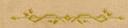


LORE

A HYBRID CARD GAME



by Tarik El-Khateeb





by Tarik El-Khateeb

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Abstract

Lore is a critical and creative exploration of stock characters in folktales that often take the form of one-dimensional representations of stereotypical minorities. Lore is a social digital-physical card game that challenges these classifications by allowing players to go on a storytelling journey that brings back the orality of traditional folktales into the digital age.

By engaging a research-creation approach to explore storytelling through social play, the history of literary stock characters, and the motifs and dramatic structures of folktales; the goal of this project is to create a platform that has the potential to generate discussion on stereotypes. This goal is achieved on two levels: by making non-active stereotypical characters active through agency and customized play, and by providing them with language tools and choices that augment their capacities with actions that might be unconventional to their stereotypical representations in literature.

Key words:

 $Hybrid\,card\,game, Digital\,physical\,game, Fiducial\,marker\,recognition, Digital\,storytelling, Folktales, Stock\,Characters.$





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Introduction



"...and so, Scheherazade began..."

"the Arabian Nights" 1





Introduction

From enchanted beasts and magical lamps to epic battles and fantastical lands, folktales and fairytales have been a constant source of awe and inspiration in my life. Stories I was told as a child, movies I watched as a teenager, and books I read as an adult shaped how I visualize and conceptualize my work; and are one of the main reasons I chose to pursue a creative career path as an illustrator and designer.

While heroes and villains were mostly the focus of these tales, what interested me most were the one-dimensional and stereotypical characters such as the 'wise old man' or the 'damsel in distress'. Stereotypical, or stock, characters appear often in folktales in the form of one-dimensional representations of protagonists such as a hero or a knight, antagonists like a villain or a dragon, and secondary characters such as the afore mentioned damsel in distress (Jackson, 2010). I found it intriguing that so many of these secondary characters were similar in stories from different parts of the world, yet they were never distinct enough to be differentiated from one narrative to another. I was curious to know their stories: Where did they come from? Where were they heading?

This curiosity is the initial inspiration behind my thesis game through which I question and explore some of the ways in which stereotypical characters might be freed from their conventional literary representations, and I use game design to translate this questioning into an engaging social gameplay activity. The game focuses specifically on empowering non-active secondary stock characters as they are the ones that I believe they are the most underrepresented and underdeveloped stereotypical characters in folktales who deserve to have their stories explored.

This exploration takes the shape of a hybrid digital-physical card game entitled *Lore*, which combines a tabletop card game with a digital gaming platform. The players, on behalf of the stereotypical character of their choice, use their storytelling skills to connect story cards and weave them into short narratives to overcome challenges presented to





them by the digital component of the game. By composing stories for these characters players have the potential to explore and challenge the tropes attributed to them. The digital part of the game generates the challenges and keeps track of game progress, it uses fiducial markers to recognize the cards played and saves each player's gameplay choices. At the end of the game, this meta-data is used to generate a digitally composited portrait of each of the characters that have successfully completed their stories, creating a unique visual representation of each player's choices and how they reflect on the character expanding it from its stock values.

Storytelling through play is the most important factor in *Lore*. Oral traditions were the lifeblood of folktakes for centuries and *Lore* pays homage to those traditions. One of the unique aspects of oral storytelling is the ever-changing details added to these stories by each narrator in each iteration of a story that evolve with different narrators and their perspectives; a richness that *Lore* aims to recreate with its physical story cards and narrative threads, that when used together, prompt the imagination of the players to create non-linear narratives. Such digital storytelling platforms and games are active forms of engagement that enable players to control the flow and structure of a narrative, as Library Sciences professor Eliza Dresang notes, the digital age has brought back this non-linear aspect of orality that was removed once stories took linear formats (Honeyman, 2010). The hybridity of *Lore* intentionally evokes the fluidity of traditional folktale storytelling by using orality as a core component of gameplay while simultaneously taking advantage of digital technology in the presentation and mediation of a linear narrative-based game.

As noted above, the intentional blending of technology and storytelling aim at prompting and exploring conversations on stereotypes, however, the key to the success of *Lore* lies in its social framing. Douglas Wilson, whose doctoral dissertation is on social game design reiterates that the richness of a multiplayer game comes from this social encounter. Emphasizing the importance of balancing content (for *Lore*, the design of the game and the iPad component) and context (the social aspect of the game and the storytelling mechanism) in the design of any game, Wilson notes that context is essential to the success of a game as it arises out of the social interaction between the players. A game that depends on social interaction, player creativity and performativity can easily fall flat if the players are not self-ironic

or willing to perform (Wilson, 2012). In *Lore* the social setting is essential to the type of dialogue that I want to generate and the active engagement of the player is intended to bring the discussions to life. The rules of a game play an important part in this engagement. The intentional simplicity of the rules, building cards to form a narrative in the case of *Lore*, helps increase the social interaction by allowing players to focus on creating narratives and discussing them instead of getting lost amongst various rules and regulations. Folklorist Linda Hughes notes that it is this simplicity that makes a game engaging and enjoyable, not the complex rules that might dominate it (Wilson, 2012).

The ultimate goal of the game is to generate discussion on stereotypes by incorporating secondary stereotypical literary characters as the main protagonists. This goal is achieved on two levels; by making non-active stereotypical characters active through customized play, and by providing them with language tools and choices that augment their capacities with actions that might be unconventional to their stereotypical representations in literature.

It is important to note that *Lore* aims to create an enjoyable experience for the players and to start a dialogue on these characters. However, using stereotypical characters in pre-determined settings can also be interpreted as replacing one set of stereotypical representations with another. The intention of using specific stereotypes as dynamic, "playable" characters within a set game is to generate a conversation and help players question them and how they operate. This intention is achieved by giving players greater agency and choice in formulating their stories and by encouraging them to actively discuss and defend these narratives amongst each other. The success of this intention was evident after various play-testing sessions that resulted in lively discussions on stereotypes. Players noted that they felt empowered playing a character such as the damsel by purposefully making choices that went against her stereotypical trope and resulted in her becoming a strong warrior, for example.

Lore is a dream project that combines my lifelong fascination for literary characters and tales of yore; a passion for digital and board games, branding, design and illustration; with the optimistic belief that dialog and discussion are positive starts in unraveling, dissecting, and unpacking social issues.









Motivation and Background



"Mother says that
everything you look at
can be turned into a story...
you can make a tale of
everything you touch."

"The Elder Tree Mother" 2





Motivation and Background

I come from a diverse background: my father was born and raised in Jordan, and my mother is of Finnish and Russian origin, born and raised in China. My mother's family eventually immigrated to Turkey where she met my father at university.

My grandmothers were polar opposites. My paternal grandmother, an independent strong-willed woman with Bedouin beauty marks tattooed on her face, striking green eyes and deep olive skin; managed and worked in our family's fruit plantations and live-stock farms in rural Jordan. My maternal grandmother, an enchanting blonde and blue-eyed lady, who was always in an apron baking in the kitchen with her perfectly manicured nails and diamond rings; survived several wars and immigration before she turned 30. As different as these women were, they both spoke the language of stories: the real mixed with the made-up and the traditional. I used to spend hours listening in awe to the weird and wonderful, sometimes disturbing and scary, stories that they told in four languages spanning continents, cultures and time-lines.

What fascinated me most in their stories was not the subject matter but the commonalities within them. There was always an evil witch or a cunning animal - mostly a fox or wolf, a male hero that saves the day with a female character as his prize. The settings, be it a king's castle in a lush forest or a rich Sheikh's tent in the desert, were different versions of the same location and fulfilled the same narrative purpose. The antagonists, however mundane or fantastical, had very humanistic ambitions and faults that caused their downfalls: greed, lust or a desire for glory. I started to notice that details and embellishments enhanced these stories but were never strong enough to over-power the obvious: regardless of where my grandmothers came from, what the sources of their stories were and the different locations and languages in which they occurred - the types of characters, motifs and lessons in these stories seemed universal.





This passion and interest in folktales and folklore is the main reason why I decided to undertake this program, wanting to explore age-old stories within contemporary technologies and digital platforms. But as with any exploratory project, the focus of the project shifted from comparative folktales to literary stereotypes as I delved deeper into the research and eventually evolved into this digital and physical hybrid game.

We live in a time where traditional folk and fairy tales are being reinvented into expanded literary worlds and feature length movies, changing their locations and narratives, modifying and introducing new characters, even meshing a multitude of stories or totally reimagining them within a modern context. *Lore* is indirectly paying homage to this tradition of using folktales in contemporary contexts by allowing players to create their own narratives, however obscure, fantastical or true-to-form as they may be, and by using the unique capabilities of modern technologies in presenting the results.









Hypothesis and Research Question



"Because

she could not go near all these wonderful things, she longed for them all the more."

"the Little Mermaid" 2



♦ Chapter []

Hypothesis and Research Question

Many questions arose as my research shifted to stock characters: what if these characters were stripped of all of the stereotypical attributes that were typically associated with them? What if they were given the chance to start fresh, to go on their own personal hero's journey and create their own stories and happy endings? What media and technologies would be appropriate to translate these concepts into a project?

Progressing through this degree, I ventured into the world of game design, a world that I always found appealing but never had the opportunity to discover. Through the various digital and physical games I was involved in creating in the Digital Games course, creating an award-winning board game in a Board Game Jam workshop in February 2015, and via an independent study; I found a new appreciation for games as a platform to tackle my topic of interest. With that, a clear question emerged:

Can a digital-physical card game challenge the stereotypical classification of secondary literary stock characters allowing players to engage in a dialogue on stereotypes and creative ways of dismantling them?

Lore is a game that allows players to create adventures using stock characters. The players remove the 'stock' from the 'character' by giving them a unique story that makes them stand out from their stereotype.

Through multiple play-tests, as discussed further in Chapter Five (page 45), storytelling, inspired by the dramatic structures of narratives, emerged as an engaging gameplay experience that allowed players to compose narratives that added depth to their characters. In the game a player uses Object, Adjective and Verb cards to compose a short story when their character faces a challenge, after which the players discuss and judge the success of the created





story. Wilson notes that this dynamic interaction between the players is an important element in gameplay because, as a social practice, games "... occupy a privileged space where absurdity, raucousness, and silliness are all culturally sanctioned" (Wilson, 2012) allowing players to become less inhibited and go further with their imagination. What emerged from these game-testing sessions was that the players started to question these cultural tropes and the gameplay initiated discussions on stereotypes and ways of dismantling them, and as Wilson reiterates, humour and levity are important triggers to initiate dialogue (Wilson, 2012).

Fiducial marker recognition technology was used to further enhance the storytelling experience by allowing the digital application (app) to recognize the cards in play and translate them into a custom portrait. In other words, the actions of a character-in-play dynamically impact the way they appear at the end of the game. In the world of board games fiducial recognition is a new trend in hybrid games that started in 2014, as discussed further in Section 6.1 (page 54), however, the combination of physical cards with an app that builds digital portraits from their use is unique to *Lore* in concept and application.

Mandryk and Maranan, authors of the paper False Prophets: Exploring Hybrid Board/Video Games, note that combining the positive implications of both physical board games and digital games can lead to a new class of hybrid games. Taking advantage of the social aspects of board games in which players face each other (instead of a screen) promotes and facilitates interaction and discussion, the actions of moving, distributing and handling physical objects, and the flexibility of introducing house rules, are important advantages of physical board games (Mandryk & Maranan, 2002). In Lore, the physicality of having a deck in hand, being able to draw, shuffle and hide cards from other players cannot be replicated in a digital medium without either having each player have their own digital device, or by passing a single digital device between players which disconnects the rest of the players from the gameplay. As a game that aims to instigate discussion amongst the players, this physical interaction and narrative discussion is both essential and beyond the capabilities of a purely digital app.





On the other hand, Mandryk and Maranan note, the advantages of the digital counterpart are also important for games as they can create "...complex simulations, evolving environments, impartial judging, the suspension of disbelief, and the ability to save the state of the game" (Mandryk & Maranan, 2002). Alongside introducing the game and setting the scene, *Lore's* digital app recognizes cards with fiducial markers, sorts and stores them digitally and then transforms that information into visual portraits; actions that cannot be replicated outside a digital medium with the same speed, accuracy and level of detail, without having a player constantly taking notes and keeping track of other player's actions and then using sheets of translucent visual assets to compile a portrait.

As an illustrator and a newcomer to the game design industry, I chose to mix the physical and digital as this blend is the optimum solution to the compound portrait outcome that I envisioned for the project. The social framing of the game is also essential to the type of discussion on stereotypes that I hope to generate through the game as it is a dialogue that can best happen in a social setting.









"Research-Creation" Approach



"...follow your dream,
and if you do not find
the happiness that you seek,
at any rate you will have
had the happiness of seeking it."

"the Enchanted Canary" 3





Research-Creation Approach

The article Research-Creation: Intervention, Analyses and "Family Resemblances" (2012) by Chapman and Sawchuk of Concordia University, Montreal, identifies "research-creation" as a significant research approach in Canada. They define "research-creation" projects as those that "...typically integrate a creative process, experimental aesthetic component, or an artistic work as an integral part of the study." In this approach "...the theoretical, technical, and creative aspects of a research project are pursued in tandem, and quite often, scholarly form and decorum are broached and breeched in the name of experimentation." (Chapman & Sawchuk, 2012).

