



UNIVERSITY OF
GOTHENBURG

EXPLAINING PROENVIRONMENTAL BEHAVIOR

**A QUALITATIVE STUDY INTO THE MOTIVATIONS OF
SWEDISH ENVIRONMENTALISTS**

Margit de Boer
Supervisor: Tom Böhler

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Abstract

In the quest to solve environmental problems it is crucial that we understand the basic willingness of people to adopt relevant behavior changes. This study aims to make a qualitative contribution to research in this field by analyzing influencing factors for proenvironmental behavior particularly in Western society. The analysis unfolds in two steps. Firstly, relevant theoretical insights to explain proenvironmental behavior or the lack thereof are presented. The study finds that there are several possible biological and cultural limitations to the potential of humans to behave in proenvironmental ways. It also finds that quantitative studies that have attempted to explain proenvironmental behavior have rendered rather weak correlations and have thus been relatively unsuccessful. As a second step, semi-structured interviews are conducted with a sample of Swedish environmentalists in order to learn more about motivations and influencing factors for proenvironmental behavior. The study identifies as the main influencing factors those that are either of long duration or offer a visual aspect. It also finds that values are important and their place amongst the aforementioned factors in influencing proenvironmental behavior is discussed. Based on the findings, recommendations are made for further research as well as practical steps in which proenvironmental behavior might be encouraged.

***Keywords:** proenvironmental behavior; environmental ethics; psychology; norm-activation; ecocentrism; anthropocentrism; Sweden*

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Table of Contents

<i>Abstract</i>	i
<i>Acknowledgements</i>	ii
<i>List of Abbreviations</i>	v
1. Introduction	1
1.1 Research Problem.....	1
1.2 Aim and Research Questions.....	4
1.3 Perspective.....	5
1.4 Delimitations.....	6
1.5 Context.....	6
1.6 Organization of the Study.....	8
2. Theoretical Analysis	10
2.1 The Nature of Human Beings.....	10
2.2 On Western Society.....	12
2.3 Environmental Ethics.....	16
2.4 Deep Ecology.....	19
2.5 Insights from Psychology.....	21
2.6 Summing up.....	25
3. Methodology	27
3.1 Choice of Method and Delimitations.....	27
3.2 Selection of Respondents.....	28
3.3 Interview Design.....	30
3.4 Analysis of Data.....	31
3.5 Critical Side Notes.....	31
4. Interview Analysis	33
4.1 Types of Proenvironmental Behavior and Barriers	33
4.2 The Development of Proenvironmental Behavior.....	35
4.3 Moving away from the Western Lifestyle.....	41
4.4 Views on the Human-Nature Relationship	43
4.5 The Activation of Norms.....	46
4.5.1 The Presence of Personal Norms amongst Respondents.....	46
4.5.2 Awareness of Consequences (AC).....	48
4.5.3 Ascription of Responsibility to Self (AR).....	50
4.6 Perspectives on Environmentalism in Sweden.....	51

5. Final Discussion.....	54
5.1 Conclusions.....	54
5.2 Summary of Theoretical Contributions.....	57
5.3 Recommendations.....	58
<i>Bibliography</i>.....	60
<i>Appendices</i>.....	67
A. Membership of Environmental Organizations.....	67
B. Geographical Distribution.....	68
C. Interview Guide.....	70

List of Abbreviations

ABC	attitude-behavior-correspondence
AC	Awareness of Consequences
AR	Ascription of Responsibility to self
DSP	dominant social paradigm
EPI	Environmental Performance Index
NEP	new environmental paradigm
PEB	proenvironmental behavior
UNFPA	United Nations Population Fund
VBN	value-belief-norm

Introduction

1.1 Research Problem

Humanity is conducting a crude, giant experiment on its natural environment and cannot afford to fail. We have only one Earth (Gardner & Stern 2002: 3-5).

One of the characteristics inherent to our time on this planet is the unprecedented destruction of the natural world. We are depleting fish stocks, causing air and water pollution, deforesting old-growth and tropical forests, using chemical products, causing desertification and soil erosion, and even taking over from nature in regulating global temperatures. We are causing the extinction of species at a rate 10.000 times faster than before the emergence of humankind (Stern 1992), and greenhouse gas emissions have grown tremendously since 1750, with a 70% increase between 1970 and 2004 (IPCC 2007).

It is the first time in history that mankind has had such a pervasive and disturbing influence on natural systems. Indeed, we may be facing the largest extinction since the Age of the Dinosaurs (Winter & Koger 2004). It is not difficult to imagine the consequences for current and future generations and the ecosystems of the world. Firstly, environmental problems know no borders and do not distinguish between those that cause and those that suffer. Although developed countries contribute disproportionately to carbon dioxide emissions from burning fossil fuels, climate change has especially detrimental effects on the livelihoods of populations in poorer regions. Secondly, if we look ahead in the future one would feel disturbed when imagining the kind of world we will have left for the next generations. Much of our behavior has consequences that evolve gradually and over very long time spans, so that they may not manifest themselves during our own lifetime. Future generations, however, will have to deal with low biodiversity and the remnants of nuclear waste, which remain damaging for thousands of years. Thirdly, if environmentally destructive behaviors by individuals and industry are not curtailed, healthy ecosystems will be disturbed and green areas annihilated to make way for an increasingly affluent and big human population.

Indeed, the affluence and size of the human population have a big impact on the severity of environmental problems. Environmental impact (I) is calculated by the following well-known formulation: $I = P \times A \times T$, in which P stands for population, A for affluence and T for technology. Thus, the magnitude and severity of our impact will depend on the size of the world population, the affluence of such, and relevant technologies and innovations to mitigate the impact (Gardner &

Stern 2002). Population growth is exponential, and the United Nations Population Fund (UNFPA) report *State of World Population* (2010) estimates that world population will grow from the current 6.9 billion to 9.15 billion in 2050. Placing these numbers into perspective, consider that world population in 1800 was only one billion, whereas the latest increase of one billion was completed in just twelve years (DesJardins 2006). Meanwhile the Western consumption society is flourishing, with many people in developing countries aspiring and often succeeding to attain a similar kind of lifestyle. With such a big and prosperous population on its surface it will be very difficult for Earth to provide resources and cope with increasing pollution. As a population we may be approaching the limits of the carrying capacities of our planet.

