middle of gettin' it on. You hear me? So if that's, like, your PLAN, then I'm droppin' you off and showin' up solo."

You don't exactly remember where the day went, but as you listen to Rob rant on, bits of it start to float back to you: a day on the slopes, the brisk February wind against your face; polishing off a keg back at the lodge; those two girls you and Rob had hit it off with, the ones who'd given you their address in town. "We all should get together sometime!" they'd said. Of course, Rob insisted that by "sometime" they'd meant "later tonight." You hadn't been so sure, but then you'd blacked out before you could argue the point.

*Fig 1. The description of the user's surroundings.*

Most users would attempt to coerce Rob into stopping the car, as it is obvious that he is not fit to pilot it. The following menu is presented should the reader decide to converse with Rob:

If options (1) or (2) are chosen, Rob will simply reject the user's advice and continue speaking

```
>Talk to Rob
Please select one:

(1) >ASK ROB ABOUT BLOOD ALCOHOL LEVEL
(2) >ASK ROB ABOUT THOSE CHICKS
(3) >YOU IDIOT, PULL OVER

Select an option or 0 to say nothing >>
|
```

*Fig 2. The table presented when "Talk to Rob" is input.*

about the two girls. This leads to the car flying through a red light, triggering a fatal accident, which we later learn kills Alley.

However, if the user decides to choose option (3), they are presented with another set of options to choose from. Just like the previous selection, options (1) and (2) lead to the car flying into the red light.

Select an option or 0 to say nothing >> 3

"Only reason I'd pull the car over is to let you out and keep on going, dude," Rob says.

Rob looks at the scrap of paper with the address on it as the two of you go screaming through an empty intersection. "Aw, man, it's a fake address! They gave us a f-- no, wait, it's upside down." He turns the paper right-side up. "Oh, hey, they're right on Bartlett Hill Road. Sweet!"

>Talk to Rob

Please select one:

- (1) >ASK ROB ABOUT BLOOD ALCOHOL LEVEL
- (2) >ASK ROB ABOUT THOSE CHICKS
- (3) >ROB, PULL OVER AND LET ME OUT

*Fig 3. The table presented when option (3) is chosen*

However, choosing option (3) again leads to the following:

Select an option or 0 to say nothing >> 3

Rob shakes his head in disgust. "Have it your way, dude," he says. "All it means is that \*I\* get a threesome and YOU get a onesome. And you also get to hitch home." He pulls over and shoves you out of the car, leaving you to brush yourself off on the side of the road and watch the red glare of the taillights as they recede in the distance...

*Fig 4. The protagonist disembarks from the car.*

While the user has managed to disembark from the vehicle, Rob, in his stupor, will still continue towards the red light and collide with Alley's car. The end result remains unchanged.

The profile in this scene has a number of remarkable variations from the rest of the piece and other IF pieces. This scene, in particular, is transient; there is a limited amount of time where the user is able to act, before the accident occurs. It is also impersonal, while the text pretends to involve the user as a participant, they ultimately play no strategic role and effect no change.

This may be seen as a characteristic example of *Photopia*'s unwillingness to hand over the reader agency. Since artistic control of the story is minimalized, as the end result is of the user's prior choices, *Photopia* detracts from the traditional belief that an IF piece constitutes copious amounts of reader agency by severely limiting reader agency and giving the user an illusion of control. There is also an emotional aspect worth considering - a sense of exasperation arises when the user is unable to prevent the accident. Given that users are expected to attempt an IF piece multiple times, the user will continually be confronted by this scene, and grows increasingly vexed when faced with the short timeframe and their seeming inability to prevent Alley's death. The confined space the user is placed in also holds significance. In this scene, the user is trapped in his own car, and driven by the intoxicated Rob, a grim symbolism of how, in *Photopia*, the user is simply along for the ride in Cadre's predetermined world.

Another scene that furthers this narrative is the "PURPLE" dream-scene. A "false command line" (Silcox n.d.) is utilized in this scene to great effect. Generally, in *Photopia*, the user inputs their instruction after the ">" symbol. However, in this case, pressing any key will cause the system to generate both the input as well as the response as if the user had typed them in, despite the fact that the user has not done so.

