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Emotional design in RPG's

Creating a sense of homeliness and familiarity in
a hub area

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Abstract		
<p>The aim of this thesis was to examine the different methods that can be used to evoke diverse emotions in a player, focusing on the feelings of homeliness and familiarity that are created in the different hub areas in role-playing games.</p> <p>The thesis will begin by explaining theory behind emotional design in games and explaining how this connects to ludology and storytelling in its basic form of rhetoric. After this, it will present the results of the survey and analyze them. The survey was made specifically with RPG playing gamers as the target demographic. The survey consisted of 5 questions designed to scope out individual options rather than raw data. The results are therefore analyzed.</p> <p>Following the said analysis, the thesis will go over different variables in emotional design and how they work together.</p> <p>In the following two chapters, the thesis utilizes three well-known RPG's and analyze them based on the variables presented before. Furthermore, they will be compared with each other.</p> <p>Lastly, the thesis will explain more about the importance of emotional design and how this topic could be further expanded.</p>		
Keywords		
hub area, emotional design, homeliness, familiarization, ludology, game design, immersion		

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GLOSSARY

RPG	Role-playing game: a genre of video games in which the player takes on the role of a character in a fictional setting
Single player	a game designed to play by one player
Gameplay	Features of the game and the way in which the player interacts with it
Hub area	a central location in a game world with connections to different areas
NPC	Non-playable character, one that inhabits the game world.
Main quest	The primary quest of the games story; the main narrative of the game
Side quest	Secondary, optional quest. Not part of the main story
Ludology	The study of games

1 INTRODUCTION

The focus of this thesis is emotional design and the sense of ‘homeliness’ and familiarity that a video game hub area can evoke in a player. The way How to make an RPG (2017) describes it, hub worlds are levels where the player continually return to in order to access new levels. Furthermore, in RPG’s, the levels are more than just a level; they are the player’s home.

Emotions are very important when it comes to forming a connection between the product and the consumer. This ties in with the marketing tactic called affect transferal. Positive feedback from the game makes the user feel positive emotions. The player then starts to associate the game with these positive feelings, thus forming an emotional connection. (Lantos 2010.) The formation of these emotions is what this thesis strives to analyze.

The main research question of this thesis is how a hub area in an RPG can create emotions within the player. The thesis focuses on the more positive emotions, especially the feeling of homeliness and familiarity. The production of a project was considered for this thesis, but ultimately it was decided that, within the time frame it was better to use pre-existing games as data. Furthermore, the topic of escapism was considered for this thesis, but it was ultimately scrapped seeing that it would have been too big of a topic, and the author lacking the necessary qualifications in psychology. This thesis explores various topics, which in and of itself are vast and require more discussion and theory to fully explain and could well fit a master’s thesis on the topic. These include topics such as ludology and immersion. This thesis is meant to act as a general introduction and not a thorough analysis of these topics.

Qualitative methods were chosen in order to study what kind of emotions the players experience while playing games. The main methods used were data collection, survey, and the observation of pre-existing games and comparing them. A survey was conducted with the intention of attaining subjective data and individual thoughts from the participants.

Structurally, this thesis first covers the definition of emotional design, then moves to the results of the survey. After this, through the analysis of the survey results and other data, variables of creating emotion are defined. Following this, the thesis will analyze the methods used in ***Dark Souls***, ***the Witcher 3: Wild Hunt***, and ***the Elder Scrolls V: Skyrim*** and finally compare them together. Finally, the thesis will reiterate the importance of emotional design.

2 EMOTIONAL DESIGN

According to the Interaction Design Foundation (2021), emotional design refers to the creation of designs that evoke emotions which result in positive user experiences within the user. Emotional design is a vast subject and can be applied to topics like product design and UI design. This thesis focuses on the application of this within ludology, the study of games. Emotional design plays a big part in the creation of the player's user experience, or UX for short.

While designing, one needs to not only focus on the functionality of the product but also on the user's responses, which, according to the Interaction Design Foundation (2021), are naturally emotional. For example, positive experiences drive curiosity and motivate growth as individuals while negative experiences help us prevent repeated mistakes.

When it comes to the user's cognitive responses, there are three levels; *visceral*, *behavioral*, and *reflective*. These levels are intrinsically connected. (Norman 2003). This thesis will go over all three and explain how they are connected to Maslow's hierarchy of needs (Hopper 2020) and the three rhetoric appeals (Detisch 2020). Figure 1 illustrates these connections.

Visceral design is all about appearances and how the design makes the user feel. It relates to the automatic qualities of emotion, or in other words, gut feelings and first impressions. In essence, visceral design is the product's branding, as it helps distinguish itself from its competitors by appealing to the user's beliefs and emotions rather than by concrete benefits. This is done through appearances, for example, colors and shape language. (Interaction Design Foundation 2021).

Through the viewpoint of rhetoric, visceral design deals with pathos; the emotions and values of the player. The way that visceral design affects the player is by appealing to their need of self-actualization and esteem. This happens by appealing to the player's values and challenging them. Furthermore, by appealing to the player's need of self-actualization, a game can cause them to feel that they need the product and without it they cannot properly feel fulfilled or good about themselves.

While visceral design refers to appearances, behavioral design refers to the product in use. It is all about the usability of the product and how reliable it is. To simply put it; when a design works well and is easy to use, the user is likely to feel positive emotions and vice versa. Negative experiences can sometimes be applicable as they help the player learn not to repeat mistakes, as while using the product, the user unconsciously analyses and evaluates how reliable it is and makes strategies and plans on how to reach goals. Thus, it appeals to the player's logos, or logic. The player has to use deductive and inductive reasoning in order to complete tasks in games (Interaction Design Foundation 2021.) Furthermore, it appeals to their need of safety as a game that functions well and feels reliable makes the player feel secure. Additionally, as the player becomes familiarized with how the game functions, the game becomes safe and predictable. This helps reduce fear and anxiety.

Lastly, reflective design is all about the player's reflections to the product. It is the highest level of cognitive responses as it deals with conscious thought; the player consciously reviews their experiences, rationalizing the product and determining what it means to us as an individual. This rationalization happens both before, during as well as after the use of the product. (Kominos 2020.) As Interaction Design Foundation says, a satisfied player will keep playing the game and form emotional bonds with it. In essence, reflective design is the ethos of the product, or in other words, its credibility. Reflective design further appeals to the player's need of love and belonging by offering them emotional bonds not only with the game, but with other people as they can tell stories about the game and introduce it to their friends for example.

Norman's Levels of design		Aristotle's Rhetoric	Maslow's Needs
Visceral	Pleasure	Pathos	Self-actualization
Behavioral	Reliability	Logos	Safety
Reflective	Usability/Functionality	Ethos	Love and belonging

Figure 1. Levels of cognitive design and their relations (Lindholm 2021)

Figure 2 further illustrates how the three levels are connected. Behavioral level is influenced by both the reflective level's conscious thoughts as well as the visceral level's unconscious ones. Reflective level does not have any control over reflective as that would be paradoxical. Understanding these three levels of design and their influences is important for the rest of this thesis, as it uses them as a basis for the different variables it imposes.

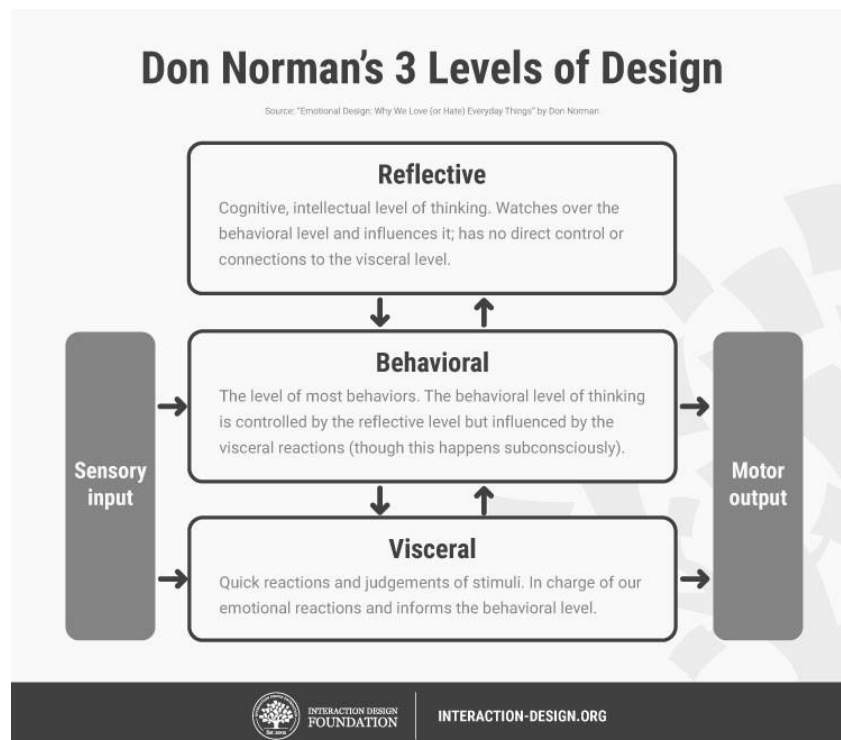


Figure 2. Don Norman's 3 Levels of Design (Interaction Design Foundation 2021)

The way that all this ties to ludology is that the sum of these levels is what helps create a narrative for the game and subsequently enhances the emotional design of the game. A game generates a storyline that persuades us and creates empathy, and it is through this empathy that we familiarize ourselves with a given situation, and from familiarization the sense of homeliness grows. Gonzala Frasca, in his article “Ludology meets narratology: Similitude and differences between (video)games and narrative” (Frasca 1999) talks about the relations of ludology and narratology and how games share many elements with stories, such as characters and settings. In the article, Frasca further mentions that narratology had been invented in order to unify scholar’s work about narrative, and that ludology plays a similar role in the study of games.