In the 1960's and 1970's awareness of the magnitude of the problems started to grow. Such books were published as *The Population Bomb* (Ehrlich 1968), and Meadows et al.'s *The Limits to Growth* (1972), later to be followed by *Beyond the Limits* (Meadows et al. 1992). Rachel Carson was one of the first to address the problem of indiscriminate pesticide use and its danger to animal and human health. In her book *Silent Spring* (1962) she portrayed a “spring [which] now comes unheralded by the return of the birds” (103), since bird life in certain areas was wiped out by the use of the pesticide DDT. The book sparked much upheaval in the United States and the publication is often credited for causing the start of an international environmental movement that continues until the present day.

Indeed, by some measures, awareness of environmental problems seems to have increased. It has been proposed that a “new environmental paradigm” (NEP) is emerging in contradiction to the “dominant social paradigm” (DSP) (Dunlap & Van Liere 1978). The latter would be an anti-ecological worldview which is widespread in society, and the former would be a view that is more aware of the limits to growth and the consequences of our actions on the natural order. Support for the NEP is measured through agreement with a number of statements about the human-nature relationship. The support is consistently high in the locations where it has been measured (i.a. the United States, Canada, the Baltic States, Latin-America, Spain, Japan, Norway and Sweden) (Dunlap et al. 2000), suggesting that a new worldview of the environment is indeed emerging. Also, a global survey by Gallup International (2000) found that 65% of the respondents indicated that they believed their government had done too little to protect the environment.

Considering this high level of concern for environmental issues, one would expect a correspondingly radical change in behavior to try and avert the predicted negative consequences. One would call such actions that try to benefit the natural environment “proenvironmental

behavior” (PEB), and can for example be seen in membership of an environmental organization and more environmentally friendly consumer choices. However, such behavior change is not widespread in society. The discrepancy between attitudes and behavior has recently become the subject of much research and an array of different theories and study results have emerged, which on certain issues reach some degree of agreement and in many other issues are contradictory. It is generally acknowledged that the specific nature of environmental risks makes us prone to inaction for several possible societal, biological and psychological reasons. For this reason, some research gives a gloomy outlook for our ability to introduce true sustainable development. However, despite the numerous barriers to action, there are those people that are environmentalists, that do in fact manage to become active in changing their behavior. To understand specific circumstances under which this becomes possible is a crucial aspect in the quest to solve environmental problems, but it is one that has not been fully accomplished by research.

Indeed, much current research into this area has been quantitative in nature. Although these studies have provided valuable contributions towards better understanding proenvironmental behavior, they too have their limitations. While “measuring” environmental concern and behavior in a statistical regression, we should ask ourselves if we know enough about the complexities of the human mind to be confident that we can capture its motivations through a series of coded survey questions that often cannot be further explained upon request. Furthermore, quantitative analyses are incapable of distinguishing between informed and uninformed opinions (Kaplan 2000). It has also been found that demographic, age and gender variables account for only a small portion of the variance (see section 2.5). Hence, more interpretative studies are needed into explanations for proenvironmental actions that pay attention to motivations from a personal not a categorical point of view. Such a qualitative study, which is attempted in this work, can then serve as a basis for further quantitative and qualitative research.

If we better understand human motivations for acting in proenvironmental ways it will become possible to identify strategies to encourage such behavior and to find solutions for the environmental problems we are facing today. This field of study is a crucial addition to research that tends to focus on the development of green technologies and government actions only. After all, even if we have all the technology and knowledge in place to become sustainable, if we do not understand our own willingness to accept the intrusion of these changes in our lifestyles, their development becomes futile.

1.2 Aim and Research Questions

The aim of this study is to contribute to literature that explains proenvironmental behavior. It will do so by firstly reviewing theoretical insights from different disciplines about PEB and secondly applying this knowledge to a sample of seventeen Swedish environmentalists. With these environmentalists, semi-structured interviews will be conducted that aim to understand personal and contextual factors through which respondents arrived at their proenvironmental behavior. The study is exploratory in the sense that respondents are left free to give their own explanations for their environmental behavior, but they will also be approached with questions that are related to theoretical insights from the academic literature, so as to achieve more interesting and meaningful results.

Main research question:

How did proenvironmental behavior come about in the Swedish environmentalists, and what does this suggest for theories related to explaining proenvironmental behavior?

With “proenvironmental behavior” (PEB) I mean any behavior that is undertaken with the intention to benefit the natural environment. It can take the form of for example private-sphere environmentalism, being an active or inactive member of an environmental organization, or trying to influence one's friends or employer to become more green. In this study I have left out political PEB like voting for green parties because the question could be considered too personal by respondents. With “environmentalists” I mean not only those that are active in environmental organizations, but all those that feel strongly for the cause of environmental protection and sustainability and take corresponding actions.

The main question is asked in the context of existing literature on factors influencing PEB. As we will see in Chapter 2, there are many possible hindrances towards behaving in more environmentally friendly ways. It is therefore interesting to study how come some people (in this case the Swedish environmentalists) overcome these hindrances and do perform PEB. The findings can then contribute knowledge and insights to existing theories to explain PEB.

Sub-questions:

- 1. Which proenvironmental actions are performed most frequently by Swedish environmentalists in the sample, and which barriers are identified?*
- 2. Which kinds of experiences were influential in shaping PEB in these Swedish environmentalists?*

3. What is the nature of concern amongst the Swedish environmentalists?

Sub-question 1 aims to unveil which proenvironmental actions are undertaken by the environmentalists and if there are any factors that are seen as barriers for other kinds of actions (the importance of barriers will be clarified in Chapter 2, especially section 2.5). With sub-question 2 I want to address the personal circumstances of interviewees that may have led to their PEB. For example, were there any other persons that influenced their behavior? Were there any special events or experiences which particularly sparked their awareness? Sub-question 3 focuses more on concern; what is the object of concern and what kind of values are held? As will become clear in the theoretical discussion, there are several levels and types of concern in relation to environmental problems, such as a vision where humans are seen as the sole most important beneficiary versus a vision where nature is seen as deserving conservation for its own sake. The questions will be answered by means of an analysis of the interviews and the relevant theoretical perspectives.

1.3 Perspective

At this point an important side-note must be made about the nature of both my own research and the studies on which it is based. The literature on environmental problems and human behavior is predominantly Western, i.e., written by Western researchers studying Western subjects. The articulation of the NEP, for example, occurred in the United States and was constructed based on American values. This Western perspective has a big influence on the shape of the environmental literature. Indeed, the focus of these studies is mainly on what “we” should change in “our” consumer societies. Although general worldwide surveys exist, the frequency of focused research in developing countries on environmental attitudes is low. It is very important that future research fill this gap, so that we can get a more complete understanding of human motives.