While this approach is not new, the writers expand on it by outlining four modes that form the research and the creation processes. 'Research-for-creation' is the process of gathering information to begin the creation process and 'research-from-creation' is the iterative process of creation that aids and drives research. 'Creative presentations of research' is the presentation of academic papers and research in creative and academically unconventional materials, formats and outlets (such as video, animation, interactive webpages et cetera), and 'creation-as-research' refers to projects where creation is required for the research to emerge through the weaving of theory and practice (Chapman & Sawchuk, 2012).

As a graphic designer and visual artist I identify with this approach as any research I undertake, be it visual or literary, always occurs in tandem with my visual and practical experimentations and explorations. Chapman & Sawchuk's identification of the four different approaches within a larger research-creation umbrella helped name the approaches that I already use in my own practices, and which are applied to my thesis work, and aided me in contextualizing my research and ideas.





The iterative foundational research process (*research-for-creation*), Chapter Four (page 16), was undertaken by reviewing twentieth century writings on folktale classification, motifs in storytelling and the dramatic structure of narratives. These writings were central in establishing a theoretical base for the content and structure of the game.

The influential works of William Morris are reviewed in Section 4.4 (page 39) within the context of digital technology and its implications on twenty-first century art and maker culture that connects with *Lore* in terms of visual style, player agency and co-creation. In prototyping and play testing (*research-from-creation*), Chapter Five (page 45), observation and informal interviews were used as research methods to gather non-intrusive information and feedback during and after the testing process, part of the iterative development approach taken in this thesis. And the design and creation of this support document (*creative presentation of research*) utilizes the style, artwork and design elements from created for the game; alongside the graduate degree show presentation which showcases the various evolutionary phases of development that the game design and artwork creation processes went through via a digital slideshow and video animatics.







hapter IV



"Research-for-Creation" Literature, Art and Technology



"So labour at your Alphabet, for by that learning shall you get to lands where Fairies may be met."

"the Blue Fairy Book " 4





Research-for-Creation: Literature, Art and Technology

In research-for-creation I used an iterative refinement and development process for the research undertaken that occurred concurrently with the process of creating of the game. Through this process the gradual unpacking of literature influenced the evolution of the game. Investigating the motifs and structures of folktales impacted the first iterations of the game that focused heavily on literary motifs such as 'the call to adventure' and 'fighting a monster', and in turn, the results of the testing highlighted areas of literature that required further investigation such as the dramatic structure of narratives which were imperative in constructing the flow of the game. Chapman and Sawchuk note that this continuous process of gathering materials, ideas and content alongside creating, testing and revisiting enables "... an artistic perception of technology as a practice or craft" and increases creative spontaneity and research freedom (2012).

4.1. Folktales: Classifications and Motifs

The topic of folklore is wide and dense, spanning thousands of years and hundreds of cultures with an almost infinite number of stories, characters and themes. It is unfeasible to create a project within the short period of time allocated for this thesis that would honour all world cultures, views and approaches. Therefore, the appropriation of folklore in this research is used as a proof-of-concept to support the underlying core goal of generating a discussion on stereotypes through the medium of a hybrid card game. As this masters of design thesis is an exploration of art, design and technology, and not an exploration of history, narratives and literature; thousands of years of tradition have been inevitably condensed and the focus narrowed. This project mainly focuses on canonical Western European approaches to folklore. This is a conscious decision as my aim is to create a game that feels instantly familiar to the North American target audience of the thesis project by using dramatic structures and plot lines that they have been





most probably exposed to through various versions of folktale representations in stories and movies.

The research I conducted in this chapter looks to the commonalities of folktales and not the differences and divergences between them. It focuses on a motif-based approach rather than a structuralist look into folklore. Motifs, in the context of folktales, refer to non-linear and disassembled characters, concepts, themes or actions that in combination create full narratives, disregarding the genre and country of origin of the tale. On the other hand, structuralism, which is attributed to Russian folklorist Vladimir Propp in the world of folktale, focuses on the interrelationships in linear narrative patterns and structures (Haase, 2008). *Lore's* focus on the *Motif-Index*, which is discussed in-depth in the following paragraphs, is intentional. It is a recourse back to universal themes and motifs that can be applied to any narrative or story without the need to focus on its genealogy, structure or the specific time and place from which they originate. While this reasoning might seem to be too surface, the ultimate goal in *Lore* is to create dialogue through non-linear and oral storytelling, and therefore it was imperative to provide players with disassembled tools to serve as inspiration to these stories from a resource index that was non-linear and non-narrative-pattern specific.

The project uses folklore as the foundation for the questioning of stereotypes, thus the focus of the project is on secondary stock characters and their representations more than it is on folktales themselves. Looking into motif-based comparative folktales resulted in finding thematic content for the game. Therefore the most direct and straightforward explorations of folklore and folktales have been undertaken here, not to undermine the complexity and richness of the topic but in order to elicit in order to elicit a clearer range of themes that I can draw forth into my practice. Given more time, resources and funding; the ultimate version of this game would have a more worldly view and approach to folktales. The definitions of and differences between *folklore*, *folktales* and *fairytales* are in Appendix A.1, page 73.

To frame the topic of folklore and folktales my research started by looking into folklorists who examined comparative tales as a way to understand similar thematic content and characters in folktales on a global scale. One of the first



attempts in creating a comprehensive system for classifying folklore was by Finnish folklorist Julius Krohn (1835-1888) who developed the 'historical-geographic' method to compare different versions of traditional Finnish songs. This method involved investigating all known versions of these songs and tracing down their origins focusing on the chronological and geographical changes. Krohn's son, Kaarle, continued his father's work and applied the method to folktales starting with his own Finnish culture. In 1910, Kaarle's student Antti Aarane used the method to create a system for cataloging and sorting tales by type in his book *Verzeichnis der Marchentypen* (Tale Type Index). Stith Thompson, an American folklorist, translated the work into English and used this system to expand on Aarane's work in 1928's *The Types of the Folktale* and used it as a base for 1932's *Motif-index of Folk-Literature*, a massive index spanning six volumes, in which he created the "AT" or "AaTh" (Aarne-Thompson) classification system to organize folk literature motifs using numbers and decimal points that would allow the system to grow and expand (Garry & El-Shamy, 2005).

Thompson's work in indexing folktales is revered for its importance to the study of folklore and folktales, however it has also faced a lot of criticism. In his paper on both of Thompson's works *The Motif-index* and *The Tale-type Index: a Critique*, folklorist Alan Dundes states that the works suffer from issues such as the overlapping of categories between both works, unnecessary censorship and ghost entries; which dilute the accuracy and reliability of the source material. However, he also notes, that with all their faults, both works are "... indispensable for the identification of traditional folk narratives" (Dundes, 1997).

One of the key issues with this classification system in contemporary society is its treatment of gender. Documented folktales have a tendency to be sexist by glorifying the male hero character and fashioning stories around them and diminishing the role of female characters to mere stereotypes, such as the princess and the witch in *Sleeping Beauty*, and the protagonist maid and antagonist stepmother in *Cinderella* (to reference some of the better-known tales). This sexism can be attributed to the fact that most of the documented folktales were complied and written by men, reflecting their own beliefs and prejudices regarding gender roles. The evident issue with Thompson's work is that

he continues this trait in his own classification by focusing on male characters and characteristics and using the female ones as additions to them, often classifying many characters of both genders under male categories. In *What Happened to the Heroines in Folktales?* (2009) feminist writer Kathleen Ragan notes similar issues with the system referencing Torborg Lundell's challenges for the AT index which "... places both male and female protagonists under male headings, ignores female activity, focuses on male activity at the expense of females, portrays females as passive, and uses different standards to evaluate male and female behavior." Lundell, a professor of comparative literature and folklore, argues that the "... urgent need for revision of these research tools is made particularly clear when we read the following cross-references in Stith Thompson's Motif-Index of Folk-Literature: 'Man, see also Person.' 'Woman, see also Wife'" (as cited in Ragan, 2009). This prominent issue was one of the main decisions in shifting the focus of my project from comparative tales to stock characters as I felt that focusing on these characters, such as the damsel in distress, would make a more interesting project in which they had the opportunity to be broken free from their stereotypes and in the hands of the player take charge of their own narratives.

Even with these problems, one cannot deny that importance and significance of Thompson's books to folktale enthusiasts and folklorists alike. As Dundes puts it they "... represent the keystones for the comparative method in folkloristics, a method which despite postmodernist naysayers and other prophets of gloom continues to be the hallmark of international folkloristics." (Dundes, 1997) and the extensive and expansive work undertaken by Thompson is still unrivalled without comparison. My research into Thompson and archetypes led me to Jean Garry and Hasan El-Sahmy's book *Archetypes and Motifs in Folklore and Literature: A Handbook* (2005) who distill Thompson's expansive index into separate chapters transforming each of his main categories into detailed essays, updating and contextualizing his classification system by cross referencing tales, using cross-cultural examples and focusing on reoccurring archetypes that the original work did not directly allude to.

I found this resource to be invaluable in identifying some of the core content of the game such as selecting the appropriate archetypes as game characters and the stories and motifs that are used as game content, as the writers



successfully transform Thompson's somewhat tedious lists that span six volumes into a contemporary single comprehensive book.

4.2. Stock Characters and Stereotypes

The research conducted on comparative folktales shifted my attention to literary characters, especially secondary stock characters, altering the trajectory of the research from comparative folktales to literary stereotypes. To understand these characters better, the following phase of the research delved into how and why stock characters came into being and how they relate to folktales.

It is important to note that literary stock characters are stereotypical translations of generic archetypes; and I would argue that in literary settings, the terms stock character and stereotype could be used interchangeably as they both refer to social constructs based on "... what a given type of individual should be" (Rolling, 2010). It also worth repeating that stereotypical, or stock, characters in folktales are one-dimensional representations of protagonists, antagonists and secondary characters (Jackson, 2010), and Lore focuses primarily on these secondary and non-active stock characters. The definitions of and differences between *Archetype*, *Stereotype* and *Stock Character* are in Appendix A.2, page 73.

First evidence of documented stock characters in narratives can be traced back to *The Characters*, in Ancient Greece, written by Aristotle's apprentice Theophrastus, one of the earliest documentations of stock characters. Theophrastus's stock characters focused on offensive and superficial stereotypical traits such as *the stupid*, *the coward*, *the arrogant* and *the shameless*. This focus shifted in the Middle and New Comedy periods to relatable characters with ordinary issues such as *the trickster servant* and *the angry old man*, similar to most stock characters that appear in folktales (Jackson, 2010).





The lines between a stock character and stereotype blur even further when the characters are represented through a specific cultural or racial lenses (Jackson, 2010). Stereotypes are representations and when "... something is represented, something is always left out of the account, (...) a stereotype leaves so much out of the account it operates more as a fiction than a reliable portrayal of an identity" (Rolling, 2010). This is inherently problematic as "... once approved and accepted by the majority of people, any idea, any style, label or impression becomes stereotypical", and when individuals - especially minorities - reject these labels that are assigned by the majority "... an offensive quality comes to tinge the label, especially when its purpose is to shape the image of the "things other than oneself". These struggles over opposing representations affect individuals, countries, nations, cultures, religions and ethnicities (Geybullayeva, 2010).

These issues also appear in folktales, in which minorities appear in the most basic and common stereotypical representations and where the impact of women in society is often diminished to minor stereotypes and tropes and function to drive the story of the male figure forward. In *The Grimm Sisters*, Scottish poet and playwright Liz Lochhead, subverts stereotypical roles by giving traditionally one-dimensional female stock characters a voice, allowing them to tell their own stories, revising them into "... a position of literary power and authority that ultimately allows them to transcend their conventional female roles" (Tannert-Smith, 2015), and in this lies the core essence of *Lore*, as it similarly aims to dismantle the concept of a stereotype by giving characters agency and choice.

Stereotypes, and in turn, stock characters, become embedded in our consciousness and realities to a degree that we stop questioning them and accept them as they are (Jackson, 2010). In *Lore* the hope is that creating a game on stereotypical stock characters will provide a platform that generates a rich dialogue about the role of stereotypes in literature and society and discussing ways of dismantling them - as they are continually re-written based on player choice and shown by the reveal of the final portrait in the game.







4.2.1 Game Characters

The following section introduces and provides short historical information on three playable characters that appear in the final iteration of the game. These characters were chosen as they represent some of the most familiar archetypes.

When choosing these characters as a game designer, many factors had to be taken into consideration. First, they had to be characters that fit within archetypes to ensure that they were familiar to the game's audience in some form. They needed to have been used stereotypically within stories that turned them into stock characters to prove the point that I am attempting with the game. And each one of the characters had to hail from a different location or culture to add visual richness to the game in the form of traditional costumes from each of these cultures - without directly referencing the cultures in order to maintain a culturally sensitive and diverse game.

One might argue that this selection of specific cultures to associate with a character is inappropriate. There have been debates whether even grouping a whole country's cultural identity under the term folklore is correct, as the director of the Folklore Program at Utah State University Barre Toelken notes, there are "... doubts that there is any such static group as that usually implied by the folk (...) the idea of a single folk unit as a defining feature of the human context in which an individual grows up must probably be rejected." (Toelken, 1979). While I agree that the term seems unrealistically inclusive, in the context of this game, these cultures are being used to add their visual richness and diversity to characters that actually exist in these cultures, and the costumes are stylistic and respectful interpretations of historically accurate costumes that belong to each of these cultures. The game does not at any point refer to the culture of a character.