Homeliness and belonging

It is difficult to define what exactly makes a video game feel like a home. Merriam-Webster dictionary defines homeliness as “being something familiar with which a person is comfortable and at ease: comfortable and familiar like home”. The key points taken from this are that for something to feel like home, it must be somehow familiar to the person, and thus put them at ease and comfort them, furthermore, eliciting a sense of belonging. The need of belonging is part of Maslow’s hierarchy of needs, specifically psychological needs (Hopper 2020). According to Marianna Pogosyan (2017), a big part of human behavior, thought and emotion stems from this need. Furthermore, she mentions that the consequences of belonging range from happiness, stress relief and motivation. Belonging can also act as a protective factor against depression. The way Naomi Hattaway refers to belonging in the article “On Belonging” (Pogosyan 2017) as the feeling of being fully supported when stepping up on a platform.

The way this applies to games is through the way that a game can make the player feel at ease and relaxed, or, how Ben Jessey (2021) describes it in his article, ‘15 most comfy video games that fee like home’ with the word ‘comfy’. In the article, Jessey argues that these games which share the trait of comfiness

are defined by not making the player experience negative experiences like rage, fear, or sadness. Instead of challenging the player, it lets them have fun, relax, and provide a “chilled-out atmosphere” as Jessey words it. This thesis however argues against this notion that for a game to feel like home, it must not evoke negative experiences nor challenge the player. This thesis focuses on the way a hub area specifically evokes these emotions within the player. Hub areas are used in many genres of games, ranging from casual all the way to the most hardcore ones. The main traits of the hubs are relaxation, safety, and comfiness. Depending on the genre of the game, these emotions can come from various variables. The focus of this thesis is to identify and study these variables.

Escapism

The cathartic act of escapism is linked with this thesis’s definition of homeliness in the sense that it is a warped and more extreme version of it. Psychology wiki defines escapism as “a tendency to escape from the real world to the delight or security of a fantasy world”. They furthermore mention that in an extreme context, the word ‘escapism’ carries a negative connotation. Some players avoid reality by seeking comfort from virtual worlds. While escapism can be a healthy coping mechanism to some, to others it can devolve into unhealthy avoidance of their basic needs. The reason why people fall for escapism varies with the person. The way Jeremy E. Sherman (2019), puts it, we as humans, when compared to other animals, face more reality than any of us can stomach. Additionally, we have many ways of escaping it. Video games is just one method of escaping reality.

Summary

Emotional design is a vast topic and feeling homeliness and familiarization is only a small portion of it. The main interest of this thesis is to study how those feelings emerge in role-playing games. The way they tie to the survey is that the participants were asked to specify which levels evoke these feelings in them and how.

3 SURVEY ANALYSIS

The survey consisted of 6 questions (appendix 1). It was made with the goal of gaining raw subjective data from people who play single-player RPG's. The survey was open for a week, from second of January to the ninth of January 2021. In total there were 20 participants, 40% of which were male, 55% female and 5% nonbinary.

For the first two questions the participants were asked to identify their favorite RPG's. They were given various options, but most of them (65%) elected to write in their answers. Figure 3 illustrates these answers. After that, they were asked if they had a favorite RPG hub area, and to specify which. The hub areas that the participants reported were from a wide array of game genres. They consisted of the more casual type games such as *Mario* all the way to the more hardcore ones like *Monster Hunter* and *Dark Souls*.

Vastausvaihtoehto	Teksti
Yes (Specify, please)	Detroit & Hengsha in DE: Human Revolution, Prague in DE: Mankind Divided
Yes (Specify, please)	cities in skyrim
Yes (Specify, please)	Super Mario Sunshine: Delfino Plaza, Deep Rock Galactic's hub
Yes (Specify, please)	Windhelm
Yes (Specify, please)	Town
Yes (Specify, please)	villages in BOTW, camp in DA series (where you can talk to companions), space stations and the anomaly in No Man's Sky
Yes (Specify, please)	Toad town, Rogueport & Flipside
Yes (Specify, please)	Omega in Mass Effect
Yes (Specify, please)	Firelink Shrine, Gathering Hub (Monster Hunter)
Yes (Specify, please)	General trading/safe/crafting hubs
Yes (Specify, please)	Winterhold in Skyrim
Yes (Specify, please)	Any major city in MMOs, and faction order halls in WoW

Figure 3. Examples of hubs mentioned by participants of the survey (Lindholm 2021)

The next question was a follow-up from the last one, the participants were asked to specify the different emotions that the areas evoke in them and how. There was a wide array of emotions reported, which further varied depending on the game area. These were:

- Sense of wonder
- Warmth, welcoming
- Open area with free movement
- Fun, lots of things to mess around with
- Sadness/hate – narrative reasons
- Calm downness, relaxation
- Comfiness and safety
- Nostalgia and excitement
- True safety through contrast
- Homeliness and friendliness
- Lack of enemies
- Peace and calm,
- Feeling like time has stopped
- feeling of being home

Next the participants were asked to rate what kinds of activities they would do in a hub area with 1-5, 1 being not likely and 5 very likely. These were the following: wonder around the hub area not doing anything important, leave the game running and listen to the music. And lastly, play around/roleplay with the NPC's. The results of this question can be seen in figure 4.

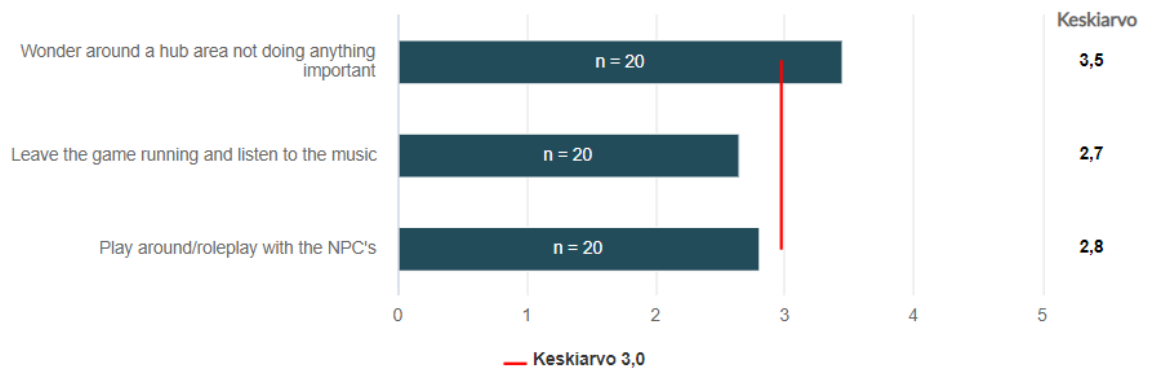


Figure 4. The results of question 5 (Lindholm 2021)

Lastly, as an extra question, the participants were asked to write about the different activities that they do in these hub areas. When analyzing the kinds of activities that the participants reported themselves doing, there were three different types of activities:

- Errand-like activities, such as crafting, selling, and buying items and doing quests.
- Explorative activities: checking every nook and cranny for secret items and interacting with all the npc's.
- Leisurely activities, such as general relaxing, playing around with the physics of the game, glitching oneself into otherwise inaccessible areas, and generally fighting the NPC's or stealing from them.
- Creative activities, such as taking pictures if the game has a camera mode

The results of this survey were used in the formation of the variables of emotions design in ludology. They strengthened their validity and supported the conclusion of the thesis. Though the survey only had 20 participants, it was still enough to gather general opinions of the people.

4 VARIABLES OF CREATING EMOTION

There are various variables in the creation of a level, the sum of which will determine not only the enjoyment of the player, but also the different emotions that they may experience during gameplay.