Meanwhile the wide availability of Western accounts of environmentalism will no doubt be reflected in my own research, although a big part of this study in fact challenges Western worldviews and systems. Indeed, some of the ideologies that will be discussed take their viewpoints from non-Western traditions. Deep Ecology, as we will see, is one such example and takes its inspiration from Taoism, Native American religions, and other non-Western cultures. Yet I am quite aware that the subjects studied are usually persons from Western cultures, and my own Western (Dutch) origin will no doubt entail that this research will still be biased with a Western perspective. On a closing note, this will not be a disadvantage for the analysis of interviews, since it also means that it will be relatively easy for me to understand the contextual situations of persons from Sweden,

which is a Western society.

1.4 Delimitations

In this study only people with high levels of PEB are interviewed. It may be remarked that people with low levels of PEB could also have been interviewed for purposes of comparison. This would indeed have been interesting, yet it was not my ambition. As will become clear in the theoretical discussion, much is already known about why people may fail to behave in proenvironmental ways, while less is known about why people may succeed. Also, it would be very difficult and sensitive to find respondents with “low PEB”, as they are not normally to be found in organizations and are not passionate to talk about this issue like the environmentalists that I interviewed were. A degree of shame might even be involved. However, if a future researcher is able to offer respondents a financial compensation I expect this would considerably increase the chances that willing participants are found.

A second delimitation concerns the nature of the results and their further applicability. Although this work aims to contribute with a qualitative approach, it must be noted that unlike its quantitative counterparts it cannot produce correlations nor generalizations. The empirical data in this particular study is based on interviews with seventeen respondents, which is a limited sample size. As will be further clarified in Chapter 3 on methodology, efforts were undertaken to introduce a degree of variety in the sample by including individuals from different ages, locations, professions and both sexes. Yet, the limited sample size and the possibility that certain perspectives have been left out means that the results represent the views of the particular environmentalists from this sample, which are not claimed to represent motivations of environmentalists in general. Meanwhile, interviewees from a single country were chosen since previous studies have pointed out that different locations and even different environmental acts (like recycling or littering) are associated with quite different motivations and behaviors (Hallin 1995, McFarlane & Hunt 2006, Olli et al. 2001). This study will therefore attempt to explain the presence of PEB in the sample of environmentalists from Sweden and with these results try to contribute to existing research into proenvironmental behavior.

1.5 Context

Whereas my theoretical discussion focuses on motivations for PEB in general, the interviews are thus confined to a sample in a single country. Sweden was chosen mainly for reasons of

convenience since it is the country of residence of the author. Since Sweden will serve as a backdrop for the sample, this section will provide a brief overview of environmental performance and attitudes in this country as emerges from previous studies and information from government sources.

From an international perspective, Sweden performs well in environmental policy. According to the Environmental Performance Index (EPI) of 2010 (Emerson et al. 2010), Sweden was the fourth best performing country in the world with an EPI score of 86 out of 100 (preceded by Iceland, Switzerland and Costa Rica). The study used 25 indicators in different categories to assess environmental performance for each country. Sweden scored particularly high on the indicators related to the effect of water use on ecosystems, environmental effects on human health, and agricultural policy. It scored lower on indicators related to biome and marine protection, the effects of pollution on ecosystems (particularly of ozone and nitrogen oxides), and fisheries. The latter is due to pressures from the large Swedish fishing fleet on marine environments, and unsustainable fishing methods.¹ For climate change Sweden reached a fair 70% of proximity to the target (as a comparison, the United States reached only 30%).

In 1999 the *Riksdag* (Swedish parliament) outlined a plan to solve all major environmental problems by 2020, presenting sixteen national environmental quality objectives (Regeringskansliet 2011). The idea is to hand over a healthy and sustainable Sweden to the next generation (Miljömål 2011). According to this year's evaluation report on progress of the objectives, the majority of the goals can be reached, whereas five goals will be very difficult to achieve before the year 2020. The five areas with difficulty are somewhat consistent with EPI findings: Reduced Climate Impact; A Non-Toxic Environment; A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos; A Rich Diversity of Plant and Animal Life; and A Good Built Environment. For these goals necessary resources, regulations, and more far-going policy changes are still lacking (Naturvårdsverket 2011).

In relation to the Swedish population, quantitative studies have indicated relatively high levels of environmental concern (Boman & Mattsson 2008, Gooch 1995, Nordlund & Garvill 2002, Widegren 1998). Boman (2008) analyzed results from a survey to find that there is a high level of environmental concern and knowledge amongst Swedes, though they indicate a higher level of willingness to endorse strategies to conserve the environment that focus on governmental action

¹ Particularly, Sweden has problems in the areas of bottom trawling and the Marine Trophic Index. The former refers to a fishing method which is destructive of the flora and fauna of the sea bottom; the latter is an indicator of overfishing.

than strategies in which they have to make personal sacrifices in the manner of changing their lifestyles. Another study of a Swedish sample in the county of Östergötland (Gooch 1995) found that respondents scored high on the NEP scale, with 71% supporting its beliefs and values.

Swedes also generally self-report to consider the environment in everyday life. For example, the Swedish Environmental Protection Agency conducted a survey of attitudes and knowledge amongst 1000 Swedes with relation to climate change (Naturvårdsverket 2008). It was found that 91% of Swedes consider themselves to be climate-aware, and half the respondents indicated that they have a bad conscience when they do things that they think will have a negative impact on climate change. Also, 44% stated that they sometimes consciously choose products or services that they know to have less impact on climate change, and 24% said that they did so often.

For a country where both policies and public attitudes seem to be quite environmentally oriented, much work towards understanding such phenomena still remains to be done. The studies into Swedish populations mentioned above are all quantitative and it would be interesting to explore motivations for proenvironmental behavior from a qualitative perspective in this country.

1.6 Organization of the Study

This study can be seen as consisting of two main parts. First, it must be noted that the study is very interdisciplinary. It researches human motivations, but in order to understand anything about human motivations in relation to PEB, knowledge is necessary from the fields of behavioral studies, environmental ethics, societal studies, and psychology. Therefore, in the first part I will analyze theories from several disciplines that all contribute to explain environmental attitudes and behaviors, and attempt to combine these together in a comprehensive theoretical framework. The review will be accompanied by studies that illustrate the theories, so that a literature review is more or less integrated with the theoretical discussion.

