

MASTER'S THESIS

When Ludology and Narratology Meet.

A Comparative Analysis of an Ecofictional Video Game and an Ecofictional Book.

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Master's Thesis in Children and Young Adults' Literature

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I confirm that the work is self-prepared and that references/source references to all sources used in the work are provided, cf. Regulation relating to academic studies and examinations at the Western Norway University of Applied Sciences (HVL), § 10.

Abstract

In this master's thesis, I study the representations of the relationship between the main characters and their wider environment in the ecofictional video game *A New Beginning* (*Final Cut*) (2012) by Daedalic Entertainment and in the ecofictional book *Code Blue* (2018) by Marissa Slaven. The aim of this study is to explore and expand on the ecocritical research on video games and books within the children's and young adult (YA) literary field of study. The study is innovative because it utilizes Espen Aarseth's "A Narrative Theory of Games" (2012), which is originally intended to be used while studying video games, to analyse and compare a video game and a novel. Therefore, this master's thesis is titled "When Ludology and Narratology Meet. A Comparative Analysis of an Ecofictional Video Game and an Ecofictional Book", because it uses theory and approaches from both fields of study. To analyse the book and the video game ecocritically, I have used the analytical tool "The Nature in Culture Matrix" (The NatCul Matrix) developed by the research group "Nature in Children's Literature and Culture" (NaChiLitCul), as presented in the book *Ecocritical Perspectives on Children's Texts and Cultures. Nordic Dialogues* (Goga, Guanio-Uluru, Hallås and Nyrnes, 2018).

I have divided the analysis into three stages (A, B and C). In stage A, I analysed excerpts from the video game and the book in accordance with Aarseth's (2012) four categories. I decided to combine the categories into pairs: "World and events" and "characters and objects". In stage B, I used The NatCul Matrix to analyse the representations of the relationship between the main characters and their wider environment that I found in each category from Aarseth's theory. I placed the categories in regards to the axes and the dimension of "techne" in the NatCul Matrix. First, I analysed and placed each category from the video game into the matrix, separately. Then, I did the same with the categories in the book. The NatCul Matrix has a vertical axis that describes attitudes from a celebrating to a problematizing of nature, and a horizontal axis showing a continuum between the ecocentric horizon and the anthropocentric horizon. The last dimension of the matrix circumscribes the notion of techne, which emphasizes that all works are created *by* humans and *for* humans. In stage C, I analysed and compared the representations of the relationship between the main characters and their wider environment, which I found in the categories "world and events" and "characters and objects" in the video game with the corresponding representations that I found in the

categories in the book. I did this by comparing how the different categories were placed within The NatCul Matrix in both the video game and the book. Within all the three analysis stages, I have drawn on Wolfgang Iser's (1972, p. 285) reader-response theory, in particular his term "gap", which I used to analyse the differences and similarities of interpreting a story as a player and as a reader, and to gather information about the relationship between the main characters and their wider environment.

The findings reveal that the representations of the relationship between the main characters and their wider environment reside within the portrayal of the world and events, and in the interactions between the characters and the objects filling the respective works' portrayal of the world. Because these representations exist within human-made stories, in a video game and a book, the representations are mediated and will inherently carry representations of how humans position themselves in relation to nature. I also found that it is possible to ecocritically compare representations of the relationship between the main characters and their wider environment in a video game and a book, by using a theoretical framework that combines ludology and narratology.

Sammendrag

I denne masteroppgaven studerer jeg framstillingene av forholdet mellom hovedkarakterene og deres omgivelser i dataspillet *A New Beginning (Final Cut)* (2012) av Daedalic Entertainment og i boken *Code Blue* (2018) av Marissa Slaven. Både dataspillet og boken er økofiksjoner. Målet med denne studien er å utforske og utvikle den økokritiske forskningen på dataspill og bøker innenfor barne- og ungdomslitteraturfeltet. Masteroppgaven er nyskapende da den benytter seg av Espen Aarseth sin teori «A Narrative Theory of Games» (2012), som opprinnelig er ment for å brukes i studier av dataspill, til å analysere og sammenligne et dataspill og en roman. Derfor har denne masteren tittelen "When Ludology and Narratology Meet. A Comparative Analysis of an Ecofictional Video Game and an Ecofictional Book", fordi jeg tar utgangspunkt i teori og tilnærminger fra begge forskningsfelt. Jeg har brukt det analytiske verktøyet «Natur i Kultur Matrisen» (NatCul Matrisen) for å analysere boken og dataspillet i et økokritisk perspektiv. Matrisen er utviklet av forskningsgruppen «Nature in Children's Literature and Culture» (NaChiLitCul), og er

presentert i boken *Ecocritical Perspectives on Children's Texts and Cultures. Nordic Dialogues* (Goga, Guanio-Uluru, Hallås and Nyrnes, 2018).

Jeg har delt analysen i tre stadier (A, B og C). I A stadiet analyserte jeg utdrag fra dataspillet og boken i lys av Aarseth (2012) sine fire kategorier, hver for seg. Underveis i arbeidet, bestemte jeg meg for å plassere kategoriene i par: «Verden og hendelser» og «karakterer og objekter». I B stadiet brukte jeg NatCul Matrisen til å analysere framstillingene av forholdet mellom hovedkarakterene og deres omgivelser som jeg fant i kategoriene fra Aarseth sin teori. Jeg plasserte kategoriene i NatCul Matrisen ved å ta utgangspunkt i matrisens akser og «techne» dimensjon. Først analyserte og plasserte jeg hver enkelt kategori fra dataspillet i matrisen. Deretter gjorde jeg det samme med kategoriene jeg analyserte i boken. NatCul Matrisen har en vertikal akse som beskriver holdninger mellom det å feire naturen og det å problematisere naturen. Den horisontale aksen viser et kontinuum mellom den økosentriske horisont og den antroposentriske horisont. Matrisens techne dimensjon understreker den underliggende forståelsen av at alle verk er laget av mennesker og for mennesker. I C stadiet analyserte og sammenlignet jeg fremstillingene av forholdet mellom hovedkarakterene og deres omgivelser som jeg fant i kategoriene «verden og hendelser» og «karakterer og objekter» i dataspillet med de parallelle fremstillingene jeg fant i bokens kategorier. Dette gjorde jeg ved å sammenligne hvordan de ulike kategoriene ble plassert i NatCul Matrisen i både dataspillet og i boken. I analysens tre stadier har jeg trukket veksler på Wolfgang Isers (1972, s. 285) resepsjonsteori og hans begrep «tomme rom i teksten» som ble brukt til å drøfte forskjeller og ulikheter mellom det å oppleve en historie som en leser og som en spiller, og til å samle informasjon om forholdet mellom hovedkarakterene og deres omgivelser.

Funnene viser at representasjonene av forholdet mellom hovedkarakterene og deres omgivelser finnes i fremstillingen av den fiktive verdenen og hendelsene, og i samhandlingene mellom karakterene og objektene som fylte de respektive verkenes framstilling av den verdenen. Fordi disse representasjonene eksisterer i menneskeskapte historier, i et dataspill og en bok, er fremstillingen mediert og vil ha iboende representasjoner av hvordan mennesker posisjonerer seg selv i forhold til naturen. Jeg fant også at det er økokritisk mulig å sammenligne representasjonene av forholdet mellom hovedkarakterene og

deres omgivelser i et dataspill med representasjonene i en bok, ved å bruke et teoretisk rammeverk bestående av ludologi og narratologi.

Dedication

Dedicated to the memory of my father Rune Haugom, who always believed in me. He died from cancer the 5th of February 2016. My interest in videogames stems from playing different video games with my father from an early age. He always encouraged me to make decisions in life that would make me happy – and studying children's and young adult literature has given me great joy. I know he would be proud.

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Table of Contents:

1. Introduction	1
1.1 Background, purpose and presentation of the problem statement	1
1.2 Relevance and previous research	3
1.3 Presentation of primary literature	5
1.3.1 Selection criteria	5
1.3.2 Code Blue	7
1.3.3 A New Beginning (Final Cut)	9
1.4 Structure of the master project	11
2. Theory	13
2.1 Ecocriticism	13
2.1.1 Historical development	15
2.1.2 The first and second wave	16
2.1.3 The third wave	17
2.1.4 The Nature in Children's Literature and Culture Research Group	17
2.2 Ecofiction – What's in a name?	18
2.2.1 True and false ecofiction	20
2.3 Reader response theory	21
2.4 Narratology and ludology	23
2.4.1 The "war" between ludology and narratology	24
2.4.2 Definitions	26
3. Methodological Approach	27
3.1 A Narrative Theory of Games	27
3.1.1 "World"	29
3.1.2 "Objects"	32
3.1.3 "Characters"	33
3.1.4 "Events"	35
3.2 A Literary perspective	36
3.3 How to "read" a video game as a multimodal text	38
3.3.1 Images and text	40
3.4 Implications of the chosen approach	41
4. Analysis, Stage A: "World and Events" and "Characters and Obj	ects" 42
4.1 Presentation of analysed parts in A New Beginning (Final Cut)	42
4.1.1 "World and Events"	44

4.1.2 "Characters and Objects"	54
4.2 Presentation of analysed parts in Code Blue	61
4.2.1 "World and Events"	62
4.2.2 "Characters and Objects"	69
5. Analysis, Stage B: An Ecocritical Perspective	73
5.1 The NatCul Matrix	74
5.1.1 Celebrating nature	76
5.1.2 Problematizing nature	78
5.1.3 The anthropocentric horizon	78
5.1.4 The ecocentric horizon	79
5.1.5 Techne	80
5.2 Placing categories from A New Beginning (Final Cut) within The NatCul Matrix	81
5.2.1 "World and Events"	81
5.2.2 "Characters and Objects"	85
5.3 Placing categories from Code Blue within The NatCul Matrix	89
5.3.1 "World and Events"	89
5.3.2 "Characters and Objects"	94
6. Analysis, Stage C: A Comparative Perspective	98
6.1 Comparative analysis of "World and Events" in <i>A New Beginning (Final Cut)</i> and <i>Blue</i>	l <i>Code</i> 98
6.2 Comparative analysis of "Characters and Objects" in A New Beginning (Final Cur Code Blue	t) and 100
7. Conclusion	102
7.1 Findings	102
7.1.1 Analysis, stage A: Findings	102
7.1.2 Analysis, stage B: Findings	104
7.1.3 Analysis, stage C: Findings	105
7.1.4 General findings	106
7.2 Future research	106
7.3 Final thoughts	107
References:	108
List of Figures:	114

1. Introduction

1.1 BACKGROUND, PURPOSE AND PRESENTATION OF THE PROBLEM STATEMENT From watching movies like *Star Wars: Episode IV – A New Hope* (Lucas, 1977), *2001: A Space Odyssey* (Kubrick, 1968), *Resident Evil* (Eichinger et al., 2002), to playing video games like the *Resident Evil 4* (Capcom, 2005), *Overwatch* (Blizzard Entertainment, 2016), *SimCity 4* (Maxis, 2003) and many more – I have always had a fascination for science fiction. The stories I especially like, are the ones that deal with a dystopian society in a future human-like world. While conducting this master's degree study, I came to realise that many of my favourite games and movies have ecofictional attributes. I realised this as I learned about the research project "Nature in Children's Literature and Culture" (NaChiLitCul). At first, I was not sure if I would be able to contribute to the field of ecocriticism but as I started to grasp how little was done on video games within ecocriticism in the children's and YA literature field of study, I developed a need to contribute. I wanted to understand more about the field, and about the potential it has to influence children and young adults' attitudes toward the environment and climate change.

Climate change is undeniably one of the most debated issues in today's society. Some people believe that humans are to blame, and others suggest that the world's climate has always been changing naturally. Even though opinion is divided concerning the reasons why the climate is changing, there seems to be a consensus that the climate *is* changing. "Climate change" and "global warming" are two terms most people either have heard of or know well – but how do we know whether it is true, and does it make any difference? Global temperature rise, warming oceans, shrinking ice sheets, glacial retreat, rising sea levels, and extreme events are just some of the evidence of the climate change that is happening right now (NASA, 2018, December 13). This master's thesis recognises global warming and climate change to be factual and scientifically proven. In this recognition, it is important to explain how these two terms are understood. The terms "global warming" and "climate change" are often used as synonyms, but there is a difference. Global warming refers to the increase in average temperatures. Many scientists have chosen to use the term "climate change" because it "...encompasses not only rising average temperatures but also extreme weather events, shifting wildlife populations and habitats, rising seas and a range of other impacts" (Nunez,

2019, January). By this, I understand climate change to be an umbrella term for the different changes we see in the climate of the earth today.

When I first started working on this master's thesis, I knew I wanted to look at, and compare, representations of nature within a video game and a book. At first, I worked with a problem statement that focused on representations of "human impact on nature", but as I began to understand more about ecofiction and ecocriticism, I realised that it was problematic to use such a phrase. It became difficult to accept the insinuated dualism in the notion that humans affect nature, when humans essentially are part of nature. This discovery motivated me to dwell deeper into ecocriticism and explore how the field has developed historically which is included in the theory chapter of this master project. The problem statement of this master's thesis is as follows:

How is the relationship between the main characters and their wider environment represented through an ecofictional video game and an ecofictional book?

I have chosen to look at the main characters of the video game and the book to limit the scope of this study. By "their wider environment", I am referring to the world the characters travel and exist in, and to the objects that fill that world – both in regards to the spatiality, and concerning the state of the climate in their worlds. When choosing an ecofictional video game and an ecofictional book, I had to have some selection criteria. These are listed in the theory chapter, part 1.3.1 "Selection Criteria". I had to understand what ecofiction is, and discuss whether to use other relevant terms.

Why compare a video game and a book? During the first year of this master study, I found that doing analyses on video games and books had great potential. I wrote a paper where I compared an illustrated novel of Pippi Longstocking (Lindgren, 1945) with a video game adaptation of the same book, to study how the aesthetic expression changed from one medium to another. By doing this, I learned that it is easier said than done to compare a video game and a book – but that it is possible, and very interesting. After I had written that paper, I *knew* I wanted to use my master project to explore the relationship between literature and video games further.

It is important to highlight that this study is *not* a comparative study of a video game and a book, but a comparative study of the *representations* of the relationship between the main characters and their wider environment in a book and a video game. The book and the video game are only connected with regard to being ecofictional eco-mysteries, and in that they both convey a fictional story. Other than that, they are two independent works in different media. Due to this, I had to find a common ground where both works could be analysed and discussed. In "A Narrative Theory of Games" (2012), Espen Aarseth uses a combination of literary narratology and ludology to analyse video games. The model was intended to be used on video games, but seeing as it contains narratological elements, I decided that it would be interesting to see how the model would work on a book as well. Thus, this study is, in addition to trying to answer the problem statement, an attempt to use Aarseth's theory on both a book and a video game. In order to do so, I have supplemented his theory with a layer of reader-response theory, more ludology and more narratology. Next, I will discuss the relevance of this study, and previous research.

1.2 Relevance and previous research

Climate change has yet to affect and alter my everyday life as a Norwegian student. By this admission, I recognise that this might affect my perspective on the issue of climate change. However, I pay attention to the news and try to educate myself on the topic. As a student working part-time as a teacher at a high school, I have experienced the climate strike initiated by Greta Ernman Thunberg. She is a Swedish pupil and climate activist who started the school strike movement, which made several thousand of Norwegian pupils leave their classrooms and take to the streets to voice their concern about the future environment. Demanding adults to take action to better the ongoing climate crisis. (Gerretsen, Lazarus and Seo, 2019, March 15). This master's thesis is a testimony to my commitment to investigate how we can challenge and instil eco-friendly attitudes in the generations to come.

The first immediate ways of reaching young adults that come to mind, are social media and video games. According to an American survey conducted by Pew Research Center (Perrin and Anderson, 2019, April 10), "Snapchat and Instagram are especially popular among 18- to 24-year-olds" with Twitter, YouTube and Facebook listed as part of the most popular social media sites. Further, video games have become a part of the everyday life of many young

adults. Gaming is popular amongst teens in America, particularly teenage boys, and the three most popular types of game are "puzzle", "strategy" and "adventure" (Perrin, 2018, September 17). There is no denying that video games and social media have become an integrated part of the younger generations' everyday lives. According to the Norwegian Media Authority (Medietilsynet, 2019, April 18), video games are an important hobby for many children and young adults, and almost all Norwegian children play video games. The climate is changing, and the next generation has to take a stand in order to save the future of the planet. I suggest that *one* relevant way of approaching teens is through video games.

There is an introductory general part in the Norwegian school curriculum, which explains the foundation for the set of values pupils are to encounter in their school-life. (Utdanningsdirektoratet, 2019). In this general part, "sustainable development" is listed as a part of the principles for teaching and pupil-development. This part emphasizes that the pupils are to be instilled with morals and values that make them want to preserve and take care of life on earth. Specifically, the part underscores that the present generation has to take care of the needs of the people of today, without ruining the future generations' ability to cover their needs. A way of incorporating the topic "a sustainable development" in teaching in schools could be to let the children read fictional books, and play video games, which deal with the topic of climate change and sustainability. By comparing the representations of the relationship between the main characters and their wider environment in an ecofictional video game and an ecofictional book, this thesis might prepare way for opening up to more use of video games and books in the classrooms when discussing the climate. By autumn 2019, in Norway, there will be six schools, which offer an "e-sport" line for young adults that want general study competence, and who like to play video games (Os Gymnas, Hordaland Fylkeskommune, 2019, April 18). The times are changing with video games becoming a bigger part of everyday life, and my study is a part of this change.

By being introduced to the field of ecocriticism, I noticed early that there had not been done much research on video games from an ecocritical perspective within the children's literature field. This might not be surprising, as there are different opinions regarding video games as a storytelling medium. While searching for previous research on video games within the literary field of ecocriticism studies, I found an article by Benjamin Abraham (2015, September 21)

titled "Video Game Visions of Climate Futures: *ARMA 3* and Implications for Games and Persuasion". In this article, he discusses how the representations of a future with renewable power generation in the video game *ARMA 3* (Bohemia Interactive, 2013), creates a desirable vision of the future. Further, he argues that the video game's potential to challenge society's cultural and imaginary dependent futures, is through the game's aesthetics, not game structure. In the book *Teaching Secondary English: as if the Planet Matters*, Sasha Matthewman (2011) has included a chapter called "New subject territory and 'new' media" (pp. 154-18), which discusses, amongst other things, how video games can function as a source for reflection on global issues such as climate change. Abraham's (2011) article and Matthewman's (2011) book exemplify the research that already exist on video games within ecocriticism. In regard to previous research on narratology used in video game studies, I have included some examples in the theory section of this master's thesis. However, I have yet to find a study, which uses ludology *and* narratology on a book *and* a video game in an ecocritical perspective within the children's and YA literary field of study. By this, my master's thesis is part of opening up an unexplored part of the field.

1.3 Presentation of Primary Literature

In this part, I will introduce the primary literature of this master's thesis by presenting the selection criteria and the selected works' plots.

1.3.1 SELECTION CRITERIA

In compliance with the problem statement, I searched for books and video games that classify as "ecofictional". In order to do so, I had to decide on some selection criteria. First, I noticed that there are not many books that deal with climate change as a main topic that are also adapted into a video game (or the other way around), and that are also suitable for children or young adult audiences. I therefore decided to stop looking for adaptations, and instead I started looking for an ecofictional book and an ecofictional video game for young adults, regardless of being adapted to another platform. The selection criteria developed into finding works that dealt with climate change within a similar fictional framework. Further, I set the criteria to include books and video games suitable for young adults. There are some video games on the market that deal with climate change, but they are not suitable for teens under the age of eighteen, and it was therefore difficult to justify the use of these in a master's thesis

on children's and YA literature. At last, the video game and the book chosen had to be "ecofictional". I chose to use Lawrence Buell's criteria for deciding whether a given work is ecofictional:

1. The nonhuman environment is present not merely as a framing device but as a presence that begins to suggest that human history is implicated in natural history. 2. The human interest is not understood to be the only legitimate interest. 3. Human accountability to the environment is part of the text's ethical orientation. 4. Some sense of the environment as a process rather than as a constant or a given is at least implicit in the text. (Buell referred to by Dwyer, 2010, p. viii).

With all of these criteria in mind, I chose the book *Code Blue* (2018) by Marissa Slaven, and A *New Beginning (Final Cut)* (2012) by Daedalic Entertainment. As previously mentioned, this study will not compare the book and the video game as mediums of storytelling, but rather compare the representations of the relationship between the main characters and their wider environment. This notion created an overarching criterion while searching for a book and a video game – I wanted the works chosen to have as much in common as possible to narrow the obvious medium difference between them. *Code Blue* and *A New Beginning (Final Cut)* are both "eco-mysteries". They both present the topic of climate change in an exciting and action-filled manner. Both the reader and the gamer partake in the solving of the different dilemmas and obstacles the protagonists encounter. Both works also fall within the genre of science fiction and young adult fiction. They thus have a number of common features. Next, I will present the book and the video game.

1.3.2 Code Blue

Code Blue was written by Marissa Slaven and published in 2018. In addition to writing books, Slaven is a palliative care physician who researches climate change scientifically (Slaven, 2018, p. 313). The book was published by Moon Willow Press, which is "...an independent niche publisher committed to helping sustain forests while celebrating the written word" (Moon Willow Press, 2019, March 7). Code Blue is a cautionary fiction in the sense that even though disasters occur and the climate change is getting worse, there is still hope for the future. This is according to Jim Dwyer's definition of cautionary fiction as "...a warning that we can and must change behaviour while we can still save ourselves and promote a rich, sustainable web of life" (2010, p. 63). Connecting Slaven's profession as a palliative care physician to the title of the book *Code Blue* is interesting. "Code Blue" is called when a patient's heart stops, and resuscitation is initiated. The earth is flatlining, and something has to be done if it is to survive.



Figure 1: The Cover Design of *Code Blue* is by Mary Woodbury at Moon Willow Press. The moon over the sea art is copyright by Tilialucida and licensed for use by Canva. Rendered with permission.

PLOT

In the book, we meet the protagonist Tic (short for Atlantic), who is a 16-year-old girl. The plot takes place in a not-so-distant future dystopic version of planet earth. Tic lives in a time-period after "the Change", which refers to the time after the point of no return. The environment has gone through severe climate change, and there are millions of climate refugees. The world is overpopulated, and there is a recognition that every human life puts a strain on the climate. Temperatures and sea levels are rising rapidly, and the world is ridden with dangerous weather. The Change also refers to an understanding and acceptance of the inter-relatedness of all of these crises. Tic lives in a small place called "the Edge", right

outside New Hope Town. The Edge is located right next to where land and risen sea levels meet. There is a tall barbed wire fence along the entire coastline of the Edge. Tic loves to stand by the fence and look out at the ocean. She lives with her mother and their 120-pound French bullmastiff dog, Ruthie. Their nearest neighbour, and their closest friend, is a farmer whom they call Uncle Al. Tic never knew her father, and all she knows about him is that he was a scientist researching climate change, and that he disappeared in the ocean on an expedition trip to the North Atlantic.

Tic wants to be a part of combating climate change. In order to do so, she needs to be accepted by the North Eastern Science Academy (NESA). She could get an education at another university, but being accepted by NESA has been her lifelong dream. The students taking the entrance exam are not allowed to move nor speak during the test, and any attempt to do so is recognized as attempted cheating. While taking the entrance exam, a girl passes out in front of Tic. Tic and a boy named Lee rush to the fainted girl's side, and by doing so, they risk being accused of cheating and banned from attending NESA. While waiting for their verdict, Tic and Lee are acquainted. Even though they broke the rules, both students are accepted into the school. NESA sends a driver to pick Tic up and escort her to the school. On the ride there, Tic meets a girl named Phish who was picked up by the same car. Phish and Tic become close friends quickly, and during their time at NESA they become best friends.

At NESA, Tic learns about how "The Change" occurred and about the state of the earth's climate and she is expected to conduct her own research on the climate change. All the first-year students have to choose their first science project, and Tic chooses to research the melting ice-shelves and glaciers in the North Atlantic. Tate, a third-year student, is assigned as the supervisor for Tic's project. This means that Tate has to help and guide Tic through her academic work. As Tic progresses in her research, *someone* is watching her every move – even hacking into her computer to tap into her video chats and download her messages. Tic is onto something, and it seems as if *someone* does not like that. During a level four storm, New Hope Town and the Edge are damaged badly. The outcome is that Tic's mother dies, and Tic travels alone to the Edge to find answers in relation to what might have happened to her father. While there, Tic sees strange men burning down her childhood home and her neighbour Uncle Al's house.

Tic travels to the North Atlantic with Lee to spread her mother's ashes. Lee's family has made themselves rich on the Change by diving down to the bottom of the ocean, taking old furniture and reusable objects to sell. Lee has previously worked as a diver himself, and he knows divers and researchers who travel to the North Atlantic often. He sets it up so that Tic and he can travel with them on their last expedition of the season. During the trip, it is revealed that Lee's Uncle Chris was in love with Tic's mother, and that he was the one who killed her father by throwing him over board all those years ago. Tic discovers that Lee's uncle and his crew are speeding up the melting process of the glaciers to help the sea levels rise faster and ensure their business for the future. This is why Tic's numbers were not adding up. *They* were altering the course of the melting rate! Tic and Lee manage to stop him, and they return home to NESA.

1.3.3 A NEW BEGINNING (FINAL CUT)

A New Beginning (Final Cut) (Daedalic Entertainment, 2012) is the video game I have chosen for my master's thesis. It is an adventure game, which is defined as "...games focusing on puzzle-solving within a narrative framework. These games typically demand strict, logical thought" (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 36). Like Code Blue, A New Beginning (Final Cut) is also a cautionary fiction, in that the main character Fay travels back in time in an attempt to save the earth, its climate and its inhabitants. In the story, the player gets to control both Fay and Bent, changing in accordance with the different parts of the story. The player is not able to change freely between the two main characters.

PLOT

In a distant future, year 2500, we meet Fay and a team of surviving scientists. They live underground to hide from the poisonous air and toxic environment on the earth's surface. The earth's climate is devastated, and humans only have a few weeks to live. In a last attempt to save humankind and the earth, Fay and the other scientists are sent back in time to prevent humans from destroying earth's climate. The scientists split into different teams of three, consisting of a mechanic to operate the time-travel-vehicle, a team-leader to oversee the mission and a radio operator. Fay is a radio operator, and it is her responsibility to keep her team in touch with the other teams. At first, Fay and her team travels back in time to San Francisco and the other teams are spread out on the planet. It soon becomes apparent that they

have not travelled far enough back in time. San Francisco lies in ruins, and there is not much sign of life except a couple of people surviving in empty buildings and science facilities. When Fay manages to establish a radio connection to the other teams, she learns that they all died in different types of natural disasters. Seeing as the other teams have succumbed to the consequences of the earth's climate change, Fay's team is the last one standing and represents the last hope to save the earth.

Salvador, Fay's team-leader, decides that they have to go back to a moment in time when the climate change has become visible, but not yet at the point of no return. Through research, Fay and her team find that they have two incidents happening at approximately the same time in history so eventful that travelling back to either one might save the future of the earth. The first option is to travel to a climate conference held in Oslo, where lawmakers are deciding whether Emilio Indez should be permitted to continue his project of building power plants in third world countries. Indez is a multimillionaire energy tycoon who built over thirty power plants in third world countries. The second option is to travel to an Indez-power plant in the Brazilian rainforest. The power plant is going to explode, which has been recorded as an incident that altered the climate and accelerated the global warming progress to the extent that the point of no return was reached a couple of years later. Fay demands that they travel to the climate conference in an effort to persuade the lawmakers to stop Indez' power plant projects and to convince them that they have to change their ways. Salvador does not agree with Fay, and uses his veto power and decides that the best option is to stop the power plant from blowing up. However, right before Fay and Salvador travel back in time, Fay switches the coordinates of the time jump, so that their new destination is the climate conference. On their way there, they agree that they need to find a Norwegian scientist named Bent Svensson. In Fay's future-like-world, they use a technology called "The Svensson" as a source of energy. The technology was invented by Bent and it utilizes a reaction between oxygen, algae and sunlight to produce electricity. Fay needs to convince Bent to invent "The Svensson" right away and replace that source of energy with all the other fossil fuel options of Bent's time.

