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# Trajectories to a Sustainable Future

Environmental education from a critical perspective

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Department of Urban and Rural Development  
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## PREFACE AND ACKNOWLEDGEMENT

The initial thought that laid the ground for this thesis comes from an interest in the Danish philosopher Søren Kierkegaard's work and his understanding of Socrates. I found myself inspired by his reflections on what he wanted to spend his life on.

*"...if our generation has any task at all, it must be to translate the achievement of scientific scholarship into personal life, to appropriate it personally."* (Kierkegaard, The Concept of Irony, 1841)

As I have a background in natural science and environmental economic, I do seek an academic truth within this field, but also seek to appropriate this knowledge so that it becomes relevant for my own life and the understanding of it. The quotation taken from the last part of Kierkegaard's Master's thesis is not to be seen as a protest against academia itself, it is a reminder of the need to make it relevant for the subjective human life. How to make knowledge relevant and useful for human beings is therefore my motivation and goal of this thesis.

My hope of this thesis is that it will bring reflections and discussions about how we from a societal and individual perspective treat a challenge like climate change. My fear is that climate change will lead to fear, guilt and suppression of human beings and destruction of nature. I believe that knowledge can be relevant and liberating if it is used in a form where people can relate it to their own life.

First I want to thank my supervisor Hans Peter Hansen (SLU) who has helped me concretise my very vague ideas about sustainability, political consumers and societal change. Thank you for helping me putting my thoughts into system and introducing me to critical theory. It has indeed given me a new perspective on the world. Secondly, I want to thank my assistant supervisor Karsten Klint Jensen (KU) who initially, some years ago, got me interested in economics and philosophy. Thank you for your support in the last process of writing.

I also want to thank CONCITO and Synnøve Kjærland for letting their organisation and material become object for my analysis. I have great respect of all the work you do on developing a practical understanding of how to make a complex topic like climate change relevant for children and young people all over Denmark.

## ABSTRACT

Climate change is one of the most significant current threats to civilisation and nature and accordingly a vast number of approaches towards its prevention are undertaken around the world. While some of these approaches are attempts at technical solutions, numerous agencies and experts argue that behavioural change is needed in order to achieve any significant and long-term results. Such adjustment require individual behavioural change in the young generations of today. Inducing behavioural changes on individuals, by education or otherwise, is, however, extremely difficult, if at all possible. With inspiration in the early Frankfurter School philosophers Adorno and Horkheimer and their work *Dialectic of Enlightenment*, this thesis tackles the question of what type of educational approaches that can be taken to truly offer a chance of having a real change effect. While it is important to educate the young generations in the science behind climate change, it is argued that in order to change their actual behaviour, the education must relate the effects of climate change to their everyday life and that the discourse of individual responsibility should be avoided. Current educational attempts are exemplified by the 2009 established Climate Embassy of the Danish green think tank CONCITO, which trains young so-called Climate Ambassadors to give lectures on climate change at Danish public schools and high schools. Although the lectures given, importantly, make the students understand the consequences of people's current behaviour and make them understand that this behaviour is wrong, the education might not yield actual behavioural change. It is argued that one of the reasons for this is that the approach of The Climate Embassy, and generally of many such organizations, work within the rationality that the problems should be fixed within the current understanding of the structure of society: capitalism, population of consumers, et cetera. Although a final solution to this very complex problem is not reached, the idea is presented that instead of lecturing on and discussing the restrictions that people must impose upon themselves within the current society, the focus should be kept on discussing what type of values in an ideal world, *utopia*, that the students would like to live in under the considerations of climate change. As proposed in this thesis such discussions should emerge from a critique of the contradictions, which the students find in their reality between every day life and societal structures surrounding them. Taking this set out can lead to entirely new ideas and the approach might make the students not see the imposed suggestions as restrictions where stepping outside these cause guilt feeling, but goals that would actually lead to a more favourable life.

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# 1. THESIS INTRODUCTION

## 1.1. Problem Area

Sustainability has become something that almost all parts of society talk about – and we talk a lot. Questions of why, how and what in relation to sustainability are addressed by individual citizens, politicians, companies and non-governmental institutions alike. All this talking has not lead to much when evaluating by the actions taken towards changing society in a more sustainable direction. The Brundtland Commission introduced sustainability in 1987 as a key concept in its report ‘Our Common Future’ (Brundtland, 1987 in Harste, 2000). The Brundtland report is recognised as the first attempt to reach an agreement on sustainable development. Sustainability, in this case, is viewed not only from an ecology perspective but also as a term composed of aspects such as the use of and issues of technology, economics, equality and justice. In a time generational perspective, sustainable development was explained as a kind of development, which meets the needs of the present without limiting future generations’ possibility of fulfilling their needs (Harste, 2000, pp. 77). Today, more than 20 years and innumerable numbers of political meetings later there is still no unanimous agreement on the meaning of sustainability, only more scientific reports telling us that the threat of climate change and other environmental problems are becoming more serious than ever.

The lack of political action has turned many individuals with an interest in the environment and ‘green’ societal actors towards other solutions for change. From observations of the public debate, a general tendency is an increasing focus on the questions of “*what can I do as an individual?*” and “*what should I do?*”. These questions are in their core ethical because the individual believes that it has a duty to act towards the harming effects of climate change (Jensen, 2015). In the market economy, this question is associated with the choices we make as consumers and to the notion of the political consumer as someone that can create change by using the market forces to purchase products, he/she finds ethically right. Throughout the middle of the 1990’s, the notion of the political consumer gained increasing significance in the political arena as well as in the public debate focusing on the consensus between environmental and consumption interests (Læssøe, 2000). The political consumer “votes with the wallet” and is considered a significant power factor in society. Politicians appeal to the political consumer, businesses manufacture the ‘ethically right’ products and environmental movements and humanitarian organizations focus on the

individual person as an easy shortcut to change in a world that is governed by a complex political system (Gjerris, 2014).

In a society with many interests and where it is hard to reach democratic decisions to change society, the political consumer at a first glance seems as an easy solution. This atomisation of values from the democratic arenas of society to the individual consumers' choice of action can be questioned, however, as to whether it is the best way of moving towards the society that we strive for. A central concern is that we, with this individualisation, risk a totalitarian system where solutions can only be produced through the economic system and the demand of consumers. The critique of the individualisation of values in society used in this thesis is by means of the thoughts of the philosophers of the early Frankfurter School, Theodor Adorno and Max Horkheimer. *"Men expect that the world, which is without any issue, will be set on fire by a totality which they themselves are and over which they have no control"* (Adorno and Horkheimer, 1997, pp. 29). This phrase is from the book *Dialectic of Enlightenment*. What Adorno and Horkheimer describe in this book is the dialectic relationship between society and the individual and the role of knowledge and science in this relationship. A central idea is that the enlightenment and the capitalistic system have made the room for addressing values in society smaller and that values and moral are increasingly individualised. Thus, society becomes de-politicised and governed by dominating scientific/economic rationality. Referring to the quote above, this creates a reality where people are unable to define alternative visions for the society they want, because they are governed by the dominating rationalities in existing society.

*"Myth turns into enlightenment, and nature into mere objectivity. Men pay for the increase of their power with alienation from that over which they exercise their power"* (Adorno and Horkheimer, 1997 [1947], pp. 9).

The enlightenment and our ever-increasing control over nature may make an efficient society and culture, but humans pay a price nevertheless, namely in shape of an alienation from the reality they themselves are part of, be this from nature, from human relations, or from the products we use.



From a broad normative and societal perspective this thesis will investigate a program called The Climate Embassy carried out by the Danish non-governmental organisation CONCITO. The aim of CONCITO is to contribute to lowering greenhouse gas emissions and limiting the harming consequences of global warming (CONCITO, 2013). The Climate Embassy form part of CONCITO and has the aim of educating a 'green generation' in sustainable energy, sustainable behaviour and consumption.

*"The goal is to activate and strengthen primary and secondary school pupils in their green skills through energizing, inspiring and professionally anchored projects and presentations."*(The Climate Embassy, 2015)

The Climate Embassy was established in 2009 and has its main focus on climate change, but is also concerned with the broader sustainability agenda. The program educates student volunteers referred to as 'Climate Ambassadors' who are mostly university students with a variety of backgrounds. They address an increased need to communicate contemporary, up-to-date knowledge on the state of the climate to public schools and high schools all over Denmark. This is done in an interdisciplinary manner, but with a focus on natural sciences. The present author was engaged in this youth-to-youth programme as a Climate Ambassador and has taught both public school students and high school students about climate change and various ways of mitigating this. In this thesis, The Climate Embassy's programme will be exemplified through a short (2 hour) presentations about sustainable consumption used by The Climate Embassy to teach Danish school classes.

The aim of this thesis is to look closer at the selected education presentations by The Climate Embassy and to understand how this way of communication affects the individuals', in this case the students', ability to act. The question of how the education programmes encourages the students to act in order to change society to become more sustainable will be brought into a broader discussion of the increasing individualisation of values and society in the perspective of critical theory and the Dialectic of Enlightenment. While new initiatives like The Climate Embassy may be creating opportunity for sustainable societal change, what is problematized from the theoretical framework of this thesis is that strategic rationality of technology, science, and economics, where experts knows what needs to be done, will exclude discussions of the values

that we want society to be governed by. The use of these rationalities can make people ‘overlook’ the actual possibilities there could be for changing society because we become blind to the immanent possibilities within existing society. Hence, this thesis argues that an approach to change needs to address the aspects of society which appears fixed and unchangeable, because often it is the dominating rationalities that determines what those aspects are. This thesis therefore also tries to investigate possibilities of how to find the immanent potentials in a discussion about climate change and sustainability. In order to address the values which we want society to develop from, sustainability needs to be related to everyday life and a deeper understanding of ethical reasons of why we want the future to be sustainable.

## **1.2. Problem formulation**

One of the most profound challenges in today’s society is human-induced climate change. A broad range of actors work to address this challenge in order to minimize the most devastating effects on humans and nature. To this end, a general argument is that humans need to change behaviour; to consume less and differently. However, this thesis focus on the paradox that in order to change behaviour, democratic society needs to collectively deliberate on the environmental and societal values we find important before we act, which is in opposition to an individualisation of the values and a society where change is driven by the ‘the political consumer’. This thesis will operate from the theoretical perspective of early critical theory and will discuss this in relation to the dialectic relationship between individuals and society. What the thesis argues is that the ways in which we are affected by the dominating rationalities in society has great influence on our ability to define the society we want and on our possibilities for action. In the empirical part of the thesis, the case of The Climate Embassy is investigated. This will be done with regard to the rationalities that govern the approach taken in the education material while also investigating where spaces do appear for the individual to discover and critique the norms and rationalities we are governed by. This is also interesting because the approach of The Climate Embassy is education and thereby also concerns itself with how children and young people in an education situation are easily affected by what they are being taught as well as relating to the abstract relationship between action and consequence in relation to climate change. On the background of this, I will answer the following questions:

1. In what way does The Climate Embassy interpret sustainability and climate change and relate this to its mission?
2. What kind of societal change perspective on climate change is being produced/reproduced by the education offered by The Climate Embassy?
3. Are there other educational practices which could address the societal needs for changes better?

#### **1.4. Delimitation**

In this thesis, where the core is the normative societal critique, it might seem narrow minded to only address one approach from critical theory, namely the one of Adorno and Horkheimer' Dialectic of Enlightenment. Since other approaches to view and critique society from exist, it can seem naïve to just adopt the normative ideal from Adorno and Horkheimer. However, it is not the objective of this thesis to discuss advantages and disadvantages of the normative approach of Adorno and Horkheimer (it will however shortly be addressed). Instead the purpose is to have a normative, societal perspective to investigate the possibilities to create change from an environmental education perspective. What is so special and useful about the perspective of Adorno and Horkheimer is that their harsh critique of current society might illuminate the places where there are possibilities for researchers and societal organisations like The Climate Embassy to actually make a difference. In order to limit the scope of this thesis, the philosophical traditions, which Adorno and Horkheimer are inspired by, will not be explained in details even though it does have significance for their societal understandings and the findings of this thesis,

In the empirical section focus is kept on only one case study. This will create epistemological and methodological difficulties regarding the general knowledge, which can be extracted from a single study. Including different case studies could have mitigated this problem. A comparative analysis of environmental education programmes would have opened the possibility to compare different results and thereby getting a better representation of the field. On the other hand, it can be seen as an advantage to only use one study since it gives the possibility to go through it in more depth and use it as the "power of the good example". In this way the dialectic understanding of seeing the case study in relation of general society, moving from the specific to the general, will also be highlighted and thus make the results appear more clear.

## **2. METHODOLOGY – CRITICAL THEORY**

This section has the purpose of clarifying the epistemological and ontological inspiration, which will be used to argue that there must be a societal change. Taking a normative outset in critical theory implies a belief in an objective “truth”. In a society where we experience contradictions, critical theory asks us to criticise and negate what we find contradictory in order to develop into something better. This is important because we need to identify the immanent possibilities to develop society further in a better direction. This will be explained in depth because the analysis of the case will try to identify these unexplored possibilities for greater understanding and relevance in relation to the case topic climate change and sustainability.

### **2.1. A normative approach**

It is central to stress that any project inspired by critical theory, such as this, will be entered with a normative preunderstanding. This is important to make clear from the start because this will make a more honest and representative presentation throughout the rest of the thesis. It is however also important to stress that the normativity will not guide the analysis and that the aim is to obtaining a nuanced and reflexive approach to the problem of the thesis. This normativity comes from the understandings of Adorno and Horkheimer and their considerations of how totalitarian structures in society have the ability to suppress potentials for a more rational society (Jørgen Dehn in Horkheimer and Adorno, 1993). Even though some might say that this is utopian thinking, their ideals should be worth striving towards in present democratic society. The normative understanding presented in this thesis is corresponding with the one of Adorno and Horkheimer in the sense that it should be of highest importance to our democracy that we have a critical enlightened society where the individuals have room to discover, critique and participate in societal decisions on an enlightened foundation. In the text of Adorno and Horkheimer there does not seem to be many possibilities for the individuals to emancipate themselves from the suppressing nature of society and their analysis is rather negative in a change perspective (Ibid.). Conversely, here, an optimistic and solution oriented approach is taken. It is, however, a difficult task for individuals to become aware of suppression, since individuals also internalise the dominating rationalities, which exist in the society. Critical theory requires that individuals need to be emancipated from their “false rationality” through an emancipatory praxis and through this become aware of the unjust and suppressive conditions of society (Ibid.). It is interesting to

investigate if education in climate change and sustainability can make the students aware if a “false rationality” is limiting their own thoughts and enable them to participate with meaningful actions toward what they find right. The emancipatory element consists in the ability of citizens to realise what appears as a fixed and unchangeable reality and figure out new perspectives about how society could be and transform it into actual actions. A key question is if an initiative like The Climate Embassy brings something new where the student can feel like they can make a difference or if The Climate Embassy just reproduces the same reality where we act inside the current rationalities of society.

