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Symbolism in Games

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Abstract

This research project is about symbolism and semiotics (the science of signs) in digital-games. There's firstly introductory information about what symbolism and semiotics are and the different aspects of them that is needed to fully understand the subject. These are things such as the two parts of a sign, signifier and signified as well as the three modes of signs, symbolic, iconic and indexical. Then there's information about how this is all put together in a digital game, that a game isn't playable without some form of signs and that besides making the game playable it is used to enhance the characters, story and experience for the player. How this is used in a more practical way is mentioned further to the end with the different approaches of working with symbolism in games. There's either being subtle or making symbolism the main focus of the game. Through all this there's also the importance of considering your audience and if they will understand your signs that is talked about.

Keywords: symbolism, semiotics, digital-games, signs

Abstrakt

Detta forsknings-projekt handlar om symbolism och semiotik (läran om tecken) i digitala spel. Det finns först introducerande information om vad symbolism och semiotik är och består av för att det ska vara lätt att fördjupa sig inom ämnet. Dessa beståndsdelar inom semiotik som går igenom är de två delarna ett tecken består av; signifier och signified. Det är även de tre olika typerna av tecken, symbolisk, ikonisk och indexikal. Projektet går sedan mer in på hur allt detta sätts ihop i ett digitalt spel och diskuterar då även om att ett spel inte är spelbart utan tecken. Förutom att göra ett spel spelbart används också tecken i ett spel för att förstärka karaktärer och handling för spelaren. Hur detta görs på ett mer praktiskt sett går igenom framåt slutet av texten och inkluderar då de olika tillvägagångssätt för att använda symboler i spel. Dessa tillvägagångssätt är att använda symboler subtilt eller som fokus i ett spel. Genom hela texten diskuteras också hur viktigt det är att tänka på sin målgrupp så att de förstår de symboler som används.

Nyckelord: symbolism, semiotik, digitala-spel, symboler

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1. Introduction

In this paper we have researched symbolism and semiotics and their connection to and use in digital games. This is a subject that is fairly important to make games that the players understand and easily can invest emotionally in the game. While this is important it is a subject with fairly little research on, something people generally don't really consciously think about when creating their games. The little actual research into this subject could easily be because of the subconscious part of it all. The point with using symbolism is to show the players how things are in a more subconscious way. All of the knowledge about meanings behind colors and such are imprinted in our brain already and when creating a game it is possible to make valid decisions without putting much thought into it. However, were one to actually think about it and make conscious well-thought out choices there is the glaring possibility that things could get even better.

This is where doing this research becomes relevant. To understand the subject and be able to do this well thought out design choices you need something to stand on. You need to know exactly what symbolism and semiotics is in order to use them. There is also the need to understand how these subjects work together with digital games. The different ways, approaches, there is to use symbolism in a game is also important to keep in mind in order to be able to choose just the one that fits the current project.

However, as mentioned there isn't much research into this subject where symbolism and digital games meet, especially not in a practical way, and that is why this research paper is important and has a usefulness and reason for being made. In order to help those interested in using symbolism to its full potential in a game.

2. Problemarea

2.1 Background

Digital games is a storytelling medium just like both movies and books are, games are also visual the same way that art is. In movies, books and art, symbols are commonly used to help convey the meaning behind the creation. Symbolism can both help give the story depth and help it being conveyed to the one watching/reading/playing and it can also be used to help portray characters' personalities and backgrounds. One example where symbolism can be used to help portray a character would be if the character has a crown we do not need be told that he is royal, the crown already tells us. The character could also be horned which would give the impression that the character is evil since in the Western culture horns are connected to the devil. One concrete example on how this is used in games is the game Fable (<http://lionhead.com/fable/>, 2004) in which the player character changes appearance depending on what moral actions the player makes, good or evil. Choosing the evil path grants the player horns while the good paths gives the player character fair hair, fair complexion and blue eyes. When telling a story symbolism can be used a bit more subtly, for example when retelling an old classic story in the modern times just keeping the themes and a vague relation to the original actions. One example would be Enslaved: Odyssey to the west (<http://enslaved.namco.com/>, 2010) which is a retelling of the old classical Chinese story Journey to the West written by Wu Cheng'en but in Enslaved it is the same themes and events just told in a post-apocalyptic future instead of a fantastical ancient China. In games there is the more subtle symbolism used in Bioshock (<http://www.bioshockgame.com/>, 2007) where an utopian society puts more importance into science and research than they put on humans. This causes vile experiments to happen and a dependency on science which ultimately leads to the downfall of the utopia. This would on the more subtle level tell the player that morals and humanity is more important than scientific research and inventions.

All of these examples show that the subject of symbols and symbolism is a wide subject that can be applied in many different ways. These different ways are a part of what is called semiotics in which the symbolism, amongst other things, are included. Semiotics is important to understand in order to know just how to use these symbols so that they can be applied to games.

2.2 Research Question

How can symbolism be used in digital games focused on story to enhance the characters and story?

2.3 Aim

The purpose of this bachelor thesis is to find out how symbolism can be used in digital games and how it affects them. This is so that symbolism can be used effectively in digital games to enhance the experience for the player and how the player then perceives the story and characters the way they were intended to be perceived.

2.4 Previous Research

This section is about the research into the subject of symbolism and semiotics and exists to see what has already been said on the subject. It also has the important function to explain exactly what symbolism and semiotics are.

2.4.1 Academic Research

We conducted our research by using different scientific databases such as Summon (<http://www.bth.se/bib>, 2013) and also Google Scholar (<http://scholar.google.se/>, 2013). First of it was decided that we needed to find out more information about the symbolic, symbols and symbolism. We needed to know exactly what symbolism is and what it means so that we could use it correctly further on in our work. Through searches with those keywords we found our way to the semiotics which symbols are a part of.