It also needs to be stressed that, while these characters have been used in their stock forms in several stories, each one of these characters also exists in many different versions in literature. As with any archetype in literature, in some stories they go against the stereotypes associated with them and sometimes they are heroes/heroines or villains and have had fully developed stories.



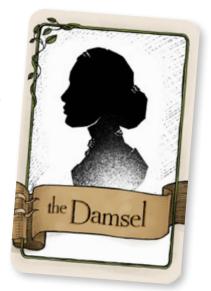


Creative and artistic licenses have been liberally taken in selecting and portraying these characters in the game. They have been kept deliberately vague, it does not matter which character the player chooses to portray, as they are all clean slates ready to be shaped by the player's imagination. This is intentional to emphasize that these are the stock versions of the characters that serve as a representation of the core concept that the game is tackling, which is dismantling stereotypes, because "...a stereotype that can no longer enclose is a norm that can no longer capture, restrict and define - and is thus opened to poststructural renovation." (Rolling, 2010). Therefore, for example, the player choosing the damsel, most commonly found in literature as a passive character in distress, is given freedom and choice to have her face a challenge in any way they wish - be it in a distressed or a warrior like fashion - and by doing so, they are subverting the original stereotypically passive trope by giving her choice and agency. The end portrait result is a concatenated representation of the character that will be varied enough for players to feel the agency in creating these individual and unique images.

4.2.1.1 The Damsel

The Damsel character in the game is a human female from France representing the European continent, particularly Western Europe.

While the damsel is a very generic archetype that represents a maiden often of royal or noble blood, the damsel in distress stereotype is one of the most instantly recognizable ones that appears as a passive character in a multitude of tales such as *Rapunzel* trapped in a tower awaiting to be rescued and *Snow White* tricked by a witch, awaiting for true love's kiss in eternal slumber. In these damsels in distress stories "... a female character is placed in a perilous situation from which she cannot escape on her own and must be rescued by a male character, usually providing a core incentive





or motivation for the protagonist's quest." (Sarkeesian, 2013). The largest references to damsels in distress appear in French medieval folktales, for example, Princess Lountaine's kidnapping by dragons and eventual rescue by knights or princes. With this in mind, I chose France from Western Europe as the culture to which the damsel will visually belong to.

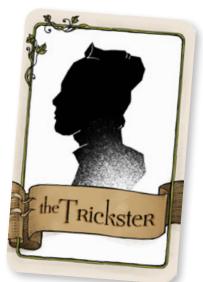
This stereotype is one of the first ones included in the game as it is one of the most commonly used (and abused) female tropes and is ripe to be challenged. Prolific modern feminist writers such as Jane Yolen have been breaking down the stereotype by re-writing folktales and stories for girls that empower damsels, sometimes switching genders and placing the men in distressed situations. In her introduction to *This Book Is For You* (2005) she dedicates the book to young female readers, maybe even to her younger self: "... this book is for you because they are stories about heroes - regular sword-wielding, villain-stomping, rescuing-type heroes who also happen to be girls." (Yolen, 2005).

The discussion of stereotypical female characters in folktales and narratives is important and widely analyzed and critiqued, however, more detailed analyses of this topic is beyond the scope of this research.

4.2.1.2 The Trickster

The Trickster character in the game is a human male from Japanese culture representing East Asia.

Trickster archetype appears in tales in many different forms, sometimes good, sometimes evil and sometimes a combination of both. "Tricksters are destroyers and creators, heroes and villains, often even both male and female" and a prime example of the trickster character is Loki from Norse





mythology who has a mixture of good qualities (the creation of man) and evil qualities (killer of gods) (Garry & El-Shamy, 2005).

In Japanese mythology and folktales, Susa-nö-o, the brother of the sun goddess, Amaterasu is a classic polar Trickster archetype as he controls storms that damage and destroy lands and produce, yet he also helps people by giving them rice and grains (Garry & El-Shamy, 2005).

🍁 4.2.1.3 The Ghost

The Ghost character in the game is a female magical being from Persian culture representing Western Asia and the Middle East.

The belief in spirits, ghosts and supernatural beings (such as genies and fairies) is universal and they are characters that are a part of or have moved to another realm. They are used as literary vessels for information, advice or news that the human characters cannot possibly know on their own, and they are also used to drive plots forward by the use of their magic without providing the reader with any information regarding their background and history. They



can appear as either menacing or benevolent in any one culture (Garry & El-Shamy, 2005), as helpers or tricksters, and even sometimes as a damsel in distress as in the story of *Peri Merjan* in Persian folklore (Bane, 2013).

The peri is a ghostly spirit figure in Persian folklore who also represents this duality. They were most commonly female characters, and in their menacing forms were held responsible for droughts and crop failures, and in the later benevolent figures were kind helpers who guided human souls to paradise (Jones, 1995).



4.3. Dramatic Structure

Lore's content is based on folktale motifs and characters as outlined in the previous two sections. The gameplay in the final iteration of the game is split into chapters instead of levels, as it is customary in lengthier folktales, and is influenced by the structures of these tales by having a beginning, a climax and an end, a structure commonly known as the hero's journey. By composing narratives that expand and enrich their story, the player, embodying a stock character, gradually creates their own personal hero's journey.

It is important to acknowledge that *Lore* gives players language tools to create non-linear narratives. However, to ensure that the game has the structure and flow of a folktale, it uses a linear journey as a base for the actions of the players. Once it became clear that the characters needed to follow a linear pathway, as it gave them purpose and a full narrative arc, this purposeful juxtaposition between the linear and non-linear was play-tested, and none of the players commented on or even noted this tension. It became evident that having agency in making decisions on behalf of the characters was enough to generate discussion, and the fact that they were following a set pathway, did not in any way impact or alter the purpose of the game, in fact, players who tested previous versions of the game noted that following a narrative made the game stronger and gave their characters purpose to go on a journey and to tackle challenges.

The following section focuses on the dramatic structures and plot lines that have been adapted in the final iteration of the game and the rationale behind using them.

The hero's journey (or cycle or quest) is noted by prolific authors Otto Rank, Lord Raglan and Joseph Campbell to be one of the most common structures of storytelling with each author using his own terminology for the different phases and structures of this journey (Garry & El-Shamy, 2005). Joseph Campbell divides the hero's journey into eighteen stages that can be split into three acts: the Departure, Initiation and Return. In his description of the monomyth, or hero's journey, he notes that: "... the usual hero adventure begins with someone from whom something has been

taken, or who feels there is something lacking in the normal experience available or permitted to the members of society. The person then takes off on a series of adventures beyond the ordinary, either to recover what has been lost or to discover some life-giving elixir. It's usually a cycle, a coming and a returning." (Campbell, 1972).

This dramatic structure of stories has been dissected and analyzed by philosophers and critical thinkers for centuries. Starting with Aristotle's the 'Poetics', one of the oldest writings on dramatic theory and narrative literature, outlines a three-act dramatic structure: the setup, leading to the confrontation and ending with the resolution (Booker, 2004). German novelist and playwright Gustav Freytag, almost two thousand years later, builds on Aristotle's theories with a five-act dramatic structure known as 'Freytag's Pyramid', which he labels as the Exposition, Rising Action, Climax, Falling Action and Resolution. (Hiltunen, 2002).

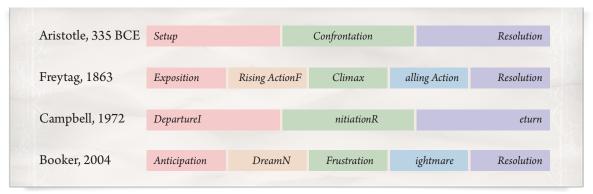


Figure 1. Dramatic Structures

The hero's journey is a set of plot lines in the form of stages that are joined together within the bounds of a dramatic structure to form a narrative. As previously noted, many writers, including Campbell, have presented their own theories and lists of story stages. Professor of English Literature Wallace Martin states that "... the existence of patterns of universal narratives does not only tell us about literature but also about the universal characteristics of the human mind and culture" and therefore, regardless of the different taxonomies used in labelling these stages, the "... pattern became conventional because many people over many years learned by trial and error that it was effective." (Hiltunen, 2002).





Dr. Jon Adams, of the London School of Economics, questions the implications of categorizing plots, dramatic structures and even motifs into definitive taxonomies. Critiquing works that attempt to classify narratives, such as Booker's plots and Campbell's *monomyth*, he notes that "...there is disappointingly little convergence, however, and the inclusiveness of such schemes varies according to the taxonomist's agenda", the vast different between Campbell's thirty one plots in comparison to Booker's seven, being one example (Adams, 2008). Adam's argument is that for each category or classification claimed by an author, there can easily be a counter claim by another, a testament to the inconsistencies of these classification systems. Even though Adams critiques Booker for being part of this problem, Booker admittedly notes this shift in theories of literature from attempting to find general all-encompassing stages to studying each piece on its own and within its own unique structure. He quotes anthropologists and folklorists Peter and Iona Opie stating that "...happily such all-embracing theories are now regarded with scepticism. (...) Each tale, it is now believed, should be studied separately." (Booker, 2004).

In *The Seven Basic Plots*, Booker presents a five-act dramatic structure that follows in the footsteps of Aristotle and Freytag, as well as seven plots lines that he claims to appear in almost every narrative in some form, individually or as a blend of more than one plot (2004). This approach was helpful in distilling the structures and sections of the game, as the plot lines that Booker outlines seem to encompass narratives from early folktales to modern-day cinema, showing how these themes have recurred across time in various forms of storytelling. What differentiates Booker's ideas from the previously mentioned theorists, such as Campbell, is that instead of presenting one form of a journey and outlining all of its stages - which are limited to a handful of narratives; he presents the stages in the form of separate plot lines. Each plot line can form a full narrative that contains the five-act dramatic structure, a structure he claims to be evident in almost every narrative. He also notes that many stories can feature more than one plot line, showcasing the diversity and differences in the world of literature without enforcing a preset taxonomy per each single narrative. So the *overcoming the monster* plot for example, one of the most common folktale plot lines, can also appear in stories that mainly feature another plot such as *the quest* (Booker, 2004). Booker's theories are represented in the game as they try to cover a vast array of narratives from modern tightly-scripted movies to oral nonlinear

stories; encompassing Lore's structure of using oral storytelling within a modern constructed platform.

It is worth noting that this research is not an exploration of literature or narrative, nor an examination of taxonomy or structuralism; it is simply an exploration of the stylistics of this particular game within the generic frame of folktale narratives and literary dramatic structures. A more detailed examination of dramatic structures, the hero's journey and their critiques are beyond the scope of this design research. As Adams points out that, even with its obvious issues, pursuing taxonomical classifications is still a viable decision as long as the researcher is aware of the inherent problem of them being vast in content and yet specific to each author. He concludes that "...it isn't necessarily a terrible problem, but it is one we ought to at least be alert to before embracing wholeheartedly the promise of the literary taxonomy." (Adams, 2008).

With this in mind, the dramatic structure and plot lines of the game were chosen as they are clear and concise, refer to well-known and instantly recognizable plot motifs and create a sense of familiarity to the player. This is important in a game that is meant to be played in the Graduate Degree Exhibition by a multitude of individuals for shorts periods of time. The aim of this thesis is to create a functional proof-of-concept that demonstrates the conceptual and technical capabilities of the project and the social implications resulting from it, regardless of the content of the game that can be adjusted and modified and even fully changed.

4.3.1 Booker's Story Stages and Plot Lines

Booker (2004) notes that there are consistent patterns underlying stories, regardless of the location, culture or era that they have been created. He elaborates that, "...one might find, for instance, a well-known nineteenth-century novel constructed in almost exactly the same way as a Middle Eastern folk tale dating from 1200 years before; or a popular modern children's story revealing remarkable hidden parallels with the structure of an epic poem composed in ancient Greece".



As a culmination to his research, that spans over 30 years, he deduces five identifiable stages of these story parallels in narratives as:

The anticipation stage:	in which an unfulfilled hero is on the precipice of a great adventure.
The dream stage:	the hero finds a passion or purpose and starts to reap the benefits of a dream-like success.
The frustration stage:	the reality of the difficulty of the quest becomes apparent which leads to the hero's increasing frustration.
The nightmare stage:	the dream turns in a nightmare and the hero faces a great darkness.
The resolution stage:	the dream ends in a resolution of sorts, which could be tragic or happy.

Figure 2. Booker's five story stages

He also reveals the seven story plots, which he claims to apply to almost any story and that are almost impossible for any storyteller to break from. These plots are as follows:





Outamanuina	in which "the hore is being called to feed a tourille and dealler
Overcoming the Monster	in which "the hero is being called to face a terrible and deadly personification of evil".
	Examples: Perseus, Beowulf.
Rags to Riches	in which a "young, unrecognized hero or heroine is eventually lifted
	out of obscurity, poverty and misery to a state of great splendour and happiness".
	Examples: Aladdin, Cinderella.
The Quest	in which the hero is pulled "towards some distant, all-important
	goal" and regardless of the episodes he faces along his journey, his focus and purpose lies in reaching the goal.
	Example: The Odyssey.
Voyage	which shows "the hero or heroine being abruptly transported out of
and Return	their 'normal' world into an abnormal world, and eventually back to where they began."
	Examples: Alice in Wonderland, Goldilocks.
Comedy	this plot refers to light stories that have cheerful endings.
	Example: A Midsummer Night's Dream.
Tragedy	in which the hero or heroine has fatal flaws that end with their fall.
	Examples: The Picture of Dorian Gray, Carmen.
Rebirth	in which the "hero or heroine falls under the shadow of the dark
Reultin	power" ending with freedom and redemption.
	Examples: Beauty and the Beast, The Frog Prince.