## **2.2. Ontology and epistemology**

The ontology, which is operated from in the early as well as the late critical theory, is understood as an objective reality from which researchers can gain a deeper understanding of. Critical theory is not completely social constructionism in the sense that the scientific knowledge creates the world, which it knows something about. Our knowledge is incomplete and can be developed in a more rational and just direction (Sørensen, 2012). This allows the researcher from an ontological perspective to objectively “come closer to the truth”. In relation to the specific case study, it is interesting to reflect on the fact that the case is an education situation. Is the reality in an education situation similar to the reality that is outside in the real society, or are there things that are different? The relationship between the world inside and outside the classroom is too complex to describe here, it is however considered in the analysis because this can have implications for the general findings of the thesis.

The epistemological understanding of critical theory is that we have to apply a close relationship between theory and its empirical context. Critical theory takes theory as a part of the societal development. Theory should contribute to the awareness about modern society’s structures and theory should in this sense contribute to the political struggle for justice. Critical theory is therefore an analysis, which considers the societal totality. This is not only a totality, which is the sum of all the parts; it is a dialectic shift between the universal and the particular. Dialectic is here understood as a method where contradictions are discussed and where the contradictions have to be enlightened and repealed in order to gain real recognition. Critical theory is thus a cross disciplinary programme concerning society oriented towards being holistic and critical, believing

that you cannot understand everything if you take it out of its context (Ibid.). Presently, the case study will be approached from many sides in order to get as close as possible to the ontological and epistemological ideal about “the objective reality” as the theory and empirical material allows.

### **2.3. The critical theoretical method**

Critical theory does not have a specific and systematic methodology; therefore the investigation of the problematic of the thesis is to look at the dialectic relationship between the empirical material and the theory. Dialectic means the art of investigating or discussing the truth of opinions illuminating where contradictions are inherent in arguments and opinions. In critical theory the central element is not to isolate variables from the context in which they appear, but to maintain the complexity (Bilfeldt, 2007).

The word critique comes from the Greek verb *krinein* that means to manage the task of differentiate, select, evaluate and conclude (Ritter 1976: 1249, in Sørensen 2012). A critique of a case therefore involves both analysis and assessment. Critical theory inherited two different kinds of understandings of critique. The first one is from Karl Marx (1818-1883) and his critique of capitalism, which shows how the realisation of the classical liberal society leads to an unjust society (Lund et al. 1970). The thought of emancipation through the critique, from this unjust society, is also inspired from this understanding in critical theory (Antonio, 1981). The second understanding comes from the German philosopher Immanuel Kant (1724-1804). In Kant’s work *Kritik der reinen Vernunft* (1781) he presents an analysis of the human consciousness in regard to determine what the boundaries for knowledge and science are. It is the understanding of critique in both senses; in the political and the epistemological meaning, that gives critical theory its special character (Shafer-Landau, 2010; Sørensen, 2012).

In general it can be argued that critical theory is not a theory but rather a method, which is led by the non-positivistic<sup>1</sup> epistemological understandings (Antonio, 1981). In this thesis the concept of immanence will be guiding as a method for the analysis for discovering the unrealised possibilities

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<sup>1</sup>Positivism is the culmination of the pure natural science perspective on history. It was presented it in the 1830’s by Comte who in his laboratory saw the ideal for every scientific discipline. By measuring and drawing causalities in a natural science understanding it was possible to gain real knowledge and understanding about social matters (Lund et al. 1970, pp: 308).

in the education material. Immanence can be understood as the answer to the question: How are the actual society conditions? As an opposition to this transcendence is the answer to the question: How should they be? Immanence is therefore descriptive and transcendence normative. The normative justified critical theory tries to find substantial experiences in the social immanence, which has emancipatory potential to change the society in a moral progressive direction (Honneth<sup>2</sup> 2005, pp. 25). The immanent critique is therefore<sup>3</sup> a method in which through critique one can discover the immanent. The critique could be revealed in the contradictory nature of society and individual but also in a self-critique when values and actions contradict - this is also something that is inter-linked. The immanent critique is thereby a way of finding contradictions which can also lead to possibilities for emancipatory societal change (Antonio, 1981). The method of using immanent critique in the analysis cannot, however, be separated from its historical context. Therefore the main themes, which are most important in the societal analysis of Adorno and Horkheimer, are presented in the theoretical framework. Immanent critique is a critique taking its departure in peoples everyday life where the goal is to find a better reality, that is to make correspondence between the reality (what is), and the determinate possibilities for what could be (Ibid.). Central for critical theory is the aspect of change potentials and therefore it is not only the intention of the project to make a descriptive analysis but, because of the normative approach, also to contain an ideal about societal change. What is also an important aspect of critical theory is that it sees the individuals as having an inner desire of overcoming barriers blocking dehumanising aspects, and this creates a potential for change (Sørensen, 2012). In critical theory the societal structures are creating a framework for the individual, but the future of the structures is not predetermined and is therefore possible to change (Ibid.). The critique is supposed to form the basis of praxis. The critique is thus not the final goal but forms the basis for praxis. A way to do this will be explained in the theoretical section.

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<sup>2</sup> Axel Honneth is from the later generations of scholars within critical theory. He is now the director of Institute for Social Research, known as the Frankfurter School.

<sup>3</sup> This interpretation will be elaborated on in the theoretical section under "The immanent critique as emancipatory" where passages from Dialectic of Enlightenment will be presented which forms the basis of understanding the immanent.

### **3. METHOD**

In this section I will describe the more specific methodical approach for the thesis. Focus will be on the meanings that my chosen material, theory and empirical material have and why these methods are relevant for the problematic of the thesis.

#### **3.1. Deduction and induction**

Both induction and deduction will be used throughout this thesis. Induction is when a conclusion is reached from a single observations and deduction is when a conclusion is made from general axioms and theory of single observations (Føllesdal, 1997). Induction will be used in relation to the case study of The Climate Embassy. The Climate Embassy works as a single case about how an organisation works in order to make societal sustainable change. In combination with a deductive method, the single case of The Climate Embassy will be related with general theory about society, education and sustainability. By using both induction and deduction the problems, which are present for both methods, can to some extent be overcome. The problem of induction is to say something universal from single observations. And the problem of deduction is that general theories about society determining the understanding of social reality might not take into account those cases that differ from the theory (Ibid.).

#### **3.2. Presentation of theoretical framework**

The following section presents the theory that will be made use of in this thesis. The choice of this theory and the purpose thereof will be explained. Critical theoretical understanding and Dialectic of Enlightenment by Adorno and Horkheimer is used as the main body of theory. In addition to this, different aspects of democracy and sustainability will be included as a way of actualizing, positioning and nuancing the understanding that Adorno and Horkheimer presents.

Adorno and Horkheimer's societal analysis Dialectic of the Enlightenment can provide perspective on and explanation of the challenges of modern society. What Adorno and Horkheimer noticed in society in their historical context was that people engaged in suppression from totalitarian rationalities, making them unable to think alternatively. The interesting aspect in relation to the empirical context is the dialectic relationship between the individual and society, and the role of enlightenment in this relationship. The work is also interesting because it describes



critique as our way of becoming aware of these hidden structures and therefore also reveals a hope of emancipation. A project like The Climate Embassy might be a possibility in modern society to create a setting in which it is possible to question the existing structures of society and to formulate alternative futures. It is therefore interesting to discuss a societal initiative like The Climate Embassy in relation to the societal diagnosis of Adorno and Horkheimer, and to discuss the potentials for change from their understandings.

Immanent critique will be explained as the driving force for emancipation in order to purvey the background on which critical theory will be used and discussed. The normative purpose of critical theory is the emancipation from the suppressive nature of modern society (Sørensen, 2012). This emancipation is not a specified society model, but a general ideal of the true, humane society. This ideal has a fundament in the already existing social praxis, which the critique and the emancipation could take base in and further develop from. The critique is therefore understood as immanent, since it takes its departure in the already existing society where contradiction appears. The aim of the critique is to expose the objective barriers for recognizing the true nature of society. In connection with Adorno and Horkheimer's society diagnosis, the immanent critique explains why society continually creates obstacles for itself and systematically undermines the realisation of rationality and freedom in society (Ibid.). The immanent critique is thus a critique of e.g. facts and concepts that are perceived to be true without being questioned. In this context, the word "openings" will be used. Openings should be understood in the way that whenever we question or critique what appears to be fixed about reality we create an opening towards defining what one could do about these fixed structures – in this way keep on changing society in a normative way.

The overall theoretical framework of critical theory will now be tied together with perspectives on sustainability, education and the understanding of instrumental rationality. In order to include perspectives on how to approach environmental education differently I have investigated perspectives from critical utopian action research and the concept of future creating workshops.

### **3.3. Presentation of empirical material**

The case study of this thesis is interesting in the theoretical framework because it involves a direct societal situation where sustainability is discussed among average students in Denmark. The case study is not about experts from different scientific areas, but concerns laymen and their confrontation with the sustainability agenda. In order to create a balance in the empirical material, an attempt has been made to take in as many perspectives as possible so as to illuminate the nuances of the case.

The following empirical material will be used:

- Written material used for teaching: The presentation “*Reduce, Reuse and Recycle*” (Appendix 1) and the corresponding manuscript (Appendix 2) used in 2012.
- Interview with project leader Synnøve Kjærland from The Climate Embassy (Appendix 3)
- Interview with high school teacher and former Climate Ambassador Amalie Zeeman (Appendix 4).
- Interview with Climate Ambassador Lotte Nymark Jensen (Appendix 5).
- Own reflections from volunteering as a Climate Ambassador.

The following will provide a description of how this empirical material was collected and what consideration in this context were made.

### **3.4. Case typography of The Climate Embassy**

The method used for the case study is to apply a shift between theory and the concrete. To be able to say anything general about the case one must say something about the case in the context it appears. This is also the point in making use of critical theory since this claims that true knowledge must be discovered within a context (Sørensen, 2012).

#### **3.4.1. Presentation of the case**

In 2009 the Danish think tank CONCITO launched a climate change campaign which aimed at young school children. The demand for this was high among the Danish schools and the programme has continued since, expanding to the higher classes in public school and to high school students. This subdivision of CONCITO was dubbed The Climate Embassy. Their objective is “*to contribute to lower emissions of greenhouse gases and mitigation of the*

*consequences of global warming*”(CONCITO, 2015) and they have a non-political agenda. The purpose of The Climate Embassy is to create awareness of climate change, of what creates climate change and of what consequences it has for society and nature. The approach to reach their goal is through education programmes in public schools and high schools. Using young people as teachers, the youth-to-youth concept, has the inherent idea that the teachers’ act not only as teachers but also as role models by being someone who care and work for free to spread the word about climate change. Approximately 200 young people work voluntary as teachers or “*Climate Ambassadors*” to hold lectures, which last around 2 hours at schools around Denmark. The Climate Ambassadors get the material that they use in their lectures from CONCITO. They are given presentations and “manuscripts” that explain in details what they should say in the presentations. However, there is also a high degree of freedom for the Climate Ambassadors to change the presentations and they are not required to say exactly what is proposed in the “manuscripts”. The project is supported by Nordea Fonden, which is a foundation administrated by the Nordic bank Nordea. The foundation does not have influence on the project, but, naturally, they do decide from the project description in the application if they will support the project or not.

An important aspect of the case is that the present author was active in The Climate Embassy and has been out on two schools holding presentations. Access and knowledge about the case study and the setup was attained through this participation and access to the material in general. It is therefore important to stress that the present author has a personal stake in the work of The Climate Embassy. Hence, a bias in opinions could be present and accordingly any use of personal observations will be made clear in the analysis. The lectures at the schools are held in pairs of two, and therefore an interview with the present author’s co-presenter Lotte Nymark Jensen has been included in order to back up and remain critical towards personal observations.

### **3.4.2. The critical/paradigmatic case**

*“The case study is useful for both generating and testing of hypotheses but is not limited to these research activities alone.”* (Flyvbjerg, 2006, pp. 229). A strategic choice of case study can increase the generalizability of the conclusion. However, the objective in the thesis is also to learn about specifics from the case study and therefore a representative case may not be a sufficient strategy (Flyvbjerg, 2006). The present case is a rather atypical form of environmental campaign

since it actually creates a sphere with the opportunity for the target group to actually ask questions. It is a campaign in the traditional sense because it has a traditional aim (provide knowledge with the aim of behavior change), but it interacts with its target group. That the case is atypical can in the analysis work be both an advantage and a disadvantage since the generalizability can be questioned, but the case holds more information and more interesting aspects such as more active actors. Flyvbjerg (2006) identifies different forms of cases; the extreme case, maximum variation cases, the critical case and the paradigmatic case. The critical case is in its form characterized by “*If this is (not) valid for this case, then it applies to all (no) cases*” (Flyvbjerg, 2006, pp. 300). If there is no room for being critical and challenge dominating views in the case of The Climate Embassy, it seems unlikely that “normal” one-way communication environmental campaigns can do better. A key questions to be answered is whether The Climate Embassy actually creates change potentials or if they are just reproducing status quo.

However, this case study is not only used for the purpose of applying the analysis of Adorno and Horkheimer. The aim of the case study is also to elaborate on the possibilities for the immanent critique to be the driver for change – the creation of openings and the identification of values. Therefore, the case can also be used as “*the paradigmatic case*”: a case that “*highlight[s] more general characteristics of the societies in question*” (Ibid. pp.232). As Flyvbjerg explains it is, however, hard to identify the paradigmatic case since it transcends any sort of rule-based criteria. “*No standard exists for the paradigmatic case because it sets the standard*”. In the analysis a ‘search for’ certain meanings in the case will be made, which can illuminate the immanent and where potentials for change are created.