In his book *Game Feel: A Game Designer's Guide to Virtual Sensation* (Swink, 2008), Steve Swink talks about the concept of Game Feel. In his words, game feel is built from real-time control, simulated space, and polish. These terms refer to different aspects of game. Real-time control refers to interactivity which forms from a closed loop of a minimum of at least 2 participants, the participants in this case being the player and the gaming platform. Simulated space can also be referred to as level design. It is as simple as it sounds; a space for the player to interact with and get physical responses from the same way one would get from a real physical space, but in this case with an avatar in a simulated space. Lastly, polish refers to 'extra effects' that, while not changing the mechanics of the game, add to the overall feeling of the game. This could be as big as adding loud sound effects and controller vibration to emphasize an explosion, or as small as adding dust particle effects lifting from the ground as the character walks on it.

As a summary, game feel comprises of the process of interaction between the player and the game, immersion which comes from simulated space and lastly the 'extra' polish'. This thesis attempts to establish the variables for creating such game feel and the sense of homeliness and familiarity. These variables have been gathered into five categories (Quality and quantity of visits, gameplay and activities, immersion, atmosphere and narrative elements, and outside connections).

Firstly, the gameplay-related variables; how often the player visits the area and how long they stay there, the layout of the level and the activities they perform. These are the most basic and the easiest to track variables. After those comes the more conceptual ones; atmospheric, immersive and story related variables. These relate to the overall mood and appearance of the game. Lastly, there are the outside connections. This relates to variables outside of the game, such as a connection to a wider narrative through a franchise. It relates heavily to the story and narrative.

4.1 Quality and quantity of visits

This is the first variable of creating an emotion that the author will discuss, where the keyword is time. What matters here is the frequency of visits to the specific area and the time spent there. With each subsequent visit, the player gradually builds more and more familiarity with the area.

In order to define the diverse hub areas, they have been grouped into two main categories and each in two subcategories: **A1** and **A2**, **B1** and **B2**. Firstly, type **A1**: the pit stops. This refers to the areas where the player will mostly return to after long adventures to restock and do upgrades. Typically, this type of hub areas appears in the types of games which feature more restricted exploration. This means that, in order to traverse the map into a specific area, the player must go through a specific route. As an example of this in practice, the game *Dark Souls* has a big map full of branching paths and Firelink shrine is a sort of starting hub area; the player begins their journey from there. The shrine has various routes that they can take to reach different areas. Typically, the player

picks a route and follows it to the end, and only after that long adventure, they return to the shrine.

Similar to the **A1** areas, there are the **A2** type areas. While similar to the **A1** type, these areas are mostly, if not entirely physically disconnected from the rest of the game. This means that, in game terms they are their own ‘map’; only accessible through warping or otherwise going through a loading screen. These areas are largely a means to let the player relax and upgrade things at their own pace and return to the game when they are ready. These areas can be either fully 2D and act similarly to a mobile phone app; the player can access various buildings or NPC’s easily with a click of a button or by tapping them. An example of this in practice is the game *Darkest Dungeon* by *Red Hook Studios*. The Hamlet is the main hub area in which the player resides when they are not busy exploring the dungeons. As can be seen in Figure 5, the town of Hamlet is simply a UI which the player can tap through.



Figure 5. The Hamlet from *Darkest Dungeon* (Red Hook Studios 2015)

While *Darkest Dungeon* features the type A2 hub as a 2D game, an example of the A2 type in 3D games is the game *Bloodborne* by *FromSoftware*. The game

features an area called the Hunter's Dream, which the player can return to from the game world by accessing a lantern. The player can then access different levels by interacting with specific gravestones, as can be seen in figure 6. In the Hunter's Dream, the player is able to make their character more powerful by upgrading their stats and weapons, shop for items, and equip runes. This type of hubs offers the player more peace of mind as they are completely out of reach of outside threats like enemies.



Figure 6. Hunter's Nightmare from Bloodborne (FromSoftware 2015)

When it comes to the type B areas, this type of areas is more actively 'lived-in' and thus feel more like proper home. This kind of area is mostly featured in open-world games, where the game the world is fully open for exploration. This means that it is less limiting in the accessibility to specific areas, letting the player constantly visit certain hub areas. First, B1, the type where most, if not all action happens within the area and secondly B2, the type where the action happens outside.

The way a player interacts with a game level varies greatly, not only with how the level itself is designed, but also the individuality of the player. No matter how

much the game designer intends the player to spend a lot of time in the level, there are still those who just breeze through the levels as fast as possible.

This type of players make errand runs where the player travels along a set path between different points of interest, such as shops and weapon upgrading facilities and leaves the level.

The way these aforementioned types of hub areas evoke emotions in the player vary. Type **A1** and **A2** both act as a safe place where nothing can directly harm the player (unless the player goes out of their way to get hurt, via gravity for example). This means that the player can easily forge a sense of security and homeliness from actual safety. This is enforced on type **A**, for example, when the player has been exploring the game world for a long time without being able to return, and suddenly unlocking a shortcut back to the hub area. With type **B**, the player has constant access to the hub area. This means that they will most likely be spending more time within it.

Level design and player guidance

The way the player moves through and explores the area is not only tied to the type of player but also the way the level is designed. In his thesis, *Level flow and player guidance in a 3d multiplayer level*, (Kuoppala 2019), Kuoppala covers the different ways that a level guides the player. These can range from direct guidance, for example with signs, pathways, and colour coding, to indirect guidance with the overall layout of the level, shape language, landmarks, detail density, light and sound design, and the restriction of the player.

4.2 Gameplay and activities

On a base level, a hub area's function is not only to act as a safe place from harm and allow access to various other areas, but also to offer varying activities to the player. In this segment, activities refer to gameplay, or in other words, the very things that the player does when they are in the hub area.

The types of activities, as seen in figure 7, have been put into three different sections. Primary activities refer to activities put there by the developers with a

clear purpose, such as running errands: upgrading equipment and levelling up one's character. Secondary activities include exploring the area and looking for secrets. Furthermore, it includes extra optional minigames. Lastly, the tertiary activities refer to more extracurricular ones, such as toying around with the game physics, the npc's and the environment. Tertiary activities include a concept called "emergent gameplay". Paananen (2020) defines emergent gameplay as situations that arise as the result of the interaction between multiple, simpler rules as opposed to an explicit rule. This refers to how some players toy around with the level and even use it as a form of escapism and relaxation.

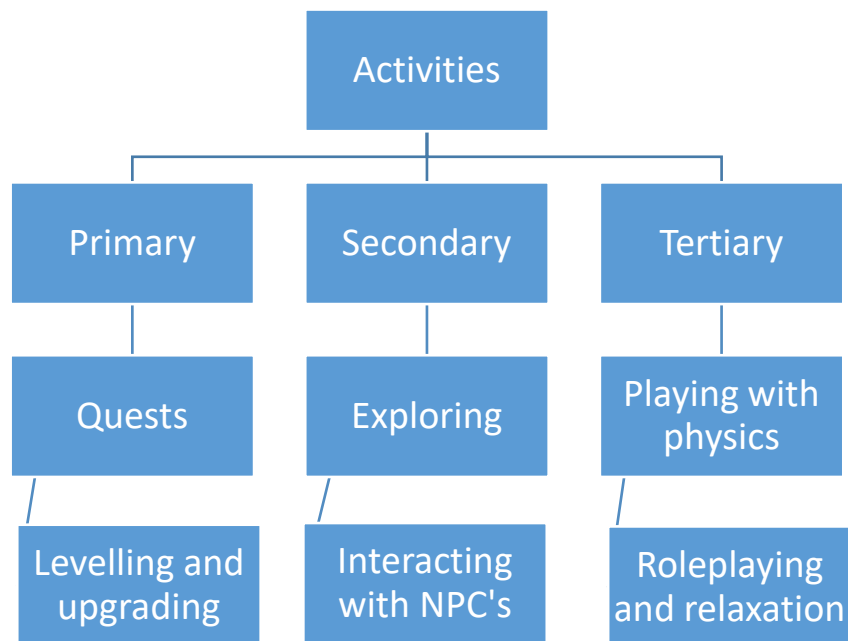


Figure 7. Activities in games (Lindholm 2021)

Activities are an important in emotional design, as they are the players input into the game world. With the other variables, the game is affecting the player, but this time, the player gets to affect the game back. The way a player interacts with a game varies greatly with every different player.

It does not only matter when the player decides to perform these activities, but when the game itself lets them. Usually, at the start of a game, it is designed so that the player is slowly eased into the different activities rather than giving access to everything at the very beginning. The reason behind this is so the

player will not get overwhelmed by having too much to do. The way narrative elements tie to this variable is not only through the introduction of new activities with story, but also through down-times in the story. This refers to the moments in the story where the player is suggested to take a break from the main-quest and focus on doing side-quests. This gives the player free time to explore and to perform activities.

The way that different activities evoke emotions in the player varies. The different aspects of gameplay stimulate and or arouse different emotions in the player. For example, having a goal arouses the player's emotion to be directed, while rules, interaction and challenge stimulate their emotion to strategize and their emotion to overcome challenges to achieve the goal (Baharom, et al. 2014).