The book *Semiotics: The Basics* by Daniel Chandler,(2007) covers the basics of semiotics and describes that subject in detail but with such a simplicity that is easy to understand. The book tells about how semiotics consists of different types of signs and what these signs mean. A sign can be anything, a word, an item, an act, a flavor or something else, but a sign does not simply naturally mean something. “Anything can be a sign as long as someone interprets it as ‘signifying’ something - referring to or *standing for* something other than itself.” is how Daniel Chandler (2007, p.13) explains it. The fact that the sign does not gain meaning until someone gives a meaning to it means that the meaning of a symbol is more dynamic than static. The meaning changes depending on who

gives the sign meaning and this is usually determined by the persons' cultural upbringing. One example of this is how in Western countries black is the color of mourning while in, amongst others, India's mourning color is white. In this essay we will put focus on general Western culture and the traditions in symbols that's most commonly expressed in Western culture.

As mentioned, a sign can be anything and gains its meaning when given it. In order to separate the sign and its meaning the linguist Ferdinand de Saussure, who was one of the pioneers in semiotics, created a distinction between the meaning and the sign which is useful when talking about this subject and when applying it to a medium, like digital games. The distinction is that a sign has two components, first is the signifier which is the form the sign takes, a word, an item or anything else that were mentioned before. The second component is the signified which is the thing or concept the signifier means. So if we use a previous example the crown is the signifier while royalty is the signified and together they are a sign. This is important because when using a sign in a game it has to be decided what the sign is and what it means. You can't have a meaning, a signified, without a sign, a signifier, expressing it,(Chandler 2007)

There are also different modes of relationships between the signified and the signifier, which could be explained that there are different types of signs. There are three modes of signs: symbol/symbolic, icon/iconic and index/indexical- (Chandler 2007, pp.36-37). These modes are however not exclusive, a sign can fit into several modes depending on how you look at them. (Chandler 2007, p.44)

We can talk about the symbolic mode when the signifier and the signified do not actually resemble each other and we know its meaning through learning the meaning by simply growing up in our culture,(Chandler 2007, p.36). This means that this mode is heavily influenced by culture and upbringing and thus the mode that differs the most between cultures as mentioned earlier. For example language falls into the symbolic mode. This is because the word, for example a man, has no resemblance to an actual male human neither in appearance nor in sound but we still know the meaning of the word, (Chandler 2007, pp.38-39). It is also this symbolic mode that is the most common and well known by people who do not know much about semiotics and the one we aim to focus the most on in this essay and in our game design project.

An icon is somewhat like the opposite to a symbol in the way that an icon always has a resemblance between the signifier and the signified. This resemblance can be visual or something

else like a taste or feeling of something, (Chandler 2007, pp.36-37). An icon is an icon when it resembles an object in some way, however there is no actual connection between the icon and the object. For example a picture of Marilyn Monroe is an icon signifying her, but it isn't actually she. It has been said that every picture is at least in part iconic but most icons also have some sort of symbolic or indexical qualities. (Chandler 2007, pp.40-42)

The indexical mode is opposed to the iconic one in the way that the signifier and the signified are directly connected to each other. This could be smoke and fire, footprints of a cat and the cat itself, a knock on the door and someone knocking on the door, (Chandler 2007, p.37). One way to describe it simply would be that the indexical mode indicates something, smoke indicates that there is fire for example. An index does not require to be interpreted and it is not cultural. We all know that fire generates smoke and thus everyone can understand that sign. The indexical mode also is an evidence that something else (the signified) exists, (Chandler 2007, pp.42-44).

While not being a part of these three modes nor traditionally classified as a sign, metaphors still have a strong semiotic connection and resembles the symbolic mode especially. It is when you explain an experience with terms belonging to another that you create a metaphor. One example would be "All roads lead to Rome". A metaphor does not need to be verbal, though that is what is most common, (Chandler 2007, pp.126-127).

Chandler provides basic knowledge of what a sign consists of, a signifier, something that portrays the signified which is the meaning. There's also the different modes of signs, symbolic, iconic and indexical. Even metaphors tie into the subject so the subject of semiotics is very diverse. With this basic knowledge gained from Chandler's book it is possible to move on and look at how this is applied in digital games.

2.4.1.1 Semiotics applied in digital games

All of these modes of signs that just were presented are used in digital games but games in themselves could be seen as being iconic in the way that they look like the reality according to David Myers in *The anti poetic: Interactivity, Immersion and Other Semiotic Functions of Digital Play* (2004). However, different game genres use signs differently and it has been said that the roleplaying games use more contextual relationships between their signs. This means that the

signified, the meaning, of the sign can change depending on the circumstances and other signs around it. For example we have the color yellow which would be considered a warm color in relation to blue, but in relation to the red color, yellow would be a cold color, (Myers 2004).

What Myer speaks about, the different uses of signs in games, is more about how the story and gameplay (how a game is made to be played with all of its rules and objectives) is and not so much about signs and symbols within the game itself, with the exception of contextual symbols. It is however something that is interesting and important to keep in mind that there are many different ways to look at this subject.