### **3.4.3. Strength and weaknesses of the case**

The Climate Embassy has existed for 6 years now and has about 200 young volunteers which by now have held climate and sustainability related presentations and projects for about 35,000 public and high school students (Klimaambassaden, 2015). It is a strength of the case that it has existed for that long and has had continuous activity with a significant outreach. Their approach, where they use education as their mean is similar to other education programmes about climate

change available for public schools in Denmark<sup>4</sup>. Most of the other projects concerning education in climate change are, however, run by public institutions. It can be considered as both a strength and a weakness that the case is a private organisation and not a governmental institution. The strength is that a governmental institution could have political interests involved in their project work and therefore the present case becomes more interesting because other types of interests and rationalities than political ones can be searched for. The weakness is that projects run by The Climate Embassy have to apply for funds in order to finance their projects and therefore they might be controlled to a varying degree by these foundations. This might make it difficult to understand the rationality clearly. From a critical theoretical perspective, it can be seen as a strength of the case that the work is driven by volunteers as this might make it easier to obtain “honest” opinions from the interviewed people. Using a volunteer driven organisation as a case makes it an interesting example of an organisation where critique and innovative thinking could flourish. The minimum of external interests makes it a case where it is possible to also investigate the rationalities, which govern the volunteers in their work, which is also interesting from a critical theoretical point of view. The last consideration is that, as mentioned, the present author has been volunteering in The Climate Embassy giving presentations and engaging in other projects from 2009 till 2012. This can be seen a strength and a weakness as well. It is a strength since a greater knowledge of the organisation and how they work is available, and furthermore, personal experiences and reflections can be used in the analytical work. However, it is also a weakness due to bias. Aspects might be overlooked and analysis might be not be critical enough because of over-familiarity with the material. This is slightly remedied by the interview with the author’s co-presenter at The Climate Embassy, Lotte Nymark Jensen. The interview with Lotte Nymark Jensen is therefore more like an exchange of experiences of working with the presentations. Whenever personal experiences are used from the presentation, it will be backed up with her understanding in order to nuance personal understandings.

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<sup>4</sup> There exist a range of materials and school projects concerning climate change. The other alternatives which I have searched among is Danish Radio: The Climate Campaign ”Nyheder far en varm fremtid” <http://www.dr.dk/Undervisning/nyhederfraenvarmfremtid/20140403125911.htm>. Undervisningsministeriet: <http://www.emu.dk/modul/et-undervisningsforl%C3%B8b-om-klima>. Nordisk Råd: <http://www.norden.org/da/norden-for-dig/ordboeger-kort-billeder-mv/undervisningsmateriale-om-norden/undervisningsmateriale-om-klima-og-miljoe>

#### **3.4.4. Generalizability from a single case**

The choice of the case could be criticised from a scientific point of view due to several reasons. First of all the case is not representative for the activities in general that concerns environmental education. The programme is unique because it is a private organisation with separate aim (from the traditional school system) and with private funded money that is allowed to teach in public schools. The specific character of the case is therefore not representative in a broad perspective. The goal of using this case is something completely different, however. The case has been chosen because it shows a general tendency in the societal sustainability discourse. The desire from private actors in society to make a difference and create change is something seems to be a general tendency in the sustainability agenda. Thus, hopefully, the case can illuminate something general about the sustainability discourse in society and therefore also the general potential for change from a critical theoretical perspective.

### **3.5. Interview approach and description of interview relevance**

This section consists of the general methodical considerations done in relation to the interviews conducted with Synnøve Kjærland and Lotte Nymark Jensen from The Climate Embassy and Amalie Zeeman who is high school teacher and who has used presentations from the Climate Ambassadors in her teaching. The purpose of the interviews differs from person to person interviewed. The purposes of the individual interviews are explained below this section. The overall objective is to gain knowledge about The Climate Embassy's objectives and its way of working, but also to understand the personal reflections of the interviewees on the change potential of the education approach. Through these interviews a comprehension of reality in relation to the understandings and concepts presented in the theory will be sought. Furthermore, the interviews should also challenge personal, theoretical preconceptions. By including the perspective of some of the individuals involved in The Climate Embassy, a more complex understanding of the motivations that drive the project may be obtained and thereby a richer picture of the reality as compared to what could be obtained from the written education material by itself.

The character of the interviews conducted in this thesis is semi-structured. In this way it is possible to give the interviewee space for own reflections and to give room for different or unexpected answers, which had not considered beforehand. The first question of the interview

introduces the subject and the rest of the questions take its departure in the answer given by the interviewed person. The purpose of the interview is to be explorative of the different perspectives of the person interviewed so as to get closer to the problem investigated (Kvale, 2007). As explained by Kvale (2007) the optimal design of an interview is to avoid the dilemma between the method free and the method fixated. The present interviews are what is described as in-depth interviews, which was chosen because of the goal of getting close to something very specific and likely something that the interviewee will need guidance to reflect upon. The in-depth interviewer wants to investigate the response the interviewee gives. In this kind of interview one cannot remain impersonal, so as to keep the responses open, like a conversation that keeps going. However, the interviewer has to keep track of the direction the conversation takes, and it is therefore not like a talk between friends. The interviewer should also try to verify the interpretations of the interviewees' answers in order to make the interpretations reach a greater validity. The difficult task is to balance social distance without making the interviewee feel objectified because this will make the person close the answers. These were considerations used both in preparing and performing the interviews. Since the answers will be object for the present author's interpretations, transcripts of the interviews are in the appendices such that the reader can review them critically. The interview guides, which outlined the main themes to be explored in the interviews, are also included as an appendix. Central to my conduction of the interviews have been the development of a conceptual and theoretical understanding of the phenomenon that is researched, enabling the integration of new knowledge. The concepts presented in the theoretical part will therefore be guiding for the topics and questions that will appear in the interviews. Below follows sections presenting the interviewees and the purpose of the interviews.

### **Interview with Synnøve Kjærland. Project leader at The Climate Embassy**

The purpose of interviewing the project leader of The Climate Embassy was to get a deeper insight into the visions and consideration, which laid the ground for The Climate Embassy. Synnøve Kjærland has been working as the project leader from the start in 2009 and she holds the great overview of the project from where it started and how it has developed. The interview tries to explore the reflections on the education approach in relation to the change potential and the considerations made in relation to this.

### **Interview with Amalie Zeeman, former Climate Ambassador and high school teacher**

Amalie Zeeman is a geography teacher at Rystensteen High School in Copenhagen and has several times used Climate Ambassadors when she has taught her classes about climate change. The purpose of interviewing Amalie Zeeman was first of all to investigate the perspective of a teacher who had Climate Ambassadors out in her teaching to hold presentations and find out what difference the Climate Ambassadors make to her “normal” teaching. Furthermore, she has been engaged in The Climate Embassy and has participated in several education programmes within the project. The interview with Amalie Zeeman is interesting because she has knowledge about the Climate Embassy and their work and can therefore reflect this with the normal high school education and maybe see the potentials of The Climate Embassy.

### **Interview with Lotte Nymark Jensen, former Climate Ambassador**

Lotte Nymark Jensen was active as a Climate Ambassador together with the present author. The interview with her is thus also focused on dealing with personal understanding and interpretation of the experiences of working and presenting the material. Her interview was the first one conducted and therefore also worked as a way of sorting out some of the difficulties that was interesting to investigate further and to get other perspectives on e.g. the intentions laying behind some of aspects that the Climate Ambassadors did not think worked in practice.

## **3.6. Presentation of empirical material**

As main body of material for the analysis is the presentation, which are used by The Climate Embassy to educate about sustainable consumption (Reduce, Reuse, Recycle, 2012). This includes PowerPoint slides and a “manuscript” which is guidelines for the presentations to the Climate Ambassadors. As mentioned, the manuscript are the descriptions of what is to be done and said by the Climate Ambassadors when they go and hold their presentations, but are not something that the Climate Ambassadors has to stick with strictly. Here, the presentations are used to give a picture of the actual situations where the presentations were held. Personally, the present author used the manuscripts which is a good indicator that the manuscripts are a good guideline for describing what is being done and said in the actual education situation. This will of course not always be the case, but vary from time to time. Although The Climate Embassy has kept developing this material since, it is the 2012 presentation that will be used here, since this were the presentation used by the present author as well as Lotte Nymark Jensen. The interviews are on the



other hand meant as reflections on the general approach of The Climate Embassy and how the approach is believed to have an effect on the students. The interview with the project leader of The Climate Embassy will investigate the further development of the presentations. A description of the documents used in the analysis is presented below.

### **Reduce, Reuse, Recycle (Sustainable consumption)**

The presentation aims at high school students and deals with sustainable consumption. The aim is *“to give the students an insight into the problems we face, and communicate that it is this generation that we and the students are a part of who should handle these problems. Therefore, it is important to get the students to think innovatively and creatively to find solutions and ideas on how future consumption will look like and how we can solve it together!”*(Reduce, reuse, recycle, manuscript, 2012: pp. 3, trans). The presentation starts out with an explanation on what climate change is and how human activity has contributed to this. The presentation focuses mostly on waste and consumption as human contributions to global warming. An example could be how much CO<sub>2</sub> a flight to Thailand compared to Italy or Denmark emits. The last section deals with how we can change our consumption in order to emit less CO<sub>2</sub>, such as eating less meat.

## 4. THEORETICAL FRAMEWORK

This chapter starts with a description of some of the central points of the societal diagnosis *Dialectic of Enlightenment*<sup>5</sup> by Adorno and Horkheimer. It will investigate Adorno and Horkheimer's problematizing of the enlightenment and the capitalistic mass consumption culture. Furthermore, it will look at their perspectives on critique as the emancipatory tool for societal change. It is important to understand that this theoretical framework is not "theory" in the classical sense. Critical theory is not a fixed theory but rather a historical analysis pointing at the immanent as the unrealised potential of society which modern society prevents us from realising. The aim of this theoretical sections is therefore to understand some of the obstacles in present society for realising the possibilities there might be for a more desirable society. The societal diagnosis of Adorno and Horkheimer is from the time around World War II and therefore their findings are not immediately applicable to current society. Nonetheless, it will be argued that some of their perspectives are still relevant in the light of present society and the problems with individualisation of values and alienation of the individual from nature. A section reflecting on education will follow this in which the meaning of using natural science as education material for climate change will be touched upon and tied together with the understandings of critical theory. The chapter will close with the practical potentials of critical utopian action research in order to give practical perspectives on how to create social imagination from the foundation of critical theory.

### 4.1. The concept of Enlightenment

Dialectic of Enlightenment starts with these words:

*"In the most general sense of progressive thought, the Enlightenment has always aimed at liberating men from fear and establishing their sovereignty. Yet the fully enlightened earth radiates disaster triumphant"* (Adorno and Horkheimer, 1997, pp. 3)

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<sup>5</sup> Dialectic of Enlightenment was published in Amsterdam in 1947. The original title was Philosophical Fragments and this is not a bad description of the book's fragmentary, but nevertheless coherent theme. The book was later called a philosophical classic based on its sobering and generally negative critical view of the western civilization (Jørgen Dehn in Horkheimer and Adorno, 1993)

Historically, Adorno and Horkheimer see the enlightenment as the human attempt to control nature and control the fear of the unknown. Adorno and Horkheimer are as mentioned inspired by Marx who also had the domination of nature as a central concept for the modern world. Stories about gods, which could explain the unknown of nature has historically helped humans gain meaning. With the industrial and natural science development there has, however, been a break with the religious myths and traditions. Now the rational human being has the control over nature by giving meaning to things and humans through counting, measuring and quantifying. A consequence of this is that quantifiable knowledge becomes the only entity that qualifies as real knowledge (Ibid. pp. 8). A result of this instrumental form of reasoning is that questions of value, which is not perceived as rational within society norms, are left out (Antonio, 1981). The enlightenment has claimed to be rational and emancipated from myth and tradition, but has nevertheless started a new myth: an obsession with quantitative knowledge, standardisation and classification of everything. This results in a rejection of all the things that does not fit into the boxes of quantification and standardisation.

*“Myth turns into enlightenment, and nature into mere objectivity. Men pay for the increase in their power with alienation from over which they exercise their power. He knows then in so far as he can manipulate them. The man of science knows things in so far as he can make them”* (Adorno and Horkheimer, 1997, pp. 9)

By our attempt to control nature we have lost the ability to see intrinsic values. This has created an alienation from what we exercise our power over. Thus, questions of values, which cannot be measured or put into the existing boxes, is left out of the governing rationality of society. Science in this form has led to that questions of good or right is now a personal issue.

*“The principle of immanence, the explanation of every event as a repetition, that the Enlightenment upholds against mythic imagination, is the principle of myth itself. That arid wisdom that holds there is nothing new under the sun, because all the pieces in the meaningless game have been played and all the great thoughts have already been thought, and because all possible discoveries can be constructed in advance and all men are decided on adaptation as the means to self-preservation.”* (Ibid. pp. 12).

The principle of the immanent is the mere repetition of what were before and sets up boundaries for what humans can conceive and imagine because the only thing they can do is to adapt to the existing structure. This idea is the myths' own principle. The knower shows power over the thing that is studied but this has a double effect because the subject (the knower) only has the power by means of the knowledge. The knowledge is thereby the new myth because the knower is governed or restricted by the knowledge he or she can gain and is thus alienated from the thing that is studied such as nature. The enlightenment together with the capitalistic society has made a totalitarian system, which gives the same value to everything. The ideals of the modern world becomes efficiency and rationality and becomes instrumental in the aim of controlling nature and humans around the individual. The problem of this is that the human mind loses its ability to speculate about things that does not lie inside the existing structures and science, i.e. that humans lose imagination (Ibid.; Sørensen, 2012).

#### **4.1.1. Commodification and homogenisation**

Adorno and Horkheimer see in some ways the capitalistic society as a kind of tool for the enlightenment. Through the monetary system everything is treated within the same rationality and the market turns everything into measurable terms giving little or no meaning to everything, which we cannot measure. For Adorno and Horkheimer, Marx's commodity analysis play a significant role. In Marx's understanding, commodities have two characteristics: A historical (and therefore a changeable and culturally defined) quality and an ahistorical quality, the latter of which is understood as inherent value of the commodity. These two factors are under the capitalistic system known as use value and exchange value (Marx 1970, pp. 128). The use value is according to Marx, the qualities or characteristics of the item considered. The commodity therefore has a value because it consists of this. Commodities are, however, traded on the market by comparing them on equalized terms. The labour that is put into the production of different goods is compared on the market in an exchange relation and thereby become commodities (Ibid. pp. 172). The critique from Adorno and Horkheimer is an extension of this in that things which are produced different places by different people becomes one homogeny mass. We have ended up with a totalitarian system, because it gives everything the same value and meaning, where humans have become blind to the aspect that things and humans have an intrinsic value, which may not be measured in monetary terms and this has become rational: *"Through the countless agencies of mass production and its culture the conventionalized modes of behaviour are impressed on the individual as the*

*only natural, respectable and rational ones*” (Adorno and Horkheimer, 1997, pp. 28). Adorno and Horkheimer uses Marx’ commodity analysis in a broader civilisation analysis where they find the figure of the totalitarian ‘everything becomes the same’ in every aspect of society. In this they see that the consumer culture creates a form of social control because the individual strive towards the norms of the collective, setting this as the rational way of life. People are in a way pacified because the individual is suppressed by the norms of the masses. In the picture of the political consumer this is a paradox of everyday: If one person stop eating meat, it will not make a difference since no one else is doing anything, hence it is pointless to stop eating meat. It becomes rational to just stay in the same position as always and reproduce status quo.