4.3 Immersion

Immersion is the most important factor when trying to get the player to elicit emotions and get connected to the game. Immersion within video games is a rather loose topic; it is generally understood by players and developers, however there is no academic definition (Tanskanen 2018). Immersion is what makes the game world feel more than just virtual; it makes it feel alive. Jamie Madigan, in his book *Getting Gamers: The Psychology of Video Games and their Impact of the People Who Play them* (Madigan 2015), refers to immersion as spatial presence, or presence for short. It refers to the psychological state where the player forgets that the game world is virtual and thus, fictional.

Immersion is a process, during which the player's awareness is transferred to the game (The Lentis: The Social Interface of Technology 2014). This process happens in three stages: **engagement**, **engrossment**, and **total immersion**. The first stage of the process is **engagement**, where the player is still fully aware of the physical world. During this stage, the player becomes more engaged to the game and invests more effort towards it. Essentially, there are two psychological barriers which the player must overcome in order to form engagement. These are **access** and **investment**. Firstly, **access** refers to the players compatibility with

the game. After this comes the **investment**. This refers to the player's willingness to commit to playing the game and put in effort.

After the player is engaged in the game, they must become engrossed. This is the start of the awareness transfer. **Engrossment** can also be referred to as getting into the "flow" of the game. For this to happen, the player needs to surrender their awareness to, and become emotionally connected to the game.

The third and the final stage is called **total immersion**. During this stage, the player's awareness has been temporarily transferred to the virtual world. **Total immersion** is the sum of three forms of immersion: **sensory, challenge-based, and imaginative**. Firstly, **sensory immersion** is affected by the player's devices, such as controller and controls, monitors, and audio equipment. These then help the player lose their sensory awareness and become immersed. Furthermore, according to team GingerMay (2020), video games deliver information via multiple sensory channels. This is crucial as letting the player fill in the blanks may take them out of the immersion. This is why games try and keep the player's brains focused on the game, and thus not letting them remember that they are still playing a game. Secondly, **challenge-based immersion** refers to the challenge aspects of the game. With the game becoming more and more difficult as the player keeps playing, it makes it so that the player is required to exert more attention in order to succeed. This is linked with the concept of flow. Lastly, **imaginative immersion** deals with the players emotional attachments to the different aspects of the game's narrative, such as story and characters.

Furthermore, on the topic of characters, according to the study "The impact of Avatar Personalization and Immersion on Virtual Body Ownership, Presence and Emotional Response" (Waltemate et al. 2018) players get more immersed in a game if they can play with a personalized avatar as opposed to a generic counterpart.

In summary, the way immersion works into the topic of emotional design is that it allows the player to temporarily transfer their awareness to the virtual world and

thus form emotional connections. The way it does that is by creating a believable world that delivers information on multiple sensory channels.

4.4 Atmosphere and narrative elements

Atmosphere refers to the overall mood and feeling of an area. The most important parts of creating a fitting atmosphere come from sound design, lighting, the general appearance, and the layout of the level. There are various ways to create emotion via atmosphere, but before one starts to design a level, one needs to identify the type of atmosphere that fits with the narrative. For example, Firelink shrine in *Dark Souls 3* has a very calm and mellow atmosphere created by the soothing soundtrack and dim candle candlelit aesthetic. This fits well because it is supposed to be a safe place to return to after a long and perilous adventure, full of dangers. An unfitting atmosphere creates a sort of dissonance, and thus can confusing the player. Summarizing, atmosphere helps create genres as some genres, horror for example, cannot exist without a scary atmosphere.

Light and sound design basic tools in the creation of an atmosphere. There are various techniques when it comes to light design. It can be used to elicit emotions by using specific colours and softness, create contrast between characters and objects and furthermore draw attention them (Renée 2018).

With sound design, the designer can make the game more immersive by adding in sound effects that fill in the gaps for the player. For example, having the character's footstep sound change whenever they are walking on different surfaces. Furthermore, music can help elicit emotions from players. Good examples would be to have upbeat and cheery music in casual party games, and scary intensifying music in horror games. (Dustin 2021).

Story and narrative give the player reasons to be interested in the world and characters. It is what drives the game forward and gives the player a reason to be doing what they are doing in the game. It is easier to become attached to something if you know more about it. Without a story, a game cannot be more

than a contest for the high score. Additionally, engaging narratives assist the player in suspending their disbelief and make the story a personal experience for them. Furthermore, it helps the player create connections to the characters. (Lu et al. 2012).

Invasion of safety

Generally, hub areas are made to evoke a sense of safety in the player. Contrary to this, a good way to elicit a reaction from the player is to break that sense of safety through invasion of the safe space. This works especially well in a horror game. A practical example of this is the *Resident Evil 2 Remake* developed by *Capcom*. In the game the player explores through a police station filled with zombies and puzzles. The main entrance area of the station is the first proper safe area that one discovers, meaning that the enemies will not enter it. After some exploration, the player comes across a very dangerous enemy which can follow them to any room, even the previously safe ones. This betrays the players feelings of safety, immediately putting them on the edge.

4.5 Outside connections

Outside connections is a less defined variable. While it is a looser variable, it is still an important tool when it comes to forming a connection with the player. It refers to influence outside of the game, such as nostalgia and or attachments to the source material of the game or a previous instalment in the game series. When a player starts a new game, they need to form the bonds from the scratch. This, however, is not needed when the game is based on a pre-existing book series or a TV show. For example, people may be more interested to play the *Witcher 3* if they have previously played the previous instalments or read the *Witcher* books and thus are interested in the fictional world and the characters. Furthermore, according to Juan Igartua (2010), when the player is able to identify with the characters, they can enjoy the game more.

In addition to this, there are the emotions that come from nostalgia. For example, when replaying a childhood game and hears the soundtrack, the player gets a rush of joy and nostalgia (Dustin 2021). According to Modicum (2017), the most

common causes of nostalgia are negative emotions. Contrary to this, however, the psychological benefits are positive. These are, for example, increases to self-esteem and mood.

4.6 Summary

While this thesis puts these variables in their own sections, they are intrinsically linked together. Not only do some variables flat out not work without others, but some also lift the others and makes everything work. An example of this is immersion. Immersion cannot happen if the game world does not deliver enough information to the player, thus not feeling real. Furthermore, if the controls are not intuitive and the gameplay is broken, the player will not achieve the sense of flow.

In figure 8, the different activities have been put in a hierarchal scale, the more important being in the bottom. The most important variable is immersion as it plays a big part in the player forming emotional connections to the game. After this comes variables which are part of the players input into the game world, in other worlds, the gameplay and activities. Following the gameplay-related variables comes the variables which form the overall look and feel of the game, such as atmospheric and narrative. Finally, the outside connections are the highest on the list as they are a loosest variable. Through the use of these variables does the very game come together.

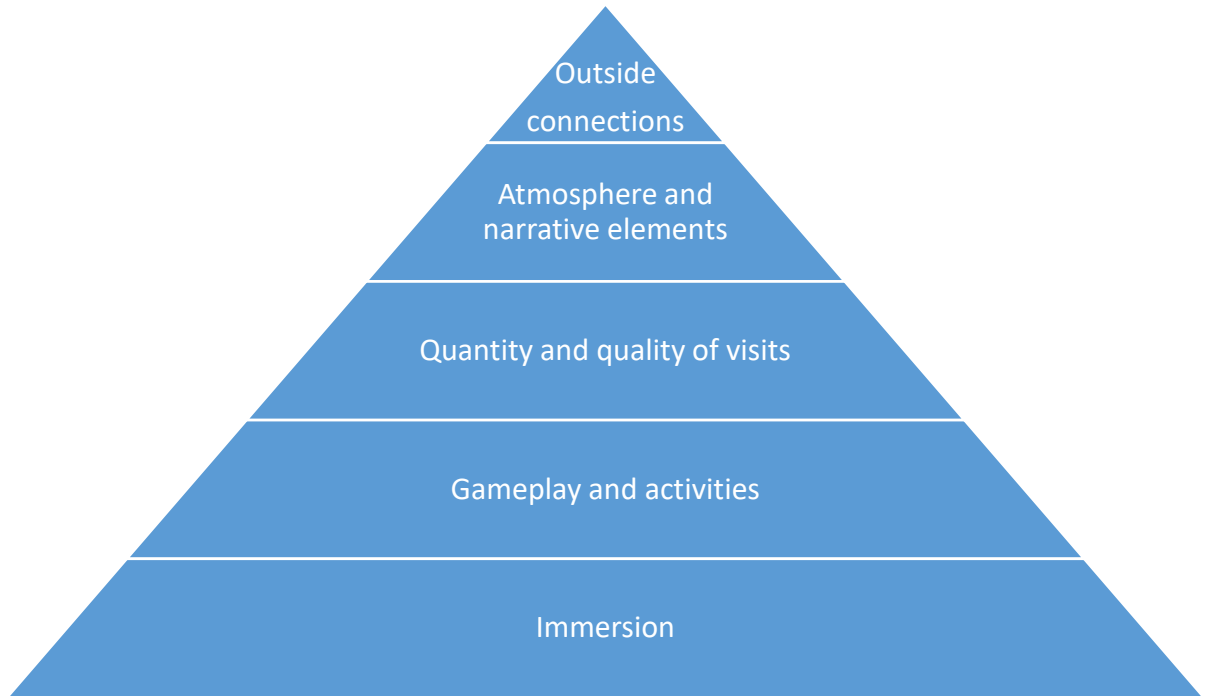


Figure 8. Hierarchy of variables in the creation of emotion (Lindholm 2021)