Another way to look at the connection between semiotics and games is presented by Rudy McDaniel, Erik H. Vick, Stephen Jacobs, Peter Telep in *Cardboard Semiotics: Reconfigurable Symbols as a Means for Narrative Prototyping in Game Design* (2009). Puzzles are used often in games and a puzzle has a strong semiotic connection in the way that is like matching signs together. Figuring out what fits where by using the meaning behind signs, clues and such. Thus the whole gameplay in a game is a very semiotic experience. There's also a sort of almost paradoxical duality to games and their meaning that makes it difficult to analyse them with semiotics. The details and parts, actions and characters, of a game that each have a meaning of their own are representations of their individual meaning (signified) and the game itself helps to represent those meanings (signifier), while not representing something of its own. That is the first side of the duality of games and their meaning. The second side of the duality is when you look at the game as a whole it is a representation (signifier) of a meaning when the game is created with a purpose (decided by the creators) behind it, something that it is supposed to tell, like the morale of the story (signified). This part of the duality sees the purpose behind the game as the signified and the game is the signifier that tells and points to the purpose. (McDaniel, Vick, Jacobs & Telep 2009) This connects to something that always is true for storytelling, that you need a purpose and aim behind your text, something you want to tell.

In practicality this would for example be characters archetypes such as The Hero or The Mentor as explained by Vogler in *The hero's journey*, (2007). Other practical examples could also be important plot points, playable characters and such that are these symbols. Also, when choosing and implementing these symbols there are several questions you could ask yourself to ensure you

choose the right symbol and have the proper use for it.(McDaniel et al. 2009) Some of those questions are as follows;

- What is the dramatic purpose of this symbol?
- What in-game actions, environmental effects (art, particle effects (visual simulation of something like fire and snowing) and sound effects), and NPC (Non playable character) behaviors can help strengthen this symbolism as the symbol evolves during gameplay?
- How do these symbols contribute to the high-level story (the initial concept of the story, what it is meant to be in the end and not its small details)?
- How do these symbols relate to other symbols? (McDaniel et al. 2009)

This source by Mcdaniel et al. goes more into the narrative part of using symbols which can be a bit more obscure than the pretty much more straightforward use of visual symbols.

2.4.2 Industry Research

We also have done some secondary research that is more practical than it is academic and analytical. These sources we will use primarily when we do our production but they are important to keep in mind from the very beginning.

As Craig Deskins argues in *Semiotics in Video Games* (2009) a game without signs would be basically incomprehensible to the player. There is a structure in digital games that is common for almost every game which makes a brand new game easy to understand since it includes these important signifiers. One example could be an arrow which helps the player know where they are and where they should go, another some kind of red bar, (or something else) that signifies the players' health. Without that how would the player know when to be careful and when to heal? There are these basic signifiers in a game that help the player to understand the game and keep track of everything within.

If something is missing or wrong (like text being badly translated) the player will have trouble understanding the game, having trouble knowing what the point is, (Deskins 2009).

In Deskins' text there is a lot of talk about why it is so important to utilize signs and symbols in games. Not only does it give depth to the story, characters and environment. It is also a useful tool for the most basic of things, allowing the player to understand the game.

“*What Happened Here?*” *Environmental Storytelling* by Matthias Worch and Harvey Smith (2010) discussed a lot about the environmental storytelling (telling the story using the environment), the use of visual signs and symbols in the environment which helps tell the story about that place and those who inhabit it. There are many tips on how to do this with many examples in this text so it is easy to understand and easy to use when trying to create an environment that tells a story.

By using visual cues, symbols and signs, the story of a place can be told visually with no need for the more classic textual narrative to tell the story of the place. Instead the player can deduce it themselves. By putting different items and such in the environment will help to communicate some of the following points: the history of the place, who lives there, what might happen next, (Worch & Smith, s.13).

There is something called telegraphing that is common in digital games and that has a semiotic origin. For example telegraphing can be bloodstains leading into a bathroom which signifies that a monster is there. The player can analyze this and decide what to do about it, load the gun and go in prepared or avoid the bathroom. It is simply when something in the environment signifies something useful to the player, that is if the player can understand what the signified is. (Worch & Smith, s.32)

It is a quite diverse subject but we started with the pure basics of semiotics with Daniel Chandler's book. Signs that consist of a signifier with a meaning that is the signified. Also the different modes of signs were mentioned, symbols, iconic and indexical. A lot of things to take into account but important to understand the subject.

When looking at how semiotics are used in games the first point is that it varies from the different genres of digital games which you need to keep in mind. Semiotics are also a big part of constructing a narrative since your game can have a deeper meaning, purpose, and the small parts in your game each can have an individual meaning contributing to the whole. There's also important to keep in mind the actual importance of using signs in games simply to make the player understand how to play the game. Or, using environmental storytelling to make the player understand the story

better and get the right clues and feeling. Thus semiotics, even when narrowed down to in digital games, as a subject you can look at in many different ways.

2.4.3 Game Analysis

In order to see how symbols and semiotics work together we conducted a small analysis of a game. This example includes the digital game Fable (<http://lionhead.com/fable/>, 2004) that has a clear alignment system for the main character. Throughout the game there are choices for the player to make that will affect how the player character looks like. These choices are split into two groups, good choices and evil choices. The further to one side of the alignment charts the more it affects how the player character looks.

When doing good deeds the player characters becomes handsome and fair. Their hair is blonde, their eyes blue and their skin light. The player character can even get a halo, which is a Christian symbol for goodness considering that the angels, Jesus, Virgin Mary all are portrayed with halos. The evil deeds stand in contrast to the good deeds by being much darker. The player-character also develops glowing red eyes and grows horns, thus resembling demons or the devil who are obvious evil characters also from Christianity.

The light theme represents what we in the Western culture consider as good, the reason for this would be because of our fear of the dark. Humans have always been afraid of the dark because we can't see what hides within it. That is why we see the light as something good, it lets us see through the darkness. There's also the big influence Christianity has in the Western society since it has been the ruling religion for hundreds of years and more than just being a religion it has been heavily integrated in how countries are ruled and how our society is built. This is why the good alignment is represented with a halo and the evil with horns.