In the epistemological section it was highlighted that there is an objective truth. Reality has the potential to become rational and the individual has the potential to become rational. However, the rational individual can only be realised together with a rational society<sup>6</sup>. For critical theory it is this historical process, which social science has to help to show how the modern capitalistic society contains contradictions. Under the right conditions, humans can be rational; the problem is that the rationality of capitalism can counteract this (Sørensen, 2012). Today the contradictions of capitalism show a shift from the material privation of workers into a dialectic, which, among other things, involves de-politicization, waste and environmental problems. This is the contemporary consequences of the rationalization of the capitalistic system, even though we hold the means to actually overcome some of the problems (Antonio, 1981). The contradictions of capitalism are, however, hidden away by the dominating forces in society by showing a false unity of the ideal and therefore humans live in a false world controlled by a false rationality.

The main reason of writing *Dialectic of Enlightenment* was to find out why humans despite education, science and enlightenment still end up in a form of barbarism. The hypothesis is that this barbarism is not caused by the lack of enlightenment or knowledge, but something immanent in the enlightenment. The dialectic described is therefore “the backside of enlightenment”, something that humans do not realize. The dialectic is also shown in the relation between the particular and the whole, between society and the individual. The interesting aspect is what role enlightenment and knowledge play in this dialectic relationship. Their hypothesis is that on a societal level, science has brought a totalitarian element in what is possible in society.

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<sup>6</sup> Critical theory builds on the understandings of Hegel “The rational is real and the real is rational” (1970 [1821] pp. 26 in Sørensen, 2012).

#### 4.1.2. The immanent critique as emancipatory

Dialectic of Enlightenment is in a way a negative societal diagnosis where society and human actions are reduced to a mere reproduction of status quo due to the alienation from reality and strategic rationality that only reproduces status quo. From the above, the dialectic relationship of individuals and society becomes very central. On one side science has contributed to the depoliticization of society in the way that it becomes hard to talk about values and the desired future. On the other side, the norms and values formed in society can suppress the individual from being critical. In this relationship, science and the capitalistic society play a role as we have seen above. One of the consequences that Adorno and Horkheimer see is that humans have lost their imagination because reality becomes a matter of adaptation and not challenges - "*Imagination atrophies*" (Adorno and Horkheimer, 1997 pp. 53). Adorno and Horkheimer draw a rather sinister picture; instead of imagining the world as it might be, rather than taking a critical stand on status quo, we reduce the reality in front of us to instrumental rationality in our strive to control and dominate our surroundings – both humans and nature. Central to this is the immanent aspect – all the things that we do not see, what Horkheimer and Adorno describe as what could be.

*"The regression of the masses today lies in their own ears what has not already been heard, to touch with their hands what has not previously been grasped; it is the new form of blindness which supersedes that of vanished myth"* (Adorno and Horkheimer 1997, pp. 37).

The homogenisation of society limits what we can hear and see but from what they call *the true praxis* they believe that we can open up to alternatives. They writes: "*..but the true praxis capable of overturning the status quo depends on theory's refusal to yield to the oblivion in which society allows thought to ossify.*" (Adorno and Horkheimer, 1997, pp. 41). The point is clear: our thoughts become rigid but 'a true praxis' can overturn this continuing reproduction of *status quo*. If theory can be critical towards these dominating structures in society, then we might be able use our imagination in visualising what could be.

Overall *The Dialectic of Enlightenment* comes with no easy answers to avoiding their prospects and how to explore *what could be*. Central for them is, however, to be critical towards everything that appears fixed where thought has '*ossified*'. What we perceive as being reality and what we perceive as being important have big implications for our possibility to uncover the immanent.

Critical theory therefore sees critique as a value in itself. The idea that everything could be different is purely represented through the passion of the critique. Society and social structures are seen in historical and cultural contexts in the task of uncovering power structures and dominating discourses that reproduces appeared reality. The task is therefore to uncover these discourses and dominating structures in order to see the dialectic nature of modern society of what is and what could be. Consequently, the task is that we become aware of the immanent barriers in our society. This is, however, a hard task since it is our own self that is a part of producing a common rationality where the individual internalise this rationality.

Horkheimer and Adorno do not have a picture or standard of what the truth ought to be and they do not present a situation where the individual actually can come to criticise the contradicting and suppressing nature of societal structures. Therefore their theory also becomes rather abstract and speculative. Rationality becomes irrational and forces everything into the same shape of the dominating rationality – everything becomes the same. Through this description of reality Adorno and Horkheimer believe to be able to reveal the true state of society. A society that appears to be rational and enlightened but in reality is an irrational society where rationality has become a myth. Adorno and Horkheimer's critical theory is therefore a critique of "[...] *why the world continually, even in a highly civilized Era, give a false rather than a true identity, which as the primary takes into account the diversity of things [...]* " (Ferland, 2005, pp. 62, trans). Society reduces everything despite the difference in things and humans. This is also evident in the way society treat environmental challenges, namely by doing everything in the same way. Asking how do we secure a sustainable future? This is often answered by consumption, just like the way all other questions in society are answered. Adorno and Horkheimer's critique is consequently not a forward oriented form of critique. There is no right moral society to reach; this would in itself be a dominating rationality. The critical element should however emerge between the everyday life experience and the critical view on society given by critical theory. Because the rational can become irrational, the fundament of the critique cannot emerge from a fixed place but have to be "in between". This is the immanent critique (Ferland, 2005). Where we become aware of the contradictory nature of society. An example of a place where the immanent could emerge could therefore as an example be between individual and society. On one side these two is in opposition to each other and on the other side they have an inner relation. The immanent critique therefore also reveals a hope, the hope of something better than and different from status quo. The central

intention of critical theory is to use and not reject normative founded society critique. The longing for what 'could be' in society emphasises the need of using imagination, utopias and persistence as means of moving the world in a better direction. In relation to the case of this thesis, these thought are interesting because through school and education, society educate the new generations in how society works. The purpose of education is not only to contribute to a reproduction of the existing society, but has to create a consciousness among the students about the right, the normal and the unavoidable things that make society work as it does (Israel, 1973, pp. 424). The rationalities and discourses the students are presented through the education system therefore have implications for their ability to critically challenge and discuss society, but also the ability to imagine society differently.

## **4.2. The meaning of environmental education**

Education is throughout our lives affecting the way we think about and interpret reality – it is to a high extent the interpretation of reality, which affects the way we act and think. Therefore it is important what interpretation we are being presented for during our lives and hence also through the education system (Israel, 1973, pp. 312). Through the education system we learn how to think in certain ways and how to fit into social norms or social conformities (Ibid. pp. 326). In relation to the case of the thesis it is therefore interesting to explore the meaning of education in climate change and how this affects the interpretation of reality. What does it mean that students are presented to the challenges of climate change and is it something that the students can relate to? In this section the use of natural science in education about sustainability and climate change in relation to everyday life will be considered. The aim of this section is to discuss how natural science knowledge can be relevant for the students, and something they feel enabled to act towards.

It is clear that we need natural science to understand how the world functions: What is climate change? Why is climate change occurring? And how can we prevent it? These are all questions, which scientists ask in relation to the challenges of climate change. As we discovered from critical theory, knowledge and science is not bad in itself, it is a foundation for understanding and change. This section will in more details look at how we are affected by this knowledge.



#### **4.2.1. Natural science and change potentials**

The scientific approach of predicting something about the future is to make use of statistical tools. This is also the case when talking about environmental problems like climate change; the temperature through time is analysed in order to say something about the future. The consequence of this is that regulations and actions taken towards an issue like climate change becomes based on information about the condition of nature and how it has gotten worse through time (Harste, 2000, pp. 77). The picture of what can be done therefore becomes extremely complex since the debate will concern tipping points and requirement for complex scientific understandings. Here, this complex picture is not up for discussion. It is objective scientific knowledge, which can be used to define a prescription of action, analogous to what was described in critical theory: it is the use of a strategic rationality that can govern what actions needs to be taken in the future. What Harste (2000) argues is that if all of our actions should be based on this strategic rationality, we will lack the possibility to criticise the material and action prescriptions independent of who said it and independent of the way it is presented. He argues that we then move closer to a totalitarian reality, where there is no possibility for change outside of what the system has prescribed. The domination of natural science in respects to sustainable development has two fundamental problems, however. Political visions are directed towards the future, but natural science knowledge is by definition oriented backwards in time. Thus political action will arrive too late if they are based purely on scientific knowledge. Secondly, Harste explains that if natural science is to give us the answer to sustainability then it will create problems of integrating this into social, cultural and political systems because they each operate with different types of rationalities and time perspectives. This implicates that sustainability will become a concept of how to avoid the future crisis instead of being a starting point for thinking about alternative sustainable futures. If we on the other hand keep a one-dimensional focus on natural science we will only be presented to different types of futures, which we should avoid (Harste, 2000). These dystopias (to be avoided) only enhance solution thinking in accordance with the problems – not a vision for a better world.

*“By integrating sustainability into different and always purposive systems, sustainability will become an undemocratic and dystopian term because these systems deal with the avoidance of certain futures by means of specific and always limited academic and technical skills.”* (Nielsen et al. 2010, pp. 243).

In relation to the latter described problem of ‘the lack of room’ for addressing values, a problem with the natural science approach might be that outside of the constraints of the economy and biology, it is difficult to find ‘timeless rules of action’ which can improve the way we understand and discuss sustainability. Harste (2000) points out that this might be due to uncertainty of time which is not expressed in either economic or biological terms because the challenge is for sustainability to not become a matter of causality. We have to recognize that if sustainability becomes something that can be identified through ‘indicators’ of nature then natural science will have a dominating nature in the sustainability agenda (Nielsen et al, 2010, pp. 231). This lack of visions for a better world might make us apathetic, increasingly trying to forget the horrible knowledge about what the future might bring of various natural disasters. Harste (2000) argues that we live in a risk society and that democratic policy in a risk society no longer can be about ‘self-government’, but has to move its focus towards ‘co-decisions’(ibid).

#### **4.2.2. The expert perspective on sustainability**

The expert dimension of natural science has an interesting implication concerning the change potential, “*Experts and scientists can help to teach us what we do wrong, but they cannot tell us what our future should be*” (Nielsen et al. 2010, pp. 243). Whereas natural science is an important part of becoming aware that *something* is wrong, it cannot tell us what exactly is wrong, because this has something to do with the social structures. The natural science dimension is here regarded as the strategic dimension which is the regulative action needed to prevent the consequences of human action (Ibid.). The natural science approach becomes totalitarian in the sense that someone knows what needs to be done – like the old myth description of Adorno and Horkheimer. What is needed is a critical dimension, which come across in the critique of the destruction of nature and ecosystems. Instead what is argued is that when societies become so complex and volatile every one of the decisions we make in society must be based on fundamental values found (Elling, 2008). What is clear is that the strategic approaches to a better society do not, in a sustainability perspective, produce anything new and better for the future. The problem in the case of an education situation in this setting is that the purpose of finding solutions through communication becomes absurd because the solutions are already defined in advance. When certain discourses are privileged and others are marginalised the discussion tend to not open up to discovering the alternatives to the dominating point of view. One of the most commonly identified discourses to exemplify this is the domination of technical/economic reasoning in the western world (Ibid.).

Another opportunity is therefore to view sustainability as a democratic process instead. What we need to get a hold on is thus the social imagination and how to train it in order to find the immanent possibilities and to deliberate on what people really want. Going from a closed to an open understanding of sustainability is consequently also creating a common awareness that sustainability is something we have in common.

### **4.3. Imagining utopias**

The third question of the problem formulation asked for alternative ways of approaching environmental education in order to enhance critique of existing rationality in society, but also to imagine alternative visions from those we have today. This section will therefore explain methods taken from critical utopian action research, which is a research method that explores how to challenge the strategic rationality and the individualisation of values. Furthermore, to challenge the alienation from nature and increase the empowerment in relation to sustainability, perspectives on how to address this will be presented. Critical utopian action research also operates from the ontological understanding of critical theory - reality is seen as an unfinished process that through the critique moves towards something objectively more just. Reality is therefore something that contains the potential for moving into alternative realities, but also contains immanent barriers towards reaching these alternative realities (Nielsen and Nielsen, 2006). Critical utopian action research change can be created through social experiments where the researcher facilitates a democratic process of knowledge creation and a critique of everything, which appears fixed such as norms, authoritarian structures and traditions. Consciousness is created not only by describing how the world is, but also by exploring the utopian possibilities that exist by using critique to challenge the “perceived reality” (Ibid.). Action research contains the thought that the participants are contributing to investigate their own life situation and the ‘expert’ (this could be the researcher or maybe the teacher) is a participant as the others. What we try to promote is consequently a ‘social imagination’, and in trying to sketch alternative futures where criticism becomes a procedural and methodological concept (Ibid.). In an education situation creating spaces where the students can discuss their everyday life in the context of nature, climate change and other environmental issues could maybe create this social imagination. Creating these spaces is not an easy task and therefore it will here be explained how it could be done through lessons learned from a nature conservation project in Norway. Mikaela Vasstrøm focused in her PhD study “*Openings and Closures in the Environmental Planning Horizon*” from 2009 on how to enhance

social imagination in defining values in a planning process. Her understanding is that “openings” are conflicts about the common; this could be conflicting values, understandings, or representations (Vasstrøm, 2009). Change is thus understood as openings towards addressing conflicts. The aim is to create situations where the societal contradictions in human everyday life can be discussed and processed. This is in the following described as the future creating Workshop (Ibid. pp. 168). The concept of future creating workshops was in Vasstrøm (2009) about exploring the good life of people, and in this case wild reindeer, positioned in a nature planning conflict. The aim was to create a democratic place where citizens could learn and be empowered in relation to their own life and conflict context. In short, the future scenario workshop incorporates a turnaround of the normal process of management in which an expert comes and tells people what the right thing to do is in a conflicting situation and invites the participants to tell what they find to be the good life from the given situation. The future scenario workshop starts out by inviting all the people in the local community to critique the existing from the perspective of the place they live including the social aspects, society, and nature, present and future. People invited will inspire each other with points of critique and they say all the things they have to say. After this, the citizens are going to put votes on the aspects, which they find most important. Then the facilitator helps them group the critique into themes. In this way, the invited in some way invents the themes for the workshop, which they will work on afterwards. It is a central aspect of the workshop that it is not the expert who comes up with the central themes for discussing, but that it is the invited themselves. After thematising the critique, the facilitator opens up for turning around the critique and define utopias concerning what they think is the good life using the critique as a starting point. This can create concrete suggestions for the future that the citizens desire, making a process that starts from beneath (Vasstrøm, 2009).