One purpose of this part is to understand the various limitations to PEB on the biological, societal, and individual level. Once we understand the limitations, we can look at the situation of the environmentalist from the sample and analyze the ways in which they succeed to overcome these limitations. The theoretical part further aims to present several possibilities for PEB that are derived from different fields of study. We will see that PEB (and especially the lack of which) has been explained on many fronts: the biological, the societal, and the moral. To have an understanding of

human motivations we need to take into account all these processes.

The second part consists of a methodological discussion and an analysis of the interviews with the sample of Swedish environmentalists. The theory from the first section guides the construction of the questions for the interviews and is used to analyze the results. Subsequently the contributions of the findings from the sample to research on PEB will be discussed.

Theoretical Analysis

In the following pages I will give an overview of the most important theoretical insights from different disciplines. All serve to contribute to understanding the human motivations involved in environmental concern and proenvironmental behavior. I will begin with a discussion on human nature itself, since the way we interpret our biological predispositions shapes much of the other theories that will be presented. Next, I will turn to the cultural and societal factors that are hypothesized to influence much of the environmental behavior of Westerners. The third section will be devoted to the field of environmental ethics, which is relevant especially to understand environmental concern. One influence in environmental ethics, and the subject of the next section, is Deep Ecology, a philosophy that gives interesting perspectives on the human-nature relationship. The fifth section aims to summarize the work done in different areas of psychology. Finally, the last section gives a summary of the theories presented in this chapter.

2.1 The Nature of Human Beings

Although I do not pretend to answer the difficult questions about our nature as a species in this small section, a brief discussion is necessary here. To even start to philosophize or theorize on psychological grounds, the basic questions about human tendencies must always be addressed. These basic questions concern whether we are egoist or altruist by nature; whether we are inherently bad or good; and how societal factors influence any such tendencies. These questions are important because in order to conserve the environment, altruist behavior is often a precondition.

First, on a clarifying note, humans have not gone through significant biological evolution since the emergence of our species, *Homo sapiens sapiens*. Our species started to appear only about 40.000 years ago, which is a too short time period for any significant evolution to occur. Thus, we are biologically the same as our primitive ancestors, whose genetic predispositions developed in a hostile environment quite different from our own (Gardner & Stern 2002). This discrepancy between our old genetic makeup interacting in our new modern environments is sometimes thought to be one of the causes of environmental problems, and is in that light referred to as “mismatch theory” (Winter & Koger 2004). We will return to this idea in section 5 when we discuss psychology.

To some theorists, then, our development in initially crude circumstances has meant that we are

inherently egoistic. In this account, natural selection favored those that survived to pass on their genes to the next generation; altruism towards other individuals impeded this goal. An environmental theorist writing from this idea of human egoism is Garrett Hardin, in his well-known article “The Tragedy of the Commons” (1968). Arguing mostly in relation to the population growth problem, Hardin illustrated the dilemma that according to him would emerge. In his view, humans had no problems benefiting from natural resources in the past, simply since there were not so many people. With population growth, however, a situation would emerge in which many people will want to use the same resource for their own consumption. According to Hardin, then, each individual will strive to maximize his/her own profit from the resource, since they do not perceive their small consumption as posing any problems, and since they know that others will do the same. Also, humans are inherently self-interested and prone to do the wrong thing. The result is that the resource will be depleted sooner or later, and everyone will in fact suffer. This is what Hardin calls the “tragedy of the commons”.

For Hardin, inherent human egoism impedes us from developing a more sensible, sustainable way of using common resources. His argument seems logical; haven't all of us ever felt like limiting our own consumption is useless since it would only punish us, while the rest of the world cheerfully continues with unsustainable practices anyway? Still, I see several problems with Hardin's account. The first concerns Hardin's claim of egoism in relation to the population problem. While it is true that more people will result in more resources being used, this happens both in a moral and in an immoral world, since everyone will need to eat, and breathe clean air. In other words, it may be said that number not egoism would be the primary cause of resource depletion. Secondly, Hardin may be underestimating the capabilities of humans to act in altruist (non-selfish) ways.

The case for altruism can be made on several grounds. For example, it is argued that humans have always lived in groups, and the long infant dependency on adults handicapped the caretaker, making it imperative for others to stay around and provide food (Gardner & Stern 2002). Furthermore, Simon (1992) argues that altruism can be explained even from a purely natural selection perspective. He interestingly shows how altruism is developed from initial egoist tendencies. Simon claims that participation in social learning enhanced the survival of self-interested individuals and they therefore became receptive to it. Humans' tendency to live in groups made social learning natural, and it brought great advantages to the individual since he did not have to reinvent the wheel by trial-and-error learning. What he does not notice, however, because of the fact that there are limits to our reasoning (“bounded rationality”), is that social learning also brings with it norms, and even altruist values that reduce the fitness of the individual, but enhances that of the group. In the

long run, a group where altruist values are strong will become more successful than one in which all individuals are selfish, since these individuals would not learn from others and do not receive the help from others to survive. For this reason, Simon argues, natural selection will eventually favor altruism in persons.

Interestingly, Simon does not claim that humans are always altruist, but aims to show how altruism does not run counter to Darwinian theory. Environmental issues in themselves call for altruist behavior to avert a “tragedy of the commons” in Hardin's account, and others have shown how people sometimes do act in altruistic ways. Kaplan (2000), for example, shows that people are generally inclined to act in pro-social ways, but how certain circumstances impede such behavior. According to Kaplan, people are by nature curious and keen to learn; they hate not being able to play a part. In the face of many environmental issues, however, a person may feel a sense of helplessness as it is difficult to make a meaningful difference in the state of the environment as an individual. Since people hate feeling helpless, they may resort to denial of the problem instead. A tragedy of the commons still ensues, but not for the reasons that Hardin claims. In Kaplan's account it is the barrier of helplessness rather than selfishness that is responsible for inaction to avert environmental problems.

Section 2.5 on psychology will elaborate on further barriers as well as on the influence of social and personal norms on environmentally relevant behavior. For now I would like to draw this section to an end by saying a few words about cultural evolution, which is an important aspect of the next section on societal systems. As already implied by Simon's reference to social learning, we must not underestimate the influence of social and cultural aspects on our choices. Whereas biological evolution has not occurred in *Homo sapiens sapiens*, cultural evolution has. This means that our behavior is a result of the interaction between biological tendencies and cultural norms and values.

2.2 On Western Society

In the previous section I have outlined how different assumptions about human nature lead to various theories about human behavior towards the environment. In this section I will discuss how society and culture (in other words, factors of cultural evolution) can also play a part. Since the sample that will be analyzed in Chapter 4 is Swedish, in what follows I focus on accounts of the different systems of Western society; religious, cultural and economic ones, and how they may have influenced environmental attitudes. Scholarship in this area is extensive but since discussing all

these studies is beyond the scope of this work I will focus on three classical authors (White, Ehrenfeld and Polanyi) that capture the main ideas of this scholarship well.