Unfortunately, at the time Fay and Salvador arrive at Bent's, they find him to have retired from his scientific work due to being mentally strained from feeling like the sole person responsible for saving the earth and the climate. Bent's algae work is now in the hands of his

son, Duve. Fay, Salvador and Bent travel to the algae rig, where Duve leads the scientific research on algae as a source for electricity. At the rig, Fay and Bent realise that the men responsible for building the nuclear power plant, Indez Industries, are trying to get a hold of the algae technology in order to capitalize it and keep it concealed from the public.

In a last attempt to save the future of the earth, Fay and Salvador travel with Bent to the Indez-power plant right before it is recorded to have blown up. However, there is a plot twist. While there, Bent realises that Salvador's original plan is to blow up the nuclear plant himself. Bent learns from Salvador that the plant's explosion never was the sole reason for the change in climate. The real reason for the climate change was due to the combined activity of all humans. A single event like a nuclear power plant blowing up would not change the climate as drastically as Fay and Salvador had told Bent. They just needed people to believe that in order to create a sense of urgency and need for action. This plot twist puts Fay and Bent against each other for a moment, but in the end, Fay sacrifices herself and Salvador when she stops the nuclear power plant from blowing up. Now the future of the earth truly lies in Bent's hands and he has to continue his work of creating "The Svensson"; warning and educating the population on what lies ahead in the future, if they do not change their ways.

1.4 STRUCTURE OF THE MASTER PROJECT

This introductory chapter is followed by the theory chapter, which presents the theoretical framework of this master's thesis. In the theory chapter, I have included several different theories to answer the problem statement. First, I present ecocriticism as a field of study and its historical development because I will apply an ecocritical perspective to the discussion of the representations of the main characters and their wider environment. Additionally, it will inform the presentation and understanding of The NatCul Matrix. Further, I discuss the use of the term "ecofiction" because the primary works chosen in this thesis are ecofictional.

Considering how a video game and a book demand different approaches to be decoded, I have included reader-response theory. Specifically, I present Wolfgang Iser's (1972, p. 284-285) term "gap", which is important in the analyses and discussions of the representations found through the interactions between the reader and the book, and the player and the video game. Because I am studying a video game *and* a book, I have included a section presenting ludology and narratology.

In chapter 3, I present my methodological approach. Here it is important to emphasize that the methodological approach chapter, which follows the theory chapter, includes several other theoretical perspectives required to analyse and discuss *A New Beginning (Final Cut)* and *Code Blue*. The theory chapter overarches the entire study's theoretical foundation, and the analysis theory is specific to the execution of the analyses and it applies to the theoretical discussion. First, I present Aarseth's "A Narrative Theory of Games" (2012). His theory has shaped how I have analysed both the book and the video game. Further, I present a literary perspective on how I am going to approach both the text in the book and the text in the video game. Lastly, I present theory on how to read a video game as a multimodal text.

In chapter 4, I analyse the video game and the book in light of the theoretical framework in chapter 2, and in line with the analysis theory presented in chapter 3. I divide the analysis into three stages (A, B and C), which I conduct through chapter 4, 5, and 6. In stage A of the analysis in chapter 4, I present and analyse the chosen parts and excerpts from the video game and from the book, in each of their own sections. To do so, I use theory from the previous chapters, and Aarseth's four categories that I have combined into pairs, "world and events" and "characters and objects", are especially important. In stage B of the analysis in chapter 5, I present The Nature in Culture Matrix first. Then I place the respective representations found in the different categories from Aarseth's theory in the book and in the video game within the matrix. In stage C of the analysis in chapter 6, I compare, discuss and place the representations found in each category, from both the video game and the book, into the matrix together.

In chapter 7, I conclude the study by summarising my findings, I propose possible future research, and I give some final thoughts on the use of Aarseth's theory on a video game *and* a book, and on the master's thesis in its entirety.

2. THEORY

This chapter presents the theoretical framework for this study and my analyses. As the problem statement focuses on representations of the relationship between the main characters and their wider environment in an ecofictional video game and an ecofictional book, I have chosen an ecocritical approach. This means that I will apply an ecocritical point of view to the analyses and the discussions of A New Beginning (Final Cut) and Code Blue. In order to answer the problem statement I need to present how I understand ecocriticism and its historical development. This will be done by looking at important researchers and scientists from the field, looking at how the scientific scope has changed through the course of its historical development, and presenting this study's understanding of central terms and topics within the field. This will enable me to place Code Blue and A New Beginning (Final Cut) within the field of ecocriticism. In recognition of the video game and book's different types of mediums, I have decided to include theory from reader-response theory. Both the reader of a book, and the player of a video game, have to *interact* with a story for it to become alive. Reader-response theory creates a theoretical common ground shared by the respective player and reader's interpretations of a given narrative, and the given narrative potential of giving the reader or the player possibilities to interpret and partake in the meaning-making process. Reader-response theory is necessary to answer the problem statement because the interpretations of the reader and the player is important in the process of finding and understanding the potential representations of the relationship between the main characters and their wider environment. Finally, this chapter will present central theory on ludology and narratology. I have chosen to use Aarseth's "A Narrative Theory of Games" (2012), as an analytical tool to study the book and the video game. To answer the problem statement it is necessary to explain how I understand the terms "ludology" and "narratology" in order to use key terms, central aspects and perspectives from the belonging fields of study.

2.1 ECOCRITICISM

Ecocriticism is a substantial interdisciplinary field of study which "…seeks to engage with environmental history, philosophy, sociology and science studies, and not least with ecology and the life sciences" (Bergthaller, 2018 October). In the words of Glotfelty (1996, p. xxviii): "What then *is* ecocriticism? … ecocriticism is the study of the relationship between literature

and the physical environment". The definition of ecocriticism varies, depending on *when* it was written and from *what perspective*. Dwyer (2010, p.1), describes ecocriticism as "...a critical perspective on the relationship between literature and the natural world, and the place of humanity within – not separate from – nature." Bradford and Massey (2011, p. 110), view ecocriticism as a field of study which focuses "...on literary and artistic expressions of the relations between humans and the natural world". These two definitions were published one year apart, and exemplifies that even in the same period – there exist different nuances of opinions. Dwyer's definition depicts a general understanding of what ecocritics research and he puts an emphasis on how humanity is not separate from nature, while Bradford and Massey underline the more specific ways (and topics; literary and artistic expressions) of conducting ecocritical research.

In the book *Ecocriticism*, Greg Garrard (2012, p. 5) gives a wide definition of the *subject* of ecocriticism as "...the study of the relationship of the human and the non-human, throughout human cultural history and entailing critical analysis of the term 'human itself'". This definition is very different from the previously discussed definitions. The definition is "human-centred" with regard to viewing everything as either "human" or "non-human". This is a contrast to Dwyer's definition, where humanity is understood to be a part of nature, not separate. These different definitions show the wide range of potential perspectives one can take as an ecocritic. In Buell's (2005, The Emergence of Environmental Criticism, section 19) words: "...ecocriticism gathers itself around a commitment to environmentality from whatever critical vantage point". So, how does *this study* define ecocriticism? Recognizing humans as a part of nature and the cultural aspect of humanity, and the first law of ecology (Commoner referred to by Glotfelty, 1996, p. xix) "Everything is connected to everything else" – this study understands ecocriticism as the critical study of the representations of nature in literature.

To engage with the field of ecocriticism today, it is necessary to understand its roots. Consequently, this thesis gives a brief presentation of the historical development of the field by looking at influential voices that have been important in establishing and defining what the field was at its beginning and what it has become today. Further, a general description of Lawrence Buell's first and second wave will be provided. Then, today's ecocriticism will be

briefly presented by looking at the "third wave". Finally, the NaChiLitCul research group and their NatCul Matrix will be introduced.

2.1.1 HISTORICAL DEVELOPMENT

The term "ecocriticism" was coined by William Rueckert in 1978 in his article "Literature and Ecology: An Experiment in Ecocriticism" (Slovic, 2010, p. 5; Dwyer, 2010, p. 2; Glotfelty 1996, p. xxviii). Even though Rueckert is recognized as the first to use the term, explorations of topics regarding nature in literature started long before 1978 (Slovic, 2010, p. 5). One of the best-known forerunners to the field of ecocriticism is the classic nature writer Henry David Thoreau (Goga et al., 2018, p.6; Dwyer, 2010, p.2). Thoreau is especially known for his book Walden, or, Life in the woods (1908), in which he writes about his experience of living two years in a house he built himself, on the shore of Walden Pond. In the book, Thoreau offers his reflections on life, nature and humanity. The beginning of ecocriticism as a field took place in the 1960s as a chain of reactions to "...the development of a greater understanding of ecological processes, concern over the intensification of global environmental degradation..." (Dwyer, 2010, p.1) and to "... the escalating environmental crises..." (Bradford and Massey, 2011, p.111). In this burgeoning phase, Lawrence Buell and Cheryll Glotfelty are known as important voices who participated in the establishing of the field (Bradford & Massey, 2011, p.111; Dwyer, 2010, p.viii and 1; Goga et al., 2018, p.7). Their best-known works are Buell's The environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture (1995) and Glotfelty's introduction in The Ecocriticism Reader. Landmarks in Literary Ecology (1996). To understand how ecocriticism has changed and developed over time, Bradford and Massey (2011, p. 111) explain how Glotfelty and Buell described "the evolution of ecocriticism", where Glotfelty described it in terms of stages and Buell characterised the development as "the first and second wave".

Common to these two accounts of the historical development of ecocriticism is an awareness of a move from the formalist approaches, with their emphasis on studying the text in isolation, to the development of a more critical approach, conscious of the cultural forces that shape, and to some extent are influenced by, the text. (Bradford and Massey, 2011, p. 111).

Next, a closer look at Lawrence Buell and his analogy "the first and second wave" of the historical development of ecocriticism.

2.1.2 THE FIRST AND SECOND WAVE

Lawrence Buell's best-known work (1) Environmental Imagination (1995) is the first book in a trilogy: (2) Writing for an Endangered World (2001) and (3) The Future of Environmental Criticism (2005). As previously mentioned, Buell is often referred to because of his influential understanding of how ecocriticism has developed historically: the first and second wave. In his latest book The Future of Environmental Criticism (2005), he revisits this analogy of historical development. "This first-second distinction should not... be taken as implying a tidy, distinct succession" (Buell, 2005, The Emergence of Environmental Criticism, Section 30). When speaking of a "first" and "second" wave within ecocriticism, Buell asserts that he is speaking of tendencies that have developed over time. Some of the new concepts and ideas build upon the notion of issues raised in the first wave, and it would be more accurate to use the term "palimpsest" as a metaphor for the historical development. With that said, it is possible to point out some of the tendencies that have been marked as typical for the first and the second wave.

In the first wave of ecocriticism, the tendency was to study texts in isolation, typically scientific texts. According to Slovic (2010, p.4-5), in first-wave there was a tendency (in North America), to study "...non-fiction 'nature writing'; non-human nature and wilderness experience; American and British literature; and 'discursive ecofeminism'". "Discursive ecofeminism" refers to the concept of understanding there to be a special bond between women and nature. Amongst writers, it was common to study "...the pastoral/wilderness canon; biographical studies of nature writers..." (Bradford & Massey, 2011, p. 111). The first wave ecocritics researched nature in literature in nonfictional texts and reinterpreted such nature-writing from the newfound perspective of environmental awareness. In the second wave of ecocriticism, the impulses changed, and there was an urge to create a field of study with a higher degree of awareness of the cultural aspects of a text. There was a shift in tendencies, from looking at nonfiction to looking at fiction (Slovick, 2010, p. 5). In addition, second-wave ecocritics broadened their scope to include urban and rural environments, environmental justice, ecofeminism "...and the profound impact of humanity on the environment as depicted in contemporary texts" (Buell referred to in Bradford & Massey, 2011, p. 111). The aspect of cultural influence in the depiction of nature in literary texts was taken into account in second-wave ecocriticism.

2.1.3 The third wave

Joni Adamson and Scott Slovic coined the term "the third wave" in their introduction to the Summer 2009 special issue of *MELUS: Multiethnic Literature of the United States*. In the article "The third Wave of Ecocriticism: North American Reflections on the Current Phase of the Discipline" (2010, p. 5), Slovic agrees with Buell's argument that the term "palimpsest" would be a better fit than "wave". He suggests that it might be easier to envision a wave, rather than "...visualize multiple layers of scholeadarly habits" (2010, p.5), and this might be the reason he has chosen to further the "wave" metaphor when looking at the field of ecocriticism today. He explains that there is a new tendency to study "...cultural background and ethnic identity more intensely than had been the case in early ecocriticism, but also seeking to overcome the limiting, isoleadating focus on specific cultures as unique phenomena". The understanding of the "waves" as not being linear becomes apparent when Slovic proposes that the first signs of a "third wave" were the indications of a trend toward taking "...a more comparative, trans-cultural approach to ecocritical studies" (2009, p. 6), which began almost as soon as the second wave had started.

One of the most typical tendencies of third-wave ecocriticism is the request for ecocritics to review their own national literatures "...in an internationally relative and comparative framework" (Murphy referred to in Slovic, 2010, p. 7). By looking at the bigger picture of, and simplifying the development of ecocriticism, one could say that first-wave ecocritics focused on American and British literature, while second-wave focused on international literature and in the third wave there is an increase in looking at regional (local) literature in comparison to other culturally based nature literature. The NatCul Matrix falls within this third-wave tendency because they have focused on Nordic Literature, which is regional literature for the researchers involved. Next is a brief presentation of the NaChiLitCul research group and their conceptual tool "The NatCul Matrix".

2.1.4 THE NATURE IN CHILDREN'S LITERATURE AND CULTURE RESEARCH GROUP In the book *Ecocritical Perspectives on Children's Texts and Cultures. Nordic Dialogues*, Nina Goga, Lykke Guanio-Uluru, Bjørg Oddrun Hallås and Aslaug Nyrnes (2018, p. 3) discuss "How is nature represented in children's and YA (young adult) texts and cultures with an emphasis on a Nordic corpus?" The underlined focus of "Nordic corpus" indicates that this

book is part of third-wave ecocriticism. The book is a collection of articles from the research group "Nature in Children's Literature: Landscapes and Beings – Fostering Ecocitizens" (NaChiLitCul). "The NaChiLitCul group was founded in a response to an identified lack of both national and international coverage of Nordic children's ecocritical writings and texts" (Goga et al., 2018, p. 5). The main goal of the NaChiLitCul group has been to:

Map out and analyse the representations of nature from a Nordic perspective in Nordic children's and YA texts and cultures; explore how they represent thought figures such as the wilderness and the idyll; and examine how the interaction of children and YAs with literary texts and outdoor learning practise shapes their environmental awareness. In addition, it has been crucial to the group to open dialogues between Nordic scholarship and texts and those of other countries. (Goga et al., 2018, p. 5).

The discussion of the book, and the main goal of the NaChiLitCul group, makes it highly relevant to my project. My master project researches how the relationship between the main characters and their wider environment is represented in a videogame and a book – and to do so, it will be applying an ecocritical perspective. The NaChiLitCul group has developed a conceptual tool called The Nature in Culture Matrix (The NatCul Matrix). I will use The NatCul Matrix in the analysis, and it will be presented in depth in the analysis stage B, in chapter 5. Even though "the main objectives of the NaChiLitCul group have been to: map out and analyse the representations of nature from a Nordic perspective and in Nordic children's and YA texts and cultures..." (Goga et al., 2018, p. 5), they also claim that it has been vital to their research to include dialogues between Nordic researchers and researchers from other countries. I am a Nordic researcher, researching an American book with an American main character and an American video game with one American and one Norwegian main character. Consequently, my master project enters the Nordic-international dialogue within both second and third wave ecocriticism and participates in the dialogue regarding The NatCul Matrix's development.

2.2 ECOFICTION – WHAT'S IN A NAME?

In the process of acquiring knowledge about the ecofiction genre, I have come across many different terms. Dwyer (2010), uses the term "ecofiction", Massey and Bradford (2011, p.109), uses the term "environmental texts", and Woodbury (2016, March 31), uses the term "eco-fiction" with a hyphenation. The Nature in Children's Literature and Culture

(NaChiLitCul) research group seems to avoid using any specific umbrella term by using goal-oriented language. Perhaps one might say that they are not limited to ecofiction, they study the portrayal of nature in all types of children's and YA literature. I have also come across terms like "green fiction", "nature-oriented fiction" and "climate fiction". What I find interesting is that almost all these different sources of information use the same term for viewing these types of texts critically: ecocriticism. Next, I would like to give an explanation to why I have decided to use the term "ecofiction" for my master's thesis.

Bradford and Massey (2011, p.109) use the term "children's environmental texts", and define it to "thematize contemporary ecological issues". They also state that the function of these types of texts is to position child readers as "ecocitizens". The meaning of the term "ecocitizen" is a citizen who is "dedicated to sustainable development in the local sphere and also to global responsibility" (p.109). In other words, Bradford and Massey view "environmental texts" as entities, which seek to instil certain attitudes toward nature in child readers. In their discussion of the use of the term "ecocitizen", they argue that the use of the term "ecological" is a gateway to more "...conceptual possibilities" than the term "environmentalist". By using "eco" as a prefix in the term "ecocitizen", they establish a connection to Barry Commoner's first law of ecology: "That everything is connected to everything else; what affects one, affects all" (pp.109-110). Woodbury (2016, March 31), uses the term "eco-fiction" to describe the "...ecologically oriented fiction as a whole".

Regarding the confusing amount of different terms, Dwyer (2010, p. 3) suggests that there is no consensus on how to spell "ecofiction". In *The Future of Environmental Criticism* (2005, Preface, Section 5), Buell explains why he has chosen not to use the term "ecocriticism" in the book's title "...even though it is the umbrella term by which literary-environmental studies is best known..." In short, he argues that the term "environmental" better captures the cross between "natural" and "constructed" elements, and better captures a field of study that lately has been more connected to cultural studies than with the science studies, than the term "eco" implies. I have decided to use the term "ecofiction" because I share Dwyer's understanding of the genre, and I agree with Bradford and Massey's perspective on using the "ecological" term instead of the "environmental" term. Even though this master's thesis uses

the term "ecofiction", it still recognizes that there are a vast variety in terms used and that they sometimes might overlap, or completely overlap.

2.2.1 True and false ecofiction

According to Dwyer (2010, p. 3), ecofiction is a subgenre composed by different styles e.g. modernism, postmodernism and realism, and can be found in several genres e.g. mystery, romance and speculative fiction (sci-fi and fantasy). Dwyer makes a distinction between "false" and "true" ecofiction, where "false" ecofiction "is based on the fear that something will go wrong..." while "true" ecofiction "...tends to be optimistic in the face of daunting challenges". For instance, *Code Blue* (Slaven, 2018) and *A New Beginning (Final Cut)* (Daedalic Entertainment, 2012) are examples of "true ecofiction" seeing as both works have plots that evolve around the notion that there is still hope and that the earth might still have a chance. This distinction between "true" and "false" touches upon the aspect of activism that is closely connected to ecofictional works' ethical orientation.

To summarize, I understand ecofiction as an umbrella concept to describe literature (within different genres and styles), that deal with the relationship between humanity and the natural world. How the relationship is dealt with and the plot of the story, decide whether it can be viewed as an "eco-mystery", "eco-sabotage", "eco-romance" and so on. Like Shakespeare's famous character Juliet said, "What's in a name? That which we call a rose, by any other name would smell as sweet." I could not find a clear-cut reasoning from Dwyer, Bradford, Massey or Woodbury regarding why they have chosen the terms to explain literature that falls within the criteria of Buell. I could only find discussions and arguments from the different authors on *how* they understand the terms they have chosen, not *why*. This goes to show that it might not be important what "term" is used, but to be able to explain *what it is*. Perhaps, in time, there will be done more research on the terminology used within the field of ecocriticism. Currently, there does not seem to be a consensus on how to label literature dealing with environmental issues. Maybe there is no need for consensus – just a need to accept the field as an organic and generic process that develops with time and with the status of the global environment.

2.3 READER RESPONSE THEORY

As noted earlier, this study understands ecocriticism as a critical study of the representations of nature in literature. It might be tempting to argue that some ecofictional books only portray nature – but this is where the essence of ecocriticism becomes clear. The books are written by humans and for humans. The portrayal of nature in a book is never created in a vacuum. The portrayal is coloured by the author's interests, opinions and potential intentions with the specific work. Whether or not the author intended it -a text will always position its reader in some way. If humanity is not a part of the book's plot, it is still a part of its creation – and the reader will have the ability to interpret the portrayals of the relationship between humanity and the natural world in it. In the words of Louise M. Rosenblatt (1960, May): "The words of a poet remain merely black marks on the page until they are brought to life anew by his readers in the context of their own worlds". Wolfgang Iser (1972, p. 279) suggests a similar idea: "The convergence of text and reader brings the literary work into existence..." This study takes the position that video games also come alive when a player interacts with them. It is not the intention of this study to insinuate that video games and books are equal modes of storytelling – they are recognized as inherently different – but still as similar in many different ways. One of the ways in which they are similar, is that they share the aspect of being objects to which a player or a reader can respond. In this part of the theory chapter, reader-response theory will be presented. This will be done by giving a brief presentation of what readerresponse theory is, explain its relevance to this study, and present how it will be implemented in the analyses and final discussion of this master's thesis.

Reader-response theory emerged in the 1970s with notable researchers such as Stanley Fish in America, Roman Ingarden, Hans Jauss and Wolfgang Iser in Germany, and Umberto Eco in Italy (Mose, 2012, pp. 213-214). Reader-response theory is a part of reception theory, which is a field of literary study. In reception theory, the reader's role is emphasized in the analyses, interpretation and reception of a given text (Mose, 2012, p. 214). In reception theory, there is a distinction between the actual reader reading the text, and the "implicit reader" of the text. In addition, there is a recognition that an author of a book has two dimensions: the actual author of that book and the "implicit author" (Andersen, 2012b, p. 46). This distinction between actual and implicit, for the reader and the author, comes down to the difference between the real world where the book exists physically, and the mediated representation of the world *within* the book. Both the actual reader and author exist in the real world. Neither of

them know the other one's intentions or expectations in relation to the content of the book. The implicit author has the same set of values and ethical orientations as the book – which might be in stark contrast to the actual author's own moral compass. The implicit reader is the intended reader of the book, and is the one that "reacts" to what is written in the text (Andersen, 2012b, p. 47). The notion of an implicit and actual reader and author is not important for the use of reception theory in this master project – but these are important terms to be aware of when moving forward. Especially seeing as this master's thesis analyses a book *and* a video game. What is the equivalent "implicit reader" in regards of playing a video game? I propose the terms "implicit player" and "actual player", and "implicit video game designer" and "actual video game designer". For the purpose of this master project, the terms "actual player" and "actual reader", carry the most relevance. The "actual player" is the person playing the video game in the real world, and the "actual reader" is the person reading the book. The actual reader and player "read" between the lines and fill out the "gaps". Next, a closer look at Wolfgang Iser's term "gap", and how this term relates to this master's thesis.

According to Iser (1972, p. 279), "...one must take into account not only the actual text but also, and in equal measure, the actions involved in responding to that text". Every literary text will affect its readers differently. Even several readings by the same reader of the same text, will elicit different responds from the reader. Further, Iser (1972, p. 283-284) explains that the different actions involved in responding to a text are the thought processes triggered while the reader reads. The text affects every reader *differently*, and each reader interprets the text *differently*, by the mere fact that we all are our own individuals with different backgrounds and personalities. Further, I would suggest that the same goes for any person experiencing a story – whether it be in text format or on a video game format.

The literary text activates our own faculties, enabling us to recreate the world it represents. The product of this creative activity is what we might call the virtual dimension of the text which endows it with its reality. This virtual dimension is not the text itself, nor is it the imagination of the reader: it is the coming together of text and imagination. (Iser, 1972, p. 284).

The virtual dimension exists in-between the interaction between the reader and the text. While reading, the reader might encounter sentences or words that halts his or her "flow". For instance, a sentence might be followed by an unexpected sentiment, surprising the reader and forcing him or her to establish an understanding on his or her own. The reader has to use his

or her own knowledge to establish what the text is conveying. This activity of connecting dots in the text's content based on personal experience and knowledge is what Iser calls "filling in the gaps" (1972, p. 284-285). By filling in the "gaps" in the text, the virtual dimension of the text is opened. If a reader reads a text one time, and fills in "gaps", some of the text's potential realisations are being discovered. However, it is important to note that

...no reading can ever exhaust the full potential, for each individual reader will fill in the gaps in his own way, thereby excluding the various other possibilities; as he reads, he will make his own decision as to how the gap is to be filled. (Iser, 1972, p. 285).

Before moving ahead to discuss "narratology" and "ludology" in the next section, I would like to return to the concepts "implicit player" and "actual player". The actual reader and player "read"/"interprets" between the lines and fill out the "gaps". In this master's thesis, I have decided to use Iser's notion of "gaps" in relation to both reading *Code Blue* and playing *A New Beginning (Final Cut)*. This aspect will be further developed and discussed in the analysis theory section. However, an important part of understanding how Iser's term is relevant, is by looking at how narratives play an important role in both the conveyance of a story on a book medium and a video game medium. In the next section, I will look closer at narratology and ludology. As we will soon see, video games have yet to be defined by an overarching term, which suggests that there is no solid ground to argue that video games cannot contain "gaps" that are interpretable by players playing the game.

2.4 NARRATOLOGY AND LUDOLOGY

In the book *Understanding Video Games*. *The Essential introduction* (2016, pp.199-237), Simon Egenfeldt-Nielsen, Jonas Smith and Susana Tosca have included a chapter entitled "narrative", which explores the importance of narrative in video games. In addition, they ask one of the most frequently debated questions in video game studies' history: "Are video games stories?" (2016, p. 199). It is not the aim of this master's thesis to answer this kind of question, but rather to use a combination of narratology *and* ludology to explore how different representations of the relationship between the main characters and their wider environment is represented through a book *and* a video game. In order to do so, it is necessary to establish how the terms narratology and ludology is understood in this study. Therefore, in this part of the theory chapter, I will give a brief presentation of narratology and ludology. In an attempt

to give a nuanced presentation, the overview includes theory from both video game studies and literary studies. As already presented, Egenfeldt-Nielsen, Smith and Tosca (2016) will provide insights about both ludology and narratology from a video game study point of view. Per Andersen, Gitte Mose and Thorstein Norheim (2012) will provide the literary field of this master's thesis perspective on narratology. Other relevant works within the field of narratology and ludology will also be included to supplement these two main sources of theory. I have chosen Aarseth's "A Narrative Theory of Games" (2012) as a model to use when analysing *both* the book and the video game – his theory is presented in the analysis theory part. In the following section, I will discuss and indicate where this study places itself in "the war between ludology and narratology", and lastly I will define and discuss the terms "ludology" and "narratology".