The future creating workshop could be interesting in the context of the case of this thesis, since it could be an alternative way for the student to talk about climate change and sustainability in relation to everyday life. However, working with the school context in relation to the future creating workshop can be challenging since there exist a grounding contradiction to an approach, which starts from beneath. In school, an adult often initiates projects and the participation of the children is therefore dependent on the room that is created by the adults in which the children can engage in activities where they can challenge and develop themselves in relation to the topic (Clausen, 2012). There is a danger of manipulation from the adult who is controlling the process

direction. If the children are not given the room to challenge their own conflicts and problems there is a danger that the adult takes over the process and it becomes top down. This risk is also described as ‘symbolic participation’ in the sense that the participation of the children is more about the signal to the surroundings that children are included than to really include them (Hart, 2002, in Clausen, 2012). Furthermore, the purpose of the school is also to discipline and teach individuals who sometimes are not there voluntarily. It can therefore be extremely hard to create a situation with voluntary participation with a rather liberal frame. The school setting could thus affect the students in a way that it becomes hard for them to fully use their imagination because normally in a school setting there is ‘a correct’ answer.

#### **4.4. Considerations using critical theory**

In the following, some critique points on Adorno and Horkheimer’s analysis will be presented, which are relevant for the use of the theory and their concepts in this thesis. For the major part, the understanding of critical theory is made use of and therefore it is important to highlight some of the critical points of the theory.

##### **4.4.1. The darkness of enlightenment**

Dialectic of Enlightenment appears as a rather pessimistic civilisation critique because it describes the historical domination mechanisms, which make the modern, enlightened and free world (and most of all the illusion of it) a fake world (Jørgen Dehn in Horkheimer and Adorno, 1993). The choice humans have therefore seems to be choice between dominating nature or be dominated by it. However, Adorno and Horkheimer acknowledge that freedom in society cannot be separated from the enlightened thought. Therefore, critical theory can lead to a somewhat practical hopelessness because it seems hard to imagine how to get around this dialectic relationship and discover the truth about this nature of enlightenment. Some of the later scholars of critical theory have, nonetheless, tried to come across this. Jürgen Harbermas developed his theoretical communication framework, which formulated a practical way getting out of this rather sinister position of Adorno and Horkheimer. Harbermas’ ideal of a speech situation is where the individual can unfold their rationality in the search for the best argument to develop society in a better direction (Sørensen, 2012).

#### **4.4.2. Difficulties of the normative approach**

In relation to the above, one could also point towards a critique of the normative approach of critical theory. Critical theory is a very “reality near” theory, since it always takes departure in the existing society and its contradictions. However, the ideal of the immanent critique where society continually is in movement, always questioning the new state, could appear to be rather impossible. If we always have to question everything, we end up in a reality where there is nothing static to hold on to. It can therefore be hard to use the normative understanding on the real world since, if everything can be questioned, it becomes hard to know where to start aiming the critique at. In this thesis this will be taken into account and the normative understanding cannot strictly be followed. Since any researcher, including the present, is a part of society, the understanding of surrounding society is internalised, and it is therefore questionable if a researcher can fulfil the normative ideal of critical theory. The analysis, therefore, is never complete, but can maybe move some of the understandings that maintain existing society in reproducing itself.

## **5. ANALYSIS**

### **5.1. Analysis strategy**

The purpose of the analysis is to apply a ‘reality-close’ yet abstract theoretical framework to the concrete empirical context of the case. The purpose is to find out how to understand critical theory and Dialectic of Enlightenment and the concept of the immanent in relation to the empirical material. The analysis of the case will be handled within three key concepts, the two first of which, *Alienation* and *Individualisation*, are problematizing concepts, which through the theoretical framework are identified as being the most important considerations in relation to societal change. The latter concept, *Utopia*, is a visionary concept connected to the immanent as something, which is inaccessible under the dominating rationalities in society. The key concepts will be used in relation to the empirical material through investigating the following questions in the analysis:

*Alienation:* How does The Climate Embassy enhance the understanding of climate change? Do they achieve to relate climate change to the children’s everyday life?

*Individualisation:* How does The Climate Embassy treat the relationship between the collective and the individuals' responsibility and ability to act in society?

*Utopias:* Utopias are here understood as the ability to imagine alternative futures. Does The Climate Embassy encourage the children to think creative and reflect about values in relation to a sustainable future?

By moving between the concreteness of the case and the abstract conceptions of critical theory, the contradictions and conflicts that are inherent in the education material and the reflections of the interviewed persons will be considered.

From a critical theoretical perspective the aim of the analysis is to take a step back and look closer at the underlying rationality of the case. The central part of the analysis is concerned with the communication and actions which are present in the classroom, investigating how The Climate Embassy interpret the challenge of climate change, and how they see the possibilities for societal change in a more sustainable direction. The analysis will therefore be concerned with investigating whether this approach has a societal change potential or if the approach is just reproducing the current way society is functioning. This will in relation to the theory imply a closer look at the rationalities, which is used in the education. This should be seen in the perspective of the dialectic relationship between the individual and society in order to keep the details of the case within the context of society. More specifically this means to investigate if change is believed to be enabled by individual change or if foundations for a deeper engagement in changing some of the underlying mechanisms of society, which is part of creating the problems of climate change, is created. Here it is relevant to address the immanent to see if there is anything in the education situation, which is not addressed both in relation to the meta- communication (what is the purpose of the communication) but also in relation to the people who are interacting in the communication and what their experience of the situation are. The analysis is aiming at showing the complexity of such a communication situation as the case represents. As explained in the theoretical framework, knowledge and information is not from a critical theoretical perspective bad in itself, the purpose is to show a reflection over how structures are connected and to be open to the idea that other aspects play a role in the big picture of societal and individual change.

## **5.2. Design**

The analysis is divided into four sections. The first part will emphasise the current politics on climate change in the Danish education system and a presentation of the purposes of The Climate Embassy in general. The second part will address the overall rationality of The Climate Embassy. It will emphasise their purpose and understanding of sustainability and the role of The Climate Ambassadors. Here their ex- or implicit understanding of their societal role and what they are meant to contribute with is described. The third part is the concrete education situation where the Climate Ambassadors interact with the students, and communication and action is performed. Here the interaction and action will be investigated more closely in order to understand the rationality of the Climate Ambassadors and how this rationality is converted into action. This part will also contain reflections on what implications this action has. In order to do this, use will be made of the written material in the form of PowerPoint slides and the manuscripts that tell what the Climate Ambassadors are supposed to say in relation to the slides. This is of course not an observation of the real 'education situation' but can give a picture of the rationalities, which is present in the education. In the final part of the analysis will emphasise the possibilities in the education situation, which are not realized. The way The Climate Embassy communicates and acts in the education situation is implicit including some aspects where other aspects are left out. From the perspective of utopian action research it will be considered how The Climate Embassy can change their praxis in order to create more engagement from the students in the desired societal change.

## **Analysis part 1**

### **5.3. Current approach to climate change in the Danish school system**

Climate and climate change is a compulsory learning goal from 7<sup>th</sup> to 9<sup>th</sup> grade in the Danish school system. In public schools the students are taught about climate change in the subject geography. The goals of the education are: 1) That the student can explain the difference in living conditions in Denmark and other countries in the perspective of climate change. 2) That the students can explain the water cycle with the implications of climate change. 3) That the student can draw and explain a natural carbon cycle with human made climate change included (Undervisningsministeriet, 2015). The learning goals are therefore oriented towards a natural science understanding of climate change. However, in the description of the education the student



should also reflect on what *“what can be done - and what is possible to do - to counteract the effects of climate change as sea level rise, more intense storms including hurricanes, tornadoes and torrential rain, desertification, etc. in the respective countries.”* (Ibid.). Because the learning goals in the school system are natural science oriented it could be argued that there is a need for other perspectives concerning sustainability and climate change. This makes the case of The Climate Embassy interesting because this project might be able to approach other aspects of climate change and provide a change potential.

## **5.4. CONCITO and The Climate Embassy**

This section will first describe the overall purpose and goal of The Climate Embassy. This is followed by an explanation of the organisational structure and the “mother organisation” CONCITO. And lastly, a description of how The Climate Embassy fund their work and an analysis of how the structure and funding affects their work.

### **5.4.1. Purpose and approach of The Climate Embassy**

As stated in the introduction, CONCITO established The Climate Embassy in 2009 in order to address a need for communicating up to date knowledge about the state of the climate. Combining scientific knowledge with green solutions and best practice examples, this knowledge yields a solution-oriented approach. Many of their projects have a natural science focus (especially the short presentations, which are emphasised in this thesis), however, the natural science focus varies from project to project and with the focus of the funding which supports the projects. The Climate Embassy has children and young people as their target with the following considerations:

*“.. a fundamental belief that it is by working with young people one can accomplish a foundation for positive social change in our working field. Future generations have to grow up with the realization that the climate challenge affects all aspects of societal development. The Climate Embassy's goal is to inspire to commitment and action and that the young generation will use its scientific knowledge to boost and speed up a green development at all levels of society (Kjærland, project description).*

The approach is to create interest and curiosity among the students by combining scientific knowledge with concrete solutions for a greener society. The Climate Embassy works in the field between three ‘actor groups’, who are researchers and experts, schools and education institutions, and municipalities and companies (ibid.). They do this in order to create focus on the need for all actors to parley together in order to create sustainable development in society. The Climate Embassy therefore offers presentations, workshops and projects with sets off in a cross-disciplinary approach focusing on the different actors in the perspective of climate change and sustainability (Ibid.).

#### **5.4.2. Organisational structure of CONCITO and The Climate Embassy**

Overall, The Climate Embassy as a project is a subdivision of the green Danish think tank CONCITO. The purpose of CONCITO is to:

*“Contribute to (1) the reduction of greenhouse gas emissions and (2) reduction of the harmful effects of global warming. CONCITO collects new and existing knowledge and experience from Denmark and abroad. This knowledge and experience is analysed and spread to policy makers, businesses and citizens in a form that can be translated into direct action for the benefit of the purpose”*(CONCITO, 2013, pp. 1 trans).

CONCITO is a network of scientists, organisations, companies, and single individuals, who have general and specific knowledge about climate and climate change. A substantial part of their work is done through the project The Climate Embassy, which is run and funded by different independent funds (CONCITO, 26.05.15). As mentioned, The Climate Embassy consists of young volunteers called Climate Ambassadors. The Climate Ambassadors are organised by a small stirring group including the project leader, Synnøve Kjærland. Before the Climate Ambassadors are sent out with their presentations, they all go through a three-day workshop where they receive education in basic science of climate change, presentation- and facilitation skills. The goal of the workshop is to get the Climate Ambassadors to be comfortable with their presentation and their task of presenting it in front of a class. As mentioned, the Climate Ambassadors do not have to follow the provided manuscripts but can make personal presentations and can cut out and in what they feel give the most meaning to the presentation in its context. From a critical theoretical perspective, this possibility of modifying the presentation and

transforming it to the relevant context could be an opportunity to create change. Because there is a subjective interpretation through the chain of actors there is also a possibility for the individual to be critical. The project leader of The Climate Embassy gives an example of this during her interview (see appendix 3) when the presentation about sustainable consumption were discussed, where the students are encouraged to buy stuff of good quality because it last longer. Some Climate Ambassadors had this reaction to this and modified their presentation: *“If one says: Buy quality or luxury instead of cheap stuff, it is not everywhere where that has meaning. I had Climate Ambassadors who said: I do not want to stand and communicate things like that to a class, and I think that is cool”* (Kjærland, appendix 3, pp. 10, trans).

### **5.4.3. Funding**

The Climate Embassy is funded through different bigger and smaller foundations. One of the bigger foundations is the Nordea Foundation, which from 2010 has supported the development of new projects (The Climate Embassy, 26.05.15). When applying for different foundations there are different requirements in order to get the funding. Synnøve Kjærland: *“We got some money from the EU council, because some of the presentations were EU related, there are certain requirements. Then we got some from Danida and the Energy foundation”* (Kjærland, s. 11, appendix 3, trans). The short presentation about sustainable consumption, which forms the empirical material of this thesis are, however, funded by the Nordea Foundation. In the application for the Nordea Foundation it is required that the project has a big outreach in the terms of number of students, which hear the presentations and that there is a focus on strengthening the natural science understandings among the students (Kjærland, project description). However, there is a large range of freedom in relation to the actual presentations. As Synnøve Kjærland states: *“Last time [last application] we put emphasis on the point that the presentation should be adjusted to the actual situation. If one can argue for the content and include the natural science subjects and show how that can be used and how the interaction with other [disciplines like social science], then it is okay”* (Kjærland, appendix 3, pp. 14, trans). The Climate Embassy both engage in smaller and bigger projects where some only include 25 students in a project that last several weeks and projects which are short presentations for a hundred people. When asked the question if it is difficult to get funding for some of the smaller projects, she responds *“No, we have done things within the frames that were given, but then you also have to go to a high schools with 700 people and reel of a speech ... we have to have an outreach ... on paper it does not look good that*

*you only reached 25 people with two employees”* (Ibid. pp. 11). The Climate Embassy therefore tries to navigate within the given frames of the funding bodies and has to take into account that for many foundations it matters that the projects have a big outreach in numbers of people affected by the work they do, and also that some foundations, like the Nordea Foundation, focus on a strengthening of the natural science subjects.

## Analysis part 2

### 5.5. The rationality of The Climate Embassy

This part of the analysis can be considered as the meta-level concerning the overall rationality of the Climate Embassy. What is their understanding of sustainability and what is the role of the Climate Ambassadors? The section aims to find out what the ex- or implicit purpose of the Climate Ambassadors are and what they are expected to contribute with in a societal context. From the theoretical perspective this is interesting, because how this rationality is converted into action and what consequences this may have for societal change will be discussed in section tree of the analysis.

#### 5.5.1. Purpose of The Climate Embassy

*“The purpose of the presentation is to give the students an insight into the problems we are facing and disseminating that it is this generation, which we and the student are a part of, that have to handle these problems. Therefore it is important to get the students themselves engaged to think in new ways and creatively to find solutions and ideas to how the future consumption could look like, and how to solve it together”* (Manuscript, Reduce, reuse, recycle, appendix 2, pp. 4, trans).

The overall concept is that we need to do something in this generation in order to fix the problems of climate change. Either invent new technologies that can solve the problems or start consuming differently. The understanding here is a focus on the need for everyone to work towards fixing the environmental problems of today. The uniqueness of The Climate Embassy is their youth-to-youth approach where young people act as role models for others in the sense that they voluntarily engage in the climate agenda and spread the word. In order to get a better understanding of how The Climate Embassy interpret their mission of creating change, observations will be taken in the

following of their understanding of sustainability in relation to climate change in order to identify how they understand change, individual and societal.