The good and bad alignment also affects the story by changing how the NPC's (non-playable characters) react to the player character's presence. If he is good they celebrate him, see him as a hero and if he is evil they will run in fear to avoid his apparent wrath. This affects how the player perceives the story, even though it doesn't change the main story's plot.

Through this example it can be seen how semiotics and symbols can be used in many different ways in digital games to express characters using what we subconsciously know. There's both use of colors as well as symbols that all work together to present the player with the right

impression of the character and their alignment.

3. Method of Production

The way we chose to put our research into a production was to create a digital game in which we would make sure to utilize everything we through our research had learned about semiotics and symbolism in games. With that initial choice made, to create a game, we began our production, which this section will be about.

3.1 Research Methods

The first step taken in our production was to find some research material to use as a foundation for the rest of our project. The sources we were looking for were firstly sources that would in a clear and concise way describe what symbolism and semiotics are. Both so that we would have a greater understanding of the subject ourselves and so that we would be able to convey this information to others. We were also looking for sources that would approach the subject about symbols and semiotics specifically in digital games. This part of our research is more specific and serves as a form of specialization into the subject. This is because the use of semiotics and symbols in just digital games were the focus of the research question and this project. The most straightforward approach to this is the one we chose, to use databases available on the internet to find reliable and detailed sources that we could read and study.

There was also some time taken to analyze a game to see if we could use our research and with it see how the creators might have been thinking when they made some of their design choices. We chose to analyze Fable (<http://lionhead.com/fable/>, 2004) since it has a clear implementation of semiotics in the visuals of their player character.

The way we chose to portray what we had found through our research was to make a digital game with the help of other students with knowledge about creating video-games. We chose to make a game since it is a very hands-on way to try the things we researched and a very easy way for us to see for ourselves how to use symbols and learn first-hand what we need to think about.

3.2 Design Methods

We worked as part of one group of seven, one graphical artist, two game designers, one programmer and three sound designers. The first step taken with the group to decide what our game would be

was to arrange a brainstorming session where we used a whiteboard to write down ideas. We chose to use this so that it would be easy for everyone to be included in the discussion and to clearly see what we had already thought of. Having everything up on a whiteboard makes it very easy to see what we already have and thus also what we are missing, it is simply a good overview. When using this we first off chose what it was that we wanted to decide, for example one of the first things we chose was which genre we wanted to use. To decide this we made a mind map on the whiteboard where we wrote down any idea we had. (See Figure 1.)

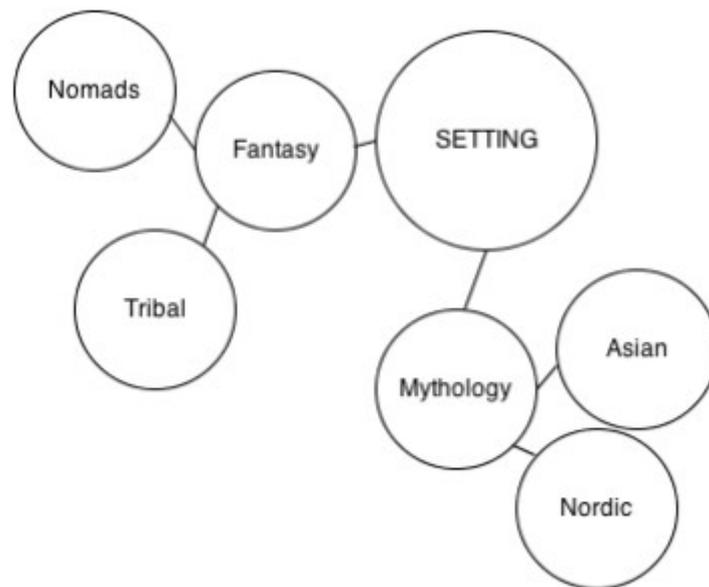


Figure 1, example of our mind map

We then took a step back and talked about the suggestions we had. Suggestions were erased and after some discussions we had chosen which genre to use for our game, fantasy roleplay. Meaning that it would most likely involve magic, a hero on a quest and magical beings the roleplay part is more in how the game is played, such as having a level-up system. That was the method we continued to use for the most basic of planning. We decided genre, setting, themes like that, as well as some general things about the gameplay like that it would be real-time combat. Genre was as mentioned fantasy roleplay, the setting were inspired by a Scandinavian forest and we used themes of illness, bravery and loyalty. Most of these choices were rather general so that everyone in the group would get some say as to what the game would be. This is something we considered important because if everyone felt as if they have a say and have a part in creating the game they will be more motivated to work on it. However, since we are all specialized in different areas of game development, as mentioned earlier, we left the details open to be decided further down the

line, by those who knew most about the specific type of choice to be made. For example the graphical artist had the final say when it came to deciding the color scheme. This was partly to save time, everyone can't agree on every little detail if efficiency is sought after and partly to ensure the decisions are good and thus made by someone who knows most about it.

The smaller more specific details we all wrote down in our design document (Ryan, 1999). This includes, for example, a list of every item the player can find in the game. A design document is a great tool to use since it is one place where basically all information for the game is stored. It should be used by all members of the project to go back to in order to confirm what to do and how much is left of the game. It also works great to keep everyone on the same page about just what exactly the game is going to be when finished. Further down the line the design document also has the potential to work as something that communicates our game to outsiders so that they too just from the text are able to understand what we want to create.