Figure 3. Booker's seven plot lines

The examples noted in the list above are internationally well-known works of literature, some of which are not folktales, used simply to add additional clarification to the definition of each plot line.



4.3.2 The Final Portrait

In *Lore*, the stock character's journey occurs across five chapters, each representing one of Booker's five stages. In the game each character, personified by a player, has to successfully complete each of the five chapters of the game in order to reveal their composite portrait. As with the limiting of the playable characters in the game to three-dimensional, the final version of this game also uses only three plot lines as a proof-of-concept. While a fully-fledged game would have various challenges within each chapter of each plot that would be randomly generated by the app, this game has only one challenge per chapter per plot line. It is worth noting that even with this limitation, the play testing and the eventual portrait creation gave very different and diverse results every time, as the final game has thirty two cards for each one of the three story card types which create a large number of unique playable combinations. The plots selected for the final game are *overcoming the monster*, the quest and rebirth.

The portrait creation in *Lore* depends on the values assigned to each card as well as the values assigned to each challenge and each plot. The portrait generated at the end of play is a visual representation, a snapshot, of the character after completing the five chapters with their 'achievements' from the gameplay. To create an image that looked iconic, the pose of the character in this version of the game deliberately mimics those of Western European heroes, saints and royal figures (as noted in Section 4.1, page 16, the game is purposefully following a Western European approaches to folktales).

And while loosely based on Booker's plots and story stages, it is mainly my personal artistic interpretation of them, and it is imperative to reiterate that while these choices might be interpreted as replacing one set of stereotypical representations and attributes with another, the intention behind these choices and the creation of a visual representation of a stereotypical character's non-stereotypical journey is to generate a conversation and dialog. Each element within the portrait is based on a specific aspect of the gameplay and the cards. Figure 8 (page 37) lists the chapters, triggers and the results of each component, and Figure 9 (page 38), is a visual representation of all the different layer of the portrait.





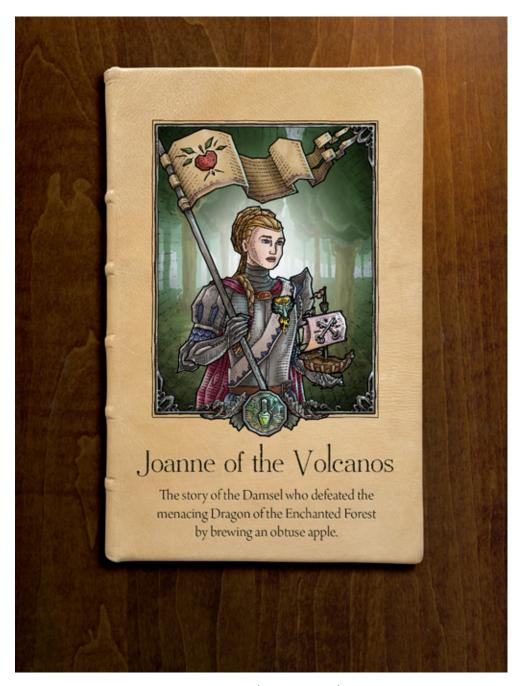


Figure 4. Final Portrait Example





6

4.3.2.1. Plot Lines

In the optimum version of the game, each player would follow one of the seven plot lines, and more than one will be able to follow the same plot line, as the game would have a large database of different content for the chapters of the same plot.

However, in the case of this project, only three plot lines were selected, as there are only three characters in the game, and each one of these plot lines follow only a single narrative thread due to time constraints in having to create multiple threads for each plot. In order to avoid having more than one player following the exact same thread of chapters in the same plot, in this proof-of-concept, each player follows one of the three plots, without the chance of more than one player following the same plot.

As with most folktales in which the call to adventure happens out of the character's control either by chance or indirect circumstances (Booker, 2004), the division of the plots amongst the players had to be indirect as well. Instead of having the app randomly select a plot line for each character, the plot lines have been associated with Locations in



Figure 5. Plot Lines





the game. There are fifteen Locations cards in the game, and every five of these cards represent a Location from story that belongs to one of the three selected plots.

At the very beginning of the game, each player is asked to identify the character they are portraying and give the character a name. Players will then select one of three Location cards generated randomly on the screen as the location their character comes from. When these decisions are made, the stage is set for the first chapter to begin.

The randomly generated Locations will ensure that each player follows a different plot line by process of elimination. The three cards presented to the first player are from different plots. The following three are from the remaining two plots, and the final three for the third player are different locations but from the same plot line. The players are unaware that they are selecting the plot that their characters will follow, giving them invisible agency in shaping the path of their journeys and creating their portrait. Each plot has different impacts on the final portrait as outlined in the table in the following section.

4.3.2.2 Costumes

Each of the thirty-two verbs used in the game are associated with one of four costume types. The character's costume is based on the player's cumulative usage of a certain type of verb. The costume associated with the most amount of verbs used, is reflected in the image. As the game has five chapters and four costume types, it is more than likely that one type of verb will be used more than the others. The only situation in which there will be a tie is when two cards of each type are used. This is solved by giving precedence to the verb type used in the fourth chapter of the game, the nightmare stage, in which each character faces the final challenge that prompted their whole journey and is therefore a very important phase of their narrative.

In the final game, each character has four possible outfit results, each one reflecting the culture of the character with each of these outfits being based on and inspired by historically accurate costumes. These costumes are inspired by historically accurate costumes as documented in *The Historical Encyclopedia of Costumes by Auguste Racinet* (1988).



The full list of all the verbs and their outfit association are in Appendix B (page 75), and costume sketches in Appendix F (page 84).

Costume type	Verbs associated with the type
Villager	Non-confrontational verbs such as <i>distract, hide</i> and <i>sneak</i> that reflect a character that is mostly agreeable and non-violent.
Warrior	Confrontational verbs such as <i>slay</i> , <i>save</i> and <i>hunt</i> that reflect a character that tackles challenges head on.
Royal / Nobility	Political verbs such as <i>negotiate</i> , <i>enforce</i> and <i>command</i> that reflect a a character with political conduct knowledge.
Magical	Magical verbs such as <i>transform, brew</i> and <i>cast</i> that reflect a character who has magical abilities.

Figure 6. Character Costumes



Figure 7. Sketches of the costumes for the damsel character

4.3.2.3 Objects and Chapters

In addition to the Verbs and Locations, the Objects used in the gameplay also impact the final portrait. The following table lists each of the five chapters, the portrait components that which are generated from each, and the conceptual rationale behind the choices made:





	Chapter Theme	Portrait Element	Rationale	Number of illustrated assets
I	The Anticipation Stage: The call to adventure.	The Location chosen at the beginning of the game dictates the Plot.	The location of the call to adventure is where the journey of the character starts and it it used to reflect the plot line of the character's adventure.	
E)	The Dream Stage: Taking initiative / having a positive outlook on their story.	The character holds a flag in their right hand. The design of the flag is determined by the Plot. The Object the player used to complete this chapter is depicted as sewn onto the flag in a crest-like design.	The flag in this context symbolizes the hardship that was overcome and the pride of overcoming the obstacle and challenge. It is a memento and a promise held in the right hand this is held higher than the left. This raising of the right hand symbolizes optimism and salvation.	3 Flags (one for each Plot line) 32 Objects based on the cards
	The Frustration Stage: Facing and overcoming an obstacle or challenge.	Each character holds a symbolic artifact in their left hand that represents the Plot they are following: a ship for the quest, a shield for the monster and a crystal ball for rebirth. The Object the player used to complete this chapter is imprinted onto the symbolic object noted above so, for example, if a player uses a feather in the quest, it will appear on the mast of the ship.	The object in the lowered left hand symbolizes the frustration and the weight of the journey on the character. The plot is depicted as a physical object held in the hand. It is a reminder of the challenge that the player overcame. This lowering of the left hand symbolizes hardship and darkness.	3 Symbolic Artifacts (one for each Plot line) 32 Objects based on the cards
2	The Nightmare Stage: Facing the final adversary / reaching the goal.	Each character wears a medal featuring the final adversary that the player conquered. The Location is reflected in the background of the portrait.	The ceremonial medal represent success and joy, a celebration of overcoming the ultimate adversary. Medals and badges are symbolically worn over the heart to indicate pride. The background of the portrait features the Location from this chapter as the visual shows the character after the events of the final confrontation that occurred in that location.	3 medals (based on the final adversary of each Plot) 15 Locations
>	Happy Ending / Reward.	The frame of each portrait has a stained glass-like ceremonial design that features the final Object the player used in obtaining their happy ending.	The design features the final object celebrates the happy end that the character chose for themselves and is displayed proudly as an icon in within the frame to represent this reward.	32 Objects based on the cards
Plot	N/A	Plots are determined by the Location chosen in the beginning of the game.		
Cost-umes	N/A	Costumes are determined by the Verbs used in play.	Costumes also impact the design of the framing of the portrait.	16 Costumes (4 for each character) 4 Frames

Figure 8. Portrait Elements Breakdown 👝

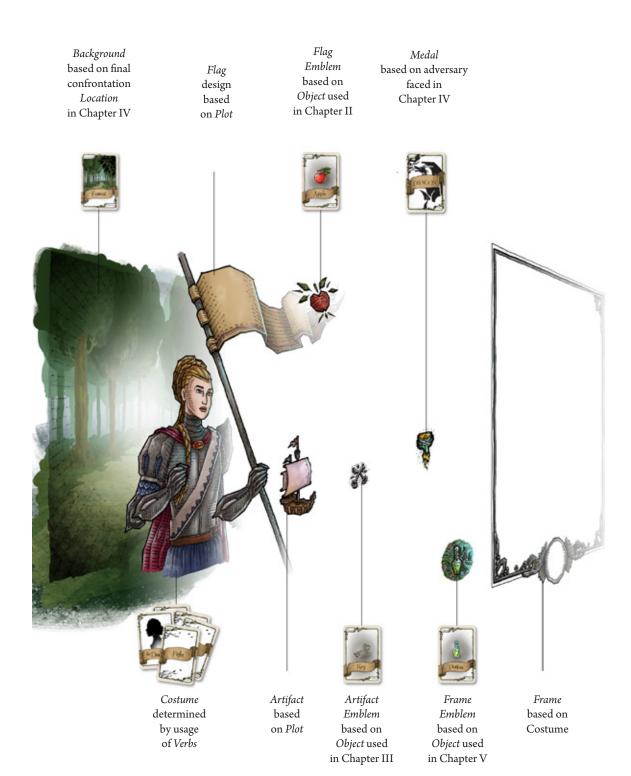


Figure 9. Portrait Layers Diagram



The volume of the portrait elements that are affected by the Plot line adds visual variety to the final portrait. The costume holds a distinct visual space in the portrait. With this in mind other elements need to be varied so that two portraits of the same character, wearing the same costume will end up looking significantly different from each other.

It is worth noting that the Adjective cards have no impact on the final portrait as they are used to add richness and levity to the story telling. For the purpose of this project, it would be a time consuming task to illustrate every Object in association with every Adjective in the deck, and would require an additional 3075 individual illustrations.

4.4 Artwork Style

Choosing an appropriate style for the portrait and the overall artwork of the game was crucial to the design process. The illustration style chosen both reflects and respects the historical elements of the subject matter. As previously noted in Section 4.1 (page 16), the game's content has been narrowed down to canonical Western European approaches to folklore as proof-of-concept. The illustration style used in the artwork is inspired by those used in the earliest printed Western European editions of these folk and fairy tale books.

Woodblock, woodcut, xylography or xylotypography is a form of printing from a reusable raised carved surface that originated in the Orient and to Europe in the 1300s. Considered to be one of the most important technological advances it was used to mass-produce religious texts and storybooks. A whole page of text and illustration was carved on a single block of wood, covered with a thin layer of ink and then transferred on to paper. The illustration style is unique for its clean and bold outlines and hatched or crosshatched shading that added depth and detail to the monochromatic artwork (Meggs, 1983). The most widely available early folk and fairy tale books were mass produced using this technology, that was considered revolutionary for the time. Repurposing the aforementioned style to convey an overall look and feel felt appropriate for a project using modern contemporary technologies to represent a game on folktales.





A major influence to the aesthetics of the game is artist, writer and architect William Morris, my personal design and

illustration hero. Morris was the leader of the English Arts and Crafts Movement in the nineteenth century. A movement that evoked a renaissance of limitededition works of art, furniture and books to note a few, a response against industrialization and mass-production, that focused on the handmade and the bespoke (Meggs, 1983). Zagalo & Branco argue that the Arts & Crafts Movement is responsible for the current emergence of the 'do it yourself' (DIY) movement noting the shift from the 'all-to-one' culture created by some to serve the masses to an 'all-to-all' culture that is produced by all to serve all. This outlook applies to digital technologies and the all-to-all open-source movement that started in the late twentieth century. They state that this DIY culture of taking initiative continues to grow because the digital community supports creation, sharing and most importantly that the rewards come from community acknowledgment more than monetary compensation. This opens up "... new opportunities for people to create and express self-talents and to answer to the means generated by the participatory culture and the

motivation people feel to get involved in the process" (Zagalo & Branco,

Figure 10. Art Style

Forest

осяпон

2015). This applies to the world of game design, be it digital, physical or hybrid. Interactivity, the ability to customize elements within in a game, level creation and the open opportunity to change a game's code are all forms of DIY, giving players agency in customization and co-creation (Ratto et al., 2014), and is similar to the creation of the final portrait in Lore that emerges from the unique actions of the players or the imaginative storytelling that is required to drive the game forward. A deeper exploration of Morris' influence on the DIY movement and connections to the digital age lies outside the scope of this project.