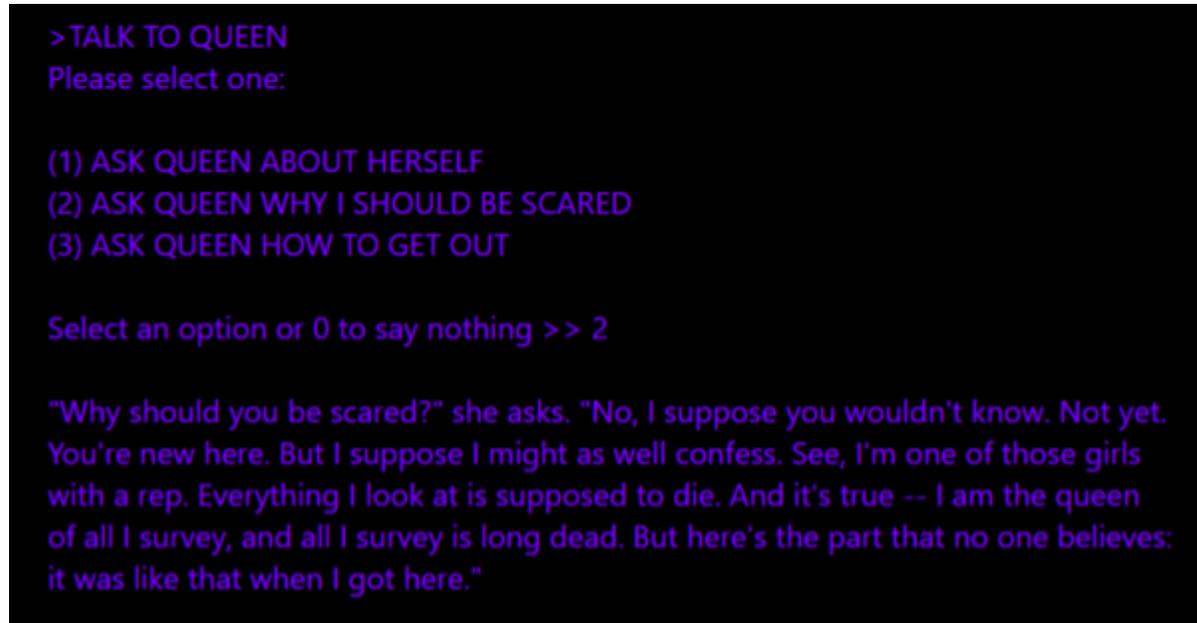
### **In a dark place**

I open my eyes, and I am in a cold, dim, lonely place. I blink, thinking my eyes are still closed, but then I realize that it is not pitch black: there is a dark purple fog billowing all around me, so close to black as to make nearly no difference. There is a faint purple glow to the stone floor, too, though I might not even notice it if it weren't holding me up.

>EXIT

I try to find my way out of this place, but no matter which direction I try, or however far I go, it's all the same. Eventually -- and maybe it's minutes, maybe it's days -- I can suddenly make out a vague shape in the fog.

*Fig 5. The input "EXIT" is not input by the user, but invariably generated by the system.*



*Fig. 6. The option (2) is chosen as default.*

The distinctive aspect of this scene's profile is its dynamics, defined as static. This means that the scriptons are constant; and that every user who experiences it is shown the exact same paragraphs in the exact same order. The majority of *Photopia*'s texts are intratextonic, implying that they have a variable amount of scriptons with a constant amount of textons and that users can complete a scene without viewing all of the scriptons, making the encounter unique for every user.