The variables tie together in varying ways. Immersion in itself is a culmination of other variables working together. For example, with atmosphere, the more detailed the game world is, and the more information it presents to the player, the easier it is for them to feel immersed in it. Gameplay also helps create immersion through controls that feel natural and intuitive to use, as the player can then focus on other things, and forget that they are indeed in a virtual world. In-game activities tie into the creation of homeliness through emergent gameplay, as the player can create their own activities. These include using the game to relax. Lastly, outside connections further help with familiarization as nostalgia helps the player form deeper connections with the characters and narrative. There are as many different types of gamers as there are people on earth. This means that one method will not work for everyone. Thus, it is better to utilize many different methods to guarantee an emotional response.

5 GAME ANALYSIS

For this part of the thesis, three role-playing games were selected for analysis. These were the following: ***Dark Souls***, ***the Witcher 3: The Wild Hunt*** and ***the Elder Scrolls V: Skyrim***. For the sake of consistency, this thesis will refer to ***the***

Witcher 3: The Wild Hunt as ***the Witcher 3*** and ***the Elder Scrolls V: Skyrim*** as ***Skyrim***. The thesis explores the different hub areas in the games, describe them and make observations. In the following chapter, it will compare them together. The games were selected based on popularity and the authors familiarity with them. Furthermore, it must be noted that this thesis analyzes the most recent versions of the games with all of the extra downloadable content.

First, this thesis will first cover basic information of the game. After this, it will explore the primary hub level of the game. The specific levels that will be analyzed are Firelink shrine from ***Dark Souls***, Novigrad from ***the Witcher 3*** and Whiterun from ***Skyrim***. These levels were chosen based on their relevance in the overall narrative of the games.

The following aspects of the levels will be analyzed: atmosphere, gameplay, activities, and narrative elements. Lastly, as a summary, they will be analyzed on how they work together to create an immersive game world and influence and hint the player to take course of action.

5.1 Dark Souls

Dark Souls is an action RPG developed by *FromSoftware* and published by *Bandai Namco Entertainment* in 2011. It is the second instalment to the Souls series of games, after ***Demon's Souls***. The story of the game is, for the most part up to the player's interpretation: what little is told is very cryptic in nature. The basic premise is that the chosen undead must travel through the world of Lordran and defeat various enemies to continue the age of fire. The game features a large world, full of branching paths filled with enemies. The player, after the tutorial area, discovers the area called the Firelink Shrine. This area acts as a base for the character to return to from adventuring.

Dark Souls, from the viewpoint of a genre is rather unique. It, while not directly connected to it, is in a way a continuation to ***Demon's Souls***. Without going too much into detail, the project of ***Demon's Souls*** was not going too well and was deemed to fail. Because of this, the director was given free reign to experiment

In the shrine there are NPC's that inhabit the shrine from the beginning of the game, but the player can also meet various characters in levels and ask them to move to the shrine. These characters can then be interacted with. Some of the characters offer side-quests and various rewards, while others sell items. The firekeeper resides in a cell underneath the bonfire platform. She allows the player to upgrade their *estus flask*, thus making it have more healing charges.

Figure 10 is a direct screenshot from the game. It illustrates the overall atmosphere of the game, as the colours are dull and monotonous, mostly consisting of tones of grey and green, aside from the bright orange of the bonfire. The dull greys and greens further drive the feeling of the world being in ruin, with nature taking over. The world of Lordran is meant to be seen as a dying world, full of ruins and undead people gone depraved.

From the viewpoint of sound design, the shrine features a melancholic soundtrack comprising of string instruments. This creates a rather bittersweet emotion as the player is exploring a dying world nearly at its end. This is enhanced furthermore by the bonfires light hum and the sound of crackling fire. Places outside the shrine rarely feature any background music, aside from boss fights. This creates a contrast between them, and helps the player connect the sounds to the feeling of security. Once the player hears the soundtrack of the shrine and the crackling of the bonfire, they know that they are safe.



Figure 10. Firelink Shrine from Dark Souls (FromSoftware 2011)

The game does not offer much information as to what the player needs to do. After going through the tutorial area, the player arrives at the centre of the shrine, in front of a bonfire. In the shrine, there is an NPC who gives the player vague hints to guide them. This creates a sense of confusion in the player. The shrine itself features routes to different areas, and through the initial placement of the player character when they arrive at the shrine, they are subtly hinted to go to what is considered the 'first' level by difficulty ranking. However, the player still has the freedom to choose otherwise and choose another route to a more difficult area.

On the topic of the player's freedom of exploration, from the very beginning of the game, the player is given free reign as to where to go. Perhaps one of the first proper ways the game indirectly teaches the player about the safety that the shrine bonfire offers is through the usage of skeletons. The player has the option to try to explore the cemetery area next to the shrine. This area, much like the shrine, offers various items that would be useful for a starting player. Once the player starts making their way through the graveyard towards the items, they

discover that it is filled with skeletons. These enemies can be tough for a new player; thus, one tends to run away from them, back to the safety of the shrine. This is one way the player can discover that resting at the bonfires makes the enemies return to their usual places, teaching the player that the shrine is a safe place.

Throughout the game, the player explores various paths of levels and occasionally unlocks shortcuts that make the exploration slightly less tedious. Some of these shortcuts link back to the shrine itself. Every time the player dies, they return to the previous bonfire that they rested at. This means that the bonfires do not only offer security, but they also as a sort of “safety net” for the player when exploring, as when the player rests at one that is in the middle of a long journey, they do not have to return to the very beginning if they happen to die. Adding to this topic, the game utilizes the betrayal of trust of the player. The first major task of the game is to ring the two bells of awakening, the second one being far below the shrine. After ringing the bell, the player would return to the shrine, only to discover that the shrine maiden has been killed. This makes it so that the shrine bonfire cannot be used.

Summary

The way *Dark Souls* forges a connection between the player and the shrine is by making them not only dependent on it but also by offering a place to relax in. The world of Lordran is full of dangers and Firelink shrine is a safe place from all of them. This contrast helps forge a feeling of homeliness and familiarization in the player.

5.2 The Witcher 3: Wild Hunt

The Witcher 3: Wild Hunt is an action RPG developed and published by CD Project Red in 2015. It is the third instalment to the Witcher trilogy, based on Andrzej Sapkowski's the Witcher fantasy novels. As a quick summary, the games story is about the character Geralt of Rivia, who, with the help of supporting characters is trying to find his adoptive daughter Ciri and save her from danger. The game world largely consists of small villages, with only a handful of major

boroughs. One of those is the closed city of Novigrad. After the prologue, Novigrad is where roughly a third of the games second act takes place.

Figure 11 displays a map of the city of Novigrad. As one can see, the city is densely packed with buildings and features various open spaces. The city of Novigrad features many districts, the main ones being the hierarch square in the middle, the temple isle in the north, the fish market in the south and the bits in the east. The city itself is very tightly packed and full of civilians. It is rather large and full of winding streets, thus it can be easy for the player to get lost in. The game does feature fast-travelling as an option but does it only through specific signposts in specific places. This means that the player has to rely on the map and quest markers to get around the place. With enough interaction and exploration, the player eventually manages to get familiar enough with at least the major places of the city.



Figure 11. Map of Novigrad city (CD Project Red 2015)

Novigrad is a large bustling city full of life. In addition to the soundtrack, one can hear plenty of noise made by the NPC's. This gives the impression that the city is densely populated, giving sense that the people in the city are quite active. While exploring the city, some of the NPC's interact with the player. These interactions vary from simple passing comments to quest offerings and some even attacking the player.

Figure 12 is a screenshot from in front of one of the marketplaces in the city. As one can see, the game features vibrant colours, which makes it feel lively and homely. This is however in direct contrast with not only with the world outside of the city, which is full of monsters and war-ridden towns, but also the overall narrative and lore of the game. Adding to the topic of narrative, while *the Witcher 3* is not explicitly in the comedy genre, it still finds moments to deliver humour and lighten the mood. Still, the overall narrative and lore of the game world is grim and dark, as it deals with various serious topics, such as war and famine. Furthermore, as the game is based on Andrzej Sapkowski's the Witcher series of books, the game has plenty of characters that some players can be familiar with if they have read them. The player can meet and interact with them in the game.