2.4.1 The "war" between ludology and narratology

It is important to note that the use of narratology when studying video games has been heavily debated and contested. "...the use of literary theory has caused the biggest clash of paradigms in video game studies so far: the 'war' between ludology and narratology" (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 222). For instance, in the book Video Games. A Popular Culture Phenomenon written by Arthur Berger (2002, p. 43), he argues that despite the many "digi-narratives", the printed book is the better choice for children seeking enjoyment and fulfilment from their various sources of entertainment. Berger explains his position by referring to the power of our imagination: "...what we create in our imaginations is infinitely greater than anything we can create in the form of images in any medium" (2002, p. 43). Another perspective on the matter is given by the Danish information- and media-science researcher Christian Andersen (2005, p. 19), who argues that it is the fiction (the story), that lures the players in to the fictional video game world, and keeps them there. He asks; who would want to play a video game, if their actions in the game were without meaning? The fictional aspect liberates the player's actions from the materiality of the video game (Andersen, 2005, p. 19). A third perspective on narrative theory applied in video game studies, is the one of Aarseth (2012, pp. 129-133). He argues that seeing as there is no overall definition of what a video game is, there is no way of ascertaining that the object we call a video game even is a game at all. Establishing what we do not know, Aarseth shifts the focus onto what we do know: "Successful definitions of narratives has a very long history and appear to be easier to come by, so at least there is some fairly firm theoretical ground to stand

on: Narrative theory" (p.129). With that argument, Aarseth also suggests researchers to be cautious. According to him, the aim should not be to prove that games are narrative forms, but "...to look for evidence and counter-evidence with equal zeal" (Aarseth, 2012, p. 129). In conclusion, Aarseth (2012, p.133) claims that narrative theory is necessary, but not enough to understand the new forms of video games. I share Aarseth's cautiousness towards studying video games. I am not seeking to prove or disprove video games as narrative forms, however, I am studying how the appliance of narrative theory, narratology and ludology combined, can be used to analyse the representations of the characters and their wider environment in a video game and in a book.

In the article "Start, Select, Continue: The Ludic Anxiety in Video Game Scholarship" Sky Anderson (2013) writes about how the phrase "ludology vs. narratology" is used to describe "the tension in video game scholarship" (p. 290). In the article, he finds that there are three different ways of conducting rhetorical video game scholarship in relation to dealing with the concept of ludology vs. narratology. This master project falls into the second and third modes:

"(2) Transitional scholarship, or work that sees video games as different but moves beyond merely targeting those differences and into other arguments, and (3) communicative scholarship, or work that investigates how video games communicate as one would examine any other media, namely by taking the differences between games and other media as granted" (Anderson, 2013, p. 290).

Anderson (2013, p.291), recognises that both the term narratology and ludology have different historical uses and appear in different fields of study – but that the terms have significant meaning when used in video game studies. This significance means that video game scholars view ludology as studying the materialistic aspects of video games and their malleability (e.g. studying the act of using controllers to play), and narratology as focusing on the video game's characters and story. In this study, I am applying both narratology and ludology in an effort to analyse both a video game and a book – this affects how the terms are used and understood. For instance, to use ludology on a book, I need to operationalise the spatiality of the given work's representation of world, characters, events and objects. How "ludology" and "narratology" is *used* in this master's thesis, will be explained in the methodological approach chapter and executed in the three analysis stages, but in particular in stage A. This master project shares Anderson's understanding of narratology and ludology. Further, it recognises

Egenfeldt-Nielsen, Smith and Tosca's (2016, p. 224) stance on the "war" between ludology and narratology: The "war" is "...a symptom of the struggle to define the new discipline of game studies, beyond the dominant paradigms – the hypertextual and the cinematic – of the beginnings of the study of digital textuality". Next, I will give a closer look at, define, and discuss the terms "ludology" and "narratology".

2.4.2 Definitions

Egenfeldt-Nielsen, Smith and Tosca define ludology thus: "Ludology [is the] study of games, particularly computer games. Ludology is often defined as the study of game structure (or gameplay) as opposed to the study of games as narratives or games as a visual medium" (2016, p. 222). Narratology is a field of study that encompasses several different disciplines. According to the perspective one takes, the definition of narratology varies. In the book *An Introduction to Narratology* (2009, pp. 1-6) Monika Fludernik gives a thorough explanation to *what* a "narrative" is. Summarized she suggests that:

A narrative is a representation of a possible world in a linguistic and/or visual medium, at whose centre there are one or several protagonists of an anthropomorphic nature who are existentially anchored in a temporal and spatial sense and who (mostly) perform goal-directed actions (action and plot structure). It is the experience of these protagonists that narratives focus on, allowing readers to immerse themselves in a different world and in the life of the protagonists (Fludernik, 2009, p.6).

Further, she states, "Narratology is the study of narrative as a genre" (Fludernik, 2009, p. 8). Fludernik's definition represents the foundation of how this master's thesis understand what a narrative is. This master's thesis studies the relationship between the *main characters* and their *wider environment* in a book and in a video game. By viewing the narrative as a representation of a possible world within both a linguistic and/or visual medium, the definition creates a common ground to study narratives in both works, on different mediums. In comparison, Egenfeldt-Nielsen, Smith and Tosca's definition of ludology underscores the notion of video games as *structures* as opposed to focusing on the narrative. The definition of ludology emphasizes on the study of games as structures and the activity of gameplay. These are concepts that traditionally are not applied to books. In Aarseth's "A Narrative Theory of Games" (2012), he combines narratology and ludology to analyse video games. In this study, I claim that because he uses narratology, it is possible to use his theory on a book *and* a video game. In the next chapter, I will present my methodological approach to study *A New Beginning (Final Cut)* and *Code Blue* in an ecocritical perspective. The methodological

approach consists of analysis theory where I, amongst other things, present and discuss how I will approach the text in the book and how I will study the video game as a multimodal text.

3. METHODOLOGICAL APPROACH

To answer the problem statement: "How is the relationship between the main characters and their wider environment represented in an ecofictional video game and an ecofictional book?" I had to combine a practical and a theoretical approach. The practical approach of gathering data for this master's thesis has consisted of reading the book and playing the video game while taking notes and screenshots. Theoretically, I had to define what constitute an ecofictional video game and an ecofictional book. I have presented central theories regarding ecofiction and ecocriticism in the theory chapter, which define and explain the selection criteria for the works chosen. However, in this chapter, I will present analysis theory, which will function as the framework for the three analysis stages (A, B and C). First, a brief overview of how I have structured this chapter. Initially, I will present Aarseth's "A Narrative Theory of Games" (2012), which will function as the main theoretical foundation for the analysis. I will use Aarseth's theory to categorise and structure the analyses of both the video game and the book. Because Aarseth's theory is originally intended for use in video game studies, I have decided to include a literary perspective. Following the presentation of Aarseth's theory, I have included a literary perspective where I will focus on "text internal" and "text external" approaches to aid my analysis of the book. Lastly, I will present how I have "read" the chosen video game A New Beginning (Final Cut) (Daedalic Entertainment, 2012). I will do this by drawing on the terms "multimodal text" and "modalities". Doing this, I will apply ludology and narratology theory on both the video game and the book.

3.1 A NARRATIVE THEORY OF GAMES

As previously mentioned, I have chosen narratology as a common denominator between *A New Beginning (Final Cut)* and *Code Blue*. This is mainly because of Aarseth's "A Narrative Theory of Games" (2012), in which he suggests a model using narratology and ludology to approach video games analytically. In this section I am going to present the five categories Aarseth suggests are common for all stories: "World", "objects", characters" and "events". In

the book *Understanding Video Games*. *The Essential Introduction* (2016), Egenfeldt-Nielsen, Smith and Tosca have written an introductory guide for newcomers to video game studies and for the more experienced game scholars. In this book, they write about studying video games, the game industry, the historic development in video game studies, and more. In the chapter "Narrative", Egenfeldt-Nielsen, Smith and Tosca (2016, pp. 199-237) look at the connections between traditional literary theory and video game theory as to how the different studies relate to narratology. This is highly relevant for my master's thesis, and I will supplement Aarseth's model with key concepts and perspectives from their book. I have also chosen to include the book *Litterær analyse*. *En innføring* (2012a) (Translated: Literary analysis. An introduction) by Andersen, Mose and Norheim. In this book, Andersen (2012b, pp. 27-55) has written a chapter where he discusses the elements of storytelling where he uses a similar categorizing as Aarseth's four building blocks. Further, a closer look at Aarseth's categories.

Aarseth (2012, p. 130) considers it hard to identify the difference between games and narratives. Instead, he focuses on the similarities between the two, which are: (1) a world, (2) characters, (3) objects and (4) events. "It is crucial to note that these elements are also the cognitive building blocks of human reality, as well as of mediated representations of the same" (p. 130). By focusing on the building blocks that encompass both the human reality and mediated representations, Aarseth emphasizes that the goal is neither to focus on games nor stories, "...but rather to base the model in the primary reality that spawned both, and that they both are part of, in somewhat different ways" (p. 130). By doing this, Aarseth shows that he understands stories and games to have an inherent composition of similarities, due to being created in reality. Further, Aarseth claims that all games and all stories embody the four categories mentioned before, but that they are constructed differently in every game and book. Specifically, Aarseth sees the ludo-narrative design space as "...four independent, ontic dimensions" (p. 130). According to Oxford Dictionaries ("Ontic", 2018), the term "ontic" refers to "...entities and the facts about them; relating to real as opposed to phenomenal existence". By labelling the design space as such, Aarseth demonstrates the notion that the elements are created in, and are inspired by, the real world. By applying Aarseth's model on both the video game and the book of this master's thesis, I will be able to analyse and compare the two, and view the same elements from an ecocritical point of view. In the following sections, I present Aarseth's four categories: "world", "characters", "objects" and

"events". In the four different categories, I have added perspectives and theories from other theoretical sources to adapt Aarseth's model to my analysis.

3.1.1 "WORLD"

All stories take place *somewhere*. In the case of video game worlds, they differ from the worlds described in books in that they are defined and bound by the limitations of the software (and/or the console) and is a "... concrete extension that can be explored directly by an independent agent" (Aarseth, 2012, p. 131). In this master's thesis, I recognize both the worlds in *A New Beginning (Final Cut)* and in *Code Blue* to have concrete existence *and* fictional existence. I suggest that as the game world is limited to the software (and/or console), the world in the book is limited to the amount of words used to describe it. By fictional existence, I am referring to the interpretative and imaginative interaction between the text and the reader, and the video game and the player, which awakens the worlds to life in both works.

Aarseth asserts that a game world is more than just *one* space. A game can consist of "...two types of space, the ludic and the extra-ludic" (p. 131). The ludic type of space is where the game "takes place": Where the character can navigate and explore (Aarseth, 2012, p. 131). An example of these types of spaces can be found in the video game Super Mario 64 (Nintendo EAD, 1996). In this game, the player explores Princess Peach's castle as the main character Mario. The ludic space is comprised of all the places Mario can travel, walk on or jump to. The extra-ludic space is everything else: The space that the character cannot explore. For example, outside of Peach's castle, Mario cannot go beyond the castle walls and the grass hills, which together function as a fencing mechanism for the character, keeping the character within the ludic space. Everything outside these "fences" is the extra-ludic space. With that said, Aarseth proposes that a game world is not necessarily only ludic, or extra-ludic, since there exist games with worlds that encompass both these types of spaces. In Super Mario 64, at the beginning of the game, the door to the second floor wing of the castle is locked, functioning as an extra-ludic space. However, this changes as the player finishes all the needed quests to open the door, turning it into a ludic space where the character can enter. It all depends on how the game is designed. In some games (typically "sand-box games") the player is able to build and expand the game world, e.g. Minecraft (Mojang, 2009) and The

Sims 4 (Maxis and The Sims Studio, 2014), but still within the frames of the software's capacity.

Now we have established that the game world contains two different types of space. Further, Aarseth suggests that there are five "topological structures" "...which have clear implications for the ease with which a particular story can be conveyed" (p. 131). He finds these different structures by looking at how the shape of the ludic landscape partook in conveying the story. In other words, when "how the character is allowed to move" helps convey the story. The structures are as follows: (1) "the linear corridor", (2) "the multicursal labyrinth", (3) "the hub-shaped labyrinth", (4) "the open world" and (5) "the one-room game". It is important to note that a game can utilize one or combinations of all the different structures to convey a particular story. "...the five structures can be combined to form more complex patterns, such as a game with a linear beginning, opening up to an open quest world in the middle, and then closing in at the end to another linear corridor" (p.131). In the video game *The Legend of Zelda: Breath of the Wild* (Nintendo EPD, 2017), the hero Link travels an open world where he can move freely, but the game world is also filled with various sized dungeons with spaces either formed as single-rooms, labyrinths, or even linear corridors. The game even has many potential storylines, apart from the main one, that the player can explore.

In literature, all fictional worlds are created by "ink on paper" – written signs and symbols, which decoded can portray a world. "Fictional worlds depend on the imagination, whereas game worlds have objective existence, even if they only exist via computing machinery" (Aarseth, 2012, p. 131). In my opinion, the fictional world in books *also* has an objective existence with regard to being ink on paper, but the written signs and symbols compose a foundation for several "potential worlds", where the reader can use his or her emotions, convictions, ideas and different perspectives to explore the world (Andersen, 2012b, p. 40-41). There lies potential within the reader's interpretations, and this concept of books having "potential worlds" makes it difficult to decipher specifically what the "ludic space" is in a book. Ludic space is the defined space in which a player can control a character within a video game. In a book, there are no such mechanics – there is no controller to hold or buttons to push. A reader can turn the pages in whatever manner he or she likes, but the story does not change. In most video games, the player can move the character within the ludic space any

way he or she likes (within the limitations of the software), without it affecting the main story of the game. This indicates that the ludic space specifically is related to the actual space a player can control the character within the video game. Then the question remains, how does the ludic space relate to the fictional world in books? I suggest that the ludic space in the fictional world in books depends on the reader's mental ability to explore the space in which the character exists, and how the text offers the reader room to explore this given space.

In literature, the fictional world and the different places within are sometimes divided into two different concepts in storytelling. There is the world in which the story takes place as a whole, and the spaces and rooms the characters exist in, or travel. In other words, there is the described surroundings and landscape of the fictional world, and there is the spatial movements made by the characters (the travelling from one place to another). There is a fine line between the two different concepts, and sometimes they overlap (Andersen, 2012b, p. 35-39). By placing this literary concept of narratology onto Aarseth's model, I find that the ludic-space in books is the characters' immediate surroundings (their spatial movements); the places they actually experience and travel in the story. Seeing as the extra-ludic space is everything the character cannot explore (both in the book and in the video game), the ludic space in the book becomes a combination between the readers ability to explore the character's surroundings, and the text's capacity to offer this to the reader. The extra-ludic space can also be interpreted as places mentioned, that is out of bounds for the given character (whether it be in a video game or a book).

Another distinct feature of video games, in the portrayal of the game world, is the use of "cut-scenes". A cut-scene is a cinematic scene that often shows the player a new part of the landscape, an important interaction between characters that develop the storyline or other key events. The use of cut-scenes in video games has both been disputed and celebrated. Some believe it to be a sign of jealousy towards the film industry; others see it as an enrichment to the aesthetics in the relaying of information to the player (Egenfeldt-Nielsen, Smith and Tosca, 2016, pp. 206-209). Cut-scenes often (but not always), limit the player's control over the character, and the player can essentially sit back, relax and enjoy the following cinematic scene. In comparison to books, the cut-scenes are similar to the act of reading in the sense that they offer little or no control over the characters movements and actions. The cut-scenes can

have an impact on how the player perceives the next part of the game world, e.g. is it a dangerous new landscape the character has entered? Is it a friendly and safe zone? Should the player be prepared for a fight? The same can be said about different elements in literary storytelling. In books, different literary tools, e.g. foreshadowing and flashback, will indicate and elicit different expectations from the reader.

To sum up, there seems to exist two different types of "worlds" within books and video games. There is the "spatial" and the "imaginative" types of worlds. The spatial type of world refers to the physical and mechanical attributes of the ludic and extra-ludic spaces. This type of "world" in a video game is the player's physically control over the character by wielding a set of controllers or pushing buttons. In a book, it is the reader's movements while turning the pages and the described surroundings and movements of the given characters. The second type of "worlds" is the "imaginative". For instance, just as the ink on the paper in a book consists of bundles of signs and symbols until decoded, the world in video games are only organized binary-codes appearing as either high or low quality graphics on a screen. Until the reader and the player use their imagination and associations to decode the content and meaning behind what they read on the paper or see on the screen – the worlds are closed. Through the player and reader's mental ability to decode and make meaning out of what they perceive, the "worlds" are opened and ready to be explored. The "spatial" and "imaginative" types of worlds are two concepts that co-exist and are intertwined. This connection will be discussed further in the analysis and following discussion. Next, I will take a closer look at Aarseth's category "objects".

3.1.2 "OBJECTS"

The game worlds would be quite empty if not filled with *objects*. In Aarseth's model, objects can be categorized in terms of their flexibility, or in his words "malleability": How they can be manipulated by the character or not. He lists six different types of objects: (1)"Static, non-interactable objects", (2) "static, usable objects", (3) "destructible", (4) "changeable", (5) "creatable" and (6) "inventible". Similar to the different structures in game worlds, more than one category of objects can be found within the same game. The most common object in game worlds is the first one; the static non-interactable object. Objects play an important role in deciding the degree of player agency. The more a player can affect the surrounding objects,

the more agency the player has. Aarseth proposes that "…a game which allows great player freedom in creating or modifying objects will at the same time not be able to afford strong narrative control" (2012, p. 132). Egenfeldt-Nielsen, Smith and Tosca (2016, p. 205), compares the concept of "objects" and "game worlds" within video games to the elements on the stage of a theatrical play – "…it [the game world] is meant for action, but many of the elements are there to be seen and not used". They underline that this is the general rule for many games, but note that there has been a development towards giving the player more possibilities to use objects that are not related to the game's story in contemporary games.

Seeing as video games have differing degrees of player agency, giving the player the possibility to engage with the game world, it is hard to relate this concept to the fictional world of books. It might be possible to make a distinction, just as was done with the extraludic and ludic space within the book. These are concepts that derive very much a video game perspective. By translating it into the fictional world in the book, one would perhaps at first think that all objects in the book are static non-interactable objects. However, the different characters in books *use* or encounter different objects – the real difference is that the reader cannot control the characters interaction with these objects, apart from imagining and interpreting different meanings and symbolisms behind these specific objects. Even though the reader cannot control how the character in a fictional world interacts with objects, this does not mean that there are no objects in the story. To clarify, I suggest that objects are used, destroyed or invented in books too, but the reader is not in control of their use – they do not have agency as a player potentially has. In the following section, a closer look at the category "characters".

3.1.3 "CHARACTERS"

Just as with game worlds and objects, Aarseth (2012, p. 132) categorizes characters into different types, depending on their "depth/shallowness" and "potential for player control". The types are as follows: (1) "Bots" with no individual identity (also known as NPC, short for non-player character), (2) shallow characters with names and individual appearance, but little personality and (3) deep characters with names and individual appearance and a lot of personality and an elaborate background story. The first category is reminiscent of characters in books that are a part of setting the tone for a particular scene, and help fill in the fictional

world, without being a part of the main story. The two last categories are parallels to the concept of a flat character and a round character in literature. Here Aarseth borrows from the literary theorist Forster (Aarseth, 2012, p. 132). A flat character is a character that stays the same throughout the course of the story. A round character changes and develops in accordance with the story's development. It is also possible to call a flat character nonchangeable, and a round character individualized (Andersen, 2012b, p. 43). Equal to the structures of the game world and the different types of objects, different kinds of characters can appear in the same game. Aarseth claims that "... the richness of a character is an important authorial tool that characterizes the positive potential of authorship in games, where malleability and user control limit authorial affordances" (p. 132). By this, I understand Aarseth to say that the more a player can affect the development of different characters, the less the author is able to give directions to the player's understanding of the said characters. In clarification, Aarseth (2012, p. 130), asserts that there is a narrative and a ludic pole to his categorization of the different types of characters. The degree to which a character is rich, deep and round is the narrative pole, and the degree to which a character is a shallow or hollow bot is the ludic pole. In books, one can draw a parallel to the concept of the relationship between the reader, the point of view and the protagonist. The more the protagonist is developed and described – the more a reader tends to engage with this character.

Aarseth's categorization of different types of characters is interesting, seeing as it is part of his model, which combine narrative and ludologic terminology. Egenfeldt-Nielsen, Smith and Tosca (2016, p. 209) propose their own typology of characters in video games, organized according to the extent to which players can *interact* with them. It is striking how different, yet similar, their categorization is. As we have seen previously, Aarseth has three categories. Egenfeldt-Nielsen, Smith and Tosca (2016, p. 209) have four: (1) Stage characters who are part of the scenario, but not to be interacted with, (2) functional characters who have differing degrees of function in the game. (3) Cast characters who have a specific function in the game related to the story and (4) the player characters who are controlled by the player. It is interesting to note that Aarseth operates without a category for the characters controlled by the player. This might be interpreted as a way of understanding characters in broad terms due to how different video games are designed. In some games, e.g. *The Sims 4* (Maxis and The Sims Studio, 2014) the player can control all the characters in his or her household, they can

even to some extent control what their neighbours (NCPs) do while visiting their house. In other games, e.g. *The Elder Scrolls IV: Oblivion* (Bethesda Game Studios, 2006) the player controls a character, who is surprisingly not "the chosen one", but the helper of the chosen one. In other words, not the main character of the story – but still the focalizing character that the story is played through. Just like in books, video games are inherently different in that they are highly individual. It would be difficult to find universal categories for *all* types and combinations of characters in different books and video games. However, the broad categories and the notion of the ludic and the narrative poles in Aarseth's model, makes it relevant in relation to conducting a comparative analysis on both a book and a video game

In literary narratology, it is a fundamental principle to respect the "incomplete" nature of the literary characters (Andersen, 2012b, p. 44). In other words, it would not be appropriate to "fill in the gaps" in a literary analysis of the given character's past or future, without firm textual evidence for the statements. Literary agents, or characters, can be created in many different ways, which elicit various ways of interpreting them (Andersen, 2012b, p. 41). This notion of characters being "incomplete" in that they exist only on paper or on the screen, except for as long as they are being imagined by a reader or player – indicates that broad terms are needed to be able to analyse and discuss characters across media. With that said, broad terms help place the different characters within a category, and from there it is possible to analyse in depth the different character's respective connections to the game world, fictional world and the story. In the analyses, the protagonists from both *Code Blue* and *A New Beginning* will be explored – and I will study whether or not they can be considered as flat or round characters. By looking at the depth of the characters, I will also analyse how they are portrayed in relation to nature. Then I will place my readings of the characters within The NatCul Matrix. Next, a closer look at the category "events".

3.1.4 "EVENTS"

In order to explain events as an element in Aarseth's model, it is useful to present his understanding of Chatman's (referred to by Aarseth, 2012, p. 131) terms "kernels" and "satellites". To Aarseth, kernels are the key elements of a story, which make that story *that story*. If a kernel is manipulated, changed or removed – the story will not be the same. Satellites are elements that can be removed or altered without the story changing. Here it is

important to note that Aarseth refers to the satellites as defining the discourse of the story. "These two concepts, kernels and satellites, allow us to say something about the ways games can contain one or several potential stories" (2012, p.131). With this in mind, we can begin to look at the element "events". Aarseth (p.132) categorizes events according to "the status and presence of kernels and satellites": (1) fully plotted, (2) dynamic satellites, (3) dynamic kernels and, (4) no kernels.

Aarseth describes a video game with fully plotted events as a "pure story". I interpret this to be a story, which has all of its kernels and satellites in a fixed position – no wiggle room by the player to affect the events that take place. The players might have agency in overcoming obstacles, labyrinths or other game world structures, and use different objects to do so, but the events that follow a "quest" will trigger a fixed cut-scene or event. By "dynamic satellites", Aarseth suggests that these make the story playable. "Dynamic kernels", are typically found in video games that offer the player different paths to follow that will possibly alter the story, character or game world altogether. A great example of a "dynamic kernel" video game is the popular game The Walking Dead (Skybound Games and Telltale Games, 2012). In The Walking Dead, the focus is not on solving quests, but rather on the development of the story and characters. Every time the player makes a choice, either in dialogue or action sequences – the story and the characters change. E.g. the player can decide whether his or her character should help someone or not, what the character says to the people in need and the decisions made. All these choices will alter the relationship between the said characters involved and the story that proceeds. Dynamic kernels can also be found in quest games (Aarseth, 2012, p. 132). I have now presented Aarseth's four categories. In the analysis, I will find examples of each category within A New Beginning (Final Cut) and Code Blue and discuss how these examples can be viewed as representations of the relationship between the main characters and their wider environment. In the following part, I will present how I am going to approach the textual elements in *Code Blue* and in *A New Beginning (Final Cut)*.

3.2 A LITERARY PERSPECTIVE

Andersen, Mose and Norheim (2012c, pp. 17-18) suggest that being a literature researcher involves reading a literary work and proposing suggestions to possible interpretations for peer review. In this master's thesis, I am a literary researcher, but I am also playing and

interpreting a video game. To do so, I am utilising analysis theory from both ludology and narratology to create a theoretical intersection between a book and a video game. To some degree, I am not only a literary researcher - I am also conducting video game research. In this methodological approach chapter, I have presented Aarseth's four analytical categories. In addition, I would require a theoretical framework for the literary approach as well. Thus, this part of the method chapter, outlines how I read the textual elements in *Code Blue* and in *A New Beginning (Final Cut)* in the analyses.

In the thee analysis stages, I explore the video game and the book in connection to Aarseth's theory, and seeing as the two different works have different attributes and formats, it is necessary to explain *how* they have been processed. As there is no consensus on what the basic principles and goals of literary research are (Andersen, Mose and Norheim, 2012c, p. 18) – it is thus more important to explicitly describe this study's choice of method from the field of literature studies. According to Andersen, Mose and Norheim (2012c, p.18), a literary scientific method can be defined as a systematic approach where one can research and ask questions regarding the subject of the research. The method will decide *how* one asks the questions and *how* one can attempt to find the answers. The *actual* conclusion and answers are the researcher's responsibility to find and articulate.

When approaching a literary text scientifically, it is common to distinguish between a "text internal" and a "text external" approach (Andersen, Mose and Norheim, 2012c, p. 19). In taking a "text internal" approach, one views the text as a uniform object, separate from both the author's intentions, the text's context and the reader's reactions. A "text external" approach includes acknowledging the outer surroundings and circumstances as an integrated part of the text. An example of taking a "text internal" approach would be to emphasize, and understand the text based on its cultural and societal surroundings (Andersen, Mose and Norheim, 2012c, p.19). These two approaches have been heavily debated. Some argue that that the methods mark two distinct methodological schools of thought, while others argue that it should not be necessary to choose either one approach or the other (Andersen, Mose and Norheim, 2012c, p.19). As this master project aims to have a wider discussion surrounding a book and a video game's representations from an ecocritical point of view, which includes contextual and cultural aspects – I have chosen a combination of these approaches. In other

words, this master project will use both a "text external" and "text internal" approach. With that stated, it is necessary to emphasize that "close reading" (as part of a "text internal" approach) will mainly be used in the collecting of data from the book, but "text external" considerations will be made throughout the close-reading process. The "text external" approach is relevant to this master's thesis because it recognises the cultural aspect of the Nature in *Culture* Matrix that I will use to discuss the representations of the relationship between the main characters and their wider environment in *A new Beginning (Final Cut)* and in *Code Blue*. The external circumstances connected to the act of writing or reading a book, or creating or playing a game, will have an impact on this master's thesis outcome. A text external approach becomes especially relevant because I am using reader-response theory as a layer in my analytical approach to the book and the video game. By applying a text external approach, I recognise that external circumstances such as culture, social economic status, ethnicity, etc. might affect how I interpret and understand the book and the video game.