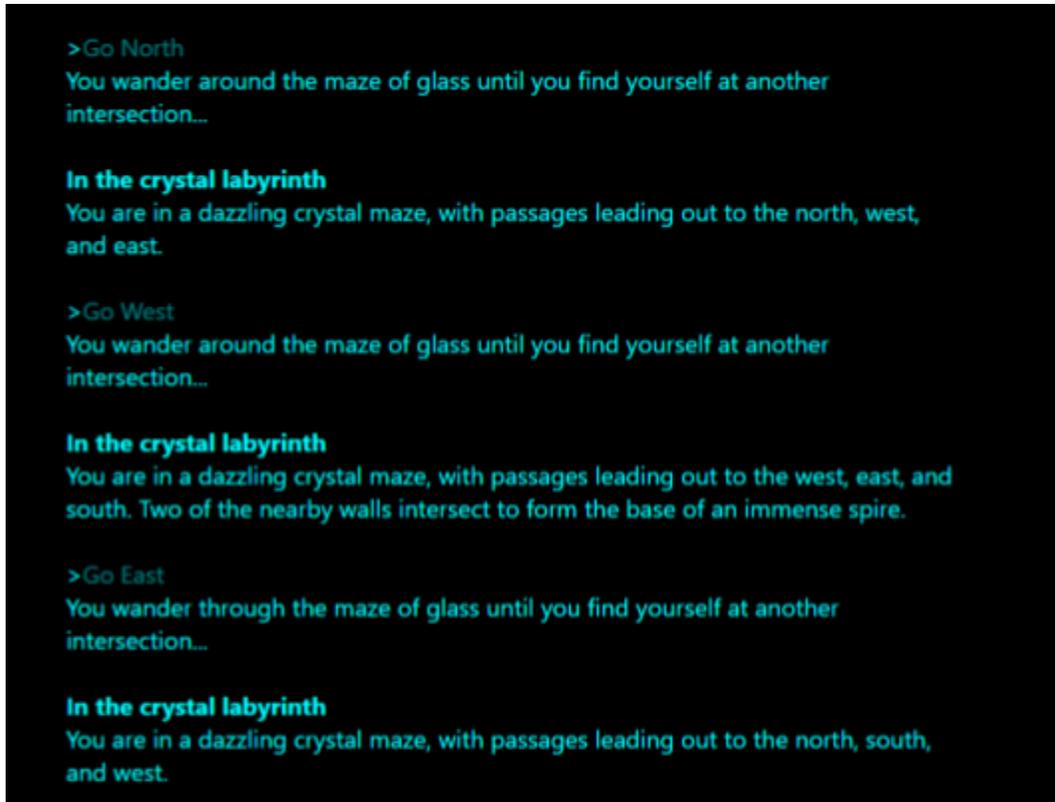
This scene, in which Cadre wrestles away autonomy from the reader, is meant to serve as a premonition of Alley's fast approaching death. Hence, the reasoning for the lack of user control is clear. The sense of powerlessness in the dream correlates with the user's sense of powerlessness at being unable to save Alley, and there is irony to be found in the complete removal of user agency in an IF piece. The overall sequence of events in *Photopia* is also worth considering - Cadre smartly places the car crash at the piece's beginning. This, along with the fragmented storyline, means that the user is gradually exposed to the details surrounding the accident and about Alley as a person, and becomes more emotionally attached. It is all the more emotionally draining for the user when it sets in that they are never given the chance to alter Alley's fate, especially when Alley does not pick up on the significance of her dream, and continues moving towards her expected death. Moreover, as readers are likely to attempt more

playthroughs in the hopes of changing Alley's outcome, and realise that they are unable to do so, *Photopia* causes the reader to undergo the five stages of grief: denial, anger, bargaining, depression, and acceptance (Kübler-Ross, 1969). The emotion experienced ties in with the aforementioned feeling of powerlessness, exacerbating it and reinforcing the notion that we are unable to influence our future.