With the functions of the game planned in the design document we shifted focus to creating the story of the game. This was done by first trying to read up some about the Norse and Chinese mythologies which we had chosen as inspirations to find something to use for our story. One thing we found that served as an inspiration for the story was the chi spring that has water that would grant eternal life that we read about in the Chinese mythology. There we also found the trickster gods in the shape of foxes which we used as inspiration for our villain, (Roberts 2010). So for story we were mainly inspired by Chinese mythology while we used the Norse mythology for creating the world, such as naming things and choosing enemies, (Lindow 2001). With some general guidelines decided on for the story, such as deciding what it is that our hero needs to do which in our game is save her ill brother, we first wrote down a simple document stating what will happen at what time. This was then used to make the full script for all the dialogue . The method of writing down everything supposed to happen in the game story wise is a quite important method. First because having everything written down creates something that is easy to view and understand for everyone involved in the project, as well as for outsiders. But mainly writing a script is a good method because then you can plan your game around it. There is something to work with and no need to improvise and just make something up as you go along. Planning ahead yields a better result in the end (Kennerly 2004).

When we had decided what the game would be about we made an art bible which was made to help us see more clearly of what we were aiming for, both style-wise and color-wise. An art bible was

really important at this stage of the work for all of us in the group. It was a collected folder with inspiration for everyone in the group to view so that we all had the same visual understanding of the game we were going to work on. It contained various pictures of games, environments and clothing. Some of the pictures were photographs intended to help inspire and create the setting while others were pictures to help inspire the art style. The type of environments we looked at were pine forests, and other Scandinavian environments since our game was influenced by old Norse mythology. The clothes we looked at were from different nomadic groups from all over the world to get a sense of what type clothes they were wearing. We came to the conclusion that they often use more leather and natural colors which we all thought were the most reasonable choice of material for our game as well.

When the art bible was done we continued working with the overall color-scheme of the game. The reason for this was to have a clear understanding of what colors we were going to use and make all objects in the game more uniform. The color-scheme was, as the art bible, easy to be viewed by all group members so no one made any mistakes. The colors were gathered from many different games but mainly from the game Bastion (http://supergiantgames.com/?page_id=242, 2011). We chose this game because of the high-saturated warm and cold colors. These colors suited us since our artstyle in the game wasn't supposed to be realistic.

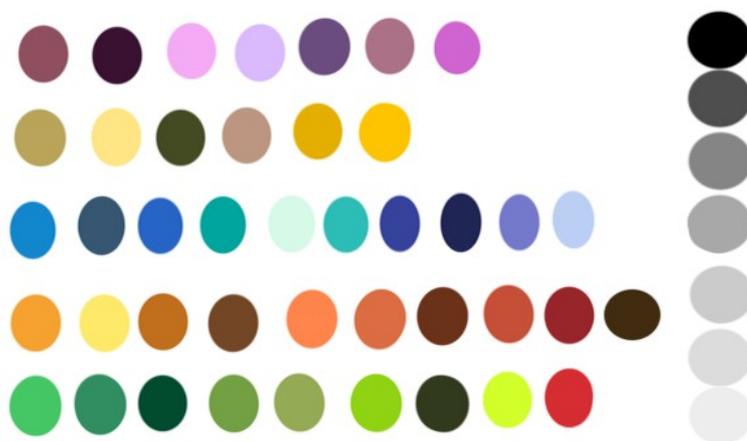


Figure 2, The color-scheme

When these parts were done we started concepting some drawings of the environments, enemies and characters while having the art bible close to hand. One example of a concept was for the trolls who were inspired by Scandinavian folklore, just like the rest of our enemies, but we still needed to find a way to make them original through trying different concepts. The concepts were just early ideas of what would be the final product and as mentioned above, they give a vision of the

art style for everyone in the group. These concepts were later on shown to the group for feedback if anything needed to be changed or added to. The reason for this was because we wanted everybody in the group to know what we were working on at the time and feel equally involved in the process of creating a compelling art style.

3.3 Work Methods

When our game had been planned out properly it was time to start working on creating the game. No one in the project had a set position in the group, everyone were allowed to help with what they wanted to, but mainly everyone stuck to what they knew though. The sound designers especially worked only with sound and our graphical artist kept to the graphical part of the production as our programmer kept to programming mainly. However, as the game progressed the designers were a bit phased out from their original work tasks as the game had already been designed. Due to this the designers' roles were a bit more free and helped our only graphical artist with creating some models for the game as well as did some simpler programming work. This slightly more free way of group roles is very helpful when some things are finished and the people who worked on that need something else to do. It is also very helpful if someone is running behind and needs additional help with the task at hand.

To keep track of the different tasks we needed to get done we set up a trello (<https://trello.com/>) account for our project. Trello is a webpage where you can put up different posts. These posts can be arranged so that they are placed in different weeks. In each week we put four posts, one for each work section, design, sound, programming and graphics. Then, in each post there were a list of tasks to be completed within that week. This way of working was inspired by the scrum method (scrum.org, 2013) but we had a slightly simplified version since it still is a fairly small group constantly working in the same room so we can keep track of each other easily.

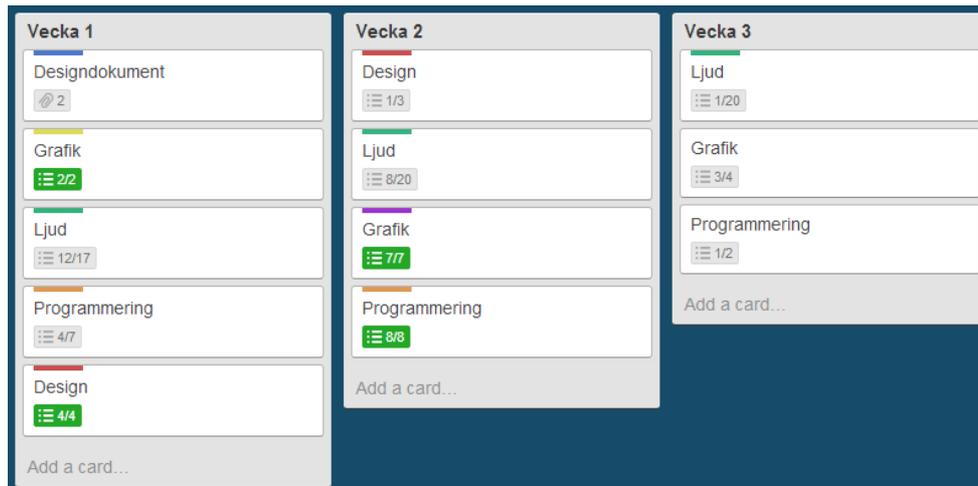


Figure 3, The Trello layout.