### 5.5.2. Making environmental problems visible

*"Reuse, reduce, recycle [the sustainable consumption presentation] puts focus on resources and resource consumption, and on the importance of being a resource conscious consumer in the modern society and try to reduce the amount of waste. And when many resources also seem to be more and more expensive, recycling is a realistic scenario that many will follow"* (The Climate Embassy, 26.05.15, trans).

This is the description of the presentation concerning issues about sustainable consumption looking at resource use and waste production. The slideshow is constructed in the way that it starts with a small introductory film with animated planets which all sit in a sort of consultancy group circle telling about how they are all doing. When it comes to the earth it explains that it feel bad because there is a lot of change happening on its surface (Planet Meeting film, 2010). This film is followed up by a technical explanation on what climate change is and several graphs showing the growing resource consumption on earth over the years. It is furthermore explained how the resource consumption and waste productions is affecting the ecosystems. The following picture from the presentation explains that we on a global scale is seeing extreme weather events all over the world and that this might be caused by global warming.



Figure 1. Weather events globally: Melting ice sheet, heavy rain, heat wave.

Presentation: Reduce, reuse, recycle, appendix 1, Slide 3

Explanation to the slide is given: “- A heat wave hit Moscow in late June 2010 and caused several thousand Russians to die and limited Russia's wheat crop by 40%, which in turn caused an increase in global food prices. -Heavy rains caused floods and landslides in Columbia in 2010, 2011 - which cost the country nearly 7 billion dollars in damage, it was the country's greatest natural disaster in its history. - In Greenland more ice melted in 2010 than ever measured” (Manuscript, Reduce, reuse, recycle, appendix 2, pp. 4, trans).

### **5.5.3. Human made climate change and responsibility**

After showing and explaining all the different weather events, the Climate Ambassadors give the following question to the students “*Do you think that some of these weather phenomena are caused by the amount of CO<sub>2</sub> which we as humans burn every day?*” (Ibid. pp. 4). The question indirectly implies that it is humans that cause global warming and this minimizes the room for the individual to think independently on the causes and effects of human action and the environment. The interpretation is therefore that humans need to take action in order to prevent all these different weather events, which causes lack of food, big expenses in damage and melting ice. Being introduced to such a complex cause and effect relation might increase the alienation felt by the students in their relation to climate change and their effect on it. However, Synnøve Kjærland has an interesting notice of the interest of the students in these global effects by climate change:

*“We asked some students in 7<sup>th</sup> grade, what do you think your classmates need to know. We asked them what have you learned and what do you think is important? They were really like wanting the horror scenarios... They wanted facts, they wanted to know the state, how many people are affected... but I think you need to relate it to something”*(Kjærland, appendix 3, pp. 10, trans.).

The students are interested in the big picture of climate change. Climate change is complex and global and hard to relate to even when you are an adult. The interest in the “horror stories” implies a distance to the phenomena, where the students relate to it, as it was a movie.

97 ud af 100 klimaeksperter mener, at mennesker forårsager global opvarmning

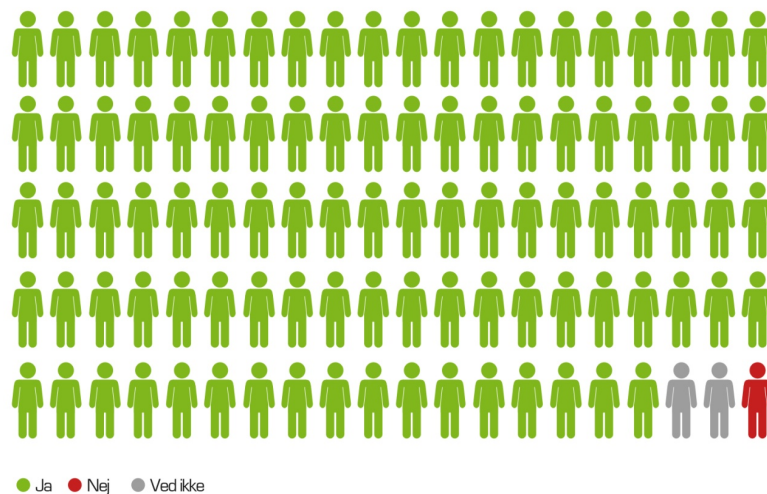


Figure 2. Trans: 97 out of 100 climate experts believe that it is humans that cause global warming.

Presentation: Reduce, reuse, recycle, appendix 1, Slide 4

The following slide (4) show that most climate experts believe that it is humans that contribute to global warming. This information is presented in order to explain the students that there is globally consensus about the human induced climate change. However, in a change perspective, this might not have a altering effect, because the students might felt that now the experts are telling them what to do. That it is the experts believe that is presented could however increase the alienation felt by he students towards relating climate change and sustainability to something that they themselves find as a challenge. If they themselves had the chance to discover the challenges of sustainability this would might empower the students to a larger degree for a more sustainable lifestyle and increase the learning dynamics in a longer perspective.

After this the presentation turns to describing what is most important when it comes to the green house gas emissions and what type of items are the major contributors to these emmissions. The presentation describes some of the things that are included in this category, such as clothes and electronic devises. Flight travel is also considered, showing that a trip in Denmark has no effect compared to a trip to Italy or Thailand. Food production, meat consumption and food waste are also aspects included in the presentation material. Illustrations and images are integrated in the material in order to make the costs of production more understandable for the students. The following picture is a presentation of what is needed to make a laptop.



Figure 3. The raw materials it takes to make a computer

Presentation: Reduce, reuse, recycle, appendix 1, slide 17

The purpose of the map is to make the students see what we use energy on in global society and hence why we have so large CO<sub>2</sub> emissions. The map shows where all the raw materials which is needed to produce a laptop is coming from, and how they need to be processed in order to make the components to the computer.

*“At the same time we must again remember that there are only a limited amount of all raw materials. Something like silicon, we might not run out of right away, but many other metals are rare and there are only a few places in the world where they exist. Therefore, we cannot just continue to extract new materials”* (Manuscript, Reduce, reuse, recycle, appendix 2, pp. 11, trans).


A laptop is something that the students can relate to in their everyday life, because they all own one. The slide enhances their understanding of the products they buy, where it comes from and how much it takes to produce it. However, the students need a computer in their everyday life because the education system is constructed in a way that you need a computer, but also just that it is a norm in society that everyone have a computer. Therefore this knowledge of knowing the energy consuming process of making a computer is double sided. On one hand it makes the student aware of how many resources it takes to produce the computer, but on the other hand the



student is quite unlikely to be able to change the global production process as an individual. This might lead to apathy because of this contradiction. The education system requires everyone to own a computer, and at the same time, they inform the students of the costs and consequences the production has on the environment. It creates a dilemma for the individual, where they are met with incompatible expectations. They need a computer, but they cannot do anything to change how it is made.

#### 5.5.4. The consumer perspective

In the last sections of the presentation it turns to the solutions: what can we do to prevent climate change? The last slide is a list of the different things that are bad and good in relation to sustainability and green house gas emissions.



## Fremtidens forbrug

<p><b>Mindre af disse ting:</b></p> <ul style="list-style-type: none"> <li>- Lange flyrejser</li> <li>- Kød</li> <li>- Forarbejdet mad</li> <li>- Brug-og-smid-væk-ting</li> <li>- Gadgets</li> <li>- Madspild</li> <li>- Bilkørsel</li> <li>- Affald</li> </ul>	<p><b>Mere af disse ting:</b></p> <ul style="list-style-type: none"> <li>- Ferier i sommerhus eller ødegårde</li> <li>- Frisk frugt og grønt</li> <li>- Kvalitetsprodukter</li> <li>- Genbrug</li> <li>- Kulturelle oplevelser</li> <li>- Cykler og offentlig transport</li> <li>- Reparation og vedligeholdelse</li> </ul>
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Figure 4. Trans: Future consumption. Red list: Less of these things: Long flights, meat, etc. Green: More of these things: Vacations in summerhouse, fresh fruit and vegetables, reuse etc.

Presentation: Reduce, reuse, recycle, appendix 1, slide: 33

This slide illustrates how the future consumption should look like if we want to live sustainable. *“If we are to avoid dramatic climate change we need in the future to spend more on services and less on things that use resources”* (Manuscript: Reduce, reuse, recycle, appendix 2, pp. 17, trans).

In the interview with the project leader Synnøve Kjærland, in response to how she thought that this information was intended to make the students change behaviour, she said:

*“It is silly to just throw out things, when you can see how much energy it takes to produce things, is it not better to reuse it? Maybe one tries to appeal to the common sense. It makes no sense to produce a lot of food and then just through it in the trash if there is scarcity of it.”* (Kjærland, appendix 3, pp. 9, trans).

On the background of the information given in the presentation, the appeal is that the students needs to use their common sense, in order to recognize the environmental sufferings caused by over exploitation. A problematic aspect of this could, however, be that the suggestions given about sustainable consumption might conflict with the structures around the students. The students are encouraged to bike and use public transportation, but maybe there are no good bike lanes to school or an insufficient public transportation system. It leads to fundamental questions about who is responsible for the establishment of a changed behaviour towards the realization of the climate goal presented. We can appeal to the individual student to change behaviour, but this request needs to go hand in hand with the establishment of structures and politics, that supports and encourages improved conditions for a more sustainable lifestyle.

#### **5.5.5. Sustainability as something common or individual**

In the introduction of the presentation the following is stated:

*“The Climate Embassy works as mentioned with climate and what we are going to talk about will contain a little about climate change, but first and foremost it is about solutions. It is not any of us in this room who is to blame for the problems of the climate, but it is us who are going to inherit the society that has created the problems, and it is also us who come to live with them. Therefore it is important that we think about it and become aware of what we can do differently and what society can do differently”* (Manuscript, Reduce, reuse, recycle, appendix 2, pp. 4, trans).

The interesting aspect here is that the climate crisis is presented as something that we have inherited and that we now need to fix together. The students themselves are not ‘to blame’ for climate change but have to find solutions to fix it. The intention is that the students should not feel

guilty about that climate change is happening, but feel encouraged to do something to counteract it. However, saying that the students are not a part of the problem might risk losing the ability to view critically one's own behaviour and how this affects the surrounding society because it was the past generation who did something wrong. This makes the challenge of sustainability a challenge that is not related to the individual in some way. The problem of this might be that the students do not get the chance to experience the conflicting nature of their behaviour, encouraged by the norms of society (like buying new gadgets) and the environmental considerations connected to this. This could risk increasing the alienation felt by the students towards the problematic of climate change if they do not get the chance to relate their own reality and behaviour to the questions of sustainability. The presentation, however, makes the students aware that climate change is a challenge for the society as a whole. One slide is showing the students that it is several actors in society that are to solve the climate change challenge. The focus of the presentation "Reduce, reuse, recycle" is however on what the individual can do.



Figure 5. Presentation: Reduce, reuse, recycle, appendix 1, slide: 9, trans

In the manuscript, the students are supposed to reflect on the different actors that should act in mitigating the climate challenge. Some of the answers they could come up with from the manuscript were examples of people that had done something in their everyday life in one way, and how they could have done it in a more energy-saving way. Another answer was that the

politicians could do something (taxes on CO<sub>2</sub> or a plan to cut down on oil consumption), or that the companies could invent new technology and produce goods more climate friendly (Ibid.). *“One could hold hours of presentations on all the different elements. But today it's about you and me and what we can do.”*(Manuscript: Reduce, reuse, recycle, appendix 2 pp. 8, trans). The climate change challenge is a complex picture, but the lack of connection between the everyday life and the political sphere from the enlightenment of the students might risk preventing action, especially if it does not address the important but also conflict sides of the political sphere in relation to the everyday life.

#### **5.5.6. The Climate Ambassadors as role models**

On the webpage where new Climate Ambassadors are being recruited, are they encouraging everyone who is interested in environmental issues to participate as a volunteer. The introduction says:

*“If you are passionate about climate or are curious to learn more, then The Climate Embassy offers a free introductory weekend where you will be educated as a Climate Ambassador, so you can bring your climate knowledge into play and use it on specific projects.”* (The Climate Embassy, 15-04-2015, trans).

As one of the Climate Ambassadors, Lotte Jensen says about why she volunteered as a Climate Ambassador *“I thought it was interesting to come out and spread knowledge about environmental issues and climate change. I also wanted to have a dialogue with the students and hear what their thought was about these issues”* (Jensen, appendix 5, pp. 1, trans). In this way, the Climate Ambassadors also get something out of their work since they get to test their knowledge and learn how to communicate it to an audience, which has little experience with the topic. An important aspect of the Climate Ambassadors in The Climate Embassy is the inherent youth-to-youth concept where the Climate Ambassadors work as role models for the younger students, which they teach.

*“The role model works and the volunteer role model works even better. (...) we experience children down to 5<sup>th</sup> grade who are impressed when they hear that the Climate Ambassadors do not get any money, then it must be important. If it is that important then I must listen and find out*

*why it is so important. It is strange and I have not been aware of that before. When we talk about what was the best thing, they [the children] often refer to The Climate Ambassadors” (Kjærland, appendix 3, pp. 2, trans).*

Also the high school teacher Amalie Zeeman explains: *“I think it is exciting when something new happens in my teaching (...) it gives life to the teaching when someone new comes from the outside. It is also something else to have someone who is a student themselves instead of me who are their teacher that has to evaluate them” (Zeeman, appendix 4, pp. 3, trans).*

The Climate Ambassadors play a central role in the work because they work as someone who inspire and engage other young people in the sustainability agenda according to Synnøve Kjærland. Amalie Zeeman also highlights the potential of ‘someone new’ entering the classroom. From a strategic point of view the role model might work if the students can identify themselves with the person. The student needs to have a pre-understanding or values, which are in correspondence with the role model for it to work. If the Climate Ambassador actually works as a role model, this could from a critical theoretical perspective be problematic. The role model could create an atmosphere where the students forget to be critical towards the things the role model says, creating a faith that the role model knows best. This might prevent conflicting values to be discussed in the situation and thereby block an opening for deeper understandings of the climate change problematic. One aspect is the student’s immediate reactions; another aspect is what happens if a student acts in the way the campaign wants. This is either something that The Climate Embassy has evaluated on or something that the empirical material of this thesis can answer. However, the interviews show that everyone doubt that the short presentations make a difference in accordance to the action of the students afterwards. However, the role model could maybe make a difference in these short presentations.