#### **4.2 Rejection of Destiny**

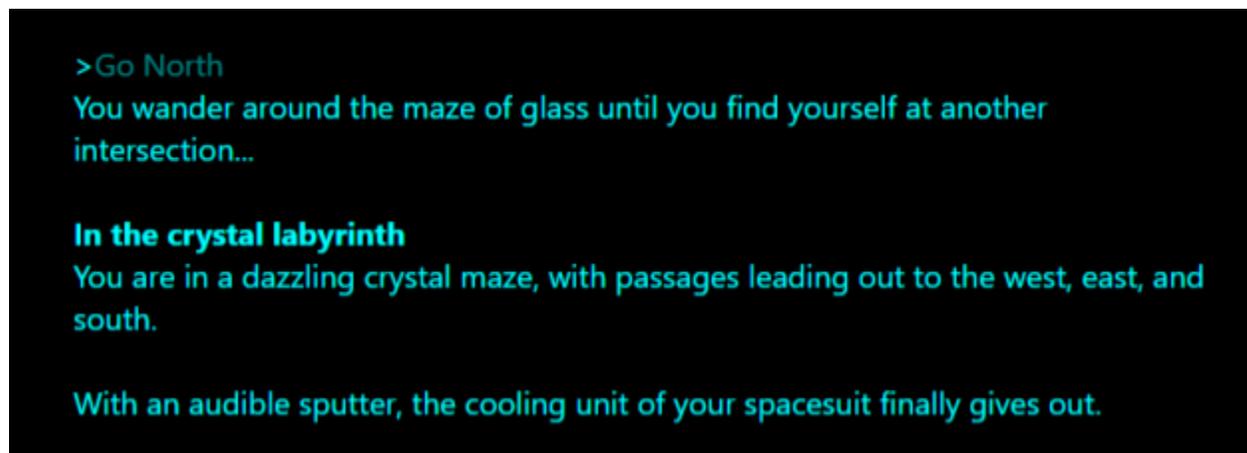
The negative emotions of resentment and frustration are commonly experienced in the earlier scenes when agency is removed from the reader. This convinces the reader into believing that life truly is predetermined and that we are destined to follow a contrived path. However, there are instances where a positive emotion is associated with a more explorative scene, thereby propagating the notion one is able to be the master of one's fate, and making it less likely that the user will throw in the towel and submit to their destiny.

One instance of this can be found in the "SKY-BLUE" scene. Here, the user is made to enter an intricate maze, and quickly loses their way. The user is made to repeatedly choose a direction in which to travel.



*Fig. 7. The repetitive process in which the user traverses the maze.*

After a certain amount of time has passed, or after the user has made a sufficient number of moves, the system interrupts, mentioning how the cooling unit of the user's spacesuit has failed. This prompts the user to remove their spacesuit and drop it on the floor.



*Fig. 8. The cooling unit of the spacesuit sputters to a halt.*

>Go North

You wander around the maze of glass until you find yourself at another intersection...

**In the crystal labyrinth**

You are in a dazzling crystal maze, with passages leading out to the north, south, and west.

With its cooling unit broken, your bulky spacesuit begins to feel very uncomfortable. It's like wearing a parka on a warm, sunny day.

*Fig. 9. The character begins to feel humid.*

Removing the suit will reveal the phrase, “The cool breeze ruffles the feathers of your wings”. The user then unlocks the ability to fly, and is able to escape the previously unnavigable maze.

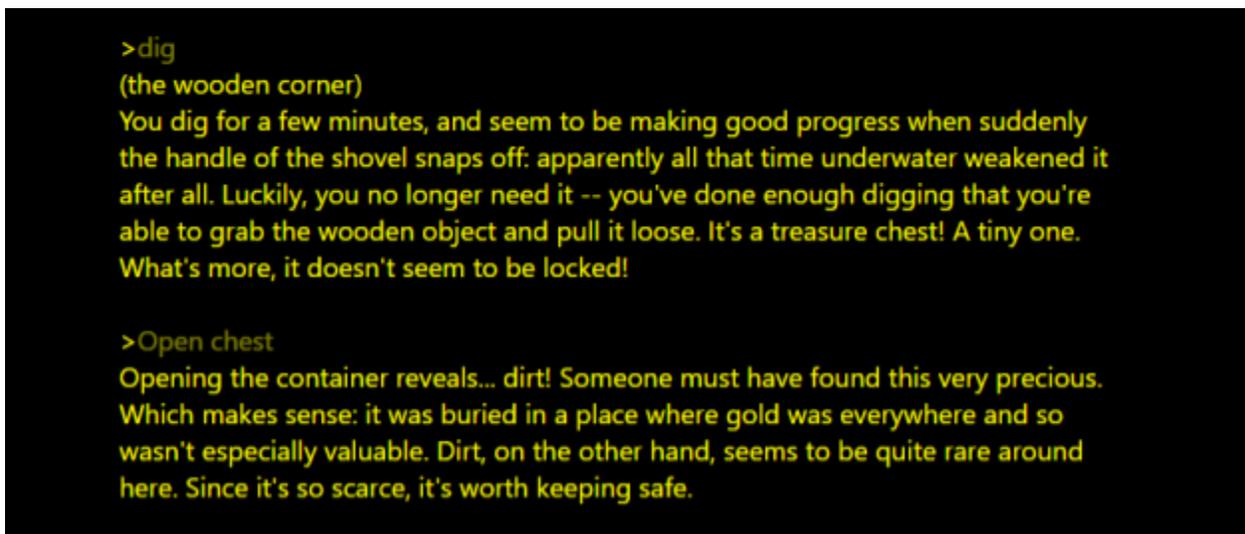
This scene’s profile differs heavily from the rest of the text in terms of its perspective. The relationship between the user and the system is personal; the user can play a strategic role as a character, and is wholly responsible for the character’s outcome.