3.3 How to "Read" A VIDEO GAME AS A MULTIMODAL TEXT

Egenfeldt-Nielsen, Smith and Tosca (2016, pp. 1-14) discuss how game studies is a new discipline that is still under development. "To say that there is more than one way to approach video games is to put it mildly" (p. 9). They note that there seems to be a tendency for researchers "...to adopt methods and approaches from their primary fields" (p. 9). This master's thesis falls within this tendency, seeing as I am studying a video game from a children's literature perspective. In the chapter, they outline five different types of game analyses one can conduct within game studies, however they also suggest that this type of categorising is a type of "reductionism", and that "...we must remember that a certain set of methodologies and a certain set of theories need not always go together" (p. 12). Out of the five different types listed in their chapter, "The game" category seems to be the closest one to the approach I have chosen:

The Game: Here, one or more particular games are subjected to analysis. The point is to look at games in themselves and say something about their structure and how they employ certain techniques – of player reward, of player representation in the game world, and so on – to achieve the player experience which the game designer aims for. This is often the type of analysis chosen by those with a background in comparative literature or other aesthetic disciplines. (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 11).

In this master project, I will be analysing a video game, in an effort to discuss the representations of the relationship between the main characters and their wider environment. However, my project does not fit the analysis type "the game" completely. In addition to analysing the video game, I am also analysing a book. I am not directly comparing the video game with the book, but I am comparing the representations found through analysis. I use Aarseth's "A Narrative Theory of Games" (2012) as a model to analyse both the book and the video game, by employing the categories Aarseth suggests exist in both: "world", "characters", "events" and "objects". However, even as the categories give some guidelines in relation to how one can understand and find the different categories within a video game, the theory is somewhat general in the sense that the model is universal. By that, I mean that because the model affirms that these categories exist within all video games, it is impossible for the model to say something specific about a particular video game. By following the model, it is easy to find the different categories within the video game, but it is necessary to give an explanation to how I will "read", or in other words, extract the information from each category. I have decided to call it "how to read a video game" in accordance with my primary field of children's literature study, and how I have chosen to view the video game as a "multimodal text".

According to Slettan (2014, p. 244), a multimodal text (also called a "compound text" or "sammensatt tekst" in Norwegian), is "a text that conveys a message through combining two or more modalities". By this, it is possible to argue that a video game is multimodal in that a message is conveyed through modalities such as sound, images and text. "...by modality, we refer to a specific form of expression or particular way of expressing opinions" (Bakken, Mose and Oxfeldt, 2012, p. 158). Principally, one can state that *all* texts have multimodal attributes. A novel can be multimodal in regards to the book's visual design or in a reading situation where voice and pitch can be viewed as different modalities (Bakken, Mose and Oxfeldt, 2012, p. 157: Tønnesen and Bjorvand, 2014, p.42). A video game is inherently multimodal due to the media platform that it appears on – computer, TV-game console, tablet or phone and so on. Multimodal texts are not a new phenomenon, but they have gotten highly relevant in regards to digital media's central role in today's society (Liestøl, Fagerjord and Hannemyr, 2009, p. 13). This is not by any means an insinuation that video games are literary works in disguise, or composed of other text-types than the traditional book-format. It is an effort to open up to further exploration of the similarities between video games and books.

This master's thesis recognises the book *Code Blue* and the video game *A New Beginning* (*Final Cut*) as being inherently different, but also being entities sharing basic story-telling attributes in regards to Aarseth's categories and by containing modalities. Next, I will present the modalities I have chosen to focus on in the analyses.

When analysing multimodal texts, it is possible to go into details regarding the composition and informational connections between the different modalities (Bakken, Mose and Oxfeldt, 2012, pp. 159-167). In order not to deviate from the problem statement of this master's thesis, and to limit the scope of this study, I have chosen to approach the modalities in the video game broadly. I will focus on the composition of the images, both static and dynamic, and the scripture, or in other words, the text used to convey the story in the video game. This is a simplification, there are many more modalities that could have been studied, but these are the modalities I see as most important to analyse to be able to answer the problem statement. Seeing as there are several different types of images used, both static and dynamic, in *A New Beginning (Final Cut)*, I will give definitions of key terms when they become relevant in the analysis. By static, I am referring to images in the video game that are "frozen", or in other words, the images without movement in them. By dynamic, I am referring to the moving" parts of a scene, and "cut-scenes". A cut-scene is a "dramatically important sequence, often displayed without the interaction of the player" (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 312).

3.3.1 IMAGES AND TEXT

Within one frame of a video game, there can appear many different modalities. Maybe the characters are saying something (sound), maybe the colour-scheme used in the image sets a particular mood (colours), maybe the music becomes more intense as the player prepares to fight or flee the scene (audio) or perhaps the text is contradicting the message of the image (linguistic). When "reading a video game", it is hard to separate the images seen, the sounds heard and the words written. Why? Because together, they create meaning, and guide and inform the player of what actions to take next. Therefore, when discussing image-composition, it seems relevant to include the notion that images have different types of "rhetoric", and that it would be impossible to exhaust every rhetoric meaning from each image (Barthes, 1994, p. 22). For this master's thesis, I have decided not to include

"sounds/audio" as a modality in the analyses, in regards to the scope of the thesis. "The linguistic message" (Barthes, 1994, p. 26) is found by looking at the text within, under or around the image. To form an impression of the linguistic message, one needs to look at the connection between the text and the image – does the text affirm the message in the image, does it introduce new information to the reader/player, or does it conflict with the information given through the image? Does the image tell a different story than the text? (Barthes, 1994, pp. 26-27). These types of questions will be a part of how I "read" the video game in the analyses, and particularly when discussing the potential representations in relation to The NatCul Matrix. In addition to looking at the connections between text and images, I will include some terminology from the literature genre graphic novels, in a recognition of the visual similarities between the genre of graphic novels and the video game A New Beginning (Final Cut). Until now, the theory presented will help answer the problem statement. In section 5.1, I present The NatCul Matrix, the analytical tool that will enable me to discuss and compare the representations of the relationship between the main characters and their wider environment in A New Beginning (Final Cut) and Code Blue from an ecocritical perspective. In the following, I discuss the implications of the chosen approach.

3.4 IMPLICATIONS OF THE CHOSEN APPROACH

Previously, I mentioned that the specific approach chosen in this master's thesis, has never been used before. My understanding, interpretations and execution of this study influences the potential findings and conclusions. If I had chosen to compare two literary works, instead of a video game and a book, the outcome could have been different. In addition, one of my selection criteria for choosing a video game, included amongst other elements, a certain degree of authorial affordance. This means that I chose an adventure game in an effort to minimize the differences in the structure of the stories in both the book and the video game. If I had chosen a video game with a higher degree of player agency, and ludic elements, the outcome would probably be different, and I would have needed to draw on more theory on ludology in order to analyse the video game. For instance, *A New Beginning (Final Cut)* is an adventure game where the player has little to no impact on the outcome of the game's main plot. If I had chosen a video game with more player control, and with a generic plot, the analysis and discussion would not have been the same. However, I believe that the study is possible to replicate, and it would be interesting to see if there are any differences in findings with a different type of video game or book.

4. ANALYSIS, STAGE A: "WORLD AND EVENTS" AND "CHARACTERS AND OBJECTS"

In this chapter, I will explain how I have chosen and analysed different parts of *Code Blue* (Slaven, 2018) and *A New Beginning (Final Cut)* (Daedalic Entertainment, 2012) in regards to Aarseth's "A Narrative Theory of Games" (2012). This will be done by presenting the work progress of each category: "World", "characters", "events" and "objects" in the video game and the book. I have decided to combine the categories "world" and "events". This decision was made when I started the process of selecting the different excerpts for the analyses. For instance, while finding the excerpts for the category "world" in both the book and the video game, I chose situations that portrayed the world, but also had a selection criteria connected with the places chosen as important for the plot. In other words, key events took place in important places, which made it logical to combine the two categories. Also, I decided to combine the categories "characters" and "objects" because the objects in both the video game and the book can be viewed as part of the wider environment, and by looking at the relationship between the characters and the objects it might be possible to discuss the relationship between the two.

4.1 Presentation of analysed parts in *A New Beginning (Final Cut)*

A New Beginning (Final Cut) (Daedalic Entertainment, 2012) falls within the "point-and-click" interface genre of video games. "Interface" refers to the type of interaction demanded from the player to play the game, whether it be by pressing different buttons, or by connecting a specific controller to the PC or console (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 314). A "point-and-click" game indicates that the player plays the game by mainly using the mouse. In A New Beginning (Final Cut), the player uses the mouse to steer and control the main characters' actions. If the player wants to have the character interact with certain objects, with other characters or move around, s/he has to click the mouse on the intended spot on the screen, and the character moves accordingly. The game's creators have clearly borrowed literary elements in the process of designing the video game. The story is divided into eleven chapters with their own titles, and the player will not be able to play a new chapter before completing the previous one. In some regards, the video game is more restricted than a book mechanically. The reader can turn to the book's last chapter and find out the ending, if he or

she wants to. However, in this video game, the player is forced to complete the narrative before being able to reveal the ending.

In addition to having chapters, similar to a book, *A New Beginning (Final Cut)* is conveyed through drawings reminiscent of cartoons or graphic novel drawings. "...comics usually have about thirty pages, whereas a graphic novel could be several hundred pages long" (Brenner referred to by Rimmereide, 2013, p. 133). In recognition of the length of the video game, I will refer to the attributes as reminiscent of a graphic novel instead of comics. I am not insinuating that the video game *is* a graphic novel disguised in a digital medium, but it visually alludes to the genre – and in light of Aarseth's "A Narrative Theory of Games" (2012), it seems relevant to point out these aspects of the video game's design.

The "main menu" of the game's start screen resembles a graphic novel (see figure 2 below). The background image is from the video game's first chapter titled "Leaden Air", and the view is from an abandoned building overlooking the city of San Francisco. Above the background picture, there are ten panels. Panels, in graphic novels, are frames in which images appear (Rimmereide, 2013, p. 136). Instead of telling a story, these panels function in the video game as various options that the player can make. Through speech bubbles, thought balloons and text boxes, the player can choose to either start a new game, continue from the last playing session or save an ongoing playing session. The player can look at further options, load a previous saved playing session, look at the game's credits, quit the game, visit the Daedalic Entertainment's Facebook page or browse other games from the producers of *A New Beginning (Final Cut)*. In the different excerpts in the analysis, it will become clear that these graphic novel elements are used during "cut-scenes". In the actual gameplay, the story is conveyed through splash pages, which are images covering the entire screen (Rimmereide, 2013, p. 136).



Figure 2: Screenshot 1 "Main Menu" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 19 with permission.

I spent approximately 17 hours playing through the game's story. I used a lot of time looking at the different images, trying to find different objects, characters and places to explore with the two main characters, Fay and Bent. I took several screenshots and wrote notes during the playing sessions. In the analyses of the different categories within the game, I have decided to focus on specific key events in the story. As previously mentioned, I will look at two combined categories in the game: (1) "World and events" and (2) "characters and objects". I have chosen to include excerpts, which consist of one or more screenshots and a transcription of the textual elements in them. By doing this, I can say something about the modalities at play in each excerpt and how they convey the category in question.

4.1.1 "WORLD AND EVENTS"

In *A New Beginning (Final Cut)* there are two main representations of planet earth: (1) Fay's world in year 2500, and (2) Bent's world in the late 1900s to early 2000s. To analyse the

game world in the video game, I will present three different excerpts. The first excerpt will analyse the structure of the game in accordance with the general notion of ludic space and extra-ludic space. The second excerpt will explore Fay's world in 2500, and the third excerpt will look at Bent's world. Now, I will briefly explain the selection criteria for choosing these three excerpts. The first excerpt had to be representative of the ratio between ludic and extraludic space throughout the video game. The excerpts chosen to analyse and discuss Fay and Bent's versions of the world had to be representative for how the two different versions were depicted throughout the video game. Additionally, I chose excerpts that portrayed important events affecting the player's perception of the two different versions of the world. Concerning the merge of the categories "world" and "events", I will now look at how the story is structured in the video game. As we have previously seen in section 3.1.4, Aarseth (2012, p. 131) uses Chatman's terms "kernels" and "satellites" to categorize different types of events in video games. Kernels are the key elements of a story, which make that story that specific story. If a kernel is removed or modified, it is no longer the same story. Satellites are elements that can be removed and altered without affecting the story. Further, Aarseth (p. 132) categorizes events in four different types, where A New Beginning (Final Cut) can be placed within the "fully plotted" category in regards of events, seeing as the game has a "pure story". This means that all the kernels and satellites of the story, are in a fixed position. The player cannot alter or change the story. The events that take place will happen regardless of the player's choices and actions. The player *does* have agency with regard to overcoming obstacles, labyrinths and other game world structures, e.g. using different objects in the progress, but the cut-scenes that are triggered, and moves the story along, are fixed and cannot be affected. This also goes for the objects; you can use, break, combine and explore different objects, but you have to use, break and combine them in the correct order to be able to progress in the story.

I categorised the space in the game world according to Aarseth's terms "extra-ludic" and "ludic" space. The ludic space were all the places I could command Fay and Bent to explore. The extra-ludic space were all the places where the characters could not explore, or in other words, the "non-playable space" (Aarseth, 2012, p. 131). As previously mentioned in the analysis theory, Aarseth (2012) divides the ludic space into five topological structures. These structures are different *types of spaces* in which the player can control a character. *A New Beginning (Final Cut)* falls mainly within the linear corridor category. In the game, most of

the ludic space consists of narrow areas or rooms, in which the player can move the character. These areas and rooms are surrounded by both static and dynamic extra-ludic spaces. I have included a screenshot from the game where Bent is standing next to his cabin in Norway (See figure 3 below). I have used the editing program *Microsoft Paint* (Microsoft, 2019) on the image to show the ratio between ludic and extra-ludic space. In the image, I have outlined the ludic space with black lines. Within these lines, the player can control Bent.

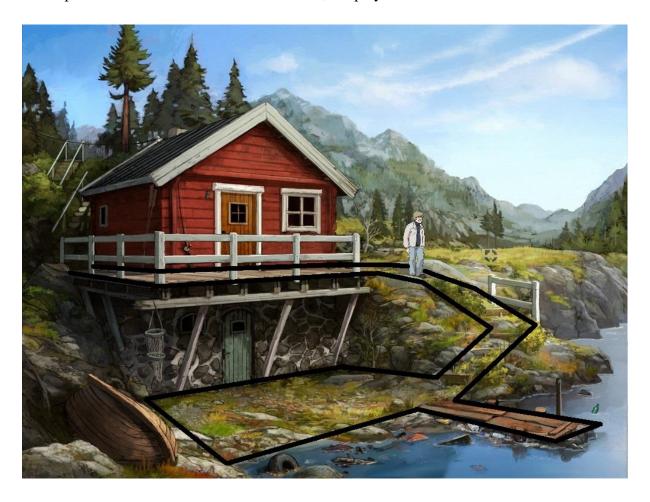


Figure 3: Screenshot 2. "Bent's Cabin" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 19 with permission.

Surrounding the ludic space is the extra-ludic space, and some objects (the cabin, the boat, the garbage on the shore, a fishing rod) with which Bent can interact. However, what is not visible in the screenshot are the different dynamic elements of the image. For instance, the garbage in the water is slightly moving due to small waves splashing onto the shore, and the fishing net hanging on the left corner of the balcony is blowing ever so slightly in the wind. These small animations are on a constant loop with brief repetitions of the same movement

cycle. This image is a good example of how all the other splash images, rooms and areas are structured throughout the game.

In some parts of *A New Beginning (Final Cut)* (Daedalic Entertainment, 2012), the player can "move" a character in between different rooms or spaces that belong to a certain part of a chapter, but will not be able to progress to the next part or chapter before completing that particular part's or chapter's tasks. For instance, in the "prologue", the player controls Bent. His first task is to fix the broken fogger, and the player has to find all the right materials and use them in the correct order before the story progresses and Fay lands a helicopter next to Bent's cabin. In the game, a fogger is a machine that keeps wood fresh for the wintertime. The notion of "time" is not of the essence in the game's real time playing experience. Even though Bent is in a hurry to fix the fogger, the player can use as much time he or she needs to complete the task – without affecting the narrative of the game.

I find that the game world in *A New Beginning (Final Cut)* has two types of spaces: extraludic and ludic, and that both these types of spaces contain "gaps" that are only accessible to each individual player. These "gaps" are mentioned in section 2.3 of this master's thesis. The player's interpretation and exploration of the ludic and extra-ludic space in a video game constitutes the "gap". For instance, in figure 3, the player might mentally envision what it would be like if Bent could take a swim in the ocean, jump off the dock, walk into the horizon on the far right to explore the wilderness, or take the boat out on the ocean. These types of pondering thoughts encompass the space inside the "gap" within the extra-ludic space. In the ludic space, the player might mentally envision Bent sitting down on the dock or doing a cartwheel on the shore.

In the next excerpt, I will take a closer look at Fay's world in the future. The excerpt gives an insight into the status of the world's climate in year 2500. I have included one screenshot, but will not include all the images from the cut-scene sequence because 29 images take up a lot of space. However, I will include a few images, and give a transcription of the textual elements of the cut-scene. I have also described the parts without text to keep track of the narrative. This cut-scene is the first sequence in the entire game, and it is triggered as soon as the player

starts the game for the first time. Salvador and his mechanic Delvin is standing on a platform bringing them upwards. They are both wearing helmets reminiscent of an astronaut's gear. Here is the transcription of the dialogue and description of following events:

Salvador: "You keeping an eye on the watch, private?"

Delvin: "300 seconds and not a second to spare".

Salvador: "And don't forget: Never look directly into the sun".

Salvador and Delvin emerge from underground on the moving platform, gaining an overview of a city skyline in ruins and decay. The air is filled with smoke, gas, lightening rays from dark clouds and an orange mist covering the scenery. It appears as if they are about to collect data from the environment using scientific measuring tools. In their location, it seems as if their radio communications are not working optimally. The dialogue continues as they fly up in the sky using futuristic wing gear:

Salvador: "-ea-y?"

Delvin: "280 second left..."

Salvador: "Damnit! Looks like my measuring equipment is broken".

Delvin: "I'm afraid it's working perfectly fine".



Figure 4: Screenshot 3. "Collecting data" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 19 with permission.

As each of the scenes from the cut-scene play out, a still-picture of the scene moves into a structure resembling a graphic novel (see figure 4). This functions as a transition into the next part of the cut-scene, which is a meeting, presumably after Salvador and Delvin have collected the data from the environment. Quadi leads the meeting, Fay, Salvador, a scientist named Nigel, Hardy and several other scientific personnel are in attendance. Here is a transcription of the dialogue during the meeting:

Quadi: "We just received news from Antarctica, Machu Picchu and Eastern Oceania. Their measurements match ours. We're expecting a solar flare similar to the Oswald Flare from 2113 within the next two weeks. We all know that the terrestrial Magnetic Field can't protect us from a flare of this scale anymore. Our time is up".

Salvador: "It's not too late, yet, Quadi! We still have a chance!"

Hardy: "Yeah, what about the Phoenix Plan? We could escape!"

Quadi: "The Phoenix Plan is not an evacuation plan, Hardy. Quite the opposite... No, Salvador is right. A manipulation is our last chance".

Fay turns to Nigel: "What are they talking about?"

Nigel: "Is the security of our pilots provided for by now?"

Quadi: "Nigel, we are looking at certain death for every living thing in two weeks. We don't have a choice I'm afraid. It's time we dare to take the final step. The step back... to the past".

In this excerpt, I find no ludic space. The player has no impact on the story being displayed on the screen, and the cut-scene functions as a cinematic sequence. The entire cut-scene falls into the extra-ludic space type, as it is a non-playable space in the game. Even though the player is unable to control the characters physically, he or she is still able to explore the extra-ludic space *mentally*. By envisioning the tense atmosphere in the meeting room, or visualising Salvador and Delvin flying to explore more of the horizon, maybe even adding onto the story itself – pondering what life must be like for the survivors in the year 2500. By exploring the story mentally, the player is essentially exploring the "gaps". In a sense, the player adds layers of expectations and interpretations to his or her own interpretation of the plot conveyed in the cut-scene. Even in the rendering of the cut-scene, I made some additions to the cut-scene myself. Nowhere did it say explicitly that Salvador and Delvin were trying to collect data from the environment. That was what seemed feasible and logical, however it might be that they were out there for completely different reasons. However, after the sequence showing the meeting, where they discuss measuring and collecting data from the environment around the world – it confirmed my first interpretations.

In the excerpt, we get a closer look at the climate on earth in the year 2500. It seems as if humans have hidden underground to escape toxic levels of pollution in the air, and to avoid sunlight. To be able to be out in the open, they have to wear suits and helmets to protect them from the climate. The earth is uninhabitable on the surface. One can only imagine the amount of "ecocide" that must have happened in such a toxic environment. Ecocide refers to the "...destruction of entire habitats, rather than just individual organisms or species" (Garrard, 2012, p. 207). The scientists agree that travelling back in time is their last hope for survival, changing the way humans live life by making them realise what will happen in the future if they do not change. This notion places *A New Beginning (Final Cut)* in the disaster novel genre, in the "cautionary fiction" category type. As previously mentioned: "Cautionary fiction is a warning that we can and must change behaviour while we can still save ourselves and promote a rich, sustainable web of life" (Dwyer, 2010, p. 63). In the excerpt, it is clear to the

player that the world is suffering. This is conveyed through the images of a ruined city and the dialogue regarding their options for survival. They are trapped in a corner with nowhere to turn – so they decide to go back in time. In the dialogue, it is revealed that they have approximately two weeks left to live. Uncertainty, panic and desperation describe the atmosphere of the cut-scene. There is a sense of urgency. Flipping over to the "prologue" that is the next part of the game, we are overlooking a beautiful Norwegian fjord where Bent is standing over his broken down fogger. The contrast is stark between the future and their struggle to survive and Bent's trivial, everyday obstacle. When Fay arrives outside Bent's cabin, and accompanies him to his fogger, she becomes angry when she sees what he is doing – polluting the air, as well as scaring and killing an innocent bird on a branch nearby the fogger.

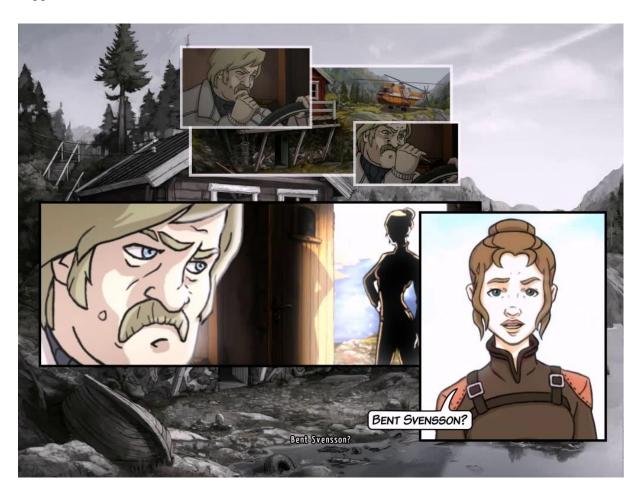


Figure 5: Screenshot 4. "Fay Arrives" in the "Prologue" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 21 with permission.

The next excerpt is from the Prologue, when Fay helps Bent fix the fogger (see figure 6 and 7). This next sequence is a mix of cut-scene and gameplay for the player. While removing a

bicycle tube to replace the broken conveyer belt in the fogger, Fay lands a helicopter next to Bent's cabin (See figure 5). This is a happy coincidence, because Bent will a few moments later realise that he needs help from another person to get the fogger started. After Fay has introduced herself to Bent, the player has to make Bent leave the cellar and accompany Fay outside to the shore. Bent does not want to hear Fay's plea for his help to save mankind, unless she helps him first. Reluctantly, Fay follows Bent up to the spot where the fogger is positioned. This triggers a short scene where Bent and Fay speak:

Bent: "There we are".

Fay: "What's this machine for?"

Bent: "The Fogger keeps the wood fresh until winter. I need you over here. You must push down this shutter while I operate the switch over there. Do you think you can do that?"

Fay: "Of course! I'm ready".



Figure 6: Screenshot 5. "Fay Asks Bent to Stop" in the "Prologue" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 21 with permission.

After the dialogue, a cut-scene with graphic novel attributes is triggered. The first panel captured shows Fay holding down the shutter and Bent operating the fogger. The next panel shows a speech bubble with the sound "BOOM". The fogger has started, and it starts to emit smoke, which leads to a bird on a nearby branch to fall over and die. The dialogue continues:

Fay: "Hey! What... Stop! STOP! STOP THIS!"

Bent: "Calm down, please, it's working as intended."

Fay: "What are you doing? Are you mad? Turn off the machine right now!" Fay bends down and picks up the dead bird in her hands.

Bent: "Oh, well. These things happen. But there's no alternative if you want to get rid of the vermin. And I need the wood for heating."

Fay cries while pressing the bird to her chest. Fay starts to walk away from Bent and says: "You are so stupid."

Bent puts his hands on his hips and says: "Oh great! I've got a visit from Miss Hypersensitivity" and follows Fay down the stairs to the cabin.



Figure 7: Screenshot 6. "Fay Cries for the Bird" in the "Prologue" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, March 21 with permission.

In this excerpt, the player gets an insight into how different Fay's world is from Bent's world. In the excerpt from year 2500, the earth was a toxic wasteland, in Bent's world there is wildlife, green trees, a blue ocean and clear skies. The two worlds could not be any more different. In Fay's world, it is dangerous to go outside due to pollution and potential solar flares. In Bent's world, you do not need special equipment or suits to be in nature. Bent lives far away from the busy city life. He is dependent on himself to make sure he survives in the countryside – even if that means to pollute by using a fogger. In his world, this is necessary to keep warm during the winter. In Fay's world, this is reckless behaviour and she is appalled by his nonchalant attitude towards the wildlife.

In the excerpt, there is a mixture of ludic-space and extra ludic space. The ludic space is the part before the cut-scene is triggered, when the player has to order Bent to ask Fay for help, by selecting the correct dialogue option. When the right option is chosen, the cut-scene is triggered. Within that ludic space, there are not many "gaps" to explore for the player mentally. However, in the extra-ludic space, the entire cut-scene sequence, there are many "gaps" for the player to explore. The first one is presented to the player when Fay reacts to the fogger emitting smoke. She begs Bent to stop, and the player might imagine how horrifying it must be for Fay to witness the pollution of such a beautiful scenery after witnessing her future world's horrific state. This "gap" might lead the player to explore the narrative further. Envisioning Fay showing Bent how the world one day will look, seeing his reaction to the future, and how his reaction to Fay's pleas might change after such an incident.

4.1.2 "CHARACTERS AND OBJECTS"

For this part of the analysis, I will look at excerpts from *A New Beginning (Final Cut)* where the two main characters Fay and Bent are included. The problem statement of this master's thesis focuses on the representations of the relationship between the characters and their wider environment. Therefore, I have decided to combine the categories "characters" and "objects" from Aarseth's theory (2012). The objects in the video game can be viewed as a part of the wider environment and by looking at the interactions between the characters and the objects it might be possible to discover information about the relationship between the two. I will focus on Bent as a main character and will elaborate on this choice in the next section while discussing both Bent and Fay as round or flat characters. In addition to including excerpts

focusing on Bent, I will draw on some of the previously presented excerpts from the category "world and events". This is because they reveal information about the characters as well. Concerning the ecocritical discussion and placing the representations of the main character within The NatCul Matrix (see chapter 5), the excerpts chosen will give insight into Bent's relationship with nature.