Since we had a focus on using symbolism in the game and using the visual to represent and tell the story, express characters and such we had a simple method for this. We made sure to think about every choice we made, for example when choosing colors for our main character's clothes we first considered who she was and the colors that could represent that were the ones we chose. That's really how complicated we made it for us. Most important was the creation of our main character Eira, a name that means snow and also has a connection to the Norse goddess of medicine and healing. This name was chosen because it takes place in a cold world inspired by old Scandinavia and what Eira does in the game is to save her and the nature from illness, thus the connection to the goddess fitted too. We also made choices about how she would look, like keeping her hair in a ponytail because she is practical and doesn't want it in the way. Colors also played a part as we chose more natural colors to symbolise her connection to the nature. Throughout the process of creating the game we made plenty of choices like this, from shape, color and materials. Every choice was made to enhance what just that part of the game was supposed to portray. It may seem like an unimportant decision to make if a bench is made of steel or wood but when we choose to make the bench wooden we show that these people live a natural life.

It may seem unorganized to simply make the decisions as we go along, but we simply did not need anything more advanced, it most likely would have taken too much time. This way the workflow was very intuitive, free and open for ideas. And with the creation of concepts and other documentations we made sure not to forget details. We did research for some of the choices we made, to find out exactly what a color stands for or to find some object with the feeling we were looking for.

3.3.1 Technical Methods

Besides using trello as a technical solution for working on our game we also had several other programs. For easy access to all information and documents we used google docs. With the documents up on the internet they don't run the same risk of disappearing and several people can write on them at the same time. This is great to get everyone in the group to contribute to the documents such as the script and design document at the same time. This is an effective way to work since everyone can work at the same time and no one has to sit without work. It is also a good way to keep all documents in one place and you can easily hand out the link to anyone outside the group so they can look at it. Similar to this was our use of dropbox where we kept research documents not written by us, the art bible and other visual items as well as every component for the game itself. This too makes for easy access to everyone in the group and is a structured way to keep track of where things are kept. It isn't however easy to show what we have in our dropbox to others which is why the things kept there are more private. It also makes up for how it isn't that easy to share pictures in google docs.

For the game itself we used the Unity3D game engine(<http://unity3d.com/>). A 3D game engine that is free so that everyone in the group is able to use it. We chose this because firstly, we wanted to use 3D since it is the standard for modern video games and thus important for us to show that we can work with it. This leaves us with a few alternatives but Unity has a fairly open and customizable way of programming so that it is easy for us to do what we want with it, it was also a personal request from our programmer to use it and no one had any objections seeing as Unity is very user-friendly so we all could learn to use it fairly well without it taking up too much of our time.

One thing with working in Unity is that with only that program it is difficult to share the files and have everyone working together which is necessary especially when all the graphics and sounds need to be implemented. This was solved by using two programs one called github and one called sourcetree where sourcetree is a program you download on your computer to manage what you have on github. This works by there always being an up-to-date version of the game available on github that everyone always has access to, and by downloading it to your own computer you have an up-to-date version you can work with as much as you like. When the changes are made that you wanted to do it is simply to upload your version to github using sourcetree again and it will update so that your changes appear in the uploaded game version.

It appeared quite complicated at first but since our programmer had used it before we could learn from him how to use it. The reason behind using these programs are obvious, the benefits are that everyone can have an up-to-date version of the game and can make any changes they want to it without bothering anyone else's version. It makes the work much easier and more effective when there is no need to move around files on dropbox or with a usb-memory.

A lot of programs were used for creating the graphical part of the game, basically we started of by 3D-modeling in Autodesk Maya with a reference of how the model should look close to hand. Maya is a 3D-program that has many functionalities but for this project we mainly used it for 3D-modeling, rigging and animations. When the basic 3D-model was UV-mapped and done with a very low-polygon count, so that it wouldn't be too taxing on the game engine, it was exported in to Autodesk Mudbox. Mudbox is a program that can handle very high-polygon models so that it is possible to sculpt the models to make them more detailed, you can also use the program to create textures for the models. After this you can use Mudbox to create a normal map which enables the user to use a low-polygon model that looks like a high-polygon model. This is used to optimize the game since game engines, such as Unity, does not support high-polygon models. As for the textures that were mentioned, Adobe Photoshop has also been used to further work with the textures, such as adding details and adjusting problems that might arise.

The reason we chose to work with these programs was because we felt that we were well acquainted with them and did not have to waste time on learning a new program. This makes the workflow more efficient and lets us focus a lot more on the actual production using existing experience rather than just jumping on to new program which would have taken up a great deal of time.

4. Result and Discussion

4.1 End Result

The game itself is a fantasy adventure roleplaying game with real-time combat. You play as the main character Eira who is a young female hunter in a nomadic tribe living in a world inspired by ancient Scandinavia. As the game begins she is worried about her ill brother and this eventually triggers her to embark on a journey to find him a cure, and along the way she finds out that there is more behind her brother's illness than she initially thought.