I believe that this juxtaposition of using an illustration technique of mass-produced all-to-one books in a bespoke art-style inspired by the Arts and Crafts movement within a hybrid game with DIY functionalities is befitting this project. *Lore's* artwork and design honours Morris' intricate floral patterns, clean and confident lines, and detailed eye for space and layout in both of the user interface of the digital app as well as the physical story cards. This style also helped create a unique coding system that was applied to the card's designs that aided in clearer fiducial recognition of the cards by the app, as demonstrated in the following section. Examples of the artwork and design created for *Lore* are in Appendix F (page 84).

4.5 Fiducial Storytelling

In *Lore*, the iPad app recognizes the physical story cards played in front of it using fiducial technologies. Fiducial marker recognition is the technology used in Augmented Reality (AR), a relatively new technology in the world of storytelling and digital games, that superimposes "... layers of 'digital' contextualized information over 'physical' settings for enriching or augmenting real world interactions" (Perez-Sanagustin et al., 2014). AR uses fiducial technology to 'see' and recognize specific images or codes on physical objects and then augments virtual elements onto these physical objects that appear on the screen of the digital component (Fiala, 2010). Fiducial technology can also used to direct the user to additional information on these physical objects without the need to augment them. Special markers are included on these objects that, when scanned using the camera of a digital interface, can lead to websites, videos and in Lore, inform the app of the cards that are currently in play.

When a player composes a narrative, they use one of each of the Object, Adjective and Verbs story cards and places them on the game board situated in front of the iPad. The iPad app uses the built-in camera to scan these cards and fiducial recognition technology to recognize them. The recognition occurs when the app compares the image it 'sees' through the camera with the stored data library of card images, when a match is made between the image and a card, the card is recognized and appears on screen.





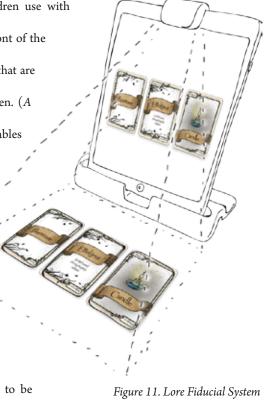
Fiducial recognition is important in *Lore* as it translates the physical gameplay choices into a virtual portrait, an element that can only occur through a digital medium, and this ability to recognize and store the cards that each player plays means that their individually composed narratives will have an impact on the outcome of their play, merging the non-linear storytelling aspect with player agency and co-creation.

Lore uses the Osmo reflector mirror to direct the view path of the iPad's camera down to the surface in front of the iPad, focusing the recognition system onto the cards played on to that surface. This reflector mirror is part of the Reflective Artificial Intelligence (RAI) proprietary by Osmo, a tech company that has created a set of hybrid educational games for children (Houghton Mifflin Harcourt, 2015). Osmo sets come with this mirror alongside

physical letters, numbers and geometrical shapes that children use with free iPad apps. The RAI recognizes the elements played in front of the iPad and translates them into digital images and information that are integrated within the games and tasks presented on the screen. (A Peek into Osmo's Reflective AI Technology, 2014). This mirror enables the technology in Lore to view the game board set in front of the iPad and translates the cards into different

It must be noted that getting accurate results with the fiducial recondition system is a challenge. Mark Fiala, an authority on designing reliable fiducial markers, states that for the markers to be successfully recognized they should be distinct enough no

successfully recognized they should be distinct enough not to be confused with the surrounding artwork and that their bitonality is important to create a contrast that is instantly recognized by the software (Fiala, 2010).





actions within the game.

In *Lore* the Object cards are illustrated and therefore were easily recognized by the app. The issue arose when testing the Verb and Adjective cards as they only contained text and had the same card design. The first few rounds of testing these cards were unsuccessful and it became evident that the text-only cards needed a clearer coding system for the software to recognize. As a visual designer, I am not an enthusiast of high contrast codes, such as QR codes, as I find them visually distracting and unappealing.

The solution was to create my own coding system that blended in with the design, yet was unique enough for the software to recognize.

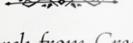
As the borders of the cards are of foliage and vines, it was appropriate to continue with that theme in the codes in the form of leaves and branches. Branches appear on the top and bottom of the cards in different corners and different combinations, and the leaves appear in groups of three on the top and the bottom in different locations based on an eight by two grid. The randomized combination of leaves and branches successfully created a unique code for each of the cards that was instantly identified by the app without any mistakes or confusion.



Figure 12 Lore Fiducial Code Examples







"Research-from-Creation"
Prototyping
and Playtesting



"For, as I told you, good deeds bear their own fruit!" "the Princess Bella-Flor" 5



Chapter V

Research-from-Creation: Prototyping & Playtesting

Research-from-creation is the iterative process of designing, testing the design on the target audience, gathering information using research methods, amending the design based on the feedback and testing it again; and repeating the process until the desired result is reached (Chapman & Sawchuk, 2012), and for a social game such as Lore, play testing was an essential in creating a functional, enjoyable, easy-to-understand, and easy-to-play game.

The three key aims for the user testing are:

- 1. Testing different game mechanics to find the most appropriate mechanic to drive the game forward, that is both easy to understand and play.
- 2. To ensure that the game has a logical narrative flow throughout all of its chapters and challenges, that it is not too confusing or vague.
- 3. To create a game that enhances the social experience and allows dialogue to emerge during gameplay and afterwards.

The game was tested at different stages over a period of six months, from October 2015 to March 2016, and was tested with approximately thirty unique players. Thirteen iterations of five unique versions of the game were tested in groups of two to five players.

Iterative play testing has the potential to reveal the weaknesses and strengths of a game that cannot be anticipated or discovered without testing it on actual players or in only a single test. Noting the player's interactions with the game as well as those amongst themselves can reveal their level of entertainment, engagement and the success of the game. As Salen and Zimmerman, the authors of Rules of Play: Game Design Fundamentals note, "...iterative design is a method in which design decisions are made based on the experience of playing a game while it is in development.





In an iterative methodology, a rough version of the game is rapidly prototyped as early in the design process as possible" (Salen & Zimmerman, 2003). Paper prototypes of the cards in the game were created and tested in October 2015, as soon as the initial research into stock characters yielded content to drive the game and after obtaining the REB approval on the user testing. Basic paper prototypes consisting of plain text on white cards were used as they were easier to amend, replace or create new ones - sometimes even during a test session. Basic prototypes help the user to focus on the game and gameplay rather than the design details that might distract or divert the focus of the feedback (Koskinen et al., 2011). This iterative process of testing, tweaking and fine-tuning evolved from basic paper prototypes to fully designed and colour-printed cards and eventually to the combination of the final cards with the iPad app, the final iteration that is presented in this paper.



Figure 13. Game & Narrative Development



The following section outlines the research methods used in the play testing as well as the results of the three key playtesting areas. A detailed list of all the playtest iterations and their results can be

found in Appendix D (page 79).

5.1. Research Methods

The research methods chosen for the data-collection of the play testing, as well as the use of paper and digital prototypes, are participant observation and informal interviews. The Observation and Interview Guidelines are in Appendix C (page 76).

The game was tested on groups of two to five individuals, with the participation of both male and female players, ranging from age twenty-four to seventy. In the early stages of the game, the game could be played with up to six players, and therefore the tests were conducted for groups of four and five subjects. After the game changed into a three player game, it was tested in groups of three and sometimes two (with myself as the third player). The tests for groups of two that included myself occurred towards the end of the play-testing phase when most of the key elements of the game were finalized, and the testing was occurring to go over all the details and to ensure that it ran smoothly and successfully.



Figure 14. Playtesting Sessions

The audience primarily consisted of fellow Digital Futures students, members of the faculty and staff, my friends and family members. The tests occurred in Toronto, Canada, and in Amman, Jordan. The game was also tested in Arabic and Turkish (using the cards with content in English), solely to test the mechanism, with successful results.



As the aim of these tests was to develop and zoom in on a successful game and game formula, the only condition in selecting the users was for them to be board-game enthusiasts. Age, gender, country of origin, original language, educational, cultural and economical backgrounds were unrelated to the game and its testing, and therefore that information is not documented or compiled.

The first research methods used was participant observation. Observation allows the researcher access to subjects in social settings and situations by recording subjective and objective human behaviour. Marshall and Rossman state that the researcher becomes part of the process "... immersed in the setting, hearing, seeing, and experiencing the reality of the social situation with the participants" (cited in MacDonald, 2012). For *Lore*, participant observation was very important, as I needed to observe and understand players' natural interaction with the game and with each other as they would if they bought the game themselves and played it in a social setting. No video or audio documentation was taken to make the participants feel comfortable and at ease. The only recording methods used were note taking and photography. The notes were on the different interactions, inquiries, confusion areas and reactions/emotions that occurred during the gameplay. Photography was only used to document some of the interesting gameplay results, photographing only the story cards without including any of the participant's faces or any distinctive features.

After the completion of a gameplay session, informal interviews in the form of open discussions were conducted with the group of testers together. Sociologist Shulamit Reinharz notes that interviews offer researchers an insight to the test-subject's thoughts and ideas by allowing them to use their own words and vocabulary (cited in MacDonald, 2012). The interviews took the shape of informal conversations rather than pre-set Q&As, and the subjects remained as a group in the same setting to keep the momentum and energy of the game going on without separating them or conducting a formal digitally recorded interview. While a set of questions was prepared for the interview (Appendix C, page 76), the outcomes of the observation were the main discussion points as they were about the player's experiences. The conversation allowed engagement and discussion by all members, and they were gently steered back to the game if the conversation strayed from the main topic. Similar to the Observation phase, only notes were

taken during the interviews.

This generated a discussion regarding what they thought worked and did not work, adding their own observations and suggestions; which in turn, gave me as a researcher the unique privilege to tweak some rules and add/remove cards on the spot and test the game again instantly with the same subjects in the same session.

The book *Design Research Through Practice* notes four guidelines for creating proper conditions to using prototypes that apply to user testing. Research Scientist Esko Kurvinen, who developed this guideline, argues that designers "... should place their imaginations into an ordinary social setting. They should also follow it in this setting using naturalistic research design and methods over a sufficient time span to allow social processes to develop" (as cited in Koskinen et al., 2011). These guidelines are:

- 1. Ordinary social setting. In Lore All of the play-tests were performed in casual and comfortable settings: my apartment in Toronto and Amman, friends' apartments, Digital Futures students lounge, boardgame cafe's and pubs that were not crowded, did not have loud music or distracting TV screens.
- 2. Naturalistic research design and methods. Koskinen notes that "... people have to be the authors of their own experiences" (2011), and in the *Lore* play-test sessions, the subjects were given the instructions of the game, and a story-creation example only if they asked for one, but they were left to discover the game and compose their own stories on their own. The participant observation was non-intrusive to the gameplay process, as I quietly took notes while the subjects played the game.
- 3. *Openness*. The *Lore* play-test subjects were encouraged to voice their opinions regarding the game, and I was open to any feedback, suggestions and criticisms. There were a few instances in which players suggested a tweak in the gameplay and it was instantly added to the game and tested to see whether it worked or not.



4. *Sufficient time span. Lore* play-tests were conducted over a span of six months and on thirteen occasions to ensure that the final game was completely playable and provided an entertainment.

5.2 Playtesting results

Following is a list of the main results that emerged from the user testing sessions, and how they answered the three key goals that were presented at the beginning of this chapter:

1. Testing different game mechanics to find the most appropriate mechanic to drive the game forward, that is both easy to understand and play:

From these tests, storytelling emerged as the most appropriate mechanic for this game. While a general consensus was that this was a successful approach, not all players were successful in the game or enjoyed the mechanism. This is due to either their lack of interest in storytelling games or the unfamiliarity with some of the Adjectives. This was amended by revisiting the adjectives, adding their definitions and pronunciation to the cards.

2. To ensure that the game has a logical narrative flow throughout all of its chapters and challenges, that it is not too confusing or vague:

The earlier iterations of the storytelling version of the game presented players with random challenges, which worked individually as a proof of mechanism, however I noticed that it also created a disjointed gameplay in which players had no connection to the characters or investment in their progress in the game. Introducing a flowing narrative across five chapters was visibly a stronger option, and players noted that they enjoyed following the arc of their stories and the fact they had a beginning, climax and an end. Some proposed narrative lines were noted as confusing or unclear and they were amended and tested again and resulted in positive feedback.





3. To create a game that enhances the social experience and allows dialogue to emerge during gameplay and afterwards:

The later versions of the game, that had a narrative arc for each character to follow, were the iterations that resulted in the liveliest and most engaging dialogues. The damsel in particular proved to be a very significant character in the game, and there were instances in which the testers playfully fought over who gets to portray her. This also resulted in the narratives composed for the damsel to be purposefully against her stereotype, and instigated interesting discussions on the choices the players made and how they wanted to dismantle the sexist image in which she is usually portrayed in folktales.