We start with Lynn White and his analysis of the far-reaching roots of Christianity in Western culture. White (1967) locates the origin of environmental destruction in the West mainly in the Judeo-Christian tradition, by arguing that Christianity is the most anthropocentric (human-centric) religion in the world. He refers to the Bible which states that God chose to create man in his own image, and then told him to dominate over all other species on Earth. Also, whereas many other religions hold sacred certain animals or natural processes, Christianity locates holiness in human entities: saints. Thus appeared a situation in which man is disconnected from the natural world, and treats other species as resources. In a multinational survey Schultz et al. (2000) indeed found that respondents that expressed literal beliefs in the Bible were more anthropocentric and showed less concern for the state of plants and animals.

However, for White this attitude is not only prevalent amongst believers, but remains even amongst post-Christians, since “no new set of basic values has been accepted in our society to displace those of Christianity” (White 1967: 1207). According to White, the only way we will be able to avert the destruction of the natural world is to find some kind of counter-religion or new set of values to replace those of Christianity. It must be noted that White wrote in the 1960's, and as we have seen, a value shift towards a new environmental paradigm may be emerging. Still, humanity is far from having a true harmonious relationship with nature, and it is undoubtedly true that Christianity has firmly shaped modern Western attitudes.

Ten years later, a book emerged which content shared much of White's view on the Judeo-Christian tradition. The title was *the Arrogance of Humanism* by David Ehrenfeld (1978), and forms the second focus of this section. Ehrenfeld relates in the line of White's argument that Christianity has implied a man-above-nature attitude, and like White, contends that our society is very human-centered. His focus, however, is above all on the mindless reliance on science in Western society, which has been a prevalent attitude since the Renaissance. Ehrenfeld refers to adherents of this science frenzy as “humanists”, and argues that we are all influenced by humanist values. Whereas he does not wish to denote all technological developments as bad, Ehrenfeld warns against the arrogance of humanists, who believe that science and reason are the solution to all our problems, including environmental ones. In reality, however, nature can easily be irreversibly damaged, and we cannot foresee the complex environmental situations that may emerge. Yet we continue our pretentious “organizing” of nature, while deep down we know this is not possible. Ehrenfeld

describes the situation very well in the following passage:

As organization spreads it becomes heavily interlinked and terribly complex [. . .] Inevitably the strands of command begin to slip, isolated pockets are created within the structure, then dissociated fragments. Efforts are made to patch the fabric; they may hold for a while, but the structure is now larger and weaker, and unexpected events happen with increasing frequency. Each new patch is greeted with applause and self-congratulation; nevertheless, the feeling grows that reason or no reason, the situation is totally out of hand (141).

This illustration of human behavior in the face of environmental problems may be quite recognizable. How often do we not ignore or deny environmental issues, telling ourselves that surely scientists will find a technical solution to it all? To counteract humanist arrogance, then, Ehrenfeld proposes that we call on our emotions and intuition to judge whether it is desirable to destroy parts of the natural world, or to use pesticides on the land. Also, people must be educated about environmental problems and the limits of what science and technology can do to solve them.

Interestingly, Ehrenfeld does not blame humans as a species for the mismanagement of nature. Instead, he sees our arrogance as rooted in the Renaissance, and it is independent of economic or political systems. It does not even seem to be limited to Western society only, since he speaks of a world culture permeated by the values of science and reason. Of course, it can also be argued that our reliance on science does not have its roots in the Renaissance but in human nature, which naturally seeks to explore and invent like in the account of Kaplan discussed in the previous section.

Whereas White focuses on religion and Ehrenfeld on humanism to explain the dissociated human-nature relationship, there is a third tendency in literature which places blame primarily on the economic system. The classic work to refer to here is *The Great Transformation* (1944) by Karl Polanyi. Polanyi wrote about the transformation from pre-industrial to industrial society, but his ideas have become ever so relevant again in our age that sees a transformation from industrial to globalized society. In essence, Polanyi defied the possibility of a market that is self-regulating, and the practice of treating “nature” as commodified “land”. He calls this a fictitious commodification, since nature is simply the environment around us which we need and should respect, and is furthermore not produced to sell on a market. A market that is unregulated, however, will attempt to put a price on nature and would be free to exploit it to the point of annihilation: “‘nature would be reduced to its elements, neighborhoods and landscapes defiled, rivers polluted, military safety jeopardized, the power to produce food and raw materials destroyed” (Polanyi 2001: 76).

Thus Polanyi, like Hardin, believes that without government regulation nature will inevitably be

destroyed. The crucial difference with Hardin, however, is that Polanyi does not blame human egoism for this, but rather the existence of a common-sense economic system that makes people believe that profit is the most important aspect of life. Polanyi defies this version of human motivations and argues that humans are primarily cultural beings that are not primarily driven by material gains. Instead, Polanyi argues, social recognition is much more important to the individual:

The economic process may, naturally, supply the vehicle of the destruction, and almost invariably economic inferiority will make the weaker yield, but the immediate cause of his undoing is not for that reason economic; it lies in the lethal injury to the institutions in which his social existence is embodied. The result is loss of self-respect and standards (2001: 164-165).

As an illustration of this, Polanyi refers to colonialism. Here, too, the destructive effect does not result from economic exploitation, but from cultural degradation experienced by the colonized, who painfully witness the collapse of long-established social institutions.

When we consider the accounts of White, Ehrenfeld and Polanyi, we see that they have one aspect in common: their focus on Western culture as anthropocentric. All three authors concede that we have misunderstood the proper relationship between man and nature, and that Christianity, humanism and the unregulated market, respectively, result in a tendency to subjugate nature to human wants and needs. Particularly, the practice of commodifying nature is a culmination of the view that nature exists primarily as a resource for humans, a view widely held in society and that can be described as “economic environmentalism”. In other words, nature is deemed of value only to the extent that it serves human needs. Ehrenfeld speaks in this respect of “the humanist trap”:

“Do you love Nature?” they ask. “Do you want to save it? Then tell us what it is good for.” The only way out of this trap, if there is a way, is to smash it, to reject it utterly (Ehrenfeld 1978: 210).