The camera, which decides the view of the game, has a fixed position following the player character around with a top-down view. The gameplay is simple, the player travels around the world exploring while fighting enemies in real-time combat for experience to level-up and thus get stronger as well as find loot, things that can be used for various purposes later on in the game such as for customizing your armor.

We chose to only make a slice of the game that we had planned using our design documents and scripts. There was not enough time to do everything we had planned, and do it well. This left us with the choice between doing a complete game but do it quite poorly and rushed through, or to simply do a slice of the game and do it really well, like a demo. As mentioned we chose the second option since it appeared to us that it would produce the best end result. The slice of the game that has been created is the very beginning and it could be seen as an introduction to the game, the first part where the player learns about how to play the game and is introduced to the world and the main character. We chose to make the beginning of the game because it would make a very nice demo and is easier for people to play and understand than if we had chosen a part of the game that was right in the middle. Starting with the beginning also makes it easy for us to just keep working if we would get time to do more done than we thought on the game. Working chronologically also is a simpler way to do things since it is easier to keep track of where you are. Especially when working on things like implementing the story.

When creating a slice there are of course many things that never make it into the game that we still had planned for and written about in our design document. There was for example supposed to be more areas with different environments to explore. A mountain, a shore and a swamp to mention a few. We did not, as mentioned, have time for these areas and the story that would have

brought the player there. In losing those areas we also lost a few other things, besides the story. There were for example supposed to be a variation in enemies depending on where in the world you were. Draugr (a kind of zombie) would be the main enemy in the swamp while the more mountainous would be populated mainly with trolls. The first area that we have made were supposed to have wights too, aside from the wolves, but time ran away from that too as it wasn't high enough on the priority list designed to make the area complete. One could play a game with only one type of enemy, but if the game has no NPC's at the beginning then we would lose all of the story planned for the game. So that was one choice we had to make to priority on our game.

4.1.1 Using Symbolism

The use of symbolism in the game is quite subtle and not something the player would know has been used in the game first off. This subtle way of using symbolism is implemented in digital games since it won't disturb the actual game but still enhances the story and characters in the game by using the more subconscious part of the player's mind. One example could be how practical our main character looks with her hair out of the way and clothes that can take a lot of hard work without being torn or getting in the way (See figure 4). This is not something the player would stop to think about for a while since it doesn't affect anything in the game that much and since it isn't a very strange thing that demands attention. Instead it is something the player is more likely to register subconsciously and that just without much work adds to the character. However, were the player to stop and think, 'why do I see the main character this way?' they would be able to link it to the way she looks.



Figure 4, The main-character

Some other examples of where and how we used symbolism to enhance the game experience is amongst other the design of the enemies. The only type of enemy implemented so far is the wolves. Wolves in themselves are something humans see as dangerous, they are after all carnivorous animals with great strength and speed. However, in our game they are supposed to be more aggressive than usual, to the extent that the characters reflect over it. In order to portray this visually, and not only by their actual aggressive actions, they were designed as being much bigger than any real wolves. They almost reach the same height as our main character herself which renders them with a more threatening and imposing look.

As for the world itself we were after a cozy homely feeling, at least for the parts of the game that were made in this slice. This is because it is right in the beginning, before things turn to bad, and it takes place partly in Eira's own home. So these were places that should feel safe and feel like home. Overall there is a great use of warmer and bright colors and a softness to the textures and shapes of things. The forest appears unthreatening since the trees are all living and bright, there's flowers and grass. All to create a slightly idyllic picture of the forest. Further on in the game this would also cause a distinct difference between the parts close to home and the nature further away from safety.



Figure 5, The forest

To create this feeling of home in the village Eira is from, where the game starts, we chose the approach of making it seem alive by using details. There could have only been tents, but that would not give the player the feeling that people lived there so we added things like bonfires, benches, pillows and such to fill out the world and create life in the environment. All these props to give the world life also have a function to tell the player about the people living there. What kind of bench, what kind of cauldron those kinds of things say a lot about the culture and their level of technology. Thus there is no need to actively *tell* the player about the world and people, they can see it themselves when we simply *show* them. Which probably is the most famous writing advice, show, don't tell, which is easily applied to games as well.



Figure 6, The home village

We haven't only used symbolism in the visual part of the game but also when naming characters and places as well as when writing the story. When naming things we have looked at old Norse words, again since we have been inspired by old Scandinavian culture throughout the game. As mentioned earlier Eira's (our main character) name has meaning behind it, both snow and curing illness which parallels the story. Her brother is supposed to very close to the nature and has the name Skógi which means forest. The small place that is Eira's home village is called Hlifaheim which is put together from the two words meaning shelter and home. The first two forests we have named Ádrmork, which means first forest, and Maervidr, meaning maiden forest. These are pretty straight-forward and explanatory names because we wanted it to sound like what these more tribal people could have actually named then. The maiden forest part is because in that forest there lives a forest wife (an old Scandinavian mythological female creature that reigned over forests and lured men to her using her looks) who reigns over the forest, thus it is the maiden's forest.

When naming characters and places using a language that very few people know it is more than subtle symbolism. It isn't very likely that many players will understand the names or the meaning behind them, yet some might or they will find out. One might question how relevant it is to have names someone won't understand when it is about expressing a character or place. But there might be someone who understands and if not that the creators will always know that they have made a thorough job.

We chose to take the subtle way of using symbolism in digital games. At first, with only the two of us researching symbolism we wanted to do something more, to do a whole game focused on symbolism. However, as we teamed up with others that idea had to change. When working with other people compromise simply is something that will happen, at least if you want to include

everyone in the process. So we came to that moment of compromise you easily find when wanting to focus on symbolism, since that focused way simply didn't work with what the others in the group had in mind.