In accordance with Aarseth's theory (2012, p. 132), I have looked at Fay and Bent's "depth/shallowness" and "potential for player control" as characters in a video game. Both Fay and Bent can be placed within the "deep characters" category. They have names, individual appearances, and a lot of personality and elaborate background stories. Relative to the literary concept of "flat" and "round" characters, Bent can be viewed as a round character, and Fay can be considered a flat character. This means that Bent changes and develops in accordance with the story's development, and Fay does not (Andersen, 2012b, p. 43). Bent and Fay have very different background stories and personalities, which in turn produces two completely different trajectories of character development in accordance with the story's development. Bent goes from believing he is not responsible for the whole world, to believing that he can make a difference. Fay has no noticeably development, because she keeps fighting to save the earth throughout the story. She never gives up hope and in her last, and final, attempt – she sacrifices herself to ensure Bent's survival and the hope of him developing his technology, and stopping the Indez Power Plant from blowing up. In comparison to Bent, Fay never doubts Bent, or that the future can be altered. Bent, however, doubts himself, is pessimistic and has given up hope at the start of the story. In the end, he changes and becomes more optimistic and hopeful for the future. Due to Fay being more of a flat character, I have decided to focus on Bent in the analyses. However, I give some reflections regarding Fay as a character in section 6.2, where I discuss and compare Bent and Tic's placements in The NatCul Matrix.

Aarseth (2012, p. 130), emphasizes that there is a ludic and narrative pole to the categorizing of different types of characters. This means that the degree of which a character is rich, deep and round would be the narrative pole, and the degree to which a character is superficial or "empty" make up the ludic pole. In *A New Beginning (Final Cut)*, Bent is a round character, and the player has no real impact on the character's development apart from playing the

game. This leads me to interpret Bent as being closer to the narrative pole than to the ludic pole. This is because the player gets to know more about him and sees a bigger change in his character. In comparison, Fay is closer to the ludic pole with regard to her limited character development, and to the amount the player gets to know her story. With that said, the player is not without opportunities to interpret both of the characters. The game is structured in a way that gives the player more information about the characters' background stories as the plot progresses. This gives the player plenty of room to interpret and reflect during gameplay. As mentioned in section 3.1.3, there is a fundamental principle in literary narratology to respect the "incomplete" nature of the literary characters (Andersen, 2012b, p. 44). Bent is a more complete and deeper character than Fay, which leaves the player with less room to "fill in gaps" regarding his background story in comparison to Fay's. I argue that there is plenty of room for the player to interpret both characters, but that there is a slight difference between the two. With regard to Aarseth's theory (2012, p. 132), A New Beginning (Final Cut) has a strong narrative control over the player. This is because the player has little freedom in creating and modifying the objects in the game world. In sum, the video game offers the player little impact on neither the development of the characters nor the story.

The game world in A New Beginning (Final Cut) is filled with different types of objects. In Aarseth's theory (2012, p.132), objects are categorized in terms of their flexibility. This means that the objects are categorized in accordance with how they correspond with the character controlled by the player. As previously mentioned in the analysis theory section, there are six different types of objects: (1) static, non-interactable objects, (2) static, usable objects, (3) destructible, (4) changeable, (5) creatable and (6) inventible. In A New Beginning (Final Cut), there is no opportunity to create objects yourself as a player, but you can order Bent or Fay to disassemble, or break, a certain object in order to make a new one by either altering it or combining it with another object to gain a new function. In other words, there are no (5) creatable, but there are some (6) inventible objects. A New Beginning (Final Cut) consists mainly of static, non-interactable objects, seeing as those objects make up the scenery in the game. Further, I found that there is a category of objects in the video game, which do not fit within the six categories in Aarseth's theory. Therefore, I have decided to add a category called (7) static, interactable objects. In figure 8, I have highlighted some of the most frequent types of objects occurring in the game, by numbering the objects in accordance with Aarseth's categories, and adding the seventh category I suggest is missing. Under the figure, I

will explain the categorizing of the different objects, and give a deeper explanation to the seventh category.

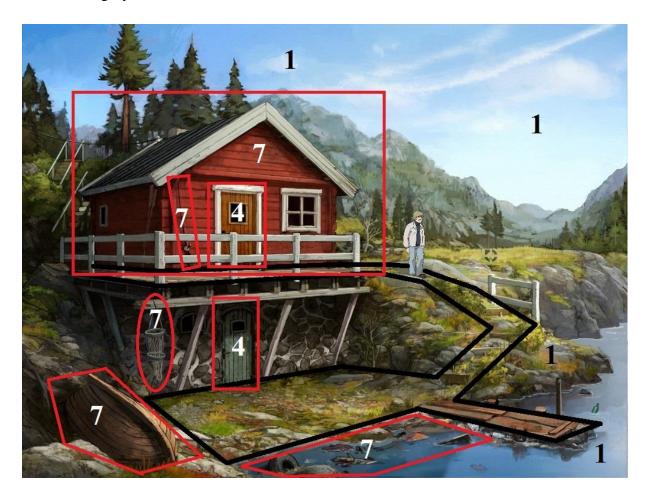


Figure 8: Screenshot 7. "Objects Outlined" in the "Prologue" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, April 4 with permission.

Figure 8 is the same image as figure 3, but I have added numbers to indicate the different types of objects occurring within the frame. The black outlines are still a representation of the ludic space in which Bent can be controlled. I have added red circles and boxes to indicate different types of objects. The number 1 indicates static, non-interactable objects, which mostly consist of the scenery. The number 2 can be seen on the boat on the shore, the garbage in the water, the fish net hanging from the balcony, the cabin, and the fishing rod resting up against the cabin. These objects are all static, interactable, but not usable objects. In accordance with how I interpret Aarseth's six other categories of objects, this seventh category would include all objects that are possible for a character to interact with, but that does not offer the character any functions, apart from containing potentially useful information. The player can click on either one, and Bent will not be able to "use" nor "take"

the objects, only respond to their existence. For instance, when choosing the command "look at" on the object "boat", Bent walks up to it and says; "This boat has seen better times. But it is still floating". Even though I suggest that there is a discrepancy between "static, interactable" and "static, usable", I do recognize that the adding of a seventh category might indicate my lack of understanding the entirety of Aarseth's categorisation. The seventh category can be part of both the extra-ludic (scenery) and ludic (playable) space. If an object, which is part of the scenery, is possible for the character to interact with, it is not necessarily a part of the ludic space in that it can be part of the extra-ludic space. This means that the player cannot control the character within the area of the particular object, but the player can click the object and it triggers a response from the character. It might just be possible to interact with it. In the analysis, I found that the most common options presented to the player when clicking on an object, is either "look at", "take" or "open". I placed the number 4 on the door to the basement floor, and on the door to the first floor of the cabin. These two objects are changeable because the player can command Bent to "open" them. The door on the basement floor will initially be locked, until the player is able to locate the hidden key in one of the picture frames hanging on the kitchen wall, inside the first floor of the cabin. In the game, there are no "creatable" objects in the sense that a player can open a "build menu" and create something new out of resources – however, there are "inventible" objects in regards to the player being able to combine different objects into new objects, or giving an object a new functionality. By clicking the right mouse button, a "toolbar" opens at the bottom of the screen, which is initially just a row of empty slots, but as the player progresses through the story and explores different objects the slots will fill up with different types of objects. When a player faces a task or an obstacle, it is possible to combine objects by dragging one item from one slot over to another. If the two objects are not meant to be combined, the game will not allow you to merge the two items, and the player has to try combining other objects. In other words, the game program is doing the inventing, not the player.

Next, I will take a closer look at the character Bent. To do so, I will be looking at excerpts that show how he interacts with some of the aforementioned objects and look at how these reveal information about his personality. Bent is the first character that the player gets to know and control. Through gameplay, it is revealed that he suffers from a "do-gooder complex" which supposedly earned him a stay in a hospital because he felt as if he was responsible for the whole world. This becomes known when his psychiatrist, Doctor Angust, calls him to check

in on him, and she repeatedly forces him to say the phrase, "I am not responsible for the whole world". In the first chapter, titled "prologue", the player has to fix Bent's fogger in order to progress the story. To do so, the player has to interact with different types of objects, but only a few will lead to solving the task. In this way, many of the objects serve only as elements that enrich the story, and a player could potentially go through the whole game without looking at certain objects, and subsequently not have all the information the different objects contain. However, the player can also choose to explore all the different objects by clicking on them with the mouse and activate the different options. This could be paralleled to the notion that one cannot exhaust all the potential "gaps" in a story, due to all the different potential interpretations they represent. Seeing as the player might unintentionally overlook an object, the information associated with that specific object is lost in the player's interpretation of the story. For instance, Bent had a wife named Meta. If the player overlooks the option to "look at" the object "tree" in the first playable scene of the game – the player would not know that the specific tree was a part of Bent's precious memories of his late wife.

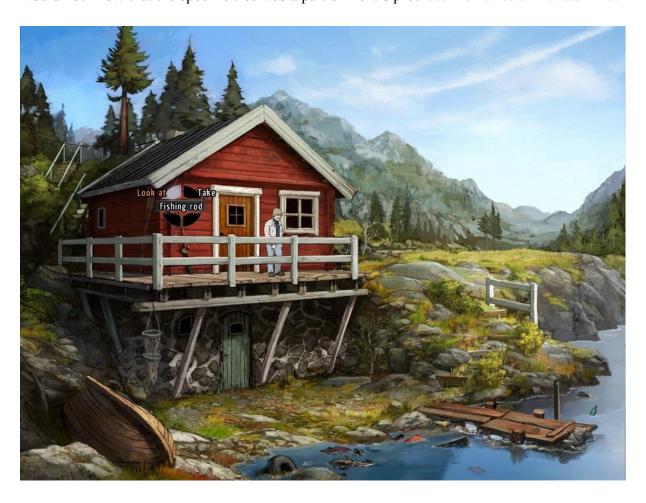


Figure 9: Screenshot 8. "Looking at the Fishing Rod" in the "Prologue" from *A New Beginning (Final Cut)*. By Daedalic Entertainment (2012). Rendered 2019, April 4 with permission.

In this part of the analysis of Bent as a character and his interaction with objects, I will present two figures of two different scenes, for visualisation, and transcribe the information revealed. I have chosen to select two excerpts from the "prologue" because this constitutes the first impression the player gets of Bent as a character. His demeanour and the things he says, reveal to the player Bent's attitude and relationship with the environment. In the first excerpt (see figure 9), Bent is standing on the balcony in front of the cabin. By clicking on the object "fishing rod" and selecting the option "look at", Bent walks over to it and states:

"The fishing rod was Dr. Angust's suggestion. 'It is very meditative, Bent. It will help you find peace.' I've been sitting at the bank each morning since then, apathetically staring into the water."

The next piece of information connected to the fishing rod is revealed by clicking on the object again, but selecting the second option "take":

"No. The fishing rod won't solve any of my problems. Even if Dr. Angust says otherwise."

In the second excerpt, during the same scene as the first one, Bent is standing on the shore in front of his cabin. I clicked on the garbage in the water and chose the option "look at." This triggered Bent to walk over to the shore and say:

"That's part of living near the water these days."

Next, I clicked on the garbage again, but chose the second option "put away." This lead Bent to state:

"I would've done that once. But it will not even take a week before it looks like this again".

In these two examples of interaction between Bent and objects, I find that there are many "gaps" to fill in, and indirect information in regards to his personality and background story. Looking at the fishing rod, Bent talks about Dr. Angust and her proposal for him to try fishing as a leisure and relaxing activity. It becomes clear that Bent has had to seek (or get involuntarily) professional help for his mental health. In the same example, Bent shows his disregard for her proposal and insinuates that no matter how hard he tries to fish, he does not find any joy or relaxation in the activity. Bent comes across as a defeated man who no longer believes that there is any happiness left in the world. When exploring the fishing rod further by trying to "take" it into his inventory, Bent disagrees with the player's command. He

directly says "no." He will not take the fishing rod, because it does not solve any of his problems. In the next interaction, Bent is looking at the garbage overflowing the shore. When looking at the garbage, Bent informs the player that this is nothing out of the ordinary. Visible garbage has become a part of looking at the ocean. The most interesting part of information gathered from the interaction with the garbage, is when Bent is told to put it away he sadly states that he would have done that one time. In other words, at some point in the past, Bent would have tried to clean the shore but something has happened in his life, substantial enough to alter this. When combining Bent's thoughts about fishing as a way of meditating and his attitude towards cleaning the shore, it might be possible to interpret that he is suffering from some type of depression. In extension of that notion, perhaps Bent is suffering from "learned helplessness." Learned helplessness is "a theory of depression maintaining that if people are unable to control life events, they develop a state of helplessness that leads to depressive symptoms" (Passer and Smith, 2011, p. G-9). I will be returning to these observations and this analysis in section 5, where I will be discussing the excerpts in relation to The NatCul Matrix. In the following, I will present the analysed parts in *Code Blue*.

4.2 Presentation of analysed parts in Code Blue

In this part of the analysis, I will analyse *Code Blue* by using Aarseth's (2012) "Narrative Theory of Games". His model is intended for video games, but utilizes narratological elements applicable to literary analysis. As previously noted, Aarseth operates on the premise that we do not really know what a video game is, and therefore focuses on what we do know. Further, he found the four categories "world", "events", "objects", and "characters" to be universal for stories, regardless of platform. In this part of the analysis, I have combined the categories into pairs: "World and events" and "characters and objects". When analysing the book in light of Aarseth's theory, I decided to adopt his theory onto the book. This means that I had to explain how the different attributes of the different categories applied to the textual work. For instance, in a video game, there are visual effects and controls that give the player clues to what kind of space (ludic or extra-ludic) is present in the particular scene. In a book, everything is written, and there are no visual clues or ways for the reader to control the characters around to find the different types of space. This forced me to adapt Aarseth's theory. I suggest that a book comprise the different categories from Aarseth's theory. Even though a reader is not able to control, or visually explore an image, it does not mean that there are no mentally imaginable images or different types of space present for the reader to explore mentally with the character. This was just an example of how I have adapted and applied Aarseth's theory when analysing *Code Blue*. Next, I will present and analyse excerpts from *Code Blue*.

4.2.1 "WORLD AND EVENTS"

When analysing the book's "world", in accordance with Aarseth's theory, I located all the places mentioned in the story. Further, I divided the places mentioned into "ludic spaces" and "extra-ludic spaces". The ludic spaces were the places *Tic was in*, the places she actually travelled and experienced. The extra-ludic spaces were all the places mentioned, but not travelled – and the places not mentioned in the book, but existing potentially in-between the lines: the "gaps". After finding all the different places mentioned in the text, I chose to narrow down the data material to include (1) the places most frequently mentioned and (2) travelled. In relation to a coherency in the different analyses, I further chose the places most frequently mentioned (3) where key events took place. This lead to these places being analysed: "The edge", her childhood home. The "North East Science Academy", which is the school Tic is accepted into and the place where most of the plot takes place. Finally, "the North Atlantic", the place her father was last seen, which is the key to her research, and the place where she confronts her past and future. By analysing these three places, I found examples of the different *types* of spaces (ludic and extra-ludic) in the "world" in *Code Blue* and representations that will be discussed in relation to the NatCul Matrix (see chapter 5).

According to Aarseth's (2012, p. 131) theory, the ludic space can be divided further into five topological structures. These structures are different *types of spaces* in which the player can control the character freely within. In a book, the reader does not have any physical control over the character – the reader can wave the book up and down, or turn the pages and the character will still be within the same space the words confine the character to. However, the same can be said about a video game player trying to move a character by lifting the game console up from the table, or waving a regular non-motion controller around. Both the player and the reader have to *engage* with the video game or the text in order to interact with the stories conveyed. Even though the reader cannot physically move the character, it does not mean that the characters in the book do not exist in a topological structure as defined by Aarseth. I claim that Tic in *Code Blue* is constantly appearing in the first type of structure: the

linear corridor. Try envisioning Tic as being locked in a fixed position by the ink on the paper, following an already set trajectory – physically speaking. Even though Tic is out of the reader's control mechanically, it is still possible for the reader to explore the character's surroundings *mentally* by filling the "gaps" in the text (Iser, 1972, pp.284-285), and adding their own associations and anticipations based on their cultural background.

I find that the "world" in *Code Blue* has two spaces: extra-ludic and ludic, and that both these types of spaces contain "gaps" that are only accessible to each individual reader. These "gaps" are mentioned in section 2.3. The reader or player's exploration of the mentioned or not mentioned space in a text or in a video game constitutes the spatiality of the "gap" in a text or video game. In a video game, the player might ponder what lies behind the mountains in the extra-ludic horizon, envisioning their character in a foreign city, or on a freezing mountaintop. In a book, the reader might mentally explore the spaces mentioned but not fully described. It is not possible for one reader to reach the full interpretive potential of a text (Iser, 1972, p. 285), and this constitutes the mental attribute of the "gap" in a book, which allows the reader to control an otherwise locked-into-place character. Next, I will go through some key scenes from the selected places mentioned in the book, and give some examples of ludic spaces, extra ludic spaces and "gaps" within both. Seeing as the main character is structured within a linear-corridor throughout the book, I will not be exploring the ludic space mechanically, but rather focus on the potential "gaps" in the different passages analysed.

"The Edge" is mentioned 21 times in *Code Blue*. The Edge is the place Tic and her mother has lived all of Tic's life. They live next to their neighbour who Tic calls "Uncle Al". Next, I will present an excerpt from the book, from the Edge:

My fingers clutch the metal wire of the chain-link fence until my knuckles turn white. I know the fence at the Edge is meant to keep people safe, to protect us, so why does it feel like a prison? I still find it hard to understand how it is even possible that the same fence that I am hanging on to stretches almost 28,000 miles on the East Edge alone. I look to the top of it, some fifteen feet above me, at the barbed wire. You can always go to a gate if you want out, as long as you have authorization anyway. I've only been out twice. Once was on a school field trip to Boston, and the other time I, well that time I didn't have authorization, but I did have wire cutters. (Slaven, 2018, p. 11).

Tic is standing by the tall barbed wired fence located by her home on "The Edge", which lies outside of New Hope Town. The fence separates humans from the dangerous ocean. Beneath the ocean lies the remnants from the old world, before "the change". As the grass hills limit Super Mario (Nintendo EAD, 1996) from exploring the world beyond Peach's castle (as mentioned in section 3.1.1), the barbed wired fence prevents Tic from exploring the ocean. The fence functions as a boundary between the ludic space Tic is standing in and the extraludic space that is the vast, dangerous and unexplored ocean. However, it becomes clear that the extra-ludic space has not always been out of bounds – Tic has been outside the fence two times. Just as the second floor in Peach's castle goes from being extra-ludic to ludic for Mario, the fence at the Edge has been both extra-ludic and ludic for Tic. While reading the excerpt, the ocean is extra-ludic, out of bounds, while the time she is reminiscing about, it was not.

While Tic is gazing through the fence, staring out at the ocean – there are several "gaps" mentioned indirectly and directly in the text. The first "gap" that can be mentally explored by the reader is her trip to Boston. One might envision a younger Tic being escorted through a gate with her other classmates, being outside of the fence for the first time. The second "gap" is the second time she went outside of the fence. She does not reveal much about what happened, and the text offers the reader an opportunity to reach beyond the ink on the paper and enter the "gap". Maybe the reader imagines Tic sneaking out of her house with wire cutters and then going for a long walk outside the fence. Perhaps the reader envisions Tic being in trouble with her mother or local officials for cutting the fence and breaking the rules not mentioned. This specific "gap" falls within the extra-ludic spectre, seeing as Tic is standing behind the fence (ludic space), thinking about a time she was on the other side (extra-ludic space) which contains an opportunity for the reader to mentally explore her surroundings further. Another direct reference to a "gap" is Tic's own thoughts: "I still find it hard to understand how it is even possible that the same fence that I am hanging on to stretches almost 28,000 miles on the East Edge alone" (Slaven, 2018, p. 11). In this line, Tic is directly mentioning an extra-ludic space, which opens a "gap" for the reader to enter and to explore. The reader might envision a bird's view of the coast, envisioning the fence – maybe there are others like Tic standing along the fence, looking out.

The "North East Science Academy" (NESA) is mentioned 70 times in *Code Blue*. More specifically, the abbreviation NESA is used 61 times and "North East Science Academy" is mentioned nine times. It is by far the most mentioned, travelled and the most eventful place in the book. NESA lies approximately a day's drive from the Edge and New Hope Town. The academy is positioned high up on a levelled mountaintop, and Tic describes it as a "…black box of a building that dominates the whole southern edge of the field. It looks solid and precise and utilitarian" (Slaven, 2018, p. 56). In the next excerpt, Tic and Phish have just entered NESA and are following the stream of new first year students into a large conference room:

In front of us is a wall of windows, and it looks like you could step out and leap from one mountaintop to the next, like stones across a giant stream, until you reach the far horizon of the fading blue sky. It is the natural world in all its overwhelming glory. (Slaven, 2018, p. 59).

Tic is amazed by the view from the windows at NESA. In this short excerpt, there is examples of ludic and extra-ludic spaces. The ludic space is the wall of windows – the physical place Tic is standing in and from which she is experiencing the view. The extra-ludic space is her description of the view, which contains Tic's thoughts about how it looks like one could physically jump from mountaintop to mountaintop. The view is extra-ludic by being out of Tic's immediate reach to explore. However, the way Tic describes the view is an example of how a text can offer interpretations of how to fill potential "gaps". This means that the potential exploration of the "gap" is suggested by the text itself. The reader might envision Tic jumping through the landscape with supernatural powers – or the reader might interpret Tic's thoughts as being strictly an analogy for how mesmerising the view is. How the reader decides to fill and explore the "gap" is entirely up to the individual reader.

In the next excerpt, Tic has been at NESA for a few weeks and soon she has to begin working on her first project of the first year. In connection with the impending first year students' choice of project – Sharon Hunt has invited Mr. Robert Sheffield. Ms. Hunt introduces him: "As chair of the National Scientific Council, his advice influences all of the important decisions our government makes around the Change" (Slaven, 2018, pp. 87-88). In the chosen part, Mr. Sheffield describes the situation of the world's climate and humans' future. I have chosen this section because it describes the state of the world in *Code Blue*. It describes the

world in which that the main character Tic exists, and marks an important event where Tic is motivated for her own research. The excerpt is in quotation marks because it is Mr. Sheffield's speech to the students at NESA:

"Listen, I can't stay long, but I had to come see you all. You may know already, and maybe you are starting to understand better, what a dire situation the world is in. Years ago, the International Organization on Climate Control reported that if people completely stopped emitting carbon dioxide – which was, of course, impossible – it would still take more than one hundred years for the carbon dioxide level to drop to three hundred and fifty parts per million, a level considered safe in terms of climate change. More than one hundred years! Stopping all carbon dioxide emissions will only solve the problem of the Change much too late to be a help to us as a species. All those efforts to cut carbon dioxide emissions are important, but generically, they are focused on destroying the environment more slowly.

It was bad enough when I graduated NESA a decade ago, but despite our best efforts, things seem to be getting worse. Here at home we have lost Hawaii, Florida, and Rhode Island completely. Big chunks of Louisiana and California are gone, and Texas, New Mexico, Nevada, and Arizona are uninhabitable. We have millions of climate refugees, and we are lucky compared to most of the world. The intensity and frequency of storms around the world has increased. Drought and famine are killing more people every day, both directly and indirectly, by causing war and facilitating the spread of disease. If things continue this way, many millions more will die, and I am afraid civilization as we know it will be lost" (Slaven, 2018, pp. 88-89).

Here I find a rather small portion of ludic space, which is the speech itself. As a reader, we read Tic's rendering of Mr. Sheffield's speech. By reading the words, we hear what Tic hears. In advance of her listening to the speech, the reader knows that she is sitting in the audience, and is confined to that ludic space at that moment. However, there is a lot of extra-ludic space in this excerpt. Mr. Sheffield speaks about the world, which might not be out of Tic's reach in the future, but at that exact moment, sitting in the audience, listening to him speak about it, it is. There are several "gaps" in the text for the reader to fill. Not all of the "gaps" are obvious, for instance in the first "gap": Mr. Sheffield says that he cannot stay long which infers that he is either in a hurry to be somewhere else, or has been instructed to not take up too much time. This is not explicitly mentioned, but by filling the "gap" as such, the reader might envision Mr. Sheffield rushing off in a helicopter after the speech, or having other things to take care of. By doing this, the reader explores the potential space within the "gap" – but it is a stretch, and it is not obvious. By exploring the space within the "gap", the reader takes mental control of the fictional character by envisioning different scenes.

Further, the detailed descriptions of the state of the world are a part of the extra-ludic space in this excerpt. By envisioning how the world must look after the Change, the reader fills in the different "gaps". If the reader goes deeper into these "gaps", and starts to envision people suffering and exploring how the characters might feel, maybe the reader interprets in light of how the world is in their own lives and starts to associate and engage their own personal experiences and cultural background – they might be able to explore the space within the "gaps".

"The North Atlantic" is mentioned specifically 11 times throughout the book. The North Atlantic (NA) is mentioned several times because it is an important place where several key events take place. Tic's father travelled to the NA to do research, but his expedition experienced bad weather and he never returned home (Slaven, 2018, p. 11). The next time Tic's father and the NA is mentioned, she is telling Lee about her family: "My dad went on his research trip to the North Atlantic, and three days later my mom got the call that he had gone overboard in rough weather" (p. 83). However, Tic checks the weather reports from the period her father was in the NA, and she cannot find any recordings of bad weather (p. 100). The NA has been a part of Tic's life as long as she can remember – it is the place where her father went missing, and the place represents many unanswered questions – both personally and to her research.

Tic decides to research glaciers and ice-shelves in her first project at NESA. As she discovers more and more through her research, she realises that the numbers do not add up. According to previous research, the glaciers and ice-shelves are melting at a much higher rate than anticipated, which might indicate that "...they got the math wrong, or there were other external, unanticipated factors affecting glacier melt" (Slaven, 2018, p. 129). Tic's discoveries are dangerous, because a big corporation called Alpha Omega does not want their illegal actions to be sabotaged by a first year student at NESA. After a storm on the Edge, her mother passes away and Tic receives her mother's ashes. Tic tells Lee that she wants to spread her mother's ashes in the NA. Lee sets it up so that Tic and he can travel to the NA. "When will I ever have the chance again? I can picture myself standing at a ship's rail with my mother's ashes. Maybe I would be better able to move on if I did this. I open my eyes. 'Yes.'" (Slaven,

2018, p. 255). Tic travels to the NA with Lee for two reasons: (1) To spread her mother's ashes, and (2) for her research project to study the glaciers and ice shelves in person.

The excerpt chosen from Tic's journey to the North Atlantic is the moment they arrive at the expedition's destination. It is the first time Tic gets to see the glaciers up close and she is standing on the deck of the boat with Lee:

Lee and I find a spot by the railing on the port side and watch in awe as the mountains grow ginormous before us. They rise straight up out of the ocean, dark black water transforming to variegated white ice that towers above us, larger than any building I have ever seen. As we draw closer I can see that some of the vertical surfaces are flat and smooth as glass and others are craggy, folded and wrinkled. I sense my physical insignificance not only in size but in terms of time. How old these giants are. It's beautiful almost to the point that it feels unreal, like we are moving into a painting or a dream. I can't reconcile what I am seeing with the calculations showing that all this will be gone in five years. It feels impossible. I squeeze Lee's hand tight. The boat stops and there is an eerie silence broken by deep groaning coming first from one direction and then another; coming from the glacier.

"I can't believe it..." I whisper.

"I know. Me too."

What else is there to say really? I am so in awe, so grateful to have this chance to see these monuments to Earth's history and unbearably sad to think I will probably never get to see them again. (Slaven, 2018, p. 271).