The trap, then, lies in the fact that the question of what nature is good for is asked within a humanist, anthropocentric framework so prevalent in society and must logically be answered in the same framework. The only alternative is to reject the framework itself. The folly of economic environmentalism is also well expressed by Neil Evernden (1999), when he states that the human body is worth \$12.98. Absurd though this economic valuation may sound to us, quite the same is done to nature when it is commodified: reduced to its separate elements and priced for selling on the market.

I believe all three accounts show us how important it is to account for societal influences on our

thoughts and actions. I deem it very plausible that our history from the Renaissance and Christianity and the influence of the unregulated market have created the tendency to be very optimistic about the future, and exploitative in our relationship with nature. The next chapter will address anthropocentrism and counter-views when we discuss environmental ethics.

2.3 Environmental Ethics

Environmental ethics is concerned with studying the moral relations between humans and their natural environment. By looking at the different ways that people philosophize about the human-nature relationship we can gain important insights about which thoughts underlie environmental actions.

As a follow-up to the previous chapter we will start by examining the attitude towards nature that has been described as “anthropocentric”, i.e., human-centric. The treatment of nature as a resource has been termed “economic environmentalism” above. Its accompanying philosophical tradition can be said to be utilitarianism. According to DesJardins (2006), utilitarianism is closely related to the principles of the free-market economy. Utilitarians believe that people act primarily out of self-interest, and that the main objective in life is to achieve the greatest good (pleasure) for the greatest number. Therefore the focus is on avoiding discomfort and pain and giving people what they desire. The fundamental problem with satisfying desires, however, which utilitarians see as an ethical “good”, is that norms and beliefs never come in. For example, many people desire to eat a lot of meat, so beef is readily available in the supermarkets. According to utilitarian ethics, the good is achieved, since the satisfaction of many people is fulfilled and they now feel happy. What is ignored, however, is any ethical considerations about cattle well-being, deforestation, and the pressures of meat production on the general environment. This is exactly the problem of the deregulated market that Polanyi foresaw more than half a century ago. If the market is disembedded from social relations, its “invisible hand” will do nothing to protect the environment unless human wants are at stake.

The rest of Western philosophical tradition has similarly been mainly anthropocentric. Probably based on the Judeo-Christian view of the man-above-nature relationship, it has held that only humans have moral value. This has been rejected by more recent Western thinking that holds that other species besides humans can have moral value too. The distinction is often captured in the instrumental versus intrinsic value argument. The first holds that nature is there for human use,

while the latter argues that species have an intrinsic value independent of human wants or needs. The instrumental version, then, is adhered to by utilitarians. The intrinsic view, by contrast, is associated with a biocentric or ecocentric value orientation. The biocentric stance argues that other living things have moral standing too, since they can be harmed from bad treatment, and can benefit from good treatment. Going one step further, even those natural things that do not have a consciousness like rivers and rocks can be valued. This is associated with an ecocentric value orientation (DesJardins 2006).

Two things must be noted here. Firstly, while anthropocentric, biocentric and ecocentric are general value orientations, there are also in-betweens. For example, many of us would not think twice about killing a mosquito or spider, while we would be much less willing to kill a dog. Second, the distinction in value orientations has been categorized in different ways. Some scholars refer to them as egocentric, homocentric, and ecocentric values; others have called them egoistic, socialaltruistic, and biospheric values; or, simply, anthropocentric versus ecocentric values (Nordlund 2002). In this work I prefer to stay with the original anthro-, bio-, ecocentric division, whereas I accommodate the other values in the already discussed categories “egoism” and “altruism”.

Let us now go back to what was mentioned in the introduction about a value shift emerging in society in the form of the new environmental paradigm (NEP). Dunlap and his colleagues have developed an instrument to measure adherence to the NEP. The respondent responds to fifteen statements about the man-human relationship on a Likert scale (strongly agree, mildly agree, unsure, mildly disagree, strongly disagree). For some statements agreement indicates adherence to the NEP, while for some statements disagreement does. I will here display a selection of the statements:

- Humans are severely abusing the environment (agreement = closer to NEP)
- Plants and animals have as much right as humans to exist (agreement = closer to NEP)
- Humans were meant to rule over the environment (disagreement = closer to NEP)
- The earth is like a spaceship with very limited room and resources (agreement = closer to NEP)
- Humans will eventually learn enough about how nature works to be able to control it (disagreement = closer to NEP)

(Dunlap et al. 2000: 433)

The worldview of the NEP, as can be seen by the statements, is similar to an ecocentric value orientation. It defies anthropocentric, man-above nature thinking and suggests that other species must be respected. In addition, it is aware that the carrying capacity of the Earth has

limits as can be seen by the spaceship metaphor (the fourth statement). This predominantly ecocentric, new environmental paradigm seems to be emerging in many countries at the expense of the dominant social paradigm (DSP) which is predominantly anthropocentric and views nature as a controllable resource.

It has been researched how anthropocentric and ecocentric value orientations influence environmental awareness. Assuming that egoism and altruism are fluid, it can also be researched how these influence awareness. To help measure these value orientations, besides the NEP instrument, different categories of values have been linked to them. For example, ecocentric and altruist values have been associated with self-transcendence values like respecting the Earth and being helpful, respectively. Egoist and anthropocentric values, on the other hand, are associated with self-enhancement values like authority and influence (Schwartz 1992, Stern et al. 1998). Nordlund & Garvill (2002) found that people with more self-transcendence values of ecocentrism were more inclined to be environmentally concerned, while those valuing self-enhancement and anthropocentrism were less inclined to do so. This is important proof that anthropocentrism actually leads to much less environmental awareness than ecocentrism.

In the above we have seen that in the face of environmental problems the object of concern can be oneself (egoism), other people (altruism, anthropocentrism), other living things (biocentrism) or all the living and non-living things of the natural world (ecocentrism). A final object of concern I would like to note is future generations. Do we have moral responsibilities to those people in the future that we have not even met? The Brundtland Commission, convened in 1983 by the United Nations, seems to claim that we do. Indeed, the notion of responsibility to future generations is central to their definition of sustainable development: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987:43). As we recall from the introduction, the Swedish environmental quality objectives follow precisely such a definition of sustainable development. The focus is very much on the future, and the kind of world we wish to leave for our children. At the same time it is often hard for us to care about the anonymous, faceless people that will be walking around on this planet for the next hundreds, thousands of years.

2.4 Deep Ecology

There is one philosophy within environmental ethics that I would like to highlight in this section. It is known as “Deep Ecology” and is worthy of special attention because it breaks away from dominant environmental attitudes in society and locates hope for a more sustainable future in changed value orientations.