*“I do not think it is wasted [the short presentations] (...) those of you [Climate Ambassadors], I can tell the difference when any of you stand in front of a class and say something and when it's me that says something, there is a difference, it works better, it's closer.”(Kjærland, appendix 3, pp. 12, trans).*

The Climate Ambassadors have a communicator role of important climate change knowledge and they have a motivating role for the students by introducing them to new ways of thinking about the environment. However, there is a risk that when the strategy becomes “help to personal development or empowerment” criticism becomes impossible and it instead induces a feeling of guilt whenever the intended behaviour fails. The problem with this is, that any attempt to think about idealistic and utopian alternatives is limited. The Climate Ambassadors goal would in an ideal state be to facilitate an open space where dreams and alternative visions about a utopian future could appear. A space where the student’s imagination was stimulated and not regulated by prescribed suggestions and fixed problematic cases. The ultimate disassembling of counter power happens at the moment when the dominated person incorporates the dominating person’s perspective. When this happens the students finally give in to the strategic rationality instead of exploring new opportunities. In a broader perspective, the problem is that criticism, which is a basic dynamics in a democratic society, be overridden when counter power reduced to a symptom of the need for help.

## Analysis part 3

### 5.6. Rationality, communication and action

#### 5.6.1. Small tasks to engage the students

*“The presentation is thought of as a dialogue between the students and the climate ambassadors. Here one could think about including the student’s own knowledge and thoughts about climate change and the solutions that they have already seen in other contexts. To increase the understanding, make the students contribute to help describe the concepts and knowledge, which is introduced to them”* (Manuscript, Reduce, reuse, recycle, appendix 2, pp. 3, trans).

Above is the description on how the presentation on sustainable consumption is supposed to be done. It should be a dialogue where the Climate Ambassadors talk together about what climate change is and investigate possible solutions to this. In order to do this, the Climate Ambassadors hand out small tasks where the students have to find solutions. Here is one example:

**Task: Clothes, things and recycling.**

Purpose: With the knowledge of their own consumption and the facts they have just been presented with, they must activate their creative skills to come up with ideas for how to change behavioural patterns. Here it is possible to focus on the community as a possibility for behavioural change.

-They sit in groups and based on their knowledge of their own and peers clothes consumption, 'things and stuff' consumption, find three specific proposals for initiatives that could alter people in the same age's habits in a climate-friendly direction.

- They could possibly do something together in the community of the class? Like the school? As a municipality - that made it more fun to change habits? They must then present to the class.

Manuscript, Reduce, reuse, recycle, 2012, pp. 19, trans

The students are encouraged to think about how they can change behaviour in order to be more climate friendly. In general all the tasks, which is given to the students through the presentation, is trying to incorporate the notion of the climate challenge as something common. It should be a common strategy to do something. The students are still thinking within the 'box' of consumption as a behavioural thing that need to change. Behaviour, also as a collective, thereby becomes a strategy to avoid climate change. In the perspective of critical theory this would be argued to not address the fundamental problematic of the societal structures and the norm culture in society that needs to be changed. That one of the suggestions is how they can do something at the school or the municipality could encourage the students to see the connection between the societal structures and the everyday life of the students and maybe create an involvement in changing some of the structural conditions for the way we all consume and in this way create change.

**5.6.2. Possibilities for action among the students**

The project leader Synnøve Kjærland emphasises that they have a lot of focus on not to be moralising, and that the students should not feel like anyone is pointing fingers at them (Kjærland, appendix 3, pp. 9, trans). Even though The Climate Embassy tries to not make the student feel guilty, it can be hard because the students live in a world where they do consume and now they are told that what they consume could be harmful. The high school teacher Amalie Zeeman had an

experience in her class where two Climate Ambassadors were making a presentation about sustainable consumption and they talked about flight travel. “.. *one time when I evaluated with the class there was kind of bad mood in the class and somebody felt targeted, there was someone who were going on vacation to Australia, and it was presented like, you were almost a bad human, and that is not the purpose of it*” (Zeeman, appendix 4, pp. 7, trans). Hence, there is a fine line between enlightenment and an unintended production of guilt. A personal experience in teaching about climate change was that it is difficult to say that the students should stop buying a lot of new things but instead reuse stuff like clothes. It is well-known that when you are young you are highly influenced by the consumption culture, which exists among many young people, and that it is not cool to wear reused clothes. When the present author, as a Climate Ambassador, was out and telling the students to reuse their clothes because it is good for the climate, it was quite clear that the students are not indifferent about climate change, but they are affected by the contradictory consumption culture. The Climate Ambassador Lotte Nymark Jensen also supports this interpretation from the experience: “*I think you just want to fit into a group. People that value nature are not being valued in the western culture. Norms play a big role – what others do matters more.*” (Jensen, appendix 5, pp. 3). At a presentation, the present author was once asked “*What do you do yourself?*” It was hard to answer such a question, and even though the answer was “try to eat less meat and reuse clothes”, it was obvious that these things are not enough if we really want to do something about climate change.

We are highly influenced by the norms of others and the structures we live under, which is why it can also be hard to advocate for sustainable change within the current system. What is advocated by the Climate Ambassadors is that the individuals need to consume differently within the same system as we have today. In the optics of critical theory this will not lead to real change since we do not challenge the reality we live in and try to develop it further by questioning some of the contradictions, which we experience. We will only reproduce a consumption-rationality or buying our way out of the problems. This attitude might overlook some of the more fundamental aspects that govern how we act, such as the consumption culture of buying new clothes. In relation to the case, through the interviews we can see that it is doubtful that the students actually go out and make a difference even though they know and care about environmental problems like climate change. The norms of society, which also foster consumption, are internalised in the individual, but also a concern for nature is internalised. As Amalie Zeeman tells: “*(...) there is plenty of room*



*to discuss, but they pretty much agree all the time, they believe what is political correct. It is clear that the environment is the most important, at least they say so. (...) someone thinks about it, but it is far from their everyday life.*" (Zeeman, appendix 4, pp. 8, trans). The students do care about the environment, but in some way they do not seem to act on it in their everyday life. Amalie Zeeman points to the fact that it is far from their everyday life. From a critical theoretical point of view this paradox could be discussed from the description of alienation. The discussions in the classroom about sustainability stay on a level where we can all agree that 'we need to do something', but then the discussion stops.

The example with the student feeling guilty about flying to Australia is a fine picture of the contradictory nature of the education situation and the student's everyday life. The student wants to fly to Australia, but The Climate Embassy tells her that this is wrong. The important part is that this leads the student to feel guilt instead of looking at why one has this need of flying far away, or why societal culture foster a travel mentality. From a critical perspective, instead of guilt this contradiction should lead to criticism of why this is even happening.

Instead of pointing fingers at problems and repeating obvious contradictions within neo capitalistic consumer culture, the Climate Ambassadors have to stimulate the student's utopian imagination as well. Clarifying the real costs and consequences that our current lifestyle causing the environment is important, but in order to take the critique a step further, we need to create a space where dreams, utopian ideas and alternative solutions can grow.

## **Analysis part 4**

### **5.7. Reproduction of status quo or creations of utopian imagination?**

In the above sections the short presentations about sustainable consumption from 2012 have been discussed. Since then, The Climate Embassy has been developing their presentations because of a belief that these short presentations do not work that well in relation to actually making a difference in a societal change perspective. Synnøve Kjærland tells:

*“In the last couple of years the Climate Ambassadors have been more active in making the actual presentations, it has gone more from top down to from the bottom. (...) I do not think the approach of being “the guest of the week” is working that well. (...) I think the biggest difference we can make is where we can make longer projects which are closer to the students’ everyday life” (Kjærland, appendix 3, pp. 3, trans.).*

Synnøve Kjærland is aware that these short top down presentations are not working that well and that longer projects which are closer to the students daily life is working better when it comes to the societal change perspective. This is in accordance with some of the considerations presented in the theoretical part on critical utopian action research, where it was argued that suggestions for change should emerge from the small conflicts which the students experience in their surrounding environment, and the teacher could help bring it up on a bigger scale. In the following, however, a focus will be kept on the short presentations and the possibilities for change, which could lie in those.

The interesting aspect is that if there is a room created in the education situation to address climate change in another way than by the rationalities of consumption or scientific solutions there is an opening towards the common room of the class to address the values, which are important for the students. One aspect, which is an opening for The Climate Embassy, is that the volunteering Climate Ambassador breaks with the traditional teacher-student relationship. The intention is to make room for a further exploitation of the subject and help them ask questions which are outside of the normal rationality of the teacher-student relation, where there typically is a correct answer to the questions being asked. As seen in the second part of the analysis, the tasks that were given out also have multiple answers so that the students can come up with different approaches to change. That the students are taught by and interact with someone different from their normal teacher might help them use their imagination to a larger extent. This is also something that was realised by the teacher Amalie Zeeman who used Climate Ambassadors in her class. *“(...) it gives more life to the teaching when someone from outside comes in” (Zeeman, appendix 4, pp. 3, trans).* The Climate Ambassadors, as a facilitator of communication that is “closer” to the students, might make room for discovering alternative answers to the climate challenge. A thing that could be a potential for change is the presentations attempts to make sustainability a common matter. In relation to figure 4 that addressed the future consumption the students are given a final task in the

presentation: *“Each one should write 2-3 things down as they can imagine that they will change from the day today - or write 2-3 things that they think might help change school emissions → followed up with a plenary discussion where two or three students read aloud what it is they have written.”*(Manuscript, Reduce, reuse, recycle, appendix 2, pp. 18 trans). The aspect of what the school can do to lower the emissions have the possibilities of both making the students aware of the structural possibilities around them to change, but also to see that how the school is structured affect their ways of behaving. In this way practical reflections about the social and sustainable elements of everyday life could emerge and collectively be changed at the school. A common discussion about the structures at the local level can open a debate, which is not based on consumer rationality and traditional solutions. It is important to involve the students in a discussion about values and how they imagine, dream and see the school as a part of a sustainable future. This might be an alternative way of addressing values and create space for utopian ideas. When the students see how the structures of the school affect their possibilities for sustainable actions, it can establish a new awareness that has potential to be scaled up to a more general consideration of the fundamental conditions for our every day life.

### **5.8. Sub conclusion of the analysis – is there a societal change potential?**

The Climate Embassy is a project that wishes to contribute to a better understanding of sustainability and to engage young people in finding solutions to the problems of climate change. Going through the education material there seems to be a belief that through natural science knowledge and guidance in behaviour from this, one can create change in society. Critical theory does not reject the importance of enlightenment but rather that we need to be aware that the way we are enlightened might risk prevention of criticism.

As we have seen from the above, the presentation on sustainable consumption is in many ways relying on the consumer system as a way for the student to make a difference in relation to climate change. There is a belief that there is a real possibility for the individual to consume or invent new technical solutions as a way out of the problem. Believing that this is the rational thing to do might cover up the fundamental problems of overconsumption. If we are taught that we can prevent climate change by buying different things, we are in a way being fooled. However, making the students aware of the causalities of their consumption and its relation to climate change and other

sustainability questions might be the first step on the way for them to become critical towards the contradictions which appear between present day consumer culture and wanting to better the environment. As Adorno and Horkheimer, with inspiration from Marx, described about a commodification of everything, even humans. From the education material we see that in our modern world it is difficult to describe sustainability outside of this commodification as well. Sustainability has in some way become a commodity, which can be traded on the market like everything else. Sustainability becomes a personal matter of whether or not to buy, and this create ethical problems because sustainability concerns a strong ethical understanding through time and space. The question, then, is how to educate the students to become democratic citizens that discuss the values that we together want society to be governed by, instead of educating people to become consumers with an individual responsibility to decide what is good or bad. The clear problem from the above is pointing towards a lack of change from the short presentations. How can it be that students who are interested and engaged in the climate agenda do not seem to change their way of acting in society? In the light of Adorno and Horkheimer, mass production and its associated culture has made the individual believe that the '*conventionalized modes of behaviour*' are the only rational ones (Adorno and Horkheimer, 1997, pp. 28). In present society, consuming goods, eating meat and flying are the 'normal' things to do and this might be the force that prevents the students from acting. The information they get about climate change is inside the same 'box' of consumption and therefore no critical thought will be created in relation to structures of society.

Adorno and Horkheimer's analysis of society can thus still be used on present day actualities and problems. The point in relation to the Frankfurter school is overt and may be stated a bit simply like; Thinking is under strong influence from our market rationality. It is however a very important point which is clearly not reflected too much upon since we keep living in a society full of contradictions. In the material from The Climate Embassy, tendencies have been presented which show that we do not come up with any new ways of thinking or any new reflections on what to do in relation to a more sustainable future because we keep having the same answers; consume differently. The important point is that we forget to address why we need to consume differently. In the presentation we need to consume differently because the earth is suffering and there are forest fires and melting ice on the poles. The question is whether this is something that the student can relate to and feel as an ethical consideration. The ethical considerations and the

values we want society to be governed by should be central before we can ask what to do in order to achieve this. An organisation like The Climate Embassy addresses climate change issues and solutions with the best intentions. The effect of their approach might work in the way that the students are presented to the issues and thereby become aware, but it is however questionable if there is a real effect for societal change. As suggested from critical utopian action research the engagement and suggestions for change needs to come from beneath. The discovering of values has, nevertheless, to come from within the subject (the student in this case) when we start to question one another in a dialogue and the subject discovers the contradiction within one owns views. This is also known as the Socratic way of discovering the truth. We cannot tell each other the truth because the truth lies within the individual. But we have to help each other to discover this truth. In this way we might also mitigate the feeling of guilt in the individual and begin a constructive self-reflection on the wants and needs we have in our daily life and how the surrounding society affects this - this might be where the immanent critique can emerge. The difference in effects between the top down and the bottom up approach is also something that the project leader of The Climate Embassy has noticed; their project makes a bigger impact when they students in groups discover sustainability questions in relation to their everyday life. However, as explained in the funding sections, applying for money to the projects still demands an amount of certain outreach and natural science focus. So, the surrounding structures of what has the ability of being funded sets limits of doing long projects in which the students themselves define from their everyday life what they find to be the problems.

## **6. DISCUSSION**

The discussion will try scaling up the concrete case of The Climate Embassy to a broader discussion about how we deal with issues of climate change and sustainable change on general societal level. The discussion will therefor also look at how and if the normative ideal of critical theory can be used as a change potential also on broad societal scale.