In this excerpt, I find both ludic and extra-ludic space. The ludic space is the spot by the railing where Tic and Lee stand. The extra-ludic space is everything she describes seeing. In addition, the extra-ludic space can also be said to reside potentially in the thoughts and emotions she describes having while taking in the view. By this, I mean that there are "gaps" for the reader to fill while reading the sections regarding her thoughts and emotions. For instance, she characterizes the view as "unreal" and compares it to a painting or a dream. The text invites the reader to envision an unrealistically beautiful painting or dream, based on the reader's own definitions of what that might be. The space within these "gaps" can be explored if the reader goes deeper into their own interpretations and explore how it would look, feel, smell, etc. if Tic (or the reader herself) were to "be moving into a painting or a dream". This

extra-ludic space is within the "gap" presented by the text, and is therefore an indirect type of space. There are several indirect types of extra-ludic space: by comparing the glacier to a building, the reader might envision Tic standing next to a tall building, and then the glacier towering above. The direct types of extra-ludic space are the actual spaces she describes that are out of her immediate reach. If it were possible for the reader to "move" or "control" Tic to jump in the water, swim to the glacier, and climb it – it would not be an extra-ludic space – it would be ludic. Seeing as the structure of the book and its physical limitations prohibits the reader from doing so, it automatically becomes a part of the extra-ludic space until otherwise is written in the text.

4.2.2 "CHARACTERS AND OBJECTS"

For this part of the analysis, I will look at excerpts from Code Blue focusing on the main character Tic and her interactions with objects. As previously mentioned, I have decided to combine Aarseth's (2012) categories "characters" and "objects". Looking at Tic's interactions with objects gives insight into her relationship with her surroundings, and in return reveal information about her as a character. The book is written in the first person point of view, and we have an exclusive insight into Tic's thoughts, feelings and emotions. In line with the book being an eco-mystery, she does not share all her thoughts and intentions – leaving some room for the reader to interpret and anticipate her next moves. In this part, I will present my analysis of the representation of the character Tic and her interaction with certain "objects" in Code Blue. To do so, I will first give an analysis of Tic as a character in light of Aarseth's theory (2012) and literary theory. Then, I will look at how the objects in the book can be viewed in light of Aarseth's theory. Finally, I will present and analyse an excerpt from the book. The excerpt I chose, is a part from the second chapter, where Tic is still waiting for the results of her important, potentially life changing, exam. She is impatiently waiting, filling her days with activities she *likes* to do. I chose this excerpt because it represents how Tic interact with objects throughout the story, and it is in particular of interest because it connects the plot to an ecocritical intertextuality.

When trying to study Tic as a character in relation to Aarseth's theory (2012, p. 132), I had to make a word change. As previously stated, Aarseth's theory is intended to be used on a video game, this means that I had to switch out the word "player" with "reader", seeing as a book is

read, not played. Then, I tried to look at Tic's "depth/shallowness" and "potential for reader control" as a character in a book. In comparison to A New Beginning (Final Cut), there are no visual images of Tic in Code Blue. Based on the descriptions in the book, the reader has to form her own interpretation and mental visualisation of how Tic looks, and there are very few references to her appearance. The reader becomes acquainted with the protagonist through Tic's thoughts and actions, also known as "indirect presentation" of a character (Lothe, 2000, p.82). Here are two excerpts that exemplifies how Tic's appearance is portrayed in the book: "Mom says it's a good thing I am only 5'2" and seem to have stopped growing, otherwise I'd have a hard time standing in my own bedroom" (p. 28) and "My shoes are muddy and I know I'm not looking my best. I didn't even run a brush through my hair this morning. I pull it up into a bun, slipping an elastic from my wrist over it as we walk" (pp. 13-14). The descriptions are few and not very detailed. This gives the reader a lot of room to interpret how Tic looks on her own, and in the end, it makes it easier for the reader to identify with the main character, and gain more of an ownership of how the reader views Tic. Therefore, it is difficult to place Tic as either a flat or a round character. In some aspects, she is clearly a round character because she is individualized and has a personality (Andersen, 2012b, p. 43). At the same time, it is possible to state that she has attributes of a flat character. Tic experiences a lot during the story; going through the dramatic entrance exam incident, being injured in a high-level storm, getting her computer hacked by the organization Alpha Omega, meeting a love interest, her mother's death, and fighting for her life on the expedition to the North Atlantic. The question of "character development" is the main concern I have when analysing Tic. Even though she has all of these life-altering experiences, does she change as a character? Through the book, Tic has the same goals and hopes for the world and the future. None of the aforementioned incidents changes her outlook. At the start of the book, all Tic wants is the opportunity to attend NESA and be a part of the solution. At the end of the book, this is still true, "I know where I am going: North East Science Academy" (p. 312). With all of this taken into consideration, I suggest that Tic is a round character in regards to her personality, but in regards to her character development and limited character description, she resides on the lower part of the "round character" spectrum with tendencies of a "flat character".

As done in the "characters and objects" part of the analysis of *A New Beginning (Final Cut)*, I will now look at Aarseth's (2012, p. 130) narrative and ludic pole in an attempt to categorize

Tic as a character in *Code Blue*. To the extent that a character is rich, deep and round it belongs near the narrative pole, and to the extent that a character is superficial or "empty", belongs near the ludic pole. As we have already seen, Tic is not a fully rounded character. She is individualized and has a personality, but does not develop much as a character throughout the story. Additionally, the descriptions of her appearance are limited. By using Aarseth's terms "ludic and narrative poles", it becomes easier to categorize Tic as a character. Calling her "flat" is almost an insult in regards to having read the story and developed an ownership to the story and with the character. Aarseth's terms can be interpreted to take into account the relationship between the author and the reader. I interpret that the more room the author gives the reader to interpret a character on their own, the more a character will reside towards the ludic pole – in the control of the reader. In addition, I interpret that the more a character is described and less room is given to the reader in interpreting the character's development and personality – the more a character is under narrative control and less in the hands of the reader. Thus, Tic is closer to the ludic pole than the narrative pole in Aarseth's model.

As previously mentioned in the analysis theory, Aarseth (2012, p. 132) claims that objects can be categorized in terms of their flexibility with regard to whether they can be manipulated by the character or not. In books, the reader is physically unable to "use" or "interact" with objects mentioned in the story. Even though there are no objects for the reader to make the fictional protagonist interact with, it does not mean that there are no objects in the story, and that these do not fit into any of Aarseth's categories. Here, it is important to notice that Aarseth states that the objects are categorised in accordance with how they are manipulated *by the character*, not the player (or in this case, the reader). Even though the reader is unable to "control" the character's actions, it does not mean that the fictional character does not interact with objects. Next, I will analyse an excerpt from *Code Blue* where Tic interacts with an object. I will look at Tic as a character and discuss in what category the object falls.

In the second chapter, "July", Tic lists things she likes to do: Hiking in the woods looking for wildflowers, checking out animal tracks, scavenging along the Edge for anything that may have washed up that she can sell and reading in one of her favourite books *Walden*. I have chosen to look closer at Tic's descriptions of the book as an object in her life. It is an important fictional piece of literature that might have influenced the way she reflects on, and

interacts with, nature. Additionally, the way Tic describes the plot of her favourite book clearly indicates an intertextual reference to Thoreau's (1995) book *Walden, or, Life in The Woods* (mentioned earlier in chapter 2):

I reach for a book on my bedside table. It was a birthday gift from Mr. Kisway, a client at Maplewood. [...] He has a collection of actual paper books and even though I could read any of them on my tablet he enjoys lending them to me. I have grown to like the weight of them in my hands, the soft feel of the paper, even the smell. I have read this one so often I think I must know parts of it by heart. I stare at the cover. The book is called Walden, and its cover has a drawing of a sweet, small cabin sheltered under tall trees. It's a real place, or it was anyway, and not all that far from here. I haven't been there since it is beyond the Edge, but I searched current images of where it should be. If the cabin is still there, you would need diving gear to see it. I press the book to my chest, close my eyes and try to imagine it the way Thoreau describes it, before all of the destruction: a peaceful, natural oasis. (Slaven, 2018, pp. 27-28).

In this excerpt, we learn that Tic likes to read and to research the stories she reads about. For instance, after reading Walden, Tic tries to connect the fictional world of the book to her real world. She realises that if she ever were to see the cabin in the story, she would need diving gear – reminding herself of how her own world has changed. In a sense, it is possible to interpret that books might not give her an escape from her own reality, but rather make her reflect on her own world. In this excerpt, there are several objects mentioned: (1) the bedside table, (2) Mr. Kisway's collection of books, (3) the book *Walden*, and (4) Tic's tablet. In order to categorize these objects in accordance with Aarseth's theory, I have looked at the functionality of the objects at the moment of time in the excerpt. The bedside table falls within the seventh category that I added to Aarseth's theory while analysing the objects in A New Beginning (Final Cut) "static, interactable objects". This is because the table is static, and Tic does not use it. Rather, she interacts with the table by taking the book placed on top of it. The table is a part of the scenery in the excerpt, and does not have a function other than setting the scene and being instrumental in the interaction between Tic and the book. Just as in video games, there are objects in literature that are there to be seen (read) and not used (Egenfeldt-Nielsen, Smith and Tosca, 2016, p. 205). Mr. Kisway's collection of books and Tic's tablet are "static, non-interactable objects because they are not in Tic's immediate reach. The tablet and the collection of books are static seeing as they exist, but while being thought of by Tic – they offer no functionality or interactability at the given time of the excerpt. The book Walden is a "static, usable object" because it exists in the space where Tic is, and she picks it up and uses it. Even though she does not read in the book, she studies the cover and

thinks of the time she tried to look up the whereabouts of the cabin in the story *Walden*. In a video game like *A New Beginning (Final Cut)*, this interaction might have been prompted by the player commanding the protagonist to interact with the book and then be given a small cut-scene of the character's thoughts and memories, or maybe the character would think aloud for the player to hear her thoughts but not see the memories.

In the excerpt, we learn information about Tic as a person and her life. In the interaction between Tic and the book, we learn that paper books are not common in her world. When thinking of Mr. Kisway, Tic states, "He has an actual collection of paper books..." where the use of the word "actual" indicates that it might not be common to own books anymore. Everyone reads on tablets. Tic states that she has "grown to love" the feel of real books in her hands, which indicates that she potentially did not like the feel of them the first time she held a book. This supports the interpretation that "actual books" are not a part of humans' everyday life in Code Blue, at least not paper ones. In the excerpt, it becomes clear that Walden is one of her favourite books, because she thinks that she knows some parts by heart. She tries to envision how the cabin and its surroundings must have looked like before "the change". The fact that Tic has researched the actual location of the cabin in her real life world indicates that she is adventurous and curious. By looking at the information embedded in the interaction between Tic and the objects in the excerpt, the reader might fill in "gaps" in the text. Nowhere in the excerpt is it stated that books are not common anymore, nor is it stated that she did not like the feel of books the first time she held one – however, by filling gaps with my own interpretations on the structure of the sentences and content, some of the potential "gaps" are filled. In chapter 5, I will discuss the interaction between Tic and the book Walden in an ecocritical perspective, to see how the relationship between Tic and her wider environment is represented.

5. ANALYSIS, STAGE B: AN ECOCRITICAL PERSPECTIVE

In this chapter, I will be applying an ecocritical perspective on the analysed parts of the book *Code Blue* (Slaven, 2018) and the video game *A New Beginning (Final Cut)* (Daedalic Entertainment, 2012). This will be done by first presenting The NatCul Matrix, and secondly

discuss the paired up categories "world and events" and "characters and objects" in light of the matrix. The NatCul matrix will function as a common ground to discuss the various categories from both the video game and the book, thus enabling a comparison between the two different works within the same ecocritical theoretical framework. This chapter is structured by first presenting and explaining the analytical matrix, and then by discussing and placing the different categories within the matrix. I will apply an ecocritical perspective on each of the paired up categories from both the video game and then the book in each of their own sections. Each followed by a positioning of the said categories within the matrix. Each pair of categories will be discussed in regards to "problematizing nature", "celebrating nature", "the ecocentric horizon", "the anthropocentric horizon" and "techne". After looking at the video game and the book separately, the two will be compared and discussed in chapter 6 titled: "Analysis Stage C, A Comparative Perspective". By doing this, I am able to discuss how the relationship between the main characters and their wider environment is represented in the book and the video game. Further, I reflect on the use of Aarseth's theory on both a book and a video game, and potential future research at the end of the master's thesis.

5.1 THE NATCUL MATRIX

As previously mentioned, The Nature in Culture Matrix (The NatCul Matrix), is a conceptual tool developed by the research group Nature in Children's Literature and Culture, led by Nina Goga. The NatCul Matrix was created through the research group's experience with and research in the fields of children and YA literature and culture, and their collective readings and discussions of central ecocritical concepts and texts (Goga et al., 2018, p. 12). The application of The NatCul Matrix "...facilitates the analysis, comparison and crossdisciplinary and international discussion of a variety of texts that comprise children's literatures and cultures" (Goga et al., 2018, p. 12). The NaChiLitCul research group, among other things, explores and focuses on the relationship between nature and culture. "Broadly speaking, all texts contain culturally established patterns and figures of thought, shaping and affecting our understanding of the world, including our understanding and knowledge of nature, humans and the environment" (Goga et al., 2018, p. 4). By this, all texts can be seen as containing different representations of how different cultures view the world – either in line with or in opposition to the author's or reader's own cultural background. I understand this notion as a way of suggesting that all texts carry mediated representations of the relationship between the main characters and their wider environment. Later, I will explore a part of The

NatCul Matrix named "techne". This concept of how texts mediate humans' understanding of the world will be further explored. First, I will present the structure and contents of the matrix.

The NatCul Matrix (see figure 10), is reminiscent of a mathematical graph. However, instead of there being an X axis and a Y axis, the axes represent the view on nature in "...a vertical continuum ranging from a celebration to a problematizing of nature, and a horizontal continuum ranging from an anthropocentric to an ecocentric horizon" (Goga, et al., 2018, p. 12). The term "continuum" refers to "A continuous sequence in which adjacent elements are not perceptibly different from each other, but the extremes are quite distinct" ("Continuum", 2019). In the description of the two axes, it is emphasized that the axes do not indicate differing degrees of depth, but rather "...each of the two dimensions carries both ontological and everyday aspects" and that "...the lines in the coordinate system are a way of depicting how the view on nature is dependent on how humans position themselves in nature..." (Goga et al., 2018, p.12). By this, I understand the two axes as ways of visualising the differing degrees between celebrating nature and problematizing nature (the vertical axis) and between an ecocentric horizon and an anthropocentric horizon (the horizontal axis). Further, each of the two outer points of these two axes (or continuums) will be explored. This will be done by looking at how the different terms are used and understood in the different chapters in Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues (Goga et al., 2018), and in light of central theory from the field of ecocriticism. The NatCul Matrix is presented and interpreted by Nordic and International researchers in the book and their combined efforts create the basis of this master's thesis' understanding of the matrix. The book's chapters are divided into five different thematically organized groups: "ethics and aesthetics", "landscape", "vegetal", "animal" and "human" (Goga et al., 2018, p. 14). Based on a reading of the book's chapters, I here present the matrix's five central concepts; "celebrating nature", "problematizing nature", "ecocentric horizon", "anthropocentric horizon", and "techne".

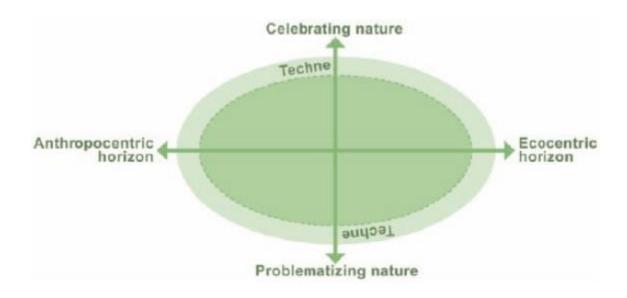


Figure 10: The NatCul Matrix. From *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), By Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

5.1.1 CELEBRATING NATURE

The vertical axis shows the continuum between "celebrating nature" and "problematizing nature". Goga et al. (2018, p.12-13) explain the concept of "celebrating nature" as an implication of the idea of the "pure child" or "child of nature". To gather a deeper understanding of what "celebrating nature" entails, it seems relevant to look at "the pastoral" tradition in literature. "Since the Romantic Movement's poetic responses to the Industrial Revolution, pastoral has decisively shaped our constructions of nature" (Garrard, 2012, p. 37). Goga et al. echo this sentiment in their description of how they have decided to use "landscape" as a specialized field within ecocriticism: "In ecocritical studies, the concept of the pastoral is often discussed – a figure within both the visual arts and literature that has been indispensable in Western thinking for more than two millennia" (2018, p. 15). Further, Nyrnes has written the chapter "The Nordic Winter Pastoral: A Heritage of Romanticism" which constitutes the first part of the "landscape" category mentioned earlier in this section. When considering the theoretical foundation of the anthropocentric and celebrating nature in the NatCul Matrix, Nyrnes (2018, p. 76) suggests three theoretical positions where the third (the ecocritical perspective) has already been covered in this master project. The first position is Romantic nature philosophy, specifically Rousseau and Schiller. The second is "...viewing the idyll or the pastoral as a classical rhetorical topos" (Nyrnes, 2018, p. 76). Looking back at the terms "pure child" and "child of nature", Nyrnes notes "The close connection between child and nature established by Rousseau was strengthened by the Romantic cultivation of

childhood..." (2018, pp. 80-81). In addition, Katheeb (2018, pp. 93-94) argues "Rousseau's impact on Western thinking with regard to the relationship between child and nature was to shape the powerful myth of a nature-culture dichotomy that made nature a sacred place". Rousseau's famous character Èmile is the epitome of "a child of nature". "The education of the child should be "according to nature" (Rousseau referred to by Katheeb, 2018, p. 93).

By reading Goga et al. (2018), Nyrnes (2018) and Katheeb (2018), it becomes evident that the term "celebrating nature" is more than representations of literature describing or depicting beautiful landscapes. The *Nature Culture* matrix emphasizes the role culture plays in representations of how humans position themselves in relation to nature. By acknowledging this, it seems important to note that "celebrating nature" can be interpreted differently, according to the context in which the matrix is used. In this master project, the concept of "celebrating nature" is understood to be linked to the pastoral tradition, and further divided into three possible kinds of pastoral.

(1) The specifically literary tradition, involving a retreat from the city to the countryside...(2) any literature that describes the country with an implicit or explicit contrast to the urban, (3) and the pejorative sense in which 'pastoral' implies an idealisation of rural life that obscures the realities of labour and hardship. (Gifford referred to by Garrard, 2012, pp. 37-38).

In addition to these three kinds of pastoral, this study also takes into account three different "...orientations of pastoral in terms of time" (Garrard, 2012, p. 42). "Elegy", "utopia" and "idyll". Elegy refers to the concept of looking back at the past as a better time, looking back in nostalgia. The second orientation idyll refers to the celebration of the beautiful present. The utopia refers to looking forward "...to a redeemed future" (Garrard, 2012, p. 42). This master project acknowledges that the terms mentioned contain historically several layers that could be explored more in depth, for instance the notion that pastoral often used nature as a mere framing device to enable "reflections of human predicaments" (Garrard, 2012, p. 39), and not for the sake of nature's wellbeing. However, in the analysis and the following use of the NatCul Matrix, these types of elements will be discussed as they become relevant. Next, a closer look at "problematizing nature".

5.1.2 PROBLEMATIZING NATURE

The concept of "problematizing nature" is explained as the notion of acknowledging an increased awareness of nature in children's literature, and the increasing environmental challenges. The vertical axis moves from "celebrating nature" to "problematizing nature". By contrasting the two, one notion seems obvious. In celebrating nature, especially the way some pastoral literature hid the realities and hardships of human life in nature – it seems apparent that a problematizing of nature would shed light on these hardships and realities. Specifically linked to ecocriticism it would seem logical that the consequences of human activities and the changes in the environment would not be put aside, but be clearly visible and emphasized.

5.1.3 THE ANTHROPOCENTRIC HORIZON

The horizontal axis shows the continuum between "the anthropocentric horizon" and "the ecocentric horizon". It is explained by the degree by which the focus shifts "...from a humancentred way of understanding towards a more integrated understanding of all life" (Goga et al., 2018, p. 13). Anthropocentrism refers to the concept of placing humans in the centre of attention as the only inhabitants of intrinsic value, and everything else as to only have instrumental value. In addition, Goga et al. (2018, p. 15) explain the concept of the Anthropocene as "...a proposed geological epoch marked by significant human impact on the Earth's natural systems". There seems to be a clear distinction between the terms "the Anthropocene" and "the anthropocentric horizon" in that the Anthropocene is viewed as a contemporary cultural theme in children's literature, and the anthropocentric horizon as a cultural representation of how humans position themselves in relation to nature. According to Garrard (2012, p. 26), "deep ecology identifies the anthropocentric dualism humanity/nature as the ultimate source of anti-ecological beliefs and practices..." An anthropocentric horizon can be understood as a representation of humans, where humans position themselves as "distinguished" and "superior" to nature due to allegedly having qualities such as "an immortal soul or rationality" (Garrard, 2012, p. 26). This study understands the anthropocentric horizon to represent the very definition of a dualistic perspective on the relationship between humans and nature. Dualism is "the division of something conceptually into two opposed or contrasted aspects, or the state of being so divided" ("Dualism", 2019). In addition, anthropocentrism is understood as a "...system of beliefs and practices that favours humans over other organisms" (Garrard, 2012, p. 206).

5.1.4 THE ECOCENTRIC HORIZON

On the other side of the continuum, ecocentricism refers to the ecosystem being the centre of attention. The term is understood to "...emphasise[s] the intrinsic value of the interrelated ecological system of which humans are part" (Quinn et al. referred to by Goga et al., 2018, p. 13). This study understands the continuum's movement towards the ecocentric horizon from the anthropocentric horizon, to be closely connected to the environmentalist position "Deep ecology". According to Garrard (2012, p. 24), "...deep ecology demands recognition of intrinsic value in nature". A deep ecologist would frown upon measures taken to preserve nature in consideration of human needs being met. The preservation of nature should be done for the sake of nature itself. The ecocentric horizon in the NatCul Matrix is a representation of humans positioning themselves within nature and the ecosphere. Humans are not to be viewed as "superior" to nature, but as a part of the bigger ecosystem. With that said, it is important to note that the ecocentric view held by deep ecologists has been criticized for promoting the same dualism that they so heavily oppose.

They claim the ecocentric monism enjoined by deep ecologists is disingenuous because, although humans are supposed to be 'part of nature', many of the things humans do are still portrayed as 'unnatural', thereby introducing the dualism they were trying to overcome" (Garrard, 2012, p. 32).

It is an important critique and shows how it might be difficult for an individual to uphold either ecocentric or anthropocentric values at all times. Within deep ecology, there are references to two different approaches one can take. There is the "hard wing" which upholds the ideal of deep ecology in every matter, and there is the "softer mainstream side" which recognizes ecocentricism as "...merely an 'orientation' within which major differences of opinion will always subsist'" (Garrard, 2012, p. 25). Then the question remains, how does this master project understand "the ecocentric horizon" in the NatCul Matrix? It is understood to represent deep ecological attitudes towards the relationship between nature and humans, with an anti-dualistic view on this relationship. More specifically, Arne Naess's two key points about deep ecology resides as the understanding of the outer point of the continuum:

1. The well-being and flourishing of human and nonhuman life on Earth have value in themselves (synonyms: intrinsic value, inherent worth). These values are independent of the usefulness of the nonhuman world for human purposes. 4. The flourishing of human life and cultures is compatible with a substantially smaller human population. The flourishing of nonhuman life *requires* a smaller human population. (Sessions referred to by Garrard, 2012, pp. 23-24).

The axes show differing degrees of a movement from one end to another – which opens up to discussions regarding different analyses of children's literature and the representations of the relationship between humans and nature portrayed. Now we have seen that the two axes represent two dimensions, which can help visualise how nature is portrayed in relation to how humans position themselves in nature.

5.1.5 TECHNE

In addition to the axes, The NatCul Matrix features an encompassing dimension – *Techne*. The techne dimension is drawn as a circular figure, which encompass the contents of the two axes. Goga et al. (2018, p. 13) list several purposes for the techne dimension, where one of them seems specifically relevant for the analysis in this master project: The techne dimension shows that both young adult and children's literature are *created* in the real world, and therefore inherently carry representations of nature. This can be paralleled to Aarseth's theory, by viewing both books and video games as being created by humans in the real world. It is especially interesting to look at Aarseth's description of the video game world in comparison to the techne dimension. As we have seen, Aarseth views the video game world as a physically existing world by that it exists within the computer software. I suggest that the same can be said about the fictional world in books, by that it exists in the physical world as signs and symbols that are waiting to be decoded by a reader. The representation of the relationship between the main characters and their wider environment is mediated. This study understands "techne" to represent the materialistic nature of the given work's physical attributes. In addition, "techne" is understood to encompass the realms of the two other continuums, thus representing the notion of the reader's, or the player's, interpretations of the given work. Summed up, "techne" is a part of all of the continuums, and is a reminder of the cultural construction inherent in a given work's representations of how humans position themselves in relation to nature.

In sum, this master project understands the NatCul matrix's different axes respectively, but also as intertwined, after reading about, and figuring out how one can understand and interpret the four outer points, and the encompassing techne. For instance, I can see several connections between "celebrating nature" and "the ecocentric horizon" – and between "celebrating nature" and "the anthropocentric horizon", and so on, where idealisation of

nature might indicate "celebrating nature". One can at the same time either have differing degrees of ecocentric or anthropocentric tendencies present in the representation. In addition, the differing degrees of problematizing nature will also have an impact on where the representation belongs in the matrix. Culture also plays an important contextual role. This realization will enable a more precise and nuanced placement of the different representations analysed and discussed from the book and the video game. The NatCul Matrix is relevant in that its broad terms and descriptions allows a variety of texts to be its subject of discussion. Next, I will place the analysed categories from *A New Beginning (Final Cut)* within The NatCul Matrix.

5.2 Placing categories from *A New Beginning (Final Cut)* within The NatCul Matrix

In this section, I place the categories "world and events" and "characters and objects" from *A New Beginning (Final Cut)* within The NatCul Matrix. I do this by discussing how the different representations found through the analyses can be placed according to the different dimensions in the matrix. Each category is discussed and placed within the matrix in turn, and at the end of this chapter, I compare the representations found in the video game with the ones found in the book. I have decided to discuss and place the categories from the video game first, since Aarseth's theory is primarily intended for use on video games.

5.2.1 "WORLD AND EVENTS"

In *A New Beginning (Final Cut)*, there are two different main versions of planet earth, divided by time and the degree of how far the earth's climate has changed. The first version of earth is in the year 2500 and its climate has changed drastically. The second version is at the turn of the millennium, and the earth's climate change has started to become visible but not yet at the point of no return. For the analysis, I chose three excerpts. In the first excerpt, I analysed the structure of the game with regard to ludic space and extra-ludic space. In the two other excerpts, each of the two different versions of earth were represented and key events took place. In this ecocritical discussion of the category "world and events" in the video game, I will look at how the two different representations of the earth relate to The NatCul Matrix's different dimensions, and finally position them within the matrix. To do this, I have chosen to focus on the excerpt depicting Bent's world, and the excerpt from Fay's world. The first

excerpt in the analysis was included to summarise and to create an understanding of the general ratio between ludic space and extra-ludic space throughout the video game.