Deep Ecology emerged from the Environmental Revolution of the 1960's as a separate environmentalism, advocating a more ecocentric and spiritual worldview than was the case amongst anthropocentric environmentalists. Deep Ecologists take up many of the same issues as White, Ehrenfeld, and Polanyi in speaking out their disapproval of the Judeo-Christian influence, the staunch belief in progress, and the mass consumption culture in Western society. Arne Naess (1973) referred to the dominant economic environmentalism, where the focus lies on resource depletion and other anthropocentric priorities, as “shallow ecology”. Naess argued that a much deeper form of ecological awareness is necessary, and can be found in the paradigm of Deep Ecology.

Deep Ecology can be characterized as a philosophical outlook on a more harmonious man-nature relationship, something Naess (1973) calls an “ecosophy”. It takes some of its ideas from the science of ecology in the sense that it stresses the interconnectedness of all life, and that the balance of ecosystems is easily disturbed. Deep Ecology is further influenced by such diverse sources as Paul Ehrlich, Lynn White, Rachel Carson, Zen Buddhism, Taoism, and 19th Century Romanticism. It takes criticisms from these sources about Western instrumentalist approaches and proposes a reversed worldview that holds that all species have intrinsic value and an equal right to live (Sessions 1995). Such a worldview is then able to question existing values of materialism and reevaluate them from the point of view of the natural world. In the words of Thomas Berry: “The meaning of the term “profit” [. . .] needs to be rectified. Profit according to what norms and for whom? The profit of the corporation is the deficit of the earth” (1995: 14).

Particularly, Deep Ecologists argue that our preoccupation with science and materialism has meant that we have lost an intrinsic connection with our natural surroundings. According to Naess (1995), we often identify ourselves by our bodies and not by our place in the greater natural whole. This disconnection of self from nature has led to alienation, and to a difficult case for environmentalism: “We need environmental ethics, but when people feel that they unselfishly give up, or even sacrifice, their self-interests to show love for nature, this is probably, in the long run, a treacherous basis for conservation” (1995:227). However, argues Naess, if we identify with other species

instead, and realize the interconnectedness of all life, proenvironmental behavior will come naturally and not forcefully to a person. This is the difference between a limited self and an ecological self. The ecological self can for example be experienced when seeing an animal suffer, being in nature, or looking at the stars. Frequent communion with nature can therefore help us realize our ecological selves.

Some Deep Ecologists take it one step further. Chellis Glendinning (1995), for example, claims that Western civilization has become too far removed from the natural world and this is the reason why so many suffer from stress, anxiety and abuse in the Western world. These symptoms, claims Glendinning, are in effect part of a trauma we are going through as a result of our separation from the natural world. Whether in this somewhat radical version or not, Deep Ecologists generally agree that direct contact with nature has a wholesome effect on humans. This assumption has in fact been extensively researched particularly in relation to the biophilia hypothesis. First coined by Edward O. Wilson (1984), biophilia refers to the idea that humans have a genetically based close affinity with nature. One body of studies that has supported the hypothesis found that human exposure to nature leads to more relaxation and attentional capacity than does exposure to urban scenes (Hartig et al. 2003, Mayer et al. 2009, Ulrich 1981).

Another popular way to test this hypothesis has been to assess landscape preferences amongst respondents. The result from this research is that people generally prefer pictures of natural environments over urban ones, especially when there is water present. Also, people tend to prefer savanna-like landscapes over dense forests. This can be explained by the fact that *Homo sapiens sapiens* was at its best on the savanna, a big open space where we could walk more freely than in dense forests seeing our upright posture, and where there were smaller chances of a predator lying hidden somewhere (Ulrich 1993). Finally, other studies have found that a window view on natural elements reduces job stress (Leather et al. 1998) and leads to faster recovery amongst post-surgical patients in hospitals (Ulrich 1984).

Although these studies support the biophilia hypothesis, it is in no way confirmed. More cross-cultural research is necessary to verify that affinity with nature and certain types of landscape is genetically not culturally based. If the biophilia hypothesis is confirmed, however, this lends greater credibility to the Deep Ecology standpoint. At the same time, other aspects of the Deep Ecology philosophy have already been confirmed in research. Particularly, a close contact with nature like Deep Ecologists advocate has been found to predict environmental concern and ecocentric attitudes (Berenguer 2010, Dutcher et al. 2007, Kals et al. 1999, Schultz 2000). For these reasons I believe

Deep Ecology potentially has much to offer. Whereas negative government incentives and diminished consumption are experienced as forced and negative, a greater connectivity with nature may actually lead to a value change and hence to a type of voluntary nature-friendliness, which can lay the basis for a long-term PEB.

2.5 Insights from Psychology

In the previous sections of this chapter we have seen how different biological, societal and ethical factors can influence environmentally relevant behavior. In this section I will discuss which psychological factors are relevant in explaining environmental behaviors in individuals. Firstly we will attempt to explain what it is about environmental risks that makes it so difficult for most people to act to prevent them. We will then discuss correlates of proenvironmental behavior as found by quantitative research.

If environmental problems are so serious, why then do we not all act to create a more sustainable world? We have seen in the previous sections that certain anthropocentric traditions in Western society can make genuine environmental concern difficult. A further cause for our reluctance to act, besides possible egoism, lies in the specific nature of environmental problems. Firstly, environmental problems are often uncertain, since the impact is dependent on many complex factors not only concerning our future capabilities of mitigating them but also the chemical and biological factors at work. The existence of human-caused climate change, for example, is denied by some scientists, while those that do believe in it fail to bring conclusive evidence. This uncertainty is often used as a justification for not undertaking action to mitigate climate change.

Secondly, environmental problems often take a long time to manifest themselves. It has been argued that when our species started to develop, the only threats we had to deal with were imminent and short-term, like a falling rock or the sudden attack of a predator (Ornstein and Ehrlich 1989). Our senses may have adapted to this type of threat, so that we are insusceptible to gradual changes like steady but slow pollution. Also, we are more motivated to act on goals that are beneficial and short-term than goals that are costly and long-drawn like most environmental ones. This is called “proximal cognition” and it explains why many people choose to focus on their everyday comforts rather than spend time and money on actions to prevent future environmental problems that may or may not occur. It also explains why caring about future generations might be difficult for humans (Winter and Koger 2004).