The two people who originally put together the team had the initial idea of creating a game inspired by the old classical roleplaying games. This was the idea that made us need to compromise, a classical roleplaying game has its own set of rules and making a more conceptual symbolic game just simply doesn't fit with a roleplaying game. This was something we just had to accept, we liked the idea of a roleplaying game too and since we were the ones to be added to the group we figured we could adhere to their initial idea, which isn't to say that they haven't made compromises too.

Making use of subtle symbolism might not have been the way we initially wanted to take, but it still works with our research and question formulation so the choice to compromise doesn't hurt our actual work at all. Of course, exaggerating would have been fun but considering that the subtle use of symbolism is the more commonly used way it is probably good to get some practice in that area.

4.2 Answering the question

“How can symbolism be used in digital games focused on story to enhance the characters and story?” That is the question we have explored in this project in order to be able to answer it. We came to the conclusion that there are two main approaches to how symbolism can be used. One is the subtle way and the other is the way when the symbolism is the main focus.

The subtle way is the one we tried in our work. The symbolism isn't the focus of the game, it is simply there in the background without adding to or bothering the gameplay. Instead it subconsciously enters the players mind. Using symbolism this way is the most flexible and the one that requires the least amount of work and research. Since the symbolism is a part different and independent from the gameplay itself it can easily be applied to any game without affecting how the gameplay is designed. This is effective in general game projects since no kind of compromise needs to be done between the symbolism and the gameplay. It is very easy for the game to reap the benefits of using symbolism while not having to sacrifice anything else.

In contrast to this you can create a game with symbolism as a main focus in the game. Then they would have to adapt what the game is, how the game is played, the gameplay, to the symbolism. It

would be more difficult and take a lot more thought and planning than the subtle way. Still, it could make for an interesting game, if done correctly. Using symbolism this way would mean that it is an integral part of the gameplay. The choices the player makes, how the player proceeds through the game, is all dictated by a form of symbolism that leads the player through the game. It can be something as simple as solving puzzle, following clues that have hidden meaning or it could be a game that is more conceptual. More conceptual in the way that it has no clear traditional narrative and perhaps a more dreamlike style.

There are plenty of ways one could use symbolism the less subtle and less traditional way. It simply is more work and thus less effective, it demands more compromises if the game isn't designed for that kind of symbolism. However, if a game were to be initially designed for utilizing symbolism as a big focus in both story and gameplay then that excludes the need for making a compromise it does instead give that need for more planning initially. Working with puzzles of any kind, symbolic or not, requires this planning. So when choosing this route to use symbolism one needs to be prepared for that.

The player needs to understand the symbols used in a digital game, otherwise the game would most likely be confusing or not have the same impact. As mentioned previously in this essay the meaning behind a symbol depends on the cultural upbringing of whoever looks at it. Where you are from in the world has a great influence on this and as mentioned the Western world does not even have the same mourning color as in Asia. This results in that it is quite likely that not everyone all over the world will draw the same conclusions from the symbols in the game. If creating a game heavily dependent on symbolism this could be a problem but with subtle symbolism it matters slightly less if not everyone understands.

This difference in interpretation of symbols has a few ways to be solved, or worked around. Firstly, it is possible to choose which area of the world to focus on and keep to the symbols present in that. For example, we chose to work towards the standards of the Western culture, with a focus on what we ourselves know. One could also take a challenge and try making a game with the symbols used in another culture. A second way to work around this that needs even more work is that one could try to use symbols that everyone could understand, things that different cultures have in common. Either way, making sure that your targeted audience understands everything is work enough, but you also need to keep in mind that to get exactly everyone to understand is near impossible.

In the end we can look at what we have done, how we implemented symbolism in our game and ask ourselves if we could have done it differently. The answer would be yes, we could have. As written earlier there are different ways to apply semiotics and symbolism in games, and we chose the subtle way. This was because it is the way that works best for the genre we created our game in. But had we chosen a different genre, or had we perhaps worked alone, we could have put much more effort into making a game where symbolism was the main focus, and not just something subtle. This would have been more challenging but also perhaps more fun and interesting. If we were to do this again it is likely that we would want to do it that way, to try them both and to properly be able to play around with symbolism and perhaps create something more unique.

But that is just the thing one needs to keep in mind when using symbolism in games. Which way of using symbolism would work best for just this project?

5. Dictionary

Gameplay how a game is made to be played with all of its rules and objectives.

Icon a mode of sign that resembles an object in some way, however there is no actual connection between the icon and the object

Index a mode of sign where the signifier and signified have a direct connection to each other, like smoke and fire.

Metaphor when you explain an experience with terms belonging to another experience.

Narrative how a series of events are presented, non-fiction or fiction, in any medium.

Normal-map is a texture map usually used to fake high-res geometry detail when it is mapped onto a low-res mesh by faking lighting bumps and dence.

Particle effects visual simulation of something like fire and snowing.

Polygon is a 2D-shape with at least three edges.

Polygon mesh consists of several polygons put together to form a 3D-shape.

Rigging is the process of preparing a 3D-character or 3D-object for animation. It involves setting up an internal skeleton that affects where your character's joints are and how they move.

Semiotics the study of signs and sign processes both visually and in language.

Signifier/Signified the two parts a sign consists of. The signifier is the form the sign takes and the signified is the meaning behind the signifier.

Signs anything that represents a meaning other than what it is.

Symbols the signifier and the signifier does not actually resemble each other and we know its meaning through learning the meaning through simply growing up in our culture

Telegraphing used in digital games when something in the environments warns the player of what will come so they can prepare for it.

Texture is a 2D-image to be put upon a polygon mesh to give it customized details and colors.

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