As with any project that relies on user feedback and engagement, this project has the potential of becoming an ongoing exploration of characters and stereotypes, however, for the purposes of this paper, the testing was concluded once it became evident that the formula of using storytelling as a mechanic and having a narrative arc for the characters to follow were both successful in creating a complete game; and that the final iteration of the game fulfilled the goal and purpose of the research by having the potential to initiate discussion on stereotypes and literary tropes.







hapter VI



the Game



"I am going forth
to hunt and course
and to take my
pleasure and pastime;
maybe this would
lighten thy heart."
"the Arabian Nights"



Chapter VI

The Game

6.1 Hybrid Card Game

After extensive amounts of iterative prototyping and play-testing, the final version of the game presented in this document and at the graduate degree show takes the form of what I call a 'hybrid card game': a boardgame that mixes physical cards with a 'smart' digital iPad app. Players use the cards to compose imaginative scenarios for their characters and the smart app uses the iPad's camera to recognize fiducial markers on the cards and stores the cards that each player has played in each chapter. The information saved of the winning player's gameplay is translated into a custom composite portrait as the final reveal.

This mix of the digital and physical in digital games is a new emergent hybrid trend in handheld devices and console games that started in 2011 with *Skylanders*, a console game that comes with a device onto which a player places plastic figurines of characters and vehicles that appear within the game. These figurines are embedded with near field communication (NFC) chips that the device recognizes and translates into digital characters and vehicles on screen (Zaino, 2012). This "toys-to-life" trend has been rapidly growing with the launch of *Disney Infinity* (2013) and *Lego Dimensions* (2015) reaching sales of around \$3 billion worldwide in 2015 (Gaudiosi, 2015).

Although it does not use NFC and is aimed at a different target audience, Lore is similar to these games by having a digital medium that recognizes physical objects that in turn affect the digital game and the gaming experience.

With the steady growth of the Internet of Things, the shift towards hybrid games, whether in the form of console games with physical objects or physical games enhanced by digital artifacts, will continue to grow especially with





affordable small electronic kits that use NFC technology being readily available in many retailers such as Amazon, and the steady growth of faster, more affordable, more accessible and accurate 3D printers.

Recent studies show that with the emergence of 3D printing, DIY and maker cultures that physical products are still valued by game players for various reasons including the feeling of ownership, standing against extreme technoenthusiasm and that physical objects seem to represent traditional values. Tyni et al. (2013) suggest that with the growing popularity of hand-held devices and the rapid increase of apps and games for such devices a merging of both worlds was only inevitable. This "... emergence of hybrid products could be seen as a cultural mediator, a sort of a middle-way in this battle of values," and on one hand digital experiences have become a part of our daily lives and, on the other, the physicality of material artifacts are still very relevant (Tyni et al., 2013).

Collecting multiple figurines not only unlocks new features but they also enable the game to be played by more than one player at the same time. Most IGT games support multiple players and some have online playing modes; however, the playing still occurs on screen and the social aspect of the game is more in the interactions between the digital characters than between the actual players. Media theorists note the "... superiority of face-to-face communication over mediated interactions in its ability to convey non-verbal cues and, more fundamentally, the subtleties of verbal and non-verbal communication" (Soute et al., 2010), this is an important gaming aspect that I had to include in my game. In *Lore* players, not the digital app, drive the game forward. They decide whether the proposed story is successful enough for a player to proceed - by narrating, discussing, arguing and convincing each other - human characteristics that a digital game cannot replicate. By using performative play as an example, Wilson emphasizes on the importance of human spontaneity, imagination and creation in games and how it is essential for game designers to take advantage of these attributes (Wilson, 2012). This is an important challenge that I attempt to tackle with the game. The digital counterpart takes care of setting the challenges and keeping track of players turns but most importantly, it composes a custom portrait based on gameplay; a feat that can only be achieved digitally in a short amount of time accurately. However, the portrait cannot be created without the actions of the players. The uniqueness of this portrait emerges

from the uniqueness of the players' stories and imagination. If every player confronted a dragon by slaying it, then all the portraits would only show that, however, by providing players with Object, Adjective, Location and Verb cards, they prompt the players to create more unique scenarios. In one example, the dragon was apparently allergic to feathers and all it took was one tiny bird for it to sneeze its way away from the village it was tormenting.

Looking into hybrid board games that use fiducial marker recognition for comparison and study, I have reached out to the community driving one of the most comprehensive and popular online board games archives BoardGameGeek. com for examples of board or card games that use this technology. The results of the search as well as feedback from the community showed that this hybridity has been commercially available to the public since 2014 and has been slowly gaining momentum with the increase of games that use these features.

Alchemists (published by Arclight in 2014) uses fiducial recognition of cards. Alchemists is a traditional board game that uses technology only for mixing ingredient cards into new potions, there are 8 different card types and each player uses their phone to scan the cards in secret and then the app tells the player of the result of the alchemical mix. The digital counterpart here is used to save time by figuring out the results of the combination of the alchemical elements almost instantly - which can be done without the use of the app, but consumes more time. (Alchemists, 2016)

Pop Stream (published by Spin Master Ltd. in 2015) is a trivia game that uses the iPad as a screen to stream questions and videos, and uses fiducial recognition through the camera to register the answers to the trivia questions. Players from two teams place an indicator of their corresponding answer on a game board that has A, B, C & D clearly marked on it and the game sees both results and declares the winners of each round. This physical answering system is used so that both teams can answer at the same time, however the game is mainly a digital. (*Pop Stream*, 2016)

Combining fiducial recognition systems on light and portable touch-screen electronic devices with a physical board



game opens the door for new ways of interaction by adding additional elements to a gameplay that can only occur through a digital medium such as keeping track of the game, displaying information or content that can be upgraded or purchased electronically and creating an atmosphere with the addition of audio/video elements. And as the recognition system advances and becomes more accurate and robust, it is inevitable that such hybrid games will steadily grow.

The 'hybrid card game' of storytelling in *Lore* that uses physical cards and a digital game that translates them into a visual image is a unique combination and hopefully it will be revised and expanded in the future to become a marketable product.

6.2 Lore Game Design Document

A Game Design Document (GDD) aids in the process of game development, helps organize the design tasks amongst the different parties involved, pitches game concepts and details a game's background, gameplay and expected results.

The following GDD format is based on a template that was provided to the Digital Games course graduate students at OCADU during which we created digital games and used this template to document them. It has been modified to accommodate the hybridity of the game and focuses on the details of the artwork over the technology, as the programming of the game was outsourced.

🍲 Intro

Welcome to LORE Publications, where we pride ourselves for our immaculate penmanship, premium goat-skin parchments and mildly poisonous pigments. Our aim is to spread stories to all the Worlds of Yonder, Wonder and Under. Thank you for sharing your story with us.



Lore is a one to three player hybrid card game in which players create a story for the stock character of their choice. Each player goes on a five-chapter journey in which they face various challenges and obstacles that they have to overcome by composing narratives using Story cards. Players who manage to complete their stories receive a custom generated portrait based on their unique narratives throughout the game.

Rough Plot

The following is a sequential rundown of the plot as it unfolds on the digital app:

[intro cutscene]

We meet Tristram the Transcriber, a publisher at Lore Publications, who tells the players to stop complaining about being mere secondary stock characters in somebody's else story and to step up, go on an adventure, tell their own stories and get published.

[set-up]

Players choose their characters, give them names and chose the location from which they hail.

[gameplay]

Each player has five chapters to overcome in order to complete their story. Starting from their call to adventure and ending with their happy (or unhappy) ending. Once all the player's turns are over, then game ends.

[cutscene]

Tristram the Transcriber congratulates the players who made it to the end of the game, and proceeds to magically create the covers of their storybooks.





[reveal and reward]

Each player gets a custom portrait of their character based on the cards they have played in the game. They have the option to save the image or share it on Twitter, Facebook or Instagram,

Character Bios

The playable characters in the game are the Damsel, the Trickster and the Ghost; stock characters from folktales and literature. No additional bio or info is provided about these characters as the goal of the game is for the players to create these characters' biographies through the gameplay, so each player relies on their own preconceived ideas regarding each characters.

Gameplay Instructions

Please see game instructions sheet, Appendix E (page 82).

🗣 Sample Chapter Gameplay Rundown

Diagram on following page (59).

Game Flow Diagram

Diagram on page 60.



Figure 15. Gameplay Rundown



The chapter begins



revealed. The player can either The content of the chapter is Play or Pass.



The player is asked to select a Lotion as the setting of the chapter.



kind and selects Play. cards: one of each



the story is successful or not. If it is then they click Win and the The rest of the players decide of

turn ends.

results are wrong, or

Accept them.

cards, the player can Rescan them if the

The App scans the

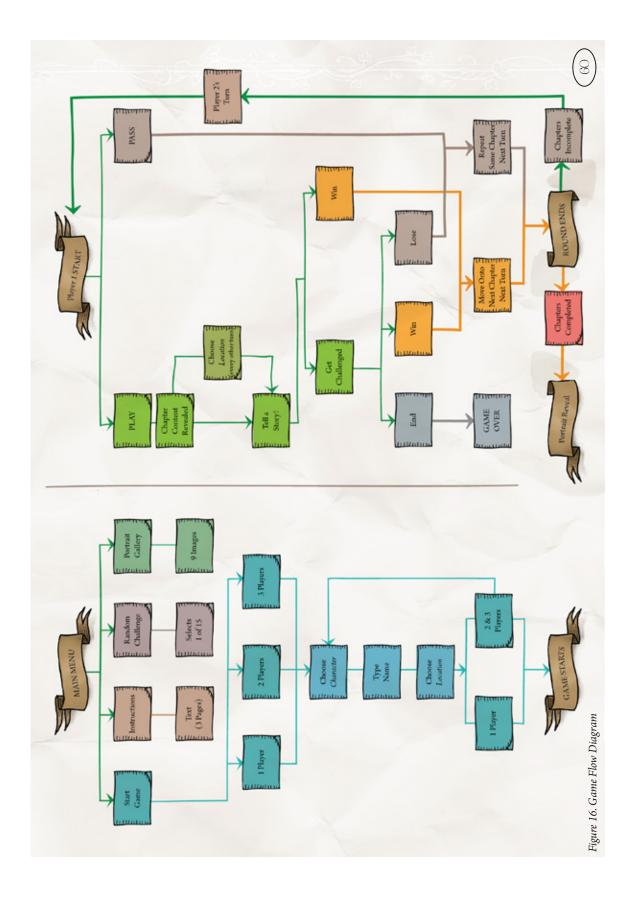


If it is unsuccessful, they Challenge the player and give them a final chance to redeem their story. The players decide whether the player is concinving and Wins or unconvincing and Loses.



The player's turn ends, and the turn of the following player





Physical Components (Boardgame Box Content):

Game board: on which the gameplay occurs. Has dedicated spaces for the draw and discard piles as well as the fiducial recognition area.

Cards:

- Story cards: 32 Verbs, 32 Adjectives and 32 Objects.
- Character cards: 3 cards, one for each of the playable characters.

W Technical Components (iPad App):

The app is created in Unity and uses Vuforia Augmented Reality Software Development Kit to recognize the fiducial markers on the cards. For further details on fiducial markers see Section 4.5 (page 42).

Digital Cards:

- Chapter cards: cards that depict the content of each chapter. 15 chapter cards (5 for each Plot).
- Location cards: 15 location cards.

Narrative Components (Plot Lines):

- 3 plot lines: Overcoming the Monster, The Quest and Rebirth.
- Each plot line consists of 5 Chapters.

Assets Breakdown

1. Art Assets (see Appendix F, page 84):

All illustrations were created using Procreate on an iPad pro with the Apple Pencil. Adobe Photoshop was used for creating the UI, the packaging and photo compositing and retouching. Adobe Illustrator was used for creating the logo, instructions sheet and packaging. See Appendix F for the artwork of the assets.

- Playable characters: two-dimensional profile silhouettes of the characters on the cards to represent their initial stock form. Fully coloured and dimensional portraits of the character.
- Playable character portrait costumes: four costumes per playable character based on the different Verbs used in the gameplay.
- Portrait assets:
 - Flags and the Objects sewn on them.
 - Symbolic artifacts and the Objects imprinted on them.
 - Medals
 - Portrait frame and stained glass reward symbol
- Card Designs:
 - Object, Location and Chapter cards (illustrated)
 - Verb and Adjective cards (text with illustrated border and fiducial marks)
- Introduction: 3-4 full-screen images for the introduction sequence.
- UI/Menus: Main menu, user-interface, chapter headers, challenge pages, and portrait page.
- Branding and logo design
- Packaging design and production
- Game board design and production

2. Text Assets:

- Cards content: for the physical Object, Verb and Adjective cards.
- Introductory animatics text
- Chapter content: 5 chapters for each of the 3 plot lines.
- Short character bios: that will be automatically generated by the app to accompany the portrait, also based on the gameplay.







Figure 17. LORE Gameplay Setup





6.3 Future Directions

Through iterative play tests, some very successful and some not, it became evident that Lore has the potential of becoming an entertaining social game, as indicated by many of the play testers, as it encouraged them to use their imaginations and narrative skills to help their characters reach their happy endings as well as having to discuss and defend their thinking processes.