The first version that is presented to the player is Fay's reality in the year 2500. In the excerpt, we learn that humankind is backed into a corner, and they are ready to make a final attempt at saving the world and its inhabitants. The vertical axis in The NatCul Matrix visualises the differing degrees between celebrating nature and problematizing nature. In the first excerpt, there is a high degree of problematizing nature – there is no beautiful nature left in the world, and we meet the characters as they emerge from a dystopian lifestyle underground, exploring the toxic reality of the climate above ground, in the middle of an abandoned city. This moves the representation of how the characters in the video game place themselves, in relation to nature, to the outer end of the vertical continuum in the matrix, towards problematizing nature. If we look at the other outer point of the same axis, the notion of celebrating nature in literature stems from the pastoral tradition. With regard to the three different types of pastoral, none would describe the way the landscape is portrayed in the first version of earth in A New Beginning (Final Cut). The only element that could have been described as potentially pastoral is that humans have moved away from the city and underground. However, there is no idealisation of rural life, which obscures the realities of labour and hardship. The harshness of the environment and consequences of climate change are obvious and directly mentioned.

The horizontal axis is a continuum between an ecocentric horizon and an anthropocentric horizon. In the first excerpt there is an emphasis on human survival, but at the end of the excerpt Quadi (the leader of the meeting), says "...we are looking at certain death for every living thing in two weeks". By this, humans are not presented as the only inhabitants of intrinsic value, but the representation of the world in the video game, is still positioned closer to the anthropocentric than the ecocentric horizon. The cut-scene's atmosphere speaks louder in the urgency of saving humanity than it focuses on other species. As far as being able to interpret whether or not the excerpt places humans as superior to nature, it seems as if humans actually are "afraid" of nature. The impending solar flare scares the survivors and holds a promise of the demise of the way of life, as they know it. This moves the representation slightly closer towards the ecocentric horizon of the continuum, but it still stands closer to the anthropocentric horizon. By looking at what encompasses the ecocentric horizon, it becomes

clear that humans are not part of nature, at least not in the first excerpt. Humans have taken sanctuary underground, away from the environment. They have isolated themselves, in an effort to survive. Nature, as it is portrayed in the excerpt, is no longer a place where humans can live. This notion places the representation of the wider environment in the video game, closer to the anthropocentric horizon than the ecocentric one.

The second version of earth presented in A New Beginning (Final Cut), is located at the turn of the millennium. In the excerpt, we meet a Norwegian scientist named Bent Svensson. The landscape is a stark contrast to the one we saw in the year 2500. The sky is blue, the air is clear, the forests are green and there is not another building in sight. There is, however, some signs of human activity affecting the environment, for instance the garbage in the water by the shore and the noise and carbon dioxide being emitted from Bent's fogger, which kills a bird. In relation to the vertical axis on The NatCul Matrix, the representation of the relationship between humans and nature is much closer to "celebrating nature" than it is "problematizing nature". The excerpt shows Bent's retreat from the city to the countryside. The cabin and its surroundings describe a contrast to the urban by being presented after the intro cut-scene of the game showing the shattered climate in the year 2500. Bent's attitude towards nature also implies a sense of idealisation of rural life that obscures the realities of labour and hardship. This is amplified when Fay pleads Bent to hear her out, but he refuses to talk to her before his fogger is up and running again. In his reality, the priority is to fix the fogger so that his wood keeps dry for the winter (which is seemingly, judging by the weather, not right around the corner). The player knows that Fay's agenda is huge and cataclysmic, while Bent's agenda is overcoming an everyday obstacle that has no devastating consequences attached. Overall, the video game emits an "elegy" orientation of pastoral in terms of time. As previously mentioned, elegy refers to the concept of looking back at the past as a better time (Garrard, 2012, p. 42). Clearly, the future is bleak in comparison to Bent's world in the past. All of these elements bring the second version of earth closer to the celebration of nature.

To position Bent's world in the matrix, it is further necessary to look at how it is positioned on the horizontal axis. Therefore, I will now discuss how it relates to the anthropocentric horizon and the ecocentric horizon. The closer we get to the anthropocentric horizon, the more dualistic the relationship between nature and humans become. In Bent's world, nature

seems to be taken for granted. Fay epitomizes this, by being completely appalled by Bent's actions towards nature. While she cries for the bird, Bent scoffs at her reaction and calls her "Mrs. Hypersensitive". This is ironic, seeing as Bent has fled to the countryside to deal with stress from feeling as if he is responsible for the whole world – but when Fay expresses dismay towards his actions in nature – his sense of reality and urgency connected to climate change reveal how their personal backgrounds divide them. In Bent's world, he is a "Mr. Hypersensitive" who wants the best for the world, but not to the extent that he changes his everyday ways of life. While Fay's background and her first-hand experiences of the dire consequences of the future if nothing changes, gives her a completely different reaction. This leads me to interpret the representation of the relationship between humanity and nature in Bent's world culturally far more dualistic than in Fay's future world. In Fay's world, they are physically divided from nature, but mentally they are much more in accord with the needs of nature because they have experienced the outcome. In Bent's world, humans are not physically restrained from existing in, and with, nature, but mentally they are separated by an attitude of taking it for granted. Summarised, the representation is much closer to the anthropocentric horizon than the ecocentric horizon.

In the dimension of techne, the video game has a physical materialistic nature in the sense that the "world" physically exists within the software on the computer, as in accordance with Aarseth's theory (2012, p. 131). In addition to this, I showed in the analysis that the game also has a "world" which exists mentally within each player, created by their interpretations of the many "gaps" discussed. In addition, the world in the video game is mediated by game designers, which means that the game inherently carries representations influenced by humans and their wider environment. However, I am interested in discussing the double standard the game represents. Seeing as the game's main plot dwells around climate change and human responsibility to the planet – the game is at the same time a part of the game industry, which causes a lot of pollution in the real world today. In fact, the video game industry is larger than the film industry (Berger, 2002, p. 24). "Six billion pounds of games and consoles have been sold, and if all the games and consoles produced by Nintendo ended up in a landfill, that would amount to the weight of more than 5,555 Statues of Liberty" (Constanza, 2012, July). Six billion pounds of games and consoles would take Nintendo 1,453 years to recycle (Constanza, 2012, July). By looking at these facts from 2012, it becomes apparent that the video game industry is not innocent in the aspect of human impact on nature. However, A

New Beginning (Final Cut) represents a positive direction within the video game industry: it is an online downloadable video game. "If all games were downloaded instead of manufactured, that would save 2,4 billion gallons of crude oil, or over 4x the yearly consumption for Italy" (Constanza, 2012, July). By being a video game, A New Beginning (Final Cut) is a part of a massive industry that has an impact on the climate, and by the game being downloadable they are ecologically oriented towards helping the environment, and I would expect the distributors of such an ecofictional video game to promote this notion more than they do. This brings the representation of the world in the first excerpt within the dimension of techne, but slightly more towards celebrating nature on the vertical axis, due to the lack of recognition for the real world implications the game industry represents.

With all these reflections in mind, this is how Fay's world (blue circle) and Bent's world (red circle) is placed within The NatCul Matrix:

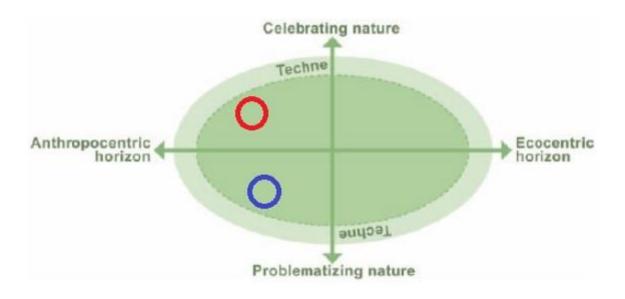


Figure 11: "World and Events" in *A New Beginning (Final Cut)* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

5.2.2 "CHARACTERS AND OBJECTS"

A New Beginning (Final Cut) is a point-and-click video game. In these types of games, the player uses the mouse to control the characters, click on objects and to navigate in the game world. In A New Beginning (Final Cut), the interaction between the main characters and the objects are vital because it is an essential part of playing the game. In the analysis, I found

that not all of the objects were necessary to explore in order to progress and solve the game. However, I found that important pieces of the characters' personalities and background stories could be interpreted from the characters' reactions to the various objects. With that said, it is important to emphasize that the game is structured in a way that often forces the player to look at different objects at random. Sometimes, other characters or cut-scenes will try to hint at what the player needs to do next, but even then, it is not always clear what the player is supposed to do to solve a task. In this uncertainty and in the search for the correct order to look at and explore different objects, the player gathers information about the characters and their relationship to their surroundings. This includes memories of a different time, thoughts about people they have lost or miss, and reflections and attitudes toward the environment. In the analysis, I looked at one excerpt from gameplay where the character Bent interacted with two different objects. In this part of the ecocritical discussion, I will look at how Bent's interactions with the objects reveal information about his relationship with his wider environment.

In the first excerpt (figure 9), Bent was commanded to "look at" and "take" the fishing rod, and to "look at" and "put away" the garbage floating in the water. From the analysis, I found that there were many "gaps" for the player to fill in, and direct information about Bent's personality and background story. In general, the fishing rod can be seen as a representation of a tool used by humans throughout history to gather resources from the sea. Specifically, to the story in A New Beginning (Final Cut), the fishing rod can be seen as a representation of Bent's many efforts to please his psychiatrist in an attempt to regain stability in his mental health. Through gameplay, it is revealed that in the past, Bent truly believed that he could save the world. To the point that he must have felt as if the entire responsibility for the world's future rested on his shoulders. The burden became too much for Bent, and at the time of the excerpt, he scoffs at the thought that he once believed that he could make a difference. The same sentiment is repeated when the player tries to have Bent "put away" the garbage floating in the water by the shore. It is revealed that he would have done that in the past, but not anymore. In general, the garbage can be said to represent how humans have impacted nature negatively by throwing plastic, and broken, unwanted, old things into the oceans. Specifically, in the video game, the garbage represents Bent's reluctance to cleaning the ocean. In his eyes, it is useless even to try. He is no longer responsible for the whole world, and even the slightest attempt at saving it would be a waste of time. As shown through Bent's Bent's personality and background story, which in turn offers the player the opportunity to interpret and reflect on Bent's relationship with the environment. Next, I will discuss these interactions between the main character and objects in light of The NatCul Matrix, and place the representation of the relationship between Bent and the objects within.

The vertical axis in The NatCul Matrix visualises a continuum between celebrating nature and problematizing nature. In the first transaction between Bent and an object, he is looking at, and trying to take, the fishing rod. In accordance with the pastoral tradition, visually, the picture of Bent in a beautiful fjord, far away from the busy city life, and the fishing rod resting up against the wall ever so peacefully gives off initially an atmosphere of celebrating nature. This swings the pendulum closer to the "celebrating nature" side of the axis. However, when we look closer and discover the garbage floating in the water by the shore, something does not seem right in the context of celebrating the beauty of nature. The image of an idealised rural life on the countryside fades when Bent starts interacting with the two objects. No, Bent does not wish to neither go fishing nor putting away garbage. This ambivalence towards the state of his own mental health and the environment is hard to decipher. In one aspect, nature is celebrated by the beautiful visual image, in another aspect; the image of garbage floating in the water is problematizing nature. However, the placing of Bent on the continuum becomes even more complex when looking at his interaction with the two objects. It is problematic for Bent to go fishing, because it does nothing for him, and to put away the garbage would be useless. Nature is idealised, but problematized – all at the same time. This places Bent as a character dead centre on the vertical axis. His character is neither a representation of celebrating nature nor problematizing it.

In the excerpt, the interaction between the fishing rod and Bent moves the pendulum closer to the anthropocentric horizon. When Bent states that the act of fishing was suggested by his psychiatrist as a way of dealing with his thoughts and emotions, nature becomes instrumental. The sea is viewed as a tool to soothe Bent's anxiety and stress. What is evolutionary seen as an act of gathering food to survive as a human, being a part of the food chain and an act to fulfil the physical need for food, is in the excerpt used to serve Bent's mental needs. Bent's responses to the garbage floating in the water, also brings the representation closer to the

anthropocentric horizon. In Bent's opinion, garbage has become a natural and expected part of the ocean view. Nature is polluted and there is nothing to do about it, because it cannot be stopped. This attitude is not in the spirit of being ecocentric. Bent is actively ignoring nature's integrity, when he refuses to clean up the mess he is a part of creating.

In regards to the dimension of techne, the interaction between the characters and the objects are interesting. In the ecocritical discussion of the game world in A New Beginning (Final Cut) in light of techne – I focused on the physical materiality of the video game industry. However, in this part of the discussion, it is interesting to look at the tools digitally represented within the video game. The fishing rod and the garbage are just two out of many objects encountered throughout playing A New Beginning (Final Cut). Even though this is not revealed in the interaction between Bent and the fishing rod, it is revealed when Dr. Angust calls Bent in a cut-scene that Bent refuses to fish because he does not want to take part in the "overfishing" of the seas. "Fishing is one of the most significant drivers of declines in ocean wildlife populations. Catching fish is not inherently bad for the ocean, except for when vessels catch fish faster than stocks can replenish, something called overfishing" (World Wildlife Fund, 2019). As stated in the analysis theory section, young adult and children's literature are created in the real world, and therefore tend to carry representations of nature. The fishing rod is a digital representation of the human activity of fishing. The fishing rod is placed near the centre of the scene (see figures 8 or 9), and by that placement, it becomes a central part of the picture, and hard for the player to overlook. Culturally, there is nothing out of the ordinary to see a fishing rod leaned up against a wall of a Norwegian cabin by the seaside. The placement of the fishing rod indicates daily use – otherwise it might have been stored in the cellar or at least inside to avoid rust. The object represents how humans throughout the history of time have used tools to exhaust resources from nature. The garbage in the water/ocean is also nothing out of the ordinary. According to Miljødirektoratet (2019, January) 1% of all garbage in the ocean is floating in the water, 5 % is washed up on the beach zone, while 94 % sink and lie on the ocean floor. Further, they state that it will take nature several hundred years to dispose of plastic naturally. The fishing rod, the garbage and Bent's interactions with these objects are representations of how humans have affected nature in the real world today. It is a serious matter and aspects of techne can be found within the continuums on both the vertical and horizontal axes.

With the discussion in mind, this is how the interactions between Bent and the objects "fishing rod" and "garbage" in *A New Beginning (Final Cut)* is placed within The NatCul Matrix:

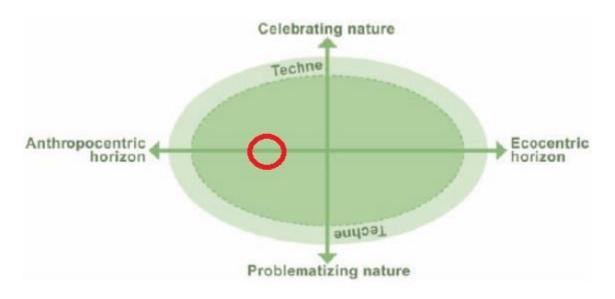


Figure 12: "Characters and Objects" in *A New Beginning (Final Cut)* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

5.3 PLACING CATEGORIES FROM CODE BLUE WITHIN THE NATCUL MATRIX

5.3.1 "WORLD AND EVENTS"

In this part, I will place the category "world and events" from *Code Blue* within The NatCul Matrix. I will do this by discussing how the three subcategories (1) the Edge, the North East Science Academy, and (3) the North Atlantic relates to the dimensions of the matrix. In *Code Blue*, Tic and her mother live outside of the small town New Hope Town. In other words, they have moved away from the city to a place reminiscent of a countryside. In the first excerpt in the analysis of the "world" in *Code Blue*, I analysed the place called "the Edge". In the excerpt, Tic is standing far away from the busy city life in the middle of nature. In relation to the vertical axis in the NatCul Matrix, there are clear implications of connections to the pastoral literary tradition with the retreat from the city. However, there is no typical "idealisation of rural life" (Gifford referred to by Garrard, 2012, pp. 37-38). The barbed wired fence could be interpreted as a symbol of the distance between humans and nature in the world Tic lives in. She is not allowed to move freely in nature, and she feels as if she is imprisoned even though she is standing in nature. She is not truly free – she feels caged and

longs to be able to explore the ocean. In this regard, Tic is not a typical "child of nature", her education is not "according to nature" (Rousseau referred to by Katheeb, 2018, p. 93), her life and movements are controlled by the government and expectations from society. This places the "world and events" category in *Code Blue* closer to the concept of "problematizing nature" than "celebrating nature". There is the link to the pastoral tradition, yet the world is not depicted in a way that hides the hardships of the world Tic lives in – on the contrary, they are confronted through Tic's thoughts and reflections. Due to the amount of reflection and pondering on human life, one might argue that the excerpt follows the historical layer of pastoral tradition that used nature as a framing device to explore "human predicaments" (Garrard, 2012, p. 39). "We might say that the idyll is *the unproblematized home* of children's literature" (Nyrnes, 2018, p. 84), however the Edge is not unproblematic.

Tic stands by the fence, grasping hard on the metal. She longs to be free to explore her surroundings. On the horizontal axis in the NatCul Matrix, the continuum ranges from an "anthropocentric horizon" to an "ecocentric horizon". The "world" depicted in the excerpt is situated much closer to the anthropocentric horizon than the ecocentric horizon. This is because there is an underlying representation of dualism between humans and nature, which is the "ultimate source of anti-ecological beliefs and practices" (Garrard, 2012, p. 26). In an effort to argument against this notion, one can also claim that there is no real proof that humans are positioned as superior to nature, they are simply separated. The ocean is dangerous, and might symbolise being more powerful than humans can withstand. In that aspect, the pendulum swings closer to the ecocentric horizon. Situating itself on the middle, seeing as the excerpt gives no indications to whether the fence has been raised to protect humans from nature (anthropocentric), or nature from humans (ecocentric).

Similar to the Edge, "the North East Science Academy" (NESA) and "the North Atlantic" (NA) lie remote from civilization. NESA lies high up in the mountains and the NA is uninhabited by humans – the furthest away from the city imaginable on earth. Even though the NESA is positioned in the mountains with an amazing view of the landscape surrounding it, and forests within Tic's reach to explore – I find the same relationship between Tic and nature at NESA as at her childhood home at the Edge. There are strict rules for students who want to explore the landscape, as explained by Ms. Hunt: "There is a rule, though, about not

being out of sight of NESA at night". In other words, Tic is freer at NESA in the sense that she *is* allowed to go outside campus at daytime, but she is not allowed to be out of sight at night. Again, like at the Edge, one might interpret this as a safety measure made by the school (and possibly the government). The fence at the Edge protects humans from the dangerous ocean, while the rules at NESA protect curious students at night. Then the question remains – are the people being protected from nature? Or are they being separated from nature? With regard to the notion of humans being part of nature – it would seem reasonable to suggest that humans are being separated from nature by having installed rules, fences and regulations to limit their access to it. As in the previous section, there are no clear indications to whether the rules are instated in protection of the students or nature – therefore the world in *Code Blue* is still situated on the middle of the anthropocentric and ecocentric continuum.

At the North East Science Academy, Mr. Sheffield gives a speech that depicts the state of the world in *Code Blue*. Before I start to interpret the different parts of the speech, I would like to acknowledge the potential bias connected to him as a researcher. The world in Mr. Sheffield's speech is depicted from his point of view – a well-known science researcher from NESA, who has done a lot of important work as chair of the National Scientific Council in the world of *Code Blue*. By recognizing this, I also emphasize that his remarks on the state of the world, might come from an intentional or unintentional urge to motivate and inspire the students to adhere to the potential goals and attitudes of the North East Science Academy. My point being, his speech represents the view of the world in *Code Blue* from a scientist's perspective, who aligns with, and recognises that there is a measure that needs to be taken by humans to save the world. Just by this potential bias alone, it is possible to suggest a placement of his sentiment on the continuums of the matrix.

The message of Mr. Sheffield's speech is that the humankind is to blame for the state of the earth's climate, and that by hurting nature, we are hurting ourselves. On the horizontal axis, the speech brings the world depicted in *Code Blue* closer to the anthropocentric horizon than the ecocentric horizon. This is because Mr. Sheffield focuses on what *humans* have lost, and how the climate change has impacted *us*. Anthropocentrism refers to the concept of placing humans in the centre of attention, which is the case in the speech. Even though Mr. Sheffield does not directly state that humans are the only inhabitants of "intrinsic value", and

everything else as to only have "instrumental value" (Goga et al., 2018, p. 13), he does not say anything against it either. In the speech, Mr. Sheffield depicts a dualism between humans and nature by using the term "we" – if there is a "we" he is also inferring that there is a "them". Nature and humans are separated in his choice of words, but his underlying message suggests otherwise. Humans are to blame that nature is changing by hurting it, and when nature is hurting, humans suffer too. These two conflicting layers of the message of the speech are: (1) Depicting a dualism between humans and nature, and (2) as seeing humans as part of nature. However, the depiction of the world is closer to an anthropocentric horizon due to the actual language used, and due to the focus of the speech. On the vertical axis, the speech brings the world depicted in *Code Blue* closer to problematizing nature than celebrating nature. This is because Mr. Sheffield describes in detail how the environment has been and is being affected by human activities. Nature is not depicted as unproblematic in his speech.

In the North Atlantic, Tic experiences glaciers for the first time. This part of the book describes the North Atlantic (NA), and the excerpt shows how the NA relates to the rest of the world in Code Blue. Tic's description of the glaciers is important regarding how the depicted world relates to the vertical axis. In my opinion, Tic's descriptions can be said to have a tendency toward being a celebration of nature, specifically within the "idyll" orientation of the pastoral in terms of time (Garrard, 2012, p. 42). As previously mentioned, the idyll refers to the celebration of the beautiful present. Tic describes the glaciers as being so beautiful, that they feel unreal. By looking to the three different kinds of pastoral, Tic's description of the glaciers falls within two of the categories: "The specifically literary tradition, involving a retreat from the city to the countryside... and any literature that describes the country with an implicit or explicit contrast to the urban" (Gifford referred to by Garrard, 2012, pp. 37-38). Tic and Lee are far away from the city in fact, they are far away from the countryside too. Tic specifically contrasts the size and shapes of the glaciers to urban objects like tall buildings and glass. She compares the natural phenomenon to something that is familiar to her – buildings. By comparing and contrasting the glaciers to city buildings, Tic is celebrating the uniqueness of the sight before her. She has never seen anything as big, as beautiful or as old as these glaciers. However, the world depicted in Tic's description is not completely a celebration of nature. If we look at the third possible kind of pastoral, it is clear that the sight is not completely unproblematic: "...and the pejorative sense in which 'pastoral' implies an

idealisation of rural life that obscures the realities of labour and hardship" (Gifford referred to by Garrard, 2012, pp. 37-38). If Tic's descriptions were to be pure celebration of nature, she would also have had to look past the notion that the glaciers are melting and will in a few years be completely gone. By highlighting this, Tic problematizes nature. The sight of the glaciers is not perfect because the overwhelming beauty reminds her that this might be the last time she will ever be able to see them. In accumulation, Tic's descriptions of the glaciers moves the pendulum closer to the celebrating of nature than problematizing nature, however not significantly in regards to the acknowledgement of the glaciers' pending demise.

With regard to the techne dimension, I suggest that the barbed wired fence at the Edge points in an anthropocentric direction, due to being a symbol of human effort to "tame nature" (Nyrnes, 2018, p. 79). Techne can be understood as an expression of the relationship between humans and nature in regards to how human approach nature – do they farm the land with tools and remedies, or do they simply exist in nature? At the North East Science Academy, the school is situated in the countryside, far away from the busy city life, but there is a heightened focus on how to improve the state of the climate on earth. They use advanced technology to research the many changes that are happening on the planet, and they use different scientific tools in attempts to stop the changes from happening. In this regard, the people in the world of *Code Blue* use many tools in their interactions with nature. However, Tic attempts (and sometimes succeeds) to interact with nature without materialistic means and tools – simply to experience nature (like the time she sleeps outside with Lee, falling asleep while stargazing). Techne can also be understood as the materialistic attributes of the text as a whole, and a reminder that the excerpt is written by someone and for someone. The representation of the relationship between humans and their landscape is *mediated*, and therefore the interpretations are affected by cultural contexts from both the text's author and reader (both implicit and authentic). I gave an explicit example of this while looking at Mr. Sheffield's speech. Slaven probably had both intentional and unintentional purposes for writing Code Blue. However, as a reader I am not aware of these potential intentions. I am aware of the "implicated author" in the text, and by recognizing that the character Mr. Sheffield might represent a biased or pre-informed instance of attitudes while interpreting his speech, I acknowledged the potential cultural contexts from the text's implicit author and potentially my own. Figure 12 shows how I would position the categories "world and events" from Code Blue in The NatCul Matrix.

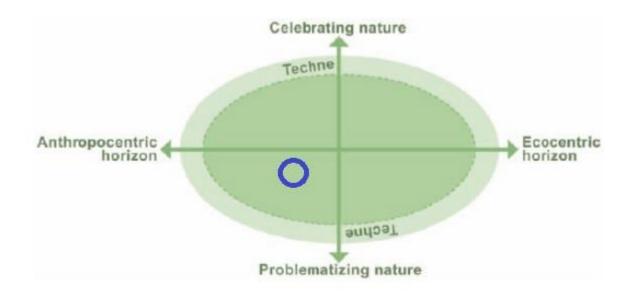


Figure 13: "World and Events" in *Code Blue* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

5.3.2 "CHARACTERS AND OBJECTS"

Code Blue is a fictional story in a book. It can either be read on paper or digitally, the point being that it is a story conveyed through the written word, read silently or vocalized. The reader has no physical impact on the story nor the characters in the book. However, the reader has mental control over his or her own reflections, anticipations, interpretations and assimilations. The uncontrollable part of the mental exploration of a text lies in the cultural predispositions, which influence how the reader perceives certain events, objects, characters, and the depiction of fictional world and fictional society. The objects in the book is out of the reader's physical control. It is not possible for the reader to command or control a literary character to interact with an object, unless, for instance if the structure of the book gives opportunities to make decisions by turning to different pages which reveal different outcomes in a story, also known as "choose your own adventure" books (Ahlin, 2018 May). Even then, the reader is not in direct control over the character or the plot, because the different alternate narrative routes are already set trajectories that exist regardless if the reader chooses one option or the other. This is the case in most games too – alternate narrative routes (or combinations) are programmed into the software of the game.

In the excerpt in the analysis, in section 4.2.2, I found that there were different types of objects represented in Tic's interaction with the book *Walden*. In the analysis, I found that even though Aarseth's theory (2012) is intended for video games, it does not mean that there are no objects in books being manipulated by the characters. The real difference is the interaction between the player and the character, and the reader and the character. The reader reads that Tic is reaching for her book and studying its cover – by reading the words, decoding them, adding his or her interpretations and assimilations, based on cultural background, the reader is part of bringing the story to life. If the reader did not read the words, or did not understand the context, Tic would not be reaching for the book as potentially envisioned by that particular reader. From the analysis, I found that there were many "gaps" for the reader to fill in, and potential information revealed about Tic's personality and life.

Next, I will discuss the different aspects from the analysis in light of The NatCul Matrix.

The vertical axis in The NatCul Matrix visualises a continuum between celebrating nature and problematizing nature. In the first interaction between Tic and an object, she is reaching for the book on the bedside table. With regard to the pastoral tradition, there is no idealisation of rural life in the excerpt. Tic is well aware of the state of the world's climate, and even though she reaches for a book that has an intertextual connection with one of the best known pieces of literature within ecocriticism, there is no pastoral idyll. The cabin in the book Walden is submerged in water, and if Tic wanted to see it, she would need diving gear. She tries to envision it as a peaceful and pure oasis, but finds it difficult due to her awareness of the state of her wider environment, the state of the world in her reality. This awareness places the representation of Tic as a character toward the problematizing point of the vertical axis. The excerpt does not give enough information to be able to place it on the outer point of the given axis, but the atmosphere of the excerpt does not speak only in the interest of humans as being the only inhabitants of intrinsic value. The cabin represents the image of an idyllic countryside in the woods for Tic. She is idealising the past, which can be said to be a sign of the pastoral type of "elegy". Elegy (Garrard, 2012, p. 42) refers to the concept of looking back at the past as a better time, and looking back in nostalgia. Because of this, the representation of Tic moves to the lower part of the continuum, in the direction of problematizing nature, but does not reach the outer point. There is an element of idealising nature, and the past, but the conscious relationship to the real-world consequences of human activity is not ignored.