Not only does this scene grant the user the ability to travel in their desired direction, it also allows them to make a monumental decision regarding their character’s fate - Wendy either remains lost inside the maze, or is able to break out and escape it. An increasing amount of agency is hence handed to the user. Additionally, while the puzzle included is an atypical one, its resolution still requires the user to be keen and detail-oriented. Thus, the user experiences joy and validation upon the successful completion of the puzzle. Furthermore, the scene’s unorthodox solution, which involves the player simply flying away instead of successfully escaping the maze on foot, is incongruous with the user’s expectations, lightening the mood. Moreover, it is also rather amusing that the scene’s title, “SKY-BLUE,” was hinting at the puzzle’s answer. Hence, the wealth of positive emotion experienced when granted free agency is contrary to the negative emotion felt when reader agency is stripped away, and the piece, in presenting autonomy in a good light, implores the reader to forge their desired future.

### 4.3 Illusion of Power

The rigid dichotomy between scenes that allow reader agency and scenes which remove it does have a few exceptions. There exists a genre of scenes that do not fall into either category and have more nuanced implications. These scenes grant autonomy, but withhold information regarding the game world and downplay the consequences of the user's actions.

One instance of this is found in the "GOLD" scene, specifically when the reader chances upon a small treasure chest. Using a rusted shovel found in the previous "SEA-BLUE" scene, the user is able to unearth the treasure and reveal its contents.

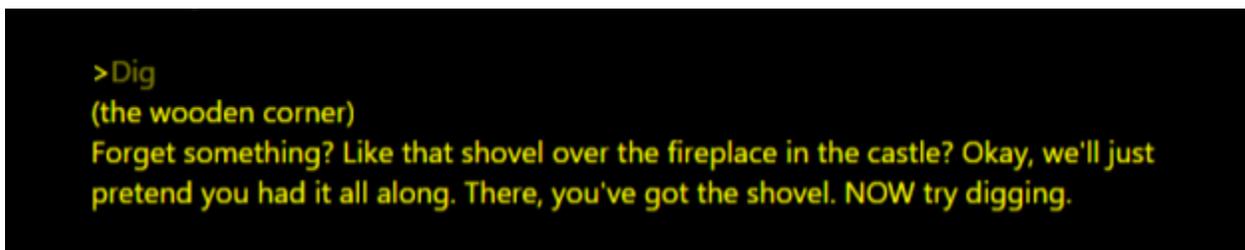


```
>dig
(the wooden corner)
You dig for a few minutes, and seem to be making good progress when suddenly
the handle of the shovel snaps off: apparently all that time underwater weakened it
after all. Luckily, you no longer need it -- you've done enough digging that you're
able to grab the wooden object and pull it loose. It's a treasure chest! A tiny one.
What's more, it doesn't seem to be locked!

>Open chest
Opening the container reveals... dirt! Someone must have found this very precious.
Which makes sense: it was buried in a place where gold was everywhere and so
wasn't especially valuable. Dirt, on the other hand, seems to be quite rare around
here. Since it's so scarce, it's worth keeping safe.
```

*Fig. 10. The user chances upon a treasure chest.*

The soil inside the chest is an important plot item, and quintessential to the progress of the plot. Though, the results are jarringly different should the user not pick up the shovel in the previous scene.



```
>Dig
(the wooden corner)
Forget something? Like that shovel over the fireplace in the castle? Okay, we'll just
pretend you had it all along. There, you've got the shovel. NOW try digging.
```