Through the different versions tested (as noted in Chapter Five, page 45), my own refections on the game and by taking player's feedback into consideration, following is a list of potential future directions for *Lore*:

h Characters and Players:

The current slice of the game is limited to a maximum of three players with only three characters to choose from. Initially the game would feature 6 characters to choose from as well as being able to accommodate up to six players. This is a direction that I would want to re-visit and expand the current universe of the game.

A revising of the characters themselves might be an interesting future direction. The Damsel proved to be the most popular and instantly recognizable and identifiable character in the game, some players fought over who gets to be the damsel. It would beneficial to dedicate more time in investigating other characters or stereotypes that are on the same level of misrepresentation and instant recognition as the damsel. This realization and discovery came late in the thesis process and it would have been nice to follow this trajectory from the start. It is also worth looking into creating customized decks for different societies and purposes.

Plot Twists and Competitive-play:

These cards were introduced in some iterations of the game (as noted in Chapter Five, page 45) and they added an fun competitive edge to the gameplay, however as the game shifted towards becoming a social game in which all



players could win rather than a competitive game with one single winner, these cards were dropped as they did not benefit the desired outcome. I personally enjoyed having them in the game, and did enjoy the competitive edge that the game had, however a social game was more befitting and true to the purpose of the research and thesis. It would be interesting to dedicate some time in trying to find ways to reintroduce the Plot Twist deck and add a competitive edge to the game without compromising its goal or purpose.

🍁 Adjectives:

This deck proved to be the most challenging aspect of the game, as some players highly enjoyed using them in creative ways, while others instantly rejected them which hindered the game and made it more laborious than fun. A future direction would be additional user testing focusing on the Adjectives and maybe trying other decks instead alongside the Verb and Object cards.

Story Sharing:

The initial pitch of the game included that a full written narrative that would accompany the composited portrait, however due to time constraints the final version of the game focuses on the portrait. Threading the cards with chapters to create a cohesive narrative would be an interesting challenge and future direction, one that would require the consultation of a literature specialist in figuring out how to construct a consistent story. It might also be interesting if players had the choice to tweet or post their narratives instantly after each chapter.

There are many obstacles that a written story faces, the major one being that that the app would not precisely know how the cards were used in the narrative. As the game encourages imaginative stories, the cards might not have been used in ways that logic dictates.







hapter VII



Conclusion



"When we get to the end of the story, you will know more than you do now..."

"the Snow Queen" 2



♦ Chapter VII

Conclusion

In Chapter Two I presented my hypothesis question: Can a digital-physical card game challenge the stereotypical classification of literary stock characters allowing players to engage a dialogue on stereotypes and creative ways of dismantling them?

The answer to this question took the form of *Lore*, an experimental social game in which players, on behalf of the stock character of their choice, used their storytelling skills to thread plot cards and weave them into fun short narratives to overcome the challenges presented to them by the digital component of the game. By composing these stories and plot lines for their stock characters, the players had the agency and potential to dismantle the character from the stereotypical tropes attributed to them and turn them into more developed and dimensional characters.

The aim of this project was to create a platform that would celebrate my passion for folktales and storytelling, and more importantly open a discussion on dismantling and subverting stereotypes by using folktales as a discussion starting point. This goal was achieved on two levels; by making non-active stereotypical characters active through customized play, and by providing them with language tools and choices that augmented their capacities with actions that were unconventional to their stereotypical representations in literature.

Through iterative play tests it became evident that Lore has the potential of achieving this goal. By creating unique and custom stories for these characters; as absurd, fantastical, realistic or disturbing as they desired, the players subverted these stereotypical tropes through choice and agency. I am very proud that, while it did not occur in every single playtest, the game did initiate some very rich dialogue on the stereotypical associations of characters as well as





their genders and roles in literature and society. The generated dialogues were very rewarding and humbling as they successfully achieved the intentions and goals I had in mind for this game.

After reaching the final stages of this thesis, two distinct conclusions came to light. The first, which fulfilled the goal of this paper, was that a game, specifically a hybrid card game, had the potential of initiating engaging, daring and passionate discussions on stereotypes and tropes. The second and more surprising conclusion was that this game's format of using story cards coupled with an app that generated custom visuals based on choices, could be used to highlight various topics from representation to identity to culture; opening a forum of discussion on many important topic for players of any age, gender, race, culture and background.

This project is far from being complete, and I look forward to having the opportunity to build a customizable story telling platform that can tackle a variety of themes and topics.









"...but shouldn't all of us on earth give the best we have to others and offer whatever is in our power?"

"the Snail and the Rosebush" 2



Story Quotes End Notes



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Appendix A: Key definitions

It is important to define a few keywords and concepts that reoccur throughout this paper. It is also worth noting that these definitions are summarized to provide context and they are by no means definitive or comprehensive, an indepth analyses of these terms is beyond the scope of this research.

A.1 Folklore, Folktales and Fairytales

Folklore is a difficult term to define precisely, however, it generally refers to the "lore of the people" (Haase, 2008), the word *lore* meaning learning or knowledge (Toelken, 1979). American folklorist Jan Brunvand defines *folklore* in the broadest term as the ... "traditional, unofficial, non-institutional part of culture. It encompasses all knowledge, understandings, values, attitudes, assumptions, feelings, and beliefs transmitted in traditional forms by word of mouth or by customary examples" and includes art, dance, song, narratives, knowledge and different traditional practices (as cited in *What is folklore?*, 2015).

Folktale is an umbrella term given to the narratives within folklore "... in a much broader sense to include all forms of prose narrative, written or oral, which have come to be handed down through the years." (Thompson, 1946), these narratives include stories of humans, animals (fables) and fairy folk (Haase, 2008).

Fairytale is another term that is difficult to define precisely, as it has been used interchangeably with *folktale*. Originating in France in the late seventeenth century it was initially used to define fairy related folktales, however it has grown to encompass stories of fairies, magic, enchantment, princes and princesses to name a few (Haase, 2008).







A.2 Archetype, Stereotype and Stock Character

An *archetype* is "the original model or standard after which later recurrences are patterned. Archetypes are keys to understanding humanity's sense of identity as a collective group. They can take the form of personal behavior, rituals, religious practices, dreams, or literature." Archetypes in narratives can take the shape of generic characters types such as the universal mother or the trickster, plot types like the quest and settings like a throne room. (Howard, 2010)

Stereotypes are "literary and image-based texts based on sensory data, typifying and creating narratives of identity around harshly delimited sets of identity markers to stigmatize some and normalize others". Stereotypes can heroes or monsters, beautiful or ugly "... over simplifications rendered as texts that secure and extend a base of power and influence in social arenas" (Rolling, 2010).

Stock characters are "one-dimensional characters in literature, theatre and film who are constructed based on archetypal or stereotypical representations [...] which are easily identifiable to a particular audience", it has been noted that they are beneficial for writers by including characters that seem familiar and therefore do not take up space in introductions and serve only a purpose to drive the plot forward; which also makes them controversial characters as they are used as one-dimensional representations of specific stereotypes of minorities and ethnic groups. (Jackson, 2010).





Appendix B: Lore Cards Content

			130	
				200
_	_	_	_	,

	VERB	COSTUME		OBJECT		ADJECTIVE
VRB-1	Sedate	Magical	OBJ-1	Apple	ADJ-1	Abounding
VRB-2	Transform	Magical	OBJ-2	Beans	ADJ-2	Antic
VRB-3	Brew	Magical	OBJ-3	Pepper	ADJ-3	Auspicious
VRB-4	Shrink	Magical	OBJ-4	Seeds	ADJ-4	Baleful
VRB-5	Illuminate	Magical	OBJ-5	Lamp	ADJ-5	Bawdy
VRB-6	Reveal	Magical	OBJ-6	Bottle	ADJ-6	Bellicose
VRB-7	Cast	Magical	OBJ-7	Pouch	ADJ-7	Bilious
VRB-8	Merge	Magical	OBJ-8	Box	ADJ-8	Brash
VRB-9	Rescue	Warrior	OBJ-9	Key	ADJ-9	Calamitous
VRB-10	Save	Warrior	OBJ-10	Slingshot	ADJ-10	Caustic
VRB-11	Slay	Warrior	OBJ-11	Spoon	ADJ-11	Direful
VRB-12	Hunt	Warrior	OBJ-12	Brush	ADJ-12	Effulgent
VRB-13	Build	Warrior	OBJ-13	Coins	ADJ-13	Ethereal
VRB-14	Duel	Warrior	OBJ-14	Gold	ADJ-14	Execrable
VRB-15	Challenge	Warrior	OBJ-15	Diamonds	ADJ-15	Friable
VRB-16	Fight	Warrior	OBJ-16	Pearl	ADJ-16	Heady
VRB-17	Distract	Villager	OBJ-17	Scissors	ADJ-17	Incendiary
VRB-18	Grow	Villager	OBJ-18	Saw	ADJ-18	Limpid
VRB-19	Steal	Villager	OBJ-19	Needle	ADJ-19	Luminous
VRB-20	Investigate	Villager	OBJ-20	Hook	ADJ-20	Mesmerizing
VRB-21	Sing	Villager	OBJ-21	Stone	ADJ-21	Munificent
VRB-22	Sneak	Villager	OBJ-22	Wood	ADJ-22	Nefarious
VRB-23	Disguise	Villager	OBJ-23	Feather	ADJ-23	Noxious
VRB-24	Hide	Villager	OBJ-24	Flower	ADJ-24	Obtuse
VRB-25	Command	Royalty	OBJ-25	Carpet	ADJ-25	Pernicious
VRB-26	Manipulate	Royalty	OBJ-26	Cloak	ADJ-26	Rebarbative
VRB-27	Evaluate	Royalty	OBJ-27	Rope	ADJ-27	Redolent
VRB-28	Conceal	Royalty	OBJ-28	Candle	ADJ-28	Risible
VRB-29	Negotiate	Royalty	OBJ-29	Goblet	ADJ-29	Salubrious
VRB-30	Enforce	Royalty	OBJ-30	Potion	ADJ-30	Turbulent
VRB-31	Poison	Royalty	OBJ-31	Wings	ADJ-31	Turgid
VRB-32	Bribe	Royalty	OBJ-32	Mask	ADJ-32	Withering





Appendix C: Research Guidelines

TARIK EL-KHATEEB (te14qh@student.ocadu.ca)

Observation and Interview Guidelines

REB Application Ref No: 1146

Observations and Interviews of potential target audience for the LORE digital and physical board game.

Project Title: LORE - A digital board game

Researcher: Tarik El-Khateeb: te14qh@student.ocadu.ca

Purpose:

The purpose of the observations and interviews is to help the researcher in successfully creating a board game with physical and digital components

based on Folklore stories.

Process to be followed:

Participants will be briefed about the purpose of the study, explain the consent form to them, and ensure that they sign the consent form. The

researcher will, with their permission, make observations of the participants playing the board game in groups, after which I will engage the each

of participants in a 10 minute long, semi-structured interview on their experience playing the game and their opinions on its rules, gameplay,

entertainment value, general experience, comments and possible advice or recommendations.

Participant selection:

Participants will be casual board game, digital game and/or game console players. In general, they will be of both sexes equally, 20-45 years old;

living, working or studying in the GTA.

Risk and benefit:

There will be no risk to the participants. The benefit will come from their contribution to the creation of a unique board game. Participants are free

to withdraw before or at any time during the study without the need to give any explanation.

Consent details:

The researcher will brief the participants about the purpose of the study and inform them that only their age and gender will be used in the data

collection and no other personal identifiers will be collected. The researcher will explain the consent form to them, and ensure that they fully

understand the form and what is requested from them and to sign the consent form.

Compensation:

Participants will receive no compensation.

Observation:

The participants will be given a paper with typed instructions on how to set-up and play the LORE board game. The researcher will observe and take notes throughout the gameplay period.

Example of questions that might arise through observation:

- 1. You seem to hesitate at (a certain point in the game), why is that? Please elaborate on what caused your hesitation.
- 2. You seem to enjoy / dislike (a certain part of the game) what caused that? Please elaborate on what enjoy / dislike.

Interviews:

After the completion of the game, the researcher will conduct an interview with all the members of the group that played the game and ask them the pre-written questions as well as other questions that can come through the observation.

Pre-written interview questions:

- 1. Was the game play enjoyable? What aspects of the game did you enjoy? What aspects of the game you did not enjoy?
- 2. Were the gameplay instructions clear and easy to follow? Please elaborate on your answer giving examples.
- 3. What did you think of the concept behind the game and the story elements presented in the game?
- 4. What did you think of the different characters in the game?
- 5. What did you think of the digital aspect of the board game? Please elaborate.
- 6. What did you think of the general design and artwork of the game?
- 7. Do you think the number of players in your group was appropriate for this game? Please elaborate.
- $8.\ Do\ you\ have\ any\ suggestions\ to\ improve\ the\ gameplay?$

Appendix D: Playtesting and Prototyping

The paper prototyping and playtestig started as soon as the concept of focusing on literary stock characters emerged.

VERSION 1:



The first version of the game focused on a narrative in which these characters were on a mission to track down, fight and defeat "the Storyteller" who created them as stock and flat characters.

> Gameplay: The game was tested on map-like game board that was to eventually feature 3D printed game pieces, cards and a die in addition to the iPad. Players were dealt random cards with weapons and allies, each having their own specific set of strengths, as well as Move cards with random directions and numbers of steps on them. Players used Move cards to move in any direction on the map, and when landing on a Monster space they would fight the monster with their weapon and ally cards that should add up to a number higher than that of the monster. This game had similar features to the popular game Munchkin.