The player character is called Geralt of Rivia, the Witcher. He is in essence a genetically modified slayer of monsters. While Geralt is an already defined character, the player is still able to make decisions and choose the way they want to act. For example, the player is able to accept quests from regular townsfolk for money. Most of these involve slaying some kind of monsters. When accepting the quests, the player is able to haggle with the questgiver and play as either a greedy extortionist by haggling for a big sum of money as quest reward, or as a generous good Samaritan, often even doing work for free.

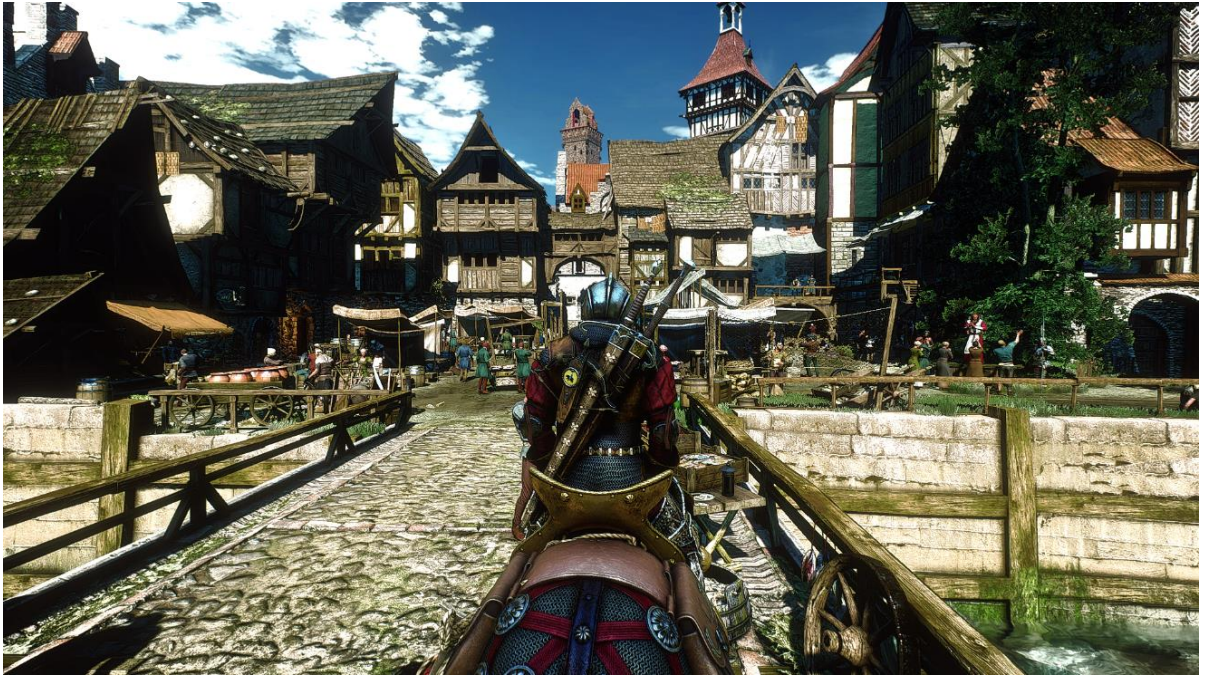


Figure 12. Novigrad (CD Project Red 2015)

The way the game handles inventory management is through the player's carry capacity. If the player is carrying too many items, they are unable to run. As opposed to Skyrim, the player is not able to buy their own house. They can, however, use containers called stashes. These stashes are located in various key locations. Accessing these stashes allows the player to store their items in them and retrieve them from any other stashes. The fact that the player gets slowed down if they are carrying too much means that they form a dependency on the hub areas as the stashes and merchants help with this, as without them they would have to just dump their loot.

Summary

The game forges a connection with the player and the hub level is by having them be in constant interaction with it. When the player has played enough and explored the city, they feel familiar with it, thus making the city feel homely. While the game has a pre-existing character as the player character, it still gives the player freedom to make choices not only in the narrative, but also the way they interact with the world.

5.3 The Elder Scrolls V: Skyrim

The Elder Scrolls V: Skyrim is the fifth instalment to *the Elder Scrolls* series of games published by *Bethesda Game Studios* in 2011. As a short plot summary, the main story of the game revolves around the resurrection of the World-eater dragon, Alduin, and the player's quest to defeat him.

The game takes place in the northern region of Tamriel called Skyrim. The game features a vast open world for the player to explore. The player is free to create their own character and play in the way they want to. This means that while the player has the freedom to do what they want; they also have the freedom to not do what they do not want to; thus, every player's experience with the game is going to be different. For the sake of convenience, this thesis will proceed with the assumption that the model player decides to follow the main story. This way, the first proper big hub area that they encounter is the capital city of the Whiterun hold, Whiterun. As can be seen in figure 13, the city of Whiterun is split into three different districts. These are in order, from south to north, the plains, the wind, and the cloud districts. Firstly, all of the basic necessities of the player, such as shops and crafting stations are placed within the lower part of the city. Secondly, the wind district acts as a residential district of the city, housing the NPC's. Lastly, the cloud district houses the Jarl, the leader of the city.

When it comes to the layout of the city and how the player can explore it, the player has the choice to either travel through the city by foot by entering through the main gate. Alternatively, they can fast-travel to the entrance or the Dragonsreach building. Layout-wise, the main activities such as smithing and bartering have been placed along the southernmost district, close to the entrance of the city. The smith and the corresponding crafting areas are located right next to the entrance, thus making it easy for a player to do quick errand runs.

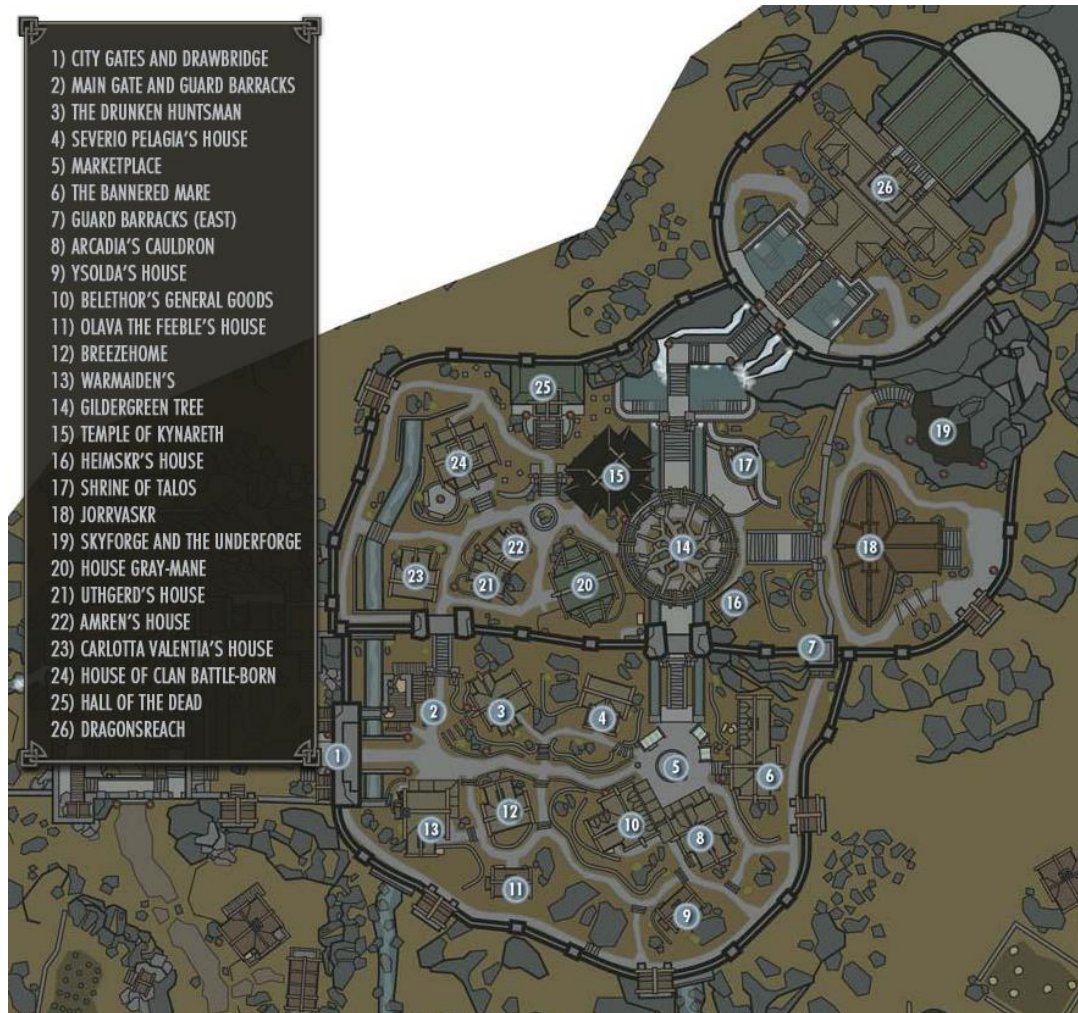


Figure 13. Map of Whiterun (Bethesda Game Studios 2011)

The player is able to create their own character and turn them into different archetypes, such as a noble soldier, a wise mage, or a sneaky thief. Furthermore, they can also roleplay as these characters and act in the way that they would. This ties into the topic of emergent gameplay. On the topic of roleplaying, once the player has reached a high enough level, sudden attacks to the city can happen. These vary from dragons to vampires and cultists. The player can then help the city guards to defend the city. This makes the player feel like they are defending their home.