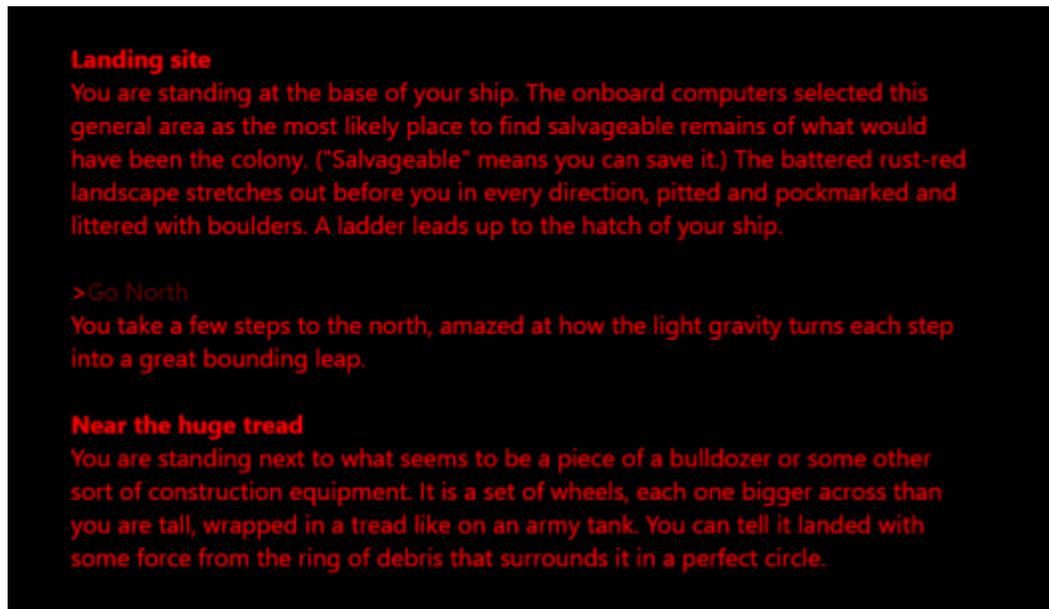
*Fig. 11. The user is given the shovel.*

Evidently, the game accords the user the wooden shovel, almost as if the user had simply willed it into existence. In doing so, the fourth wall is also broken, with the piece addressing the user directly instead of through another character.

In terms of its profile, the “GOLD” scene is neither personal nor impersonal in terms of perspective. Upon first glance, if the user only attempts one playthrough, this scene appears personal, as their previous choice has played a strategic role. Although, the scene can also be staunchly impersonal if the reader picks up on their overall insignificance. This in-between state points to a semblance of agency, which will be more thoroughly discussed at a later stage.

The tone used by the system to address the reader is also significant. The reader is addressed in a berating and somewhat irritated manner, (“Forgot something?”) as if the user is being chided for selecting the wrong option. This, along with the magical appearance of the shovel, insinuates that there are other, more otherworldly factors at play.

Another instance of *Photopia*’s illusion of reader agency can be found in the “RED” scene, where the user once again takes on the perspective of Wendy Mckay. If the reader chooses to go North, the following will occur.



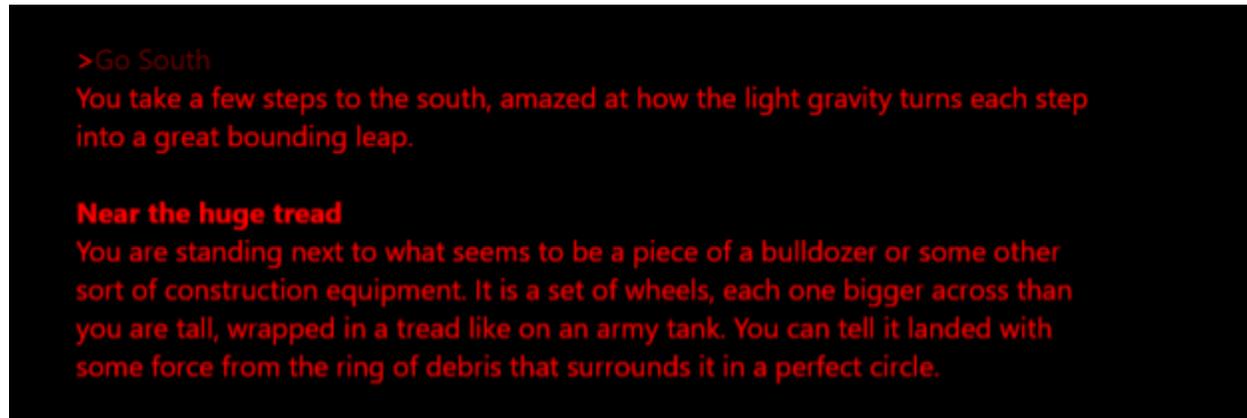
**Landing site**  
You are standing at the base of your ship. The onboard computers selected this general area as the most likely place to find salvageable remains of what would have been the colony. ("Salvageable" means you can save it.) The battered rust-red landscape stretches out before you in every direction, pitted and pockmarked and littered with boulders. A ladder leads up to the hatch of your ship.