### **6.1. The consumer approach to sustainable change**

The Climate Embassy is a project that whishes' to contribute to a better understanding of climate change and to engage young people in mitigating this. The rationality of the case was to a large

degree that through demanding the right products and stop buying what causes harm to the environment we could reach a more sustainable society. The Climate Embassy might to a great extent reflect the rationality, which are present in rest of society, where the consumer as a political driving force seem to be a general believe of being able to bring significant change. As The project leader of The Climate Embassy explained that they try to appeal to the common sense of the students (Section 5.5.4.). The political consumer is driven by a self-governance to decide what is right or wrong and through education the individual can learn what is right or wrong from a sustainability perspective, and through their common sense act in accordance with what the individual find to be important. From the rationality of the economic system The Climate Ambassadors are “the helpers” to make the pupils become more aware of their environmental impact. The images showing the awful things that can happen if we do not act towards climate change stands as a picture to remind the students that they have a problem with their behaviour and that they need to reduce the individual ‘risk-behaviour’. The question is if the student will become a better citizen to be convinced that they have a problem with their behaviour? If we convince the students that it is their behaviour that is the problem it might prevents criticism towards the structures of society. That they behave in another way (maybe keeps eating meat) is more like a confirmation, that they need help to realise the consequences. The Climate Embassy is an example that the lifestyle of the individual is a key-concept in the modern discourse, where the question of the general life conditions is diminished in importance becoming marginalised in the public discussion sphere. The increased individuality of values generates blindness to the structural issues that burdens the individual's quality of life and the environmental conditions. The Climate Embassy tries to avoid ‘pointing fingers’ at the students by having a positive change agenda where they student can find fun alternatives (e.g. concerts) to the environmental harming products. However, things like a computer is a need in modern society and could therefor create dissonance between buying what society culture ‘demands’ and the knowledge of how much energy it took to produce this computer. We can ask ourselves if the stigmatising discourse towards “environmental unfriendly people” is a good strategic tool to prevent bad environmental behaviour. The most important question is however if marginalisation and stigmatisation will increase the citizens welfare and capacities to think new? When environmental promotion uniquely targets the areas where the individual can - and will - held personally accountable, it is not just unacceptable from a human point of view. In a socio-economic perspective, it is also questionable whether the interventions have the desired effect. As we saw from the example of

case the balance between avoiding blaming people and enlightenment of the effects of their behaviour is very difficult, since this rationality can cause guilt felt by the individual. Attempts of moving focus towards the contradictions which exist between the demand for sustainability and other needs in society should therefore be encouraged. Focusing on these contradictions and exploring how to overcome these might open up for a more constructive discussion of how to minimize these contradictions and maybe questions about how the norms of society are affecting our consumption behaviour.

## **6.2. Dialectic of enlightenment in the bigger picture**

One could argue that it is the human desire of controlling and dominating nature through science that has created the problem of climate change and other environmental problems in the first place. As a consequence of our instrumental understanding of nature, an alienation and a lack of general understanding of nature has been created, thereby producing the problems we face today. The first dialectic which contributed to the creation of the problem was the liberation of humans of their otherwise nature dominated status: the rise of economic and material wealth. However, this doubles back at humans when the aspects of nature, which we have overseen emerge, such as the phenomena of climate change. The interesting aspect in the objective of this thesis is that the way in which societies handle these problems will be entangled in the same dialectic. By this is meant that we do not fully use our rationality because we are governed by the new myth of enlightenment, once again we oversee adverse effects that can double back at us when we try to fix the problem within the current system. On global scale the solution to climate change could be that we organize our current economic system in a way so that it takes into account the externalities, which the system itself has created, e.g. putting a tax on CO<sub>2</sub>. However, the problem of this approach is that it is a technical way of solving the issue, people are in a way not changing - only the system. This was problematized by critical theory in the sense that whenever the dominating rationality takes over there will be an individualisation of the values diminishing the public spaces in which we talk about the values which we want the democratic society to be governed by. Through the systemic approach people will not change their understanding and relation to the problem, only adapt to the system. People will still consume, but the system will change their behaviour by changing the prices on the different goods. However, in perspective of present democratic society such systemic changes are only possible if people truly find the mitigation of climate change important. Therefore before systemic changes a broader deliberation

and understanding of sustainability is required on small scale. This is why the discussion on values and ethics is extremely important for otherwise these bigger changes will not happen. This is, however, a question about how to change the social setting in society such that we create spaces in which these values can be discussed, in effect establishing a form of bottom up approach to change. It is of course a key question whether it is realistic that people engage in such discussions and are willing to take a holistic look at society if the enlightenment has made individuals be governed by an economic rationality and self-interest. However there is a potential in critical theory because it takes set out in the reality of present society and advocate for a development from this through critique of what is contradictory. On the other hand one of the problems with the bottom up approach is how to make it a global collective movement that can make a difference for a pressing problem like climate change without becoming a dominating culture in itself.

### **6.3. Societal change from beneath?**

Returning to the introduction of the thesis, part of the question was how we are motivated to ask the question of *“what can I do as an individual?”* in relation to climate change. Asking this question can of course have genuine moral motivation, but from the analysis of this thesis I will suggest that other forces are at play. In the light of critical theory the individual is heavily influenced by ‘the norms of the masses’. One thing that was interesting was the observation of ‘political correctness’ by the high school teacher Amalie Zeeman among her students. People have the right attitude towards the environment, but they value travel and consumption higher. From a critical theoretical perspective these ‘selfish desires’ might not be the true nature of humans but the suppression of the individual by the mass culture and the dominating structures in society. My hypothesis is therefore that asking the hard moral questions of climate change is not motivated by ethical reason, but, on the contrary, we ask the questions because it has become a common societal discourse to do so, and not many reflect on the actions that are required (albeit, this is not always the case). People are in some way motivated, uncritically, by the norms of others and therefore we do not act. The notion of the political consumer and the individualisation of the values are strongly related to this. The less room we have with each other in the public sphere to critically challenge each other’s views and motivations the more we will (without noticing it) be prone to the opinion tyranny of the masses. It is, however, difficult to find a solution on how to make people discover that they have adopted the values of others instead of having their own motivations, indeed this is



an old problem. In ancient Greek, Socrates walked around talking to people to help them find the truth within themselves instead of teaching the truth. As Socrates explained after a discussion about beauty: he benefitted from the discussion since he found out that it is so difficult to define beauty (Plato, 1964 [428–348 or 347 B.C.E.]). I think we have a lot to learn from this Socratic dialogue style - also in a sustainability context. It makes no sense to talk about actions before we have talked about what we value and how we want the world to be. Nevertheless, helping each other in mutual dialogue determine what kind of world we want is, as we have discovered, prone to domination of the meanings of others. Yet, arrangements can exist where room can be created for real discussions that end with an individual realizing that - I have benefitted from the discussion since I find it so hard to define sustainability. I do not have the final answer on how to approach the challenge of global climate change, all I can say is that I think that believing in the political consumer to solve the problem is too easy in a world with problems as complex as ours. We need each other to critically look at the different trajectories towards a sustainable future.

## 7. CONCLUSION

Through education the mission of The Climate Embassy is to inspire and engage Danish students in a societal change towards mitigating climate change by reducing the emission of greenhouse gasses. This thesis has investigated a presentation about sustainable consumption in which the students are introduced to the multiplicity of factors that impacts climate change, to the effects on a global scale and to the ways in which human consumption affects this. The presentation shows how The Climate Embassy interprets sustainability and climate change mitigation as matters of individual choice and responsibility, rather than systemic change by explaining how the students can alter their behaviours towards a more sustainable lifestyle. The aspiration of The Climate Embassy is to create a link between the everyday choices of individual consumption and the effects of climate change on a global scale and encourage that change is possible by changing behaviour. A central strategy for The Climate Embassy is the volunteers, “Climate Ambassadors”, who act as role models for younger students at the targeted schools showing that young people are engaged in the climate change agenda. In the light of the theory set out for this thesis, Adorno and Horkheimer’s societal analysis, this individualisation of values in society is a general tendency in modern society, which is governed by the instrumental rationalities of economics and science, where everything becomes commoditized. It is clear from the analysis that the case is heavily

affected by a dominating rationality saying that change is possible through the right consumption choices. As imposed in the analysis, there are tensions between the demand for sustainable societal change and all the other goals and needs of society and these tensions can create guilt and apathy. The education offered by the Climate Embassy brings valuable knowledge about climate change and perspectives on the need for decreasing consumption and could create reflections about these issues among the students. However, the political consumer rationality does not address the contradictions of a society where consumption in many cases is needed and wanted in order to fulfil the goals of life for the modern human. The feeling of guilt from consumption arguably arises from an internalisation of the contradictions of society in the individual. It then becomes an individual guilt to live in a society that fosters these contradictions. That the blame is put on the individual for the adverse effects of global warming is seemingly risk-free for political and economics institutions since it thus appears that these structures are not to blame or change. The change perspective of climate change becomes a matter of consumption left up to the political consumer and hence the solution to this becomes behaviouristic – we need to alter our consumption in order to achieve the goal of mitigating climate change. This way of thinking may enclose human perspectives on possibilities for change outside of this rationality making us lose our imagination and creativity to deliberate on alternative solutions for the future. It is hence interesting to look at other ways of how to create change through education. Forums like The Climate Embassy where sustainability and climate change can be discussed could be a good starting point for creating awareness and room for discussions on climate change and sustainable development. However, an approach that tells the students how they need to act within the current frame of society could risk neglecting a more transformative debate, including the students' own visions and suggestions. This also closes their responsibility for their own world – how can I understand sustainability and how can my actions contribute to change from this understanding? Making sustainable living a prescription of action from experts will increase the alienation between subject and the action and hence not make the individual feel responsibility for their actions. Making the students themselves define understandings of climate change and sustainable action might make environmental education more empowering in a long term horizon.

## 8. BIBLIOGRAPHY

### 8.1. Literature

Adorno, Theodor., W. Max, Horkheimer, (1997). *Dialectic of Enlightenment*. Trans. by John Cumming, Verso, London

Antonio, Robert, (1981). Immanent critique as the core of critical theory: its origins and developments in Hegel, Marx and contemporary thought. *British Journal of Sociology* Volume 32 Number 3

Bilfeldt, Anette. (2007). Metodekombination med kritisk teoretisk analyse. Optrøkt i: Fuglsang, L.

Clausen, Laura. (2012). Unges bud på Nationalparker I Danmark. Kritiske perspektiver på National og Naturparker' Keld Buciek (red.). 2012. Frydenlund

Elling, Bo (2000). Rationality and the environment: Decision-making in environmental politics and assessment. *The environment as a goal* (pp. 15-67)

Ferland, Poul (2005). Skiftespor – Essays om Adornos Tænkning og tidens kultur, Forlagsgruppen Bindslev, Letvia.

Flyvbjerg, Bent (2006). Five Misunderstandings About Case–Study Research. *Qualitative Inquiry*, 12, nr 2, 219–245

Føllesdal, Dagfin, Lars Walløe, Jon Elster (1997). *Politikens bog om Moderne Videnskabsteori*, oversat og bearbejdet af Karsten Klint Jensen, København: Politiken,

Gjerris, Mickey (2014). Den politiske forbruger kan ikke løfte opgaven. Trykt oktober 2014 I NYTFOKUS

Harste, Gorm (2000). Risikosamfundets Tidsbindinger. In Holten-Andersen, John Pedersen, Thomas Nikolai, Stensen Christensen, Hanne and Manninen, Sanni (red.) Dansk Naturpolitik - I Bæredygtighedens Perspektiv. Temarapport nr. 1 2000, Naturrådet

Honneth, Axel (2005). Behovet for Anerkendelse, Hans Reitzel, København.

Horkheimer, Max og Theodor W. Adorno, (1993). Oplysningen Dialektik, Forord ved Jørgen Dehn. Gyldendal

Israel, Joachim (1973). Sociologisk Grundbog. Gyldendahls Bogklub

Jensen, Karsten K. (2015). Climate Change and Motivation: The obstacle from conflicting perspectives. In The Politics of Sustainability – Philosophical Perspectives. Routledge. Edited by Dieter Birnbacher, May Thorseth.

Kierkegaard, Søren (1841). The concept of Irony, trans. By Howard V Hong and Edne H. Hong, Princeton University Press 1989, p. 328

Kvale, Steiner. (2007). Doing Interviews. SAGE Publications, Ltd. London

Lund Erik, Mogens Pihl and Johannes Sløk (1970). De europæiske ideers historie. Gyldendahl

Læssøe, Jeppe (2000). Folkelig Deltagelse I Bæredygtig Udvikling. In Holten-Andersen, John Pedersen, Thomas Nikolai, Stensen Christensen, Hanne og Manninen, Sanni (red.) Dansk Naturpolitik - I Bæredygtighedens Perspektiv. Temarapport nr. 1 2000, Naturrådet

Marx, Karl (1970). Kapitalen, Bind 1, Bibliotek RHODOS, København: Kapitel 1 Varen

Nielsen Kurt. A., Elling Bo, Jelsoe Erling, Figueroa Maria (2010). A New Agenda for Sustainability. Democracy and sustainability: a challenge to modern nature conservation (p 229-248

Nielsen, Kurt. A. and Nielsen, B. S. (2006), Methodologies in Action Research - Action Research and Critical Theory, In Action Research and Interactive Research - Beyond Practice and Theory, K. A. Nielsen & L. Svensson, eds., Maastricht: Shaker Publishing, pp. 63-88.

Plato (1964). Greater Hippias, Robert G. Hoerber, *Phronesis* Vol. 9, No. 2 pp. 143-155

Shafer-Landau, R. (2010). The Fundamentals of Ethics. Oxford University Press 2010.

Sørensen, Asgar (2012). Kritisk teori. In Jacobsen, M. H.; Lippert-Rasmussen, K.; Nedergaard, P. (eds.). Videnskabsteori. København: Hans Reitzel. Pp. 245-287. Isbn 978-8-7412-5581-1

Vasstrøm, Mikaela (2013). Openings and closures in the Environmental Planning Horizon – An analysis of the participatory potential in a nature protection planning process in Norway. PhD Thesis, Department of Food and Resource Economics, University of Copenhagen

## **8.2. Websites**

CONCITO, visited the 26.05.15 access online: <http://concito.dk/concito>,

CONCITO (2013) Strategy 2014-2018 access online

[http://www.concito.info/sites/concito.dk/files/u60/strategi\\_2014\\_2018.pdf](http://www.concito.info/sites/concito.dk/files/u60/strategi_2014_2018.pdf)

Planet Meeting film (2010): Help the earth. Link:

<https://www.youtube.com/watch?v=k3voOmFLy10>

The Climate Embassy, visited the 26.05.15 access online: <http://concito.dk/klimaambassaden>

Undervisningsministeriet (2015): Klima og drivhuseffect Visited: 14-05-2015. Access online:

<http://www.emu.dk/modul/klima-og-drivhuseffekt>.

### **8.3. Appendix**

All appendix material is located in the separate file attached to the thesis

APPENDIX 1 Presentation: Reduce, reuse, recycle, The Climate Embassy (2012)

APPENDIX 2 Manuscript: Reduce reuse, recycle, The Climate Embassy (2012)

APPENDIX 3 Interview guide and transcript of interview: Synnøve Kjærland (19.05.15)

APPENDIX 4 Interview guide and transcript of interview: Amalie Zeeman (19.05.15)

APPENDIX 5 Interview guide and transcript of interview: Lotte Nymark Jensen (14.05.15)