The way the NPC's work in the game is that they have a set of daily activities that they perform throughout an in-game day. This is called the Radiant AI, developed by the developers of the game themselves. For example, the merchants walk to their spots and open up their shops at 8am and close at 8pm. The npc's also

interact with each other and make passing comments towards the player. These range from the city guards commenting on the players gear and skills to the regular city folk complaining about their farms not yielding enough produce.

Figure 14 is a screenshot from the game. It features Whiterun's marketplace. The overall colour palette of the game is full of dull and cool tones. This is due to the fact that the land of Skyrim is located in the north of the game world. The dull tones also make the game feel gloomy, which fits as the country of Skyrim is in the middle of a civil war and the regular people living in it are trying to make do with what little they have.



Figure 14. Whiterun (Bethesda Game Studios 2011)

The player, after advancing in the main story, is able to become a thane of Whiterun and purchase their own house in Whiterun and furnish it. This even further cements the city as a home, as they are literally living in it. Furthermore, the player is able to marry and have their spouse live along with them along with their children and a steward. Figure 15 is a screenshot of the house interior. The house features various crafting stations and storage compartments. One feature about the game is that the players inventory space is limited by their carry capacity, meaning that at some points, they must either sell, dump, or store their

loot. This is because if the player is carrying too much, they will be unable to run or fast-travel. Thus, if the player wishes to keep a collection, they must obtain a house, as containers outside are not secure. This makes it so that the player is dependent on their house. Furthermore, with a house, the player is able to have all their necessary crafting stations in one place, instead of having to go around different places to access them.



Figure 15. Breezehome (Bethesda Game Studios 2011)

Story and narrative wise, **Skryim** features the tale of a hero. Furthermore, it is considered high fantasy as it is located in an alternative world with magic and mythical beasts and such. While the game is supposed to be set in an alternative world, the game world is more alike a low fantasy setting as it features traditional fantasy elements, such as medieval architecture. While the game features dark narrative beats and themes, it is still overall high fantasy as the player character is a hero of the people and the story lines usually end up with evil characters getting defeated.

Summary

To summarize, *Skryim* features a world which feels alive, which the player is free to use as a sandbox for their imagination. This is brought through different aspects of the game, such as radiant AI technology, day-night cycle and the player being able to create and role-play as their character. The way that the hub areas evoke the sense of homeliness in the player is by creating a warm atmosphere and by literally acting as their home, by for example, letting the player purchase and furnish their own home.

6 GAME COMPARISON

The purpose of this segment is to compare the hub areas of the aforementioned game levels and their... Firstly, this thesis will present a general overview of all three games. After this, the thesis will move on to specific comparisons. Firstly, *The Witcher 3* and *Skryim* will be compared together. Following this, *Dark Souls* will be compared to both of them. This is because *The Witcher 3* and *Skryim* are similar enough in genre and gameplay.

As for the types of hub areas, *Dark Souls* features the type **A1** hub area, while *the Witcher 3* and *Skryim*, both being open-world games, feature the types **B1** and **B2**. Figure 16 illustrates the layouts of these maps and the ways different activities and points of interest have been dotted on the maps. Going further into the comparisons, this figure will be referred to. As a final note before the individual comparisons, it must be noted that the diagrams are only loose representations of the game levels and not one-to-one recreations of them.

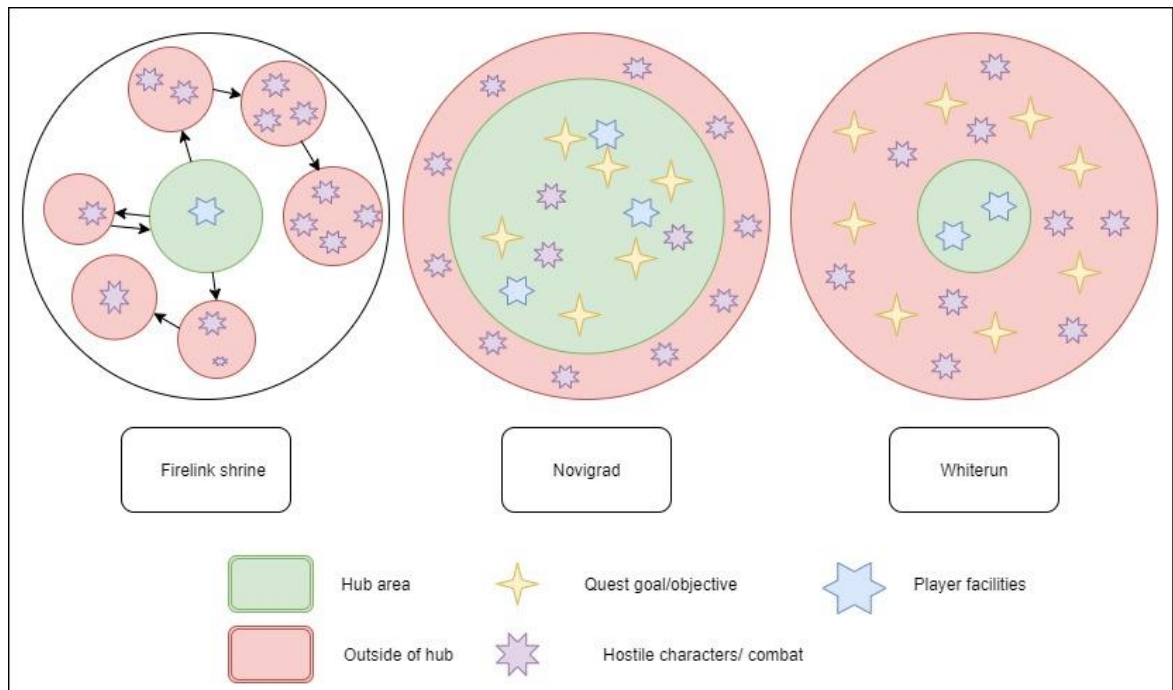


Figure 16. Diagram comparing the three hub areas (Lindholm 2021).

As a last note before doing the comparisons, one must acknowledge that the games were developed by different developers and that there is a large gap in their release dates. **Dark Souls** and **Skyrim** were released in 2011, while **the Witcher 3** was released in 2015. This means that there is going to be a gap in the level of development.

6.1 The Witcher 3 vs. Skyrim

When comparing Novigrad and Whiterun, one can see that Whiterun is overall more condensed. This is partly because of the size difference. While this could be partly because of the hardware limitations, it could also be because of the abundance of cities in **Skyrim**. Compared to **the Witcher 3**, **Skyrim** has 9 major cities with various smaller hamlets. In the **Witcher 3**, there are only 3 major cities.

When it comes to exploration, Novigrad has more to it than Whiterun, not just from the fact that it is larger, but the way that its layout is designed. Whiterun has main roads which the player can follow to reach the points of interest with ease with little to no deviation from the path. In Novigrad, the player is required to pay attention to where they are headed to as they can easily get lost. This could

mean that it is easier for the player to become familiar with Whiterun as the smaller size means that it is easier to explore.

Both Novigrad and Whiterun feature iconic and easily recognizable background music. While Whiterun is a lot smaller than Novigrad, it still has its fair share of noise produced by the NPC's. When comparing the interaction with NPC's, ***the Witcher 3*** and ***Skyrim*** does it surprisingly differently. The NPCs in the Witcher are more active by interacting with the player when they come close, while the ones in Skyrim are more passive and only properly come alive when the player interacts with them.

Referring to figure 16, one can see that the way that the quest objectives are located on the maps is very different when comparing the two games. In the case of ***Skyrim***, while it does feature a handful of quests within the city of Whiterun, the majority of the quests involve the player accepting the quest in the city and subsequently travelling away to complete them. Good example quests would be that the questgiver asks the player to fetch a specific item or kill specific monsters in a specific place. The Witcher 3 also features this kind of quests in Novigrad, but the more major quests are located inside the city. Examples of them are finding out who has been stealing the merchants produce and even taking part in a card playing competition.

Both of the games make the player somewhat dependent on the hub area through inventory management and the availability of merchants and crafting stations.