Iterations: Two iterations were tested, one with a linear path on the map, and one with a branching non-linear path.

What worked: The content of the cards were favourably received (magic lamps, talking animals... etc)

What did not work: The gameplay itself did not work. The game tried to avoid becoming Munchkin by adding multiple layers of calculation, called Powers, and each playable character had a different impact on these calculations. The game focused more on fighting and winning battles than the actual theme and purpose of the thesis.

Outcomes: The game needed players to invest in the game and character in order to successfully achieve what the thesis was aiming for.



WERSION 2:

Continued the 'defeating the Storyteller' theme.

Gameplay: The game focused on the cards removing the board, game pieces and dice. Players used Story cards to thread a narrative to defeat a Monster. These cards were an Artifact (that could be inanimate objects such as a glass slipper or animate objects like a bird), Ability (such as singing in a high pitch) and an Action (like putting somebody/something to sleep).





Iterations:

- The first iteration carried over the calculation aspect from the previous version. Not only did the player need to use cards to thread a narrative to defeat the monster, the total of the numbers of the cards needed to be higher than that of the monster.
- The second iteration kept the calculation and added a layers of Classes, in which each character had a specific class (human, magical, supernatural) and each one of the cards and monsters belonged to each class, and the matching of the classes, in addition to the narration and calculation, added extra points. A version was tested with the players paying co-operatively by exchanging cards and trying to solve the challenge together.
- The final iteration removed all class and calculations and focused on the storytelling, and added a new deck entitled Plot Twists to



the game. Players used cards from this deck at the end of their turn to impact the next player's gameplay. Plot twist cards included skip your turn, exchange decks, discards X amount of cards and draw additional cards.

What worked: The storytelling mechanic worked wonderfully, all playtesters enjoyed that mechanic and even from the very first try, it was evident that this created a much more enjoyable and entertaining game than the previous iteration. Plot Twist cards seemed to add a competitive edge to the game.

What did not work:

- $The \ calculation \ aspect seemed \ tedious \ and \ took \ away \ from \ the \ game play, so \ did \ having \ different \ classes \ that \ required \ special \ card-class \ association.$
- The types and concept of the cards also proved problematic. The inclusion of animate Artifact confused the players, not knowing whether the Ability or Action applied to the Artifact or to the character. It was also noted that Ability and Action both used verbs which made them very similar.
- Play testers noted that the co-operative playing style, while fun, did not seem to work in the favour of the thesis, as by interfering in each other's stories and sharing narratives defeated the purpose of finding ones own unique identity.

Outcomes: Storytelling was the right path for this game, as was using cards to prompt the storytelling. Plot Twist cards added a competitive edge. The co-operative aspect of the game was fun, however needed a lot of work to function properly, so it was discarded and more time allocated to focus on the storytelling cards.



VERSION 3:

This version focused completely on the cards, and shifted the narrative from trying to defeat a Storyteller to the character having amnesia and going on a journey of retracing their steps to discover their true identities.

Gameplay: In this version the Story cards were changed to Object, Adjective and Verbs. The player needed to thread them logically to tackle the challenge presented to them. The challenges were random, but based on Booker's dramatic structure (as discussed in section X, page X).

Iterations:

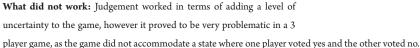
- The first iteration tested the overall mechanic of the new cards, and used random situations for the challenges, such as: one of the Objects in your hand is triggering a memory, what deep dark secret is it revealing?.





- The second iteration replaced regular Adjectives (such as angry and beautiful) with more humours and unconventional ones (such as bilious and petulant) and including their definitions on the cards.
- The third iteration introduced Location cards in which a random location was revealed at the benign of each challenge that helped frame the challenge and narrative as the player's story had to work within that environment. Locations included in the clouds, inside a volcano and a forest.
- The forth iteration added the concept of Judgement, in which other players judged whether the narrative presented by a player was plausible and enough for them to move on to the next chapter.

What worked: The new Story cards proved to be extremely successful, Location cards helped trigger the imagination of players who were less creative in their storytelling.



Outcomes: The new Story cards were the right path to follow and the Location cards added spice to the game. The Judgement cards, while necessary in a competitive gameplay, did not seem to work in a 3 player game.



VERSION 4:

In this version, the content of the game followed Christopher Booker's five dramatic structure stages, as each player had to complete five chapters to win the game, each chapter corresponding with one the five stages. Different Plot lines were introduced, also based on Booker's seven basic plots, each player followed a different Plot.

Gameplay: Players used the same Object, Verb and Adjective cards from the previous iteration (with minor changes and additions to a few), as well as the Location and Plot twist cards. Each of the three players followed a different Plot (the quest, overcoming the monster and rebirth).

- The first iteration used all the afore mentioned cards.
- The second iteration removed the Plot Twist cards from the gameplay, and relocated the Location cards to the iPad (instead of physical cards) and decreased the number of locations per game (they was initially a new location in every chapter).
- The third iteration replaced Judgement with Challenge, in which players have the right to challenge a presented narrative, initiating a discussion







amongst all players on the plausibility of the situation. After the discussion players vote whether the player who told the story would Win (move to the next chapter), Loose (repeat the chapter again next round) or End (end the game by death if their character ended in a scenario which they couldn't get out of alive). The player's turn will be over, and they would no longer continue the game.

What worked: Removing the Plot Twist cards and relocation the Location cards to the iPad, lessened the number of physical cards in play and the players focused more on their stories than additional elements. Challenge worked a lot better than Judgment and added much needed levity to the game.

What did not work: The set-narratives needed more work, as they need to be vague enough for the player to use their imaginative skills, but they also needed to add some depth so that the player would relate and want to invest in the story.

Outcomes: Replacing the problematic Judgment mechanic with Challenge affected the game in many positive ways: the game became even more social as discussion was an inevitable outcome when a player was challenged, and therefore the game became less about competition and more about the journey and experience itself. Removing the competitive edge of the game also resulted in all the players 'winning' (eventually each receiving a portrait in the final game), which seemed to please all the participating players. The addition of death is was an interesting twist to the game.



VERSION 5:

This is the final version tested before the submission of this paper, in it the dramatic structure took the form of a poem-like rhyming short scenarios.

Gameplay: Players used the same Object, Verb and Adjective cards from the previous iteration. Challenge replaced Judgment in all the tests.

Iterations: One iteration tested multiple times.

What worked: The new rhyming storyline seemed to be successful as it kept the open-ended vagueness of the previous version, however it being a poem, the players were amused by the short rhymes. In one iteration the players even tried to rhyme their own stories.



What did not work: The vagueness of the narrative worked for

most players, however it did not work at all for some. It seems like the game has reached a comfortable and successful stage and the issue with vagueness seems to be a personal choice rather than a problem with the game itself.

Outcomes:

This final version of the game was very successful and I decided that the game has reached a very good stage and that the only version left to test after the submission of this paper will be the combination of the physical cards with the digital app.





Appendix E: Lore Gameplay Instructions

pigments... I am Tristram the Transcriber.

Welcome to Lore Publications, where we pride ourselves for our immaculate penmanship, premium quality goat-skin parchments and mildly poisonous

I've been told that you no longer desire being a character in somebody else's story and are interested in having your own adventures published. Marvellous! You're at the right place.

Have a seat, pour yourself a pint of mead and tell me your stories of magical lands, perilous adventures and priceless treasures! Our aim is to spread stories to all the Worlds of Yonder, Wonder and Under. Thank you for sharing your story with us.



Game Objective

Each player must narrate the most imaginative and creative stories they can by using Object, Adjective and Verbs cards to meet the requirements of each Chapter of their story.

All the players who successfully complete all 5 chapters of the game get their stories published by the prestigious Lore Publications Inc. with a custom-generated portrait of their character based on their unique gameplay.



Setup

Each player selects a character to portray from the Character Deck and places the card in front of them face up.

All three Story category decks, Objects, Adjectives and Verbs, are shuffled individually and placed on their corresponding locations on the game board.

Each player draws 3 cards from each pile, a total of 9 cards per player. Players should keep their cards hidden from other players, however, they can look at their own cards at any time.

GAMEPLAY:

Who goes first?



The player who read a folktale most recently goes first! They select their Character, give them a name and, from the three Location cards presented on screen, select the Location that they believe their Character hails from.

The process is repeated clockwise until all players are ready.

Once all players identify their Characters, the game begins!

Chapters:



鎥 In each round, the player is presented with a Chapter from their story. Their objective is to meet the requirements of the Chapter by using three cards from the deck in their hands: an Object, an Adjective and a Verb. The player is required to narrate a short story to the other players threading these cards together in any order they desire, as long as they meet the objective of the Chapter. Some Chapters require the player to select a Location, the player has to take the Location into consideration while forming their story.







Pass:

If the player believes that the cards in their hand cannot form an appropriate story, they can choose to Pass and can discard up to 3 cards of their choice (one of each Story category) and draw the same amount of cards from the same Story categories they discarded. Their turn ends and moves onto the following player. Note: If the player chooses to Pass, they will have to repeat the same Chapter again.

Play:



If the player chooses to proceed, they tell their 🐦 story, placing the Object, Adjective and Verb cards they use in their narrative on the corresponding locations in front of the iPad.



Winning and Challenging!

If the rest of the players agree on the plausibility of the story, they select Win on the screen and the player proceeds to the next Chapter.

If the players disagree then they select Challenge on the screen. The player has a second chance to convince them with the plausibility of their story and all players have a chance to discuss the narrative.

The players have up to 3 minutes to settle on one of the 3 possible fates for the player:

- Win: allows to player to proceed to the next chapter.
- Lose: the story is rejected and the player will have to repeat the same Chapter next round.
- End: in some rare occasions the player finds themselves in an inescapable situation (like being stuck in a ditch inside of a volcano) and the rest of the players decide that the character dies and the game of the player ends!



End of the turn:

At the end of a turn, the player discards the 3 cards in play and draws 3 new cards, 1 from each of the 3 Story category decks. Their turn ends and moves onto the following player.



Winning the game:

All players who complete all five Chapters of their story, win the game!



The Prize!!!

Congratulations! Your story is now part of the prestigious Lore Publications Inc. collection. Your journey will be immortalized on the cover of tome in a unique custom-created portrait inspired by the cards you played and the Chapters you narrated! Please share this portrait with the world through the revolutionary magical 'electronic social portals'.





Storytelling Tips:

Be creative and imaginative. As long as your story meets the requirements of the Chapter, anything goes! You can expand and embellish your story any way you desire, as long you make sure that the Object, Verb & Adjective cards are the stars of the

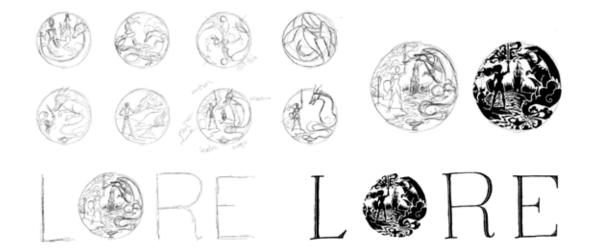
The images on the cards are simply prompts to inspire your story, you don't need to use them literally. An Apple can be an Apple Tree or Apple Pie and the Pouch can contain any object or item you desire - as long as your story is convincing, you're only limited by your imagination!

Be inspired by the Location of your Chapter and make sure your story fits that environment.

Appendix F: Art and Design



Logo: concept, sketches and design.



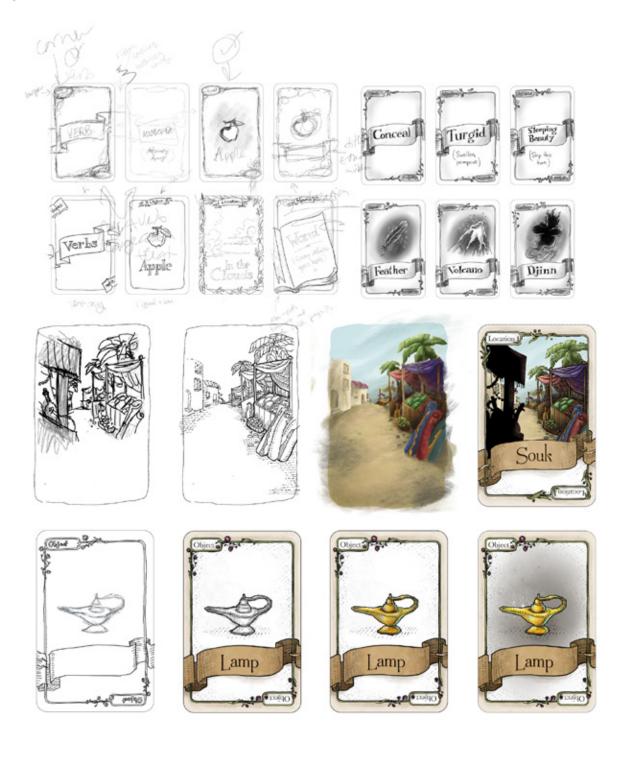


LORE

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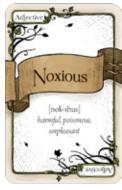


















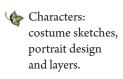




































App User Interface: layout sketch, final artwork, typefaces and assets.









Logo & title font: Mussica Antiqued Copy font: Arno Pro light italic, regular, **bold**







the END

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