The horizontal axis is a continuum between the ecocentric horizon and the anthropocentric horizon. In the excerpt, the interaction between Tic and the book Walden moves the representation closer to the anthropocentric horizon, but just barely. The outer point of the right side of the continuum is the ecocentric horizon, which indicates a view where humans are part of nature and that nature carries intrinsic value. In the excerpt, Tic is not a part of nature – she is in her bedroom looking at a book that discusses the relationship between humans and nature, reflecting over the whereabouts of the cabin and imagining how it is submerged under water now, and fantasising about how it must have been before the climate changed. To be able to visit the cabin, Tic needs to use diving gear. In other words, she is hindered in accessing the idyllic place described in the book. In addition, the nature and the cabin that she is basing her fantasies on, are mediated by the author of the book Walden, which she does not seem to reflect on. This lack of reflection places the representation of Tic as a character around the middle of the horizontal axis, just across the middle on the side towards the anthropocentric horizon. The anthropocentric horizon indicates a view of humans as being inherently of greater intrinsic value than nature. Nowhere in the excerpt is it indicated that Tic places herself, nor humanity, as greater than nature – but she is not part of nature while sitting inside looking at a mediated representation of how the relationship between nature and humanity was depicted in the past. There is missing an element of recognition of this aspect, and thus she is closer to the anthropocentric horizon. Additionally, Tic reflects on the differences between the world depicted in the book and her own world, and she emphasizes the fact that humans have destroyed the climate. In this particular excerpt, I would have placed the representation of the relationship between Tic and her wider environment a bit closer to the anthropocentric horizon than the ecocentric horizon. However, when looking at her character throughout the story of the book, the pendulum swings a bit in the other direction.

By looking at Tic in regards to the whole story in *Code Blue* – I would place her a bit more towards an ecocentric horizon, than to the anthropocentric horizon. This is due to her understanding of humans' responsibility to nature, and how her life is altered and affected by the drastic changes to the natural environment. Yes, the climate change is created by humans – but nature is not the only element affected. By humans being a part of nature, they are also suffering. This becomes clear through the actions and thoughts of Tic. She wants to have a positive impact on nature. There is an underlying message regarding Tic as a character – she

is part of humanity. Humanity has hurt nature and nature is suffering, but so are humans. When humans hurt nature, they hurt themselves. I would not place the representation of human relation to nature any closer to the ecocentric horizon due to how Tic's own suffering as a human, is as much due to the intrinsic value of nature as the intrinsic value of humans. With these arguments in mind, this is how I have placed Tic within The NatCul Matrix:

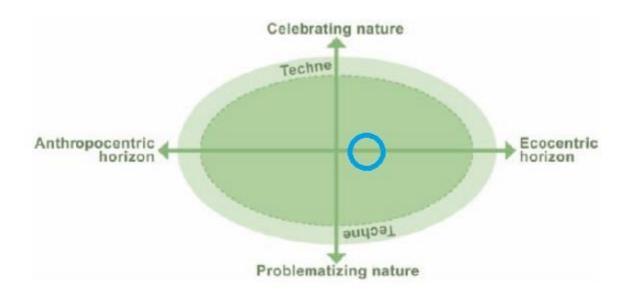


Figure 14: "Characters and Objects" in *Code Blue* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

With regard to the dimension of techne, the relationship between Tic and her wider environment is mediated by being constructed by Marissa Slaven (the author of *Code Blue*). In addition, the mediation has also been interpreted and discussed by me as a reader. My cultural predisposition and personal relationship with literature and nature have affected how I have interpreted Tic as a character. In regards to techne and the use of tools in the mediated encounter between Tic and her wider environment, the book *Walden* can be said to be a representation of human mediation of the relationship between humans and nature within the mediated representation in *Code Blue*. It might be possible to reflect on the use of *Walden* in *Code Blue* to give the reader an idea of what the past might have been like in Tic's world. However, that depends on the reader's previous knowledge of Thoreau's (1908) famous book *Walden*, *or*, *Life in The Woods*. If the reader is unaware of this intertextuality, the potential "gap" in the story is not filled in, and the metaperspective on a mediated presentation of the

relationship between humans and nature, within another mediated representation, is lost on the reader.

6. ANALYSIS, STAGE C: A COMPARATIVE PERSPECTIVE

In this chapter, I will discuss and compare the findings from the analyses of the representations of the relationship between the main characters and their wider environment in stage A and B. I will do this by comparing the categories "world and events" and "characters and objects" in A New Beginning (Final Cut) and Code Blue based on the analyses and the ecocritical discussion. To do so, I will give a brief presentation of the categories "world and events", and "characters and objects" in both the video game and the book, in two separate sections, followed by a comparison of how the representations were positioned in The NatCul Matrix from each work. It is important to emphasize that the aim of this study is not to compare a video game and a book, but to compare the representations of the relationship between the main characters and their wider environment in the video game and the book. By doing this, I claim that it is possible to answer how the relationship is represented. In addition, the problem statement of the master's thesis asks how the relationship between the main characters and their wider environment is represented in an ecofictional video game and an ecofictional book – thus far in the thesis; this has been answered through the analysis and the ecocritical discussion. However, in this chapter, I will summarise the findings and attempt to compare the representations found in the video game and the book.

6.1 Comparative analysis of "World and Events" in *A New Beginning (Final Cut)* and $Code\ Blue$

This section might seem as a comparison of the video game and the book as storytelling media, but the intention is to compare how I approach the category "world and events" in both works. While spatially exploring the world in *A New Beginning (Final Cut)* I found that the player is forced to complete the narrative before the ending is revealed. In comparison to the exploration of the fictional world in *Code Blue*, I could turn to whatever page I liked, and read. In addition to owning the book in paperback format, I also own it on *Kindle* (Amazon, 2011), which makes it possible to search for words and phrases. This enabled me to explore

the different pages in the order I wanted to and focus on different aspects of the fictional world. In the video game, I could save the game at any time while playing, which gave me the possibility to "load" the game from a selection of previously saved slots, but I still had to finish that specific part's tasks in order to get to the next sequence or scene of the game. In this regard, the video game was more restricted than the book mechanically and physically. Obviously, the turning of pages for a reader who is reading *Code Blue* for the first time, will lack a lot of context in order to fully understand what part of the world is being described if s/he turns to a random page. However, the same can be said for a player of a video game, which allows the player to start at any given moment in the plot.

In A New Beginning (Final Cut), there are two versions of the earth: (1) Bent's world and (2) Fay's world. In the ecocritical discussion, I found that the two versions mirrored each other when placed in The NatCul Matrix with Bent's world positioned closer to "celebrating" nature" and Fay's world to "problematizing nature". However, the representations were paralleled on the horizontal axis by both being closer to "the anthropocentric horizon" than "the ecocentric horizon". This notion of the past being idyllic, as represented by Bent's world, carries tendencies of an elegy type of pastoral tradition. "...elegy looks back to a vanished past with a sense of nostalgia" (Garrard, 2012, p. 42). When looking to *Code Blue*, Tic's world was positioned approximately in the same vicinity as Fay's world in the video game. In other words, there seems to be a tendency of idealising the past as a better time for the earth and being more aware of the consequences of human impact on nature in the future. However, while comparing the video game and the book further, it became clear that there is an important difference. The events of the stories where the characters in each respective work attempt to save the world are differently structured. In A New Beginning (Final Cut), Fay actually travels back to the idealised past in an attempt to salvage the future. In Code Blue, the past is unreachable, and the focus of hope lies in the future, thus showing indications of a utopia type of pastoral. "...the utopia looks forward to a redeemed future" (Garrard, 2012, p. 42). Finally, even though there is a difference in where the hope of a redeemed future lies, Fay and Bent also want a better future for the earth, as Tic does. The main difference is how they try to save the world. In figure 15, I have combined figure 11 and figure 13, and coloured the circle indicating the representation of the world in *Code Blue* in black. The red circle indicates Bent's world, and the blue circle indicates Fay's world:

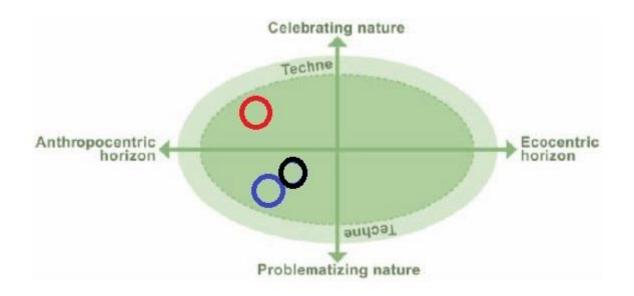


Figure 15: "World and Events" in A *New Beginning (Final Cut)* and *Code Blue* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), By Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

6.2 Comparative analysis of "Characters and Objects" in *A New Beginning (Final Cut)* and *Code Blue*

By looking at how the characters interacted with different objects in the video game and the book, I was able to discuss how the characters positioned themselves in relation to their environment. In A New Beginning (Final Cut), I decided to focus on Bent as a main character in spite of Fay also being a main character. It just became too much information to analyse both characters and their different interactions with various objects. In hindsight, the ecocritical discussion might have benefitted from including Fay in the discussion. However, just as Fay's world and Bent's world mirrored each other, the same can be said about Bent and Fay. Bent was positioned on the dead centre of the vertical axis between "celebrating" and "problematizing" nature, but approximately halfway towards the "anthropocentric horizon". If I had placed Fay, she would have been positioned slightly closer to the "problematizing nature" and halfway towards "the ecocentric horizon". Focusing on Bent, his interactions with the various objects outside of his cabin revealed that the objects had instrumental value to him. Instrumental value means that something possesses "...value only in relation to human interests..." (Garrard, 2012, p. 207). The fishing rod and the fishing net, both were tools Bent had acquired in an attempt to do a peaceful activity – and not in the interest of nature, or because of survival needs, purely therapeutically related reasons.

In *Code Blue*, Tic is closer to "the ecocentric horizon" than Bent. In the analysed excerpt, Tic reads in her favourite book *Walden*, which makes her reflect on the state of her own world and dream about what the world must have been like before all the destruction caused by human activity. It seems to me as if the closer a character is to "the ecocentric horizon", the more hopeful the character is for the future, and the more conscious s/he is about the state of the climate. The closer a character is to "the anthropocentric horizon", the more s/he feels helpless in the face of contributing to solving the climate crisis. At least, this is the difference between Bent and Tic in the video game and the book. It would have been interesting to see if this relationship holds for other main characters in other ecofictional works that focus on saving the world's environment. In figure 16, I have combined figure 12 and figure 14 to present a visual comparison of how the representation of Bent and Tic are placed within The NatCul Matrix. The red circle indicates Bent, and the blue indicates Tic. It is interesting to see how both the representations found in the categories "world and events" and "characters and objects" in the video game and the book seem to be opposite of each other.

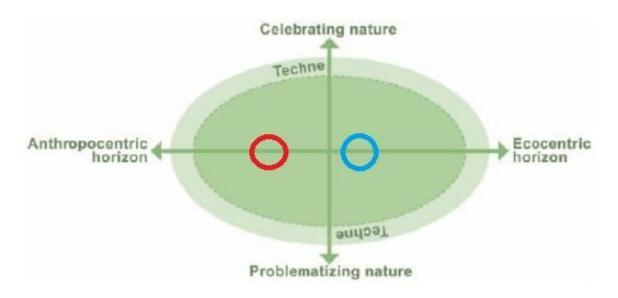


Figure 16: "Characters and Objects" in *A New Beginning (Final Cut)* and *Code Blue* in The NatCul Matrix from *Ecocritical Perspectives on Children's Texts and Cultures: Nordic Dialogues* (p. 12), By Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Rendered with permission.

7. CONCLUSION

In this final chapter of the Master's thesis, I will present an overview of the findings, discuss how this project can be continued in future research, and lastly, give some final thoughts. While presenting my findings, I will comment on how Aarseth's theory applied in the three analysis stages, and how the different theoretical approaches was applied.

7.1 FINDINGS

In this master's thesis, I have studied how the relationship between the main characters and their wider environment is represented through an ecofictional video game and an ecofictional book. By applying Aarseth's (2012) theory, I was able to find common ground between two different storytelling media. In order to show my understanding of Aarseth's theory, and utilize it, I had to add some elements from reader-response theory, ludology and literary narratology. Because Aarseth's theory originally is intended for use on video games, it was especially challenging to discuss the more mechanical attributes of video games within the novel. However, Aarseth's theory is *worded* in a way that enables it to be used on both books and video games. In this master's thesis, I divided the analysis into three stages (A, B and C), and to organize my findings I have summarised the findings of each stage in three sections.

7.1.1 ANALYSIS, STAGE A: FINDINGS

In stage A, I analysed different parts of *Code Blue* and *A New Beginning (Final Cut)* in regards to Aarseth's "A Narrative Theory of Games" (2012). I analysed the categories in the video game and the book separately. I found that by combining Aarseth's categories "world and events" and "characters and objects" I was able to concretize the process of finding different representations of the relationship between the main characters and their wider environment. In a narrative, key events usually, if not always, involve the main characters. By combining the categories "world" and "events", I was able to analyse the main characters' relationship with their wider environment in both the video game and in the book, by looking at how the characters reacted to various events. By including reader-response theory I found that both the player of a video game, and a reader of a book, have to *interact* with the media to decode the story. By including Iser's (1972, p. 284-285) term "gap", I was able to discuss the reader and the player's role in interpreting the relationship between the main characters

and their wider environment. As the reader and the player, I found that it was important to be aware of my own cultural biases and personal associations while analysing the "gaps" in the excerpts from the video game and the book.

To answer the problem statement, I analysed the excerpts from the video game and the book from an ecocritical perspective. I did this by focusing on the ecocritical elements in each section. For instance, in the video game and in the book, I focused on the state of the climate in each portrayed world, and looked at how the characters related themselves to it. Analysis stage A functions as a compilation of Aarseth's theory and ecocritical theory. Aarseth's theory enabled me to find and define "world and events" and "characters and objects", while the ecocritical theory presented in the second chapter of this master's thesis helped me apply an analytic ecocritical view on the different categories.

When I analysed the interaction between the main character Bent and the objects in the excerpts from the video game (see section 4.1.2), I found there was one type of object that did not fit into Aarseth's theory. I added a seventh category called "static, interactable objects". One might argue that this is the same type as the "static, usable object", but I claim otherwise. I understand the "static, usable object" to be an object that is *within* the ludic space, and can be operated by the main character. For instance, Fay uses a vending machine during the game. The vending machine is static, but she can *use* it. The "static, interactable object" can appear both within *and* outside of the ludic space. For instance, in figure 8, I found that Bent's cabin is static and that it had interactional options for the player to choose, and it is located within the ludic space. By asking Bent to interact with the cabin, Bent offers the player *information* about the cabin, but he does not use/operate it. Another "static, interactable object" in the same scene is the boat lying on the shore, *outside* of the ludic space. Bent is not able to walk in the same area as the boat, but he can give the player information about the boat if the player chooses to have Bent interact with it. In other words, Bent does not *use* nor *operate* the boat, he simply interacts with it, and it stays in the same place as before the interaction.

In *Code Blue*, I found that even though the reader is not able to control, or visually explore an image, it does not mean that there are no mentally imaginable images of different types of

space present for the reader to explore mentally with the main character Tic. Based on Aarseth's theory, I found the ludic space and the extra-ludic space in the book. It was easier to find these spaces in the video game. However, while analysing the ludic space and the extra-ludic space in *Code Blue*, I found that the extra-ludic spaces were all the places mentioned, but not travelled – and the places not mentioned in the book, but existing potentially in the "gaps". The ludic space were all the places Tic actually travelled and experienced. By exploring the "gaps" in both types of spaces, it was possible to find representations of the relationship between Tic and her wider environment.

7.1.2 Analysis, stage B: Findings

In stage B, in chapter 5, I further analysed the categories that I analysed in stage A, by placing the categories within The NatCul Matrix. I did this by analysing each category separately. At this stage, the ecocritical theory informed my interpretation of The NatCul Matrix, and the matrix itself helped me discuss the categories ecocritically. The reader-response theory informed my interpretations of the analysed "gaps" while discussing and placing the different categories in the book and the video game within the matrix. When analysing the relationship between Bent and objects, and Tic and objects, I found that the interaction between the main characters and the objects as part of their wider environment, contained representations of their relationship with their wider environment. For instance, in stage A of the analysis, I found that the player could interpret the interactions between Bent and the garbage floating in the water by filling the potential "gaps". In stage B of the analysis, I applied an ecocritical interpretation of what the objects represented respectively, and how Bent's interactions represented the relationship between the objects and him as a main character by interpreting if the interaction was closer to the anthropocentric or ecocentric horizon, and if the interaction celebrated or problematized nature. By using The NatCul Matrix, I had an analytical tool to see how Bent's interactions with different objects positioned him as a character in relation to his wider environment. For instance, by interpreting his responses to the player's command "put away" garbage. I found that by analysing the extra-ludic and ludic space and interpreting the potential "gaps", I could interpret how he relates to nature. I found that it was easier to apply Aarseth's terms "extra-ludic space" and "ludic space" to the video game than the novel in analysis stage A. However, after defining and operationalising an understanding of the terms in relation to Code Blue, it was much easier to find the representations of the relationship between Tic and her wider environment in analysis stage B.

7.1.3 Analysis, stage C: Findings

In stage C, in chapter 6, I discussed and compared the findings from stage A and B. To do so, I compared each of the categories "world and events" and "characters and objects" in *A New Beginning (Final Cut)* and *Code Blue* in each their sections. First, I looked at "world and events" in the video game and in the book. In regards to exploring the worlds in the video game and the book, I found that the reader of *Code Blue* was able to explore the world more freely than the player could explore the world in *A New Beginning (Final Cut)*. This was surprising because the player can mechanically control the main characters and explore different objects and areas, which in comparison; the reader of the book cannot. This has to do with the game design of *A New Beginning (Final Cut)*. The player is not able to start the game at any place s/he wants. In the book, the reader can turn to whatever page s/he likes, and if s/he were to read it digitally, it is possible to search for specific words and phrases to explore the fictional world in the book. If the player completed the entire video game without saving during the playing session, s/he would need to play the game from the beginning to explore a particular scene over again. Consequently, the player is physically more restricted in the exploration of the game world and the plot.

I noticed a tendency while ecocritically comparing the representations of the relationship between the main characters and their wider environment in the video game and the book, in the category "world and events". I found that there seemed to be a tendency of idealising the past as a better time for the earth and being more aware of the consequences of human impact on nature in the future. The main difference between the two works is *how* each of the main characters try to save the earth. In *Code Blue*, the past is unreachable and Tic looks to the future for hope, which indicates a "utopia" type of pastoral. In *A New Beginning (Final Cut)*, the notion of "elegy", as a type of pastoral, is amplified when Fay travels back in time to save the earth. While comparing the representations of the relationship between the main characters in the video game and the book, in the category "characters and objects", I found a tendency shared by Tic and Bent. Tic is closer to the ecocentric horizon in The NatCul Matrix, and she is optimistic and hopeful for the future. Bent is closer to the anthropocentric horizon in the matrix, and he seems to be defeated in the pursuit of hoping for a brighter future for the earth's climate. It would be interesting to see if this tendency applies to other ecofictional works as well.

7.1.4 GENERAL FINDINGS

In this master's thesis, I found that it is possible to analyse and compare representations of the main characters' relationships with their wider environment in the ecofictional videogame A New Beginning (Final Cut) and the ecofictional book Code Blue. By acknowledging the inherent differences between the two works' media and rather focus on the stories told, seen through a lens of ludology and narratology, and put into an ecocritical frame; it was possible to compare the representations found. By applying a layer of reader-response theory, I found that both the player and the reader partook in the meaning making process of the narratives in both the video game and the book. I found that there were empty "gaps" in both stories, and that the reader and the player alike could fill in the "gaps" in their own ways, according to their predispositions as inherently different individuals. I found that the relationship between the main characters and their wider environment resided within the portrayal of the world and events, and in the interactions between the characters and the objects filling the respective works' portrayal of the world. Because these representations exist within human-made stories, in a video game and a book, the representations are mediated, and will inherently carry representations of how humans position themselves in relation to nature. I claim that by applying the meta-perspective that reader-response theory offers I have been able to reflect on the connections between mediation and representations. Aarseth claims that all stories share these elements: "events", "characters", "objects" and "world". In this study, this has proven true in the analyses of *Code Blue* and *A New Beginning (Final Cut)*.

7.2 Future research

In a future study, it would be interesting to conduct field research, collecting and engaging with young adults' attitudes toward climate change. Shifting the focus from the representations within the given work, to focusing on the impact the stories make. In such a study, I would give all the subjects a questionnaire focusing on their thoughts about climate change. Then I would let one group read a text/book, one group play a video game, and have a control group that did not play the game nor read the book. After a given time, I would let the three groups fill in the questionnaire again, and analyse differences or similarities between their answers on the first and second questionnaire. It would also be interesting to include some open answer questions to see if they reflected differently or had no change in attitude toward climate change. Theoretically, it would be possible to place tendencies of their responses within The NatCul Matrix.

7.3 FINAL THOUGHTS

My initial motivation for writing this master's thesis within ecocriticism came when I read the article "Where are all the climate change video games? Locating digital games' response to climate change" by Abraham and Jayemanne (2017). Initially, I thought that of course there are video games that deal with the climate and the relationship between nature and humans. However, as I started to gain more knowledge of what it constitutes to call a video game ecofictional, I learned that there are actually few video games that deal with nature as a topic and at the same time can be classified as ecofictional. I found that in many games, nature was only part of the scenery, or instrumental in the quests of the main characters. At least, there are few video games that deal with climate change, that also have a strong narrative trajectory. However, I found that in the last few years, there seems to have been a change in the independent video game industry. On a monthly basis, there are video games being released on video game distribution platforms such as *Steam* (Valve Corporation, 2003), that publish video games dealing with climate as a topic downloadable for players online. Particularly, it seems as if the theme of "survival" is a trend. To mention some: Cities: Skylines (Colossal Order, 2015, March 10), Eco (Strange Loop Games, 2018, February 6), and Block'hood (Plethora Project, 2017, May 11). Cities: Skylines was published for the first time in 2015, but was rereleased in 2018 on the Nintendo Switch (Nintendo PTD, 2017) gaming console. All of these new games have in common that they have climate as a main topic in their plots, and they can all be seen as having a lot of player agency and are structured as open game worlds where the player gathers resources to build and create a sustainable society. It would be interesting to see how Aarseth's theory would apply to a video game with less authorial affordance, an open world where the goal is to gather resources and to survive without destroying the environment in the process. In this master's thesis, I have studied the representations of the relationship between the main characters and their wider environment in an ecofictional video game and an ecofictional book. Imagine the vast possibilities of comparing different sets of representations, and delving even further into the relationship between video games and literature.

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LIST OF FIGURES:

- **FIGURE 1:** THE COVER DESIGN OF *CODE BLUE* IS BY MARY WOODBURY AT MOON WILLOW PRESS. THE MOON OVER THE SEA ART IS COPYRIGHT BY TILIALUCIDA AND LICENSED FOR USE BY CANVA. RENDERED WITH PERMISSION.
- FIGURE 2: SCREENSHOT 1 "MAIN MENU" FROM A NEW BEGINNING (FINAL CUT). BY DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 19, 2019 WITH PERMISSION.

 44

7

- FIGURE 3. SCREENSHOT 2. "BENT'S CABIN" FROM A NEW BEGINNING (FINAL CUT). BY

 DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 19, 2019 WITH PERMISSION.

 46
- FIGURE 4: SCREENSHOT 3. "COLLECTING DATA" FROM A NEW BEGINNING (FINAL CUT). BY

 DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 19, 2019 WITH PERMISSION.

 49
- FIGURE 5: SCREENSHOT 4. "FAY ARRIVES" IN THE "PROLOGUE" FROM A NEW BEGINNING

 (FINAL CUT). BY DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 21, 2019 WITH

 PERMISSION.

 51

FIGURE 6: SCREENSHOT 5. "FAY ASKS BENT TO STOP" IN THE "PROLOGUE" FROM A NEW	
BEGINNING (FINAL CUT). BY DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 21	• •
2019 WITH PERMISSION.	52
FIGURE 7: SCREENSHOT 6. "FAY CRIES FOR THE BIRD" IN THE "PROLOGUE" FROM A NEW	
BEGINNING (FINAL CUT). BY DAEDALIC ENTERTAINMENT (2012). RENDERED MARCH 21	· •
2019 WITH PERMISSION.	53
FIGURE 8: SCREENSHOT 7. "OBJECTS OUTLINED" IN THE "PROLOGUE" FROM A NEW BEGINNI	ING
(Final Cut). By Daedalic Entertainment (2012). Rendered April 4, 2019 with	
PERMISSION.	57
FIGURE 9: SCREENSHOT 8. "LOOKING AT THE FISHING ROD" IN THE "PROLOGUE" FROM A NA	EW
BEGINNING (FINAL CUT). BY DAEDALIC ENTERTAINMENT (2012). RENDERED APRIL 4, 20	019
WITH PERMISSION.	59
FIGURE 10: THE NATCUL MATRIX. FROM ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS	S
AND CULTURES: NORDIC DIALOGUES (P. 12), BY GOGA, N., GUANIO-ULURU, L., HALLÅS	, O.
B. & Nyrnes, A. (2018). Rendered with permission.	76
FIGURE 11: "WORLD AND EVENTS" IN A NEW BEGINNING (FINAL CUT) IN THE NATCUL MAT	RIX
FROM ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND CULTURES: NORDIC	
Dialogues (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A.	
(2018). Rendered with permission.	85
FIGURE 12: "CHARACTERS AND OBJECTS" IN A NEW BEGINNING (FINAL CUT) IN THE NATCU	L
MATRIX FROM ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND CULTURES: NORDA	IC
Dialogues (p. 12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A.	
(2018). Rendered with permission.	89
FIGURE 13: "WORLD AND EVENTS" IN CODE BLUE IN THE NATCUL MATRIX FROM	
ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND CULTURES: NORDIC DIALOGUES (P.
12), by Goga, N., Guanio-Uluru, L., Hallås, O. B. & Nyrnes, A. (2018). Renderei	D
WITH PERMISSION.	94
FIGURE 14: "CHARACTERS AND OBJECTS" IN CODE BLUE IN THE NATCUL MATRIX FROM	
ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND CULTURES: NORDIC DIALOGUES (Р.
12), BY GOGA, N., GUANIO-ULURU, L., HALLÅS, O. B. & NYRNES, A. (2018). RENDEREI	D
WITH PERMISSION.	97
FIGURE 15: "WORLD AND EVENTS" IN A NEW BEGINNING (FINAL CUT) AND CODE BLUE IN T	HE

NATCUL MATRIX FROM ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND CULTURES:

NORDIC DIALOGUES (P. 12), BY GOGA, N., GUANIO-ULURU, L., HALLÅS, O. B. & NYRNES, A. (2018). RENDERED WITH PERMISSION.

FIGURE 16: "CHARACTERS AND OBJECTS" IN A NEW BEGINNING (FINAL CUT) AND CODE BLUE
IN THE NATCUL MATRIX FROM ECOCRITICAL PERSPECTIVES ON CHILDREN'S TEXTS AND
CULTURES: NORDIC DIALOGUES (P. 12), BY GOGA, N., GUANIO-ULURU, L., HALLÅS, O. B.
& NYRNES, A. (2018). RENDERED WITH PERMISSION.