The Witcher 3's main playable character is Geralt of Rivia, whom the player may already be familiar to, perhaps from the Witcher books. While Geralt has a pre-determined personality and demeanour, the player still has some freedom to choose the way they want to interact with the world. For example, they can act heroic and selfless, or be greedy and just kill everything in sight. In the case of ***Skyrim***, lore-wise the Dragonborn is a complete blank slate for the player. These

two types of playable character work better with different people in order to create a sense of immersion and familiarization with the game world.

6.2 Dark Souls vs the Witcher 3 & Skyrim

As has already been mentioned, both *the Witcher 3* and *Skyrim* are open-world. This makes it difficult to compare to *Dark Souls*, which by design is almost completely opposite of that. Figure 16 illustrates how the player needs to get to a specific level, they need to get there through specific routes. This style of level design forces the player to put a lot of thought into exploration. This is completely opposite of the *Witcher 3* and *Skyrim*, as through the virtue of being open-world, the player can fully explore the world in whichever way they wish. Furthermore, on the topic of exploration, the difference in the way *Dark Souls* handles it is that it is up to the player to find out where everything is, as there is no map nor are there any hints or guideposts. This is in direct contrast with how *the Witcher 3* and *Skyrim* handles exploration with guideposts and maps.

The player is on a very base level dependent on the shrine and the bonfires as it is a way to not only get to safety but also refill one's *estus flask*. This same dependency does not appear in *the Witcher 3* or *Skyrim* as the player is able to pause the game wherever they wish and heal themselves. There is still a small bit of dependency which comes from inventory management in the form of carry weight. Contrary to this, in *Dark Souls*, the player is able to carry any number of weapons, armour and other items as they please. The game does feature an item box where the player can store items, but this is only for the people who wish to organize their items better.

The three games feature vastly different atmospheres. In the case of *the Witcher 3* and *Skyrim*, while they both have serious plots with quite dark elements, the overall mood is light and both of them feature the tale of a hero. This is in direct contrast with *Dark Souls* as its atmosphere is oppressive and hostile towards the player. Adding to the topic of atmosphere, as opposed to *the Witcher 3* and *Skyrim*, *Dark Souls* does not have a day-night cycle. This means that when the

player is resting in a safe area, such as the shrine, it truly feels like time has stopped.

As for quests, ***Dark Souls*** differs greatly when compared to the other two. There is no journal which lists all the quests; thus, the player is meant to remember them by heart, or use a game guide. Even the main questline boils down to going through the game world killing the boss monsters. With the character questlines, some require the player to talk to them at one point and return after doing a specific task, such as defeating a specific boss monster, while other characters automatically move to different locations after the player has progressed far enough in the story. This is in direct contrast with ***the Witcher 3*** and ***Skyrim*** as both of them feature a quest journal which tells the player all the needed information about the quests and points them to the right direction.

While ***the Witcher 3*** and ***Skyrim*** feature vast game worlds with plenty of NPC's, ***Dark Souls*** has them very few and far between. Most of the encounters that a player makes are hostile, which makes it so that when the player finally meets a friendly or otherwise non-hostile NPC, it feels special.

Player character-wise, ***the Witcher 3*** features a main playable character who is already pre-established through the books and previous instalments of the game series, and thus is of some notoriety and is relevant in the story and grand scheme of things. In the case of ***Dark Souls*** and ***Skyrim***, while the player character is relevant to the story enough that they have their own title and lore, they are still essentially a nobody; a blank slate for the player to project onto.

6.3 Summary

While the aforementioned games vary greatly, it is still possible to compare them together and see what kinds of methods of emotional design they use and how well they work. For instance, while the games may be very different on a base level, they still use the same basic principles of emotional design.

All three games and their hub levels offer the player a safe place to take a break and relax. This happens through emergent player and by the fact that, in some way, the player forms a dependency on some level. This dependency makes it so that the players are required to interact with the level in the first place.

7 IMPORTANCE OF EMOTIONAL DESIGN

With any form of interactive art, be it movies, writing or a game, a very important part is not just the process of creation and publishing, but also the emotional reaction of the consumers. To make a consumer interested in playing the game, the consumer needs to form a sort of emotional bond to the game; why do they want to keep playing? Without an emotional bond, the player will more likely quit playing, even if they are enjoying the core loop of the gameplay. A game may have polished graphics and smooth controls but at the end of the day if the designer's goal is to have the player to keep returning to the game, there needs to be emotional stakes for them.

Figure 17 illustrates the relations of emotional design and the way it affects game design. Emotions are what help create the atmosphere for the games, which further help create genres. An example of this in practice is that without fear and as scary atmosphere, there cannot be horror games. Emotional design also assists in the creation of a narrative. It also helps the player make psychological connections to the characters and the overall narrative.

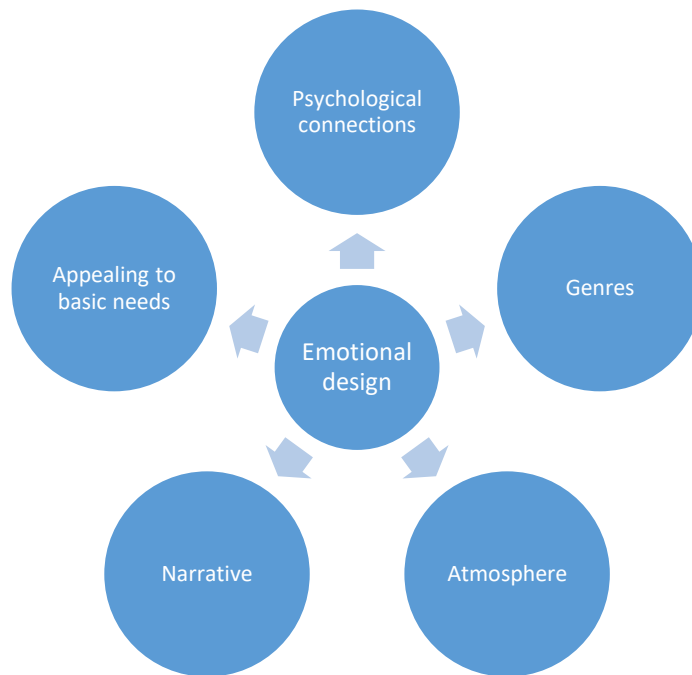


Figure 17. The relations of emotional design (Lindholm 2021)

Emotional design is what creates a need for us. It is part of the reason why we play games in the first place. By appealing to the player's need of self-actualization, the player is made to believe that without it, they cannot fulfill themselves. It also further helps to get players not just to buy the game, but to keep playing it by making them form psychological connections.

8 CONCLUSION

The goal of this research was to establish how a game area can feel homely. To summarize it, the feeling of homeliness and familiarization of a game hub area comes from different variables in the production of the game. These vary from the gameplay aspects to narrative, atmospheric and immersive qualities of the game. Furthermore, the way games create a narrative persuades the player by appeal to their basic needs, such as self-actualization, safety, and love and belonging.

What was learned from this research is how video games create a sense of homeliness in a level and help the player familiarize themselves with it. What defines homeliness in games is that, through emergent gameplay it allows the player to take a break and relax. Furthermore, the game makes the player, in

various ways, dependent on the level. This makes it so that it subtly forces them to get familiar with it.

The thesis handles subjective topics such as the participants responses to the games and the types of emotions they experience. Thus, the main concerns would be the sample-size of the survey and the scope of research. It would greatly benefit the research to have more participants and do further research into the topic. Further concerns would be the accidental insertion of the authors personal opinions.

Overall, while the thesis was completed, it suffered from time management and outside reasons. With these concerns in mind, the thesis succeeded in defining the variables of emotional design and analysing the games and seeing how they work together.

Furthermore, as a way to expand on this topic, another study could be made but from the point of view of psychology. Additionally, a tool could be implemented to identify how well a game makes the player elicit emotions. Lastly, a practical project, for example, a small game would be beneficial to prove the efficacy of these methods. With better time management, this could have been possible. Thus, it had to make do with the analysis of previously existing games.

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Appendix 1. Survey

GAME DESIGN EMOTIONS

1. Select your gender.

- Male
- Female
- Trans male
- Trans female
- Nonbinary
- Other (Specify)
- Prefer not to answer

2. What are your favourite RPG series?

- Pokémon
- the Legend of Zelda
- the Witcher
- Dark Souls
- Persona
- the Elder Scrolls
- Other

3. Are there specific hub areas in games where you spend a lot of time (for example. Firelink shrine in Dark Souls 3, cities in Skyrim, etc.)?

- Yes (Specify, please)
- No

4. What kind of emotions do those areas evoke in you? Why and how?

5. How likely do you do the following things while playing:

(1 not very likely, 5 very likely)

	1	2	3	4	5
Wonder around a hub area not doing anything important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leave the game running and listen to the music	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Play around/roleplay with the NPC's	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. (EXTRA) Are there other things that you tend to do in hub areas