>Go North  
You take a few steps to the north, amazed at how the light gravity turns each step into a great bounding leap.

**Near the huge tread**  
You are standing next to what seems to be a piece of a bulldozer or some other sort of construction equipment. It is a set of wheels, each one bigger across than you are tall, wrapped in a tread like on an army tank. You can tell it landed with some force from the ring of debris that surrounds it in a perfect circle.

Fig. 12. The user encounters the “huge tread”.

As can be seen, the user will encounter the “huge tread”. The natural assumption would be that the system had an inbuilt map, and that the aforementioned areas were located northwards from the landing site. However, if we examine the outcome when we travel in different directions, it can be concluded that this is anything but.



*Fig. 13. Going south, the user still encounters the “huge tread”.*

The same locations appear, despite the user travelling in the opposite directions. Hence, it is clear that no matter the direction chosen, the same locations still appear. Just like the “GOLD” scene, the user is unlikely to realise this unless multiple playthroughs are made, again suggesting the illusion of user control, as it is possible for a user to not pick up on the scene’s peculiarities.

This scene has a similar perspective as the “GOLD” scene - it lies in the middle ground of personal and impersonal. Another standout feature, its determinability, is tough to identify, it is neither indeterminate nor determinate, as regardless of user input, the same result is produced.

Moreover, upon closer inspection, there is a significance in the fact that this pair of scenes are dream scenes. These sequences are supposed to be bedtime stories, told by Alley to Wendy in an effort to pacify her and persuade her into going to bed. Hence, as the tales are meant to be read aloud and only once, these flaws in Alley’s logic, and the in-game world, go undetected. To both Wendy and a first time user, there is nothing wrong with the layout of Mars in the “RED” scene. So Wendy is presented with what she believes to be an interactive story, despite Alley already predetermining the events and sights she will encounter, thereby creating a believable illusion of power. However, as a large majority of IF users will tend to re-read a piece in order to uncover alternate endings (usually present in IF pieces, not in *Photopia*), they will chance upon the

discrepancies in *Photopia*'s represented world, and realise the symbolism in Cadre's text. Just as how Wendy, the literal 'baby', is being placated by Alley, the 'babysitter', we are left to ponder whether there is a higher being above us that is doing the same. The illusion of control handed to Wendy is extremely believable due to the disparity between the two characters, with Alley being far older, far more mature, and far more well-read. This opens up the possibility of an omnipotent being, higher up in the universal pecking order than us, dominating and pre-planning our every move whilst leading us to believe that we are the masters of our own fate. Hence, through *Photopia*'s illusion of autonomy, and, more importantly, the user's recognition of it, *Photopia* proposes human existence as predetermined, and that whatever attempt to break out of the mould is futile.

## **5 Conclusion**

*Photopia* ends with the revelation that the "Photopia" is a model of LCD screen, hung above Alley's crib in an attempt to stimulate brain development. The screen displays moving, multicoloured circles, whose colours match those of the dream scenes. This reaffirms *Photopia*'s theory that an individual's life is fated at birth.

Consequently, it is by the initial constriction of reader agency, the secondary promise of free will, and the final cruel semblance of power that *Photopia* attributes the negative emotions of resentment and helplessness to the concept of autonomy. This thereby "bring[s] to light the curious quirks and paradoxes inherent in the human self-conception as a species of free, autonomous agents" (Silcox, n.d.) and reiterates the notion that humans are unable to govern their own kismet.

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