A third characteristic of environmental problems is that they are often invisible to us. Of all their senses humans rely mostly on their sight, a phenomenon called “visual dependence”. This causes problems for our willingness to act on faraway problems and those that we cannot see, like distant deforestation, or climate change. Our tendency to focus on sudden threats, our proximal cognition and visual dependence were most suitable for the survival of early humans. Since our world has changed to an industrialized and globalized one, and since *Homo sapiens sapiens* has not gone through biological evolution, our cognitive equipment may no longer be suitable. We already referred to this phenomenon in section 2.1 as “mismatch theory” (Winter and Koger 2004).

Gattig and Hendrickx (2007) express the problem in the following words: “Human decision-making centers on outcomes that occur to us, here, now, and for sure. Consequences that deviate in one or more of these aspects are valued less, that is, they tend to be discounted” (22). Thus, the result of mismatch theory is that many environmental problems are prone to be considered less important than other risks. On a somewhat related note, Slovic et al. (1978) argue that there are so many different risks in an individual's life that one necessarily needs to discount or ignore some in order to “get on with one's life”. Also, there are many other barriers to proenvironmental behavior, such as financial ones (e.g. one cannot afford to buy organic food), or structural ones (e.g. the local garbage collection does not offer options for recycling) (Gardner and Stern 2002).

Now that we have discussed the specific nature of environmental risks and our cognitive tendencies to discount them, let us move on to analyze what further factors influence environmentally relevant behavior. This calls for the measurement of correlations between dependent and independent variables, and therefore the literature in this area is mainly quantitative. It addresses correlations between many different factors, and has found weak relations, with correlations rarely above 0.2.² In relation to these correlations we must first repeat the important difference between environmental values and concern and proenvironmental behavior. Concern does not automatically translate into corresponding behavior, in other words, attitude-behavior-correspondence (ABC) is not as strong as might be expected.³ One of the reasons for this may be the existence of barriers. As Olli et al. (2001) point out, ABC gets stronger when an act is easier to perform (i.e. when there are less barriers) and when the proenvironmental act studied is a specific one (e.g. recycling). When on the other hand the object of research is general environmental problems, attitude and behavior often do

² Values are between 0 and 1 where the relationship gets stronger the closer the value is to 1. Hence, 0.2 indicates a weak relation.

³ The ABC-formulation speaks of “attitudes” rather than values or concern. Whereas a value or concern refers to a single belief, an attitude captures a range of beliefs, norms and values (Gooch 1995, Stern 2000).

not show strong correlations which is easy to imagine since there will be a multitude of barriers standing in between concern and behavior.

Now let us look at the influence of general demographic variables like age, gender, income, and education on environmental concern/attitudes and PEB. To start with age, young people generally show more environmental concern than older people, probably because they grew up in a time where awareness of environmental problems was high. However, for proenvironmental behavior the same pattern does not hold, with higher age sometimes being more strongly associated with proenvironmental behavior. This can be explained if we realize that PEB of older people can be attributed to cohort rather than age (Hallin 1995, Olli et al. 2001). For example, if elderly persons have experienced war this may make them more inclined to be sparing with resources.

For gender somewhat contradictory findings exist. Many studies, especially older ones, have found no significant correlation between gender and general environmental concern/PEB (Stern 1992). Zelezny et al. (2000) have presented a meta-analysis of more recent studies and demonstrate that most of them either found that women were slightly more inclined to have ecocentric attitudes and perform PEB than men, or found no correlations. Correlations where men are more concerned were much more rare. The authors further support their claim by referring to cross-cultural research that quite consistently suggests that women are indeed more inclined to care about the environment. Still, this research is not conclusive and the representativeness of the cross-cultural studies can be questioned.⁴ Meanwhile I believe more cross-cultural research is needed to really confirm any link between women and PEB. In Sweden, Widegren (1998) found a weak relation between gender and PEB as well as environmental concern, whereas Gooch (1995) found no correlations between gender and concern.

When we examine correlations between higher education and PEB, studies have found -although not very consistently- that persons with a higher education are slightly more likely to engage in PEB, probably because they are better capable of understanding environmental problems (Olli et al. 2001, Winter and Koger 2004). It has further been hypothesized that higher incomes lead to more environmental concern and action, but global surveys show that there is widespread concern amongst people in both wealthy and developing countries. Also, political orientation is a modest predictor of PEB. Olli et al. (2001) found in their study of a Norwegian sample that left orientations like radicalism and egalitarianism lead to more PEB than (extreme) conservatism.

⁴ For example, one study conducted by Zelezny et al. themselves on gender and environmentalism focuses on different countries but only used university students as respondents, which could affect generalizability.

Sociodemographic factors still have only limited explanatory power as they produce weak correlations and even combined explain only a small part of the variance. Therefore studies have also controlled for values and norms. As we have seen in section 2.3, ecocentric attitudes lead to more and anthropocentric attitudes to less environmental concern. As we have also seen, ecocentric values or environmental concern in general do not have a one-on-one relationship with PEB, although it does seem to play an important part, particularly when the act is easy to perform. Norms have also been found to play an important role in PEB. Firstly, people tend to replicate the behavior of others in a setting where a social norm has been established (a phenomenon called “modeling”). For example, people tend to litter less in areas that are clean and more in areas that are already littered (Krauss et al. 1978, Cialdini et al. 1990). Secondly, norms often produce emotional pressure on the individual. According to Schwartz (1977), social norms are derived from social context, whereas personal norms are actually tied to one's self-expectations. Hence, a failure to act upon social norms may lead to shame, whereas personal norms make one feel guilty and self-depreciative. It has been found that such negative emotions deriving from not following up on personal norms are relatively successful in predicting PEB (Stern 2000, Widgren 1998).

Schwartz (1968, 1977) further theorizes that a person will act upon his moral norms if he is aware of the consequences of his actions to others (Awareness of Consequences, or AC), and if he perceives that he has some responsibility for these acts and their consequences (Ascription of Responsibility to self, or AR). Crucially, what is needed for acting on personal norms is the *perception* of AC and AR. Hence, a person may resort to denial or some other kind of defense mechanism to discount his influence and responsibility. If in this way the norms are not activated, the person will no longer feel guilt from inaction. With this “norm-activation theory of altruism”, Schwartz offers an interesting account of why sometimes we choose to act in altruist ways and sometimes in egoist ways. Once again, barriers, including psychological ones, play an important role in our decisions.

Stern et al. (1999) agree with Schwartz that norms are important variables in predicting altruism, but they adapt his theory to make it specifically relevant for predicting proenvironmental behavior, which is often a form of altruist behavior. Hence, they assert that AC is not only with respect to other people but also to other species and natural things, and that AC must concern something the individual values in order for norms to be activated. Stern and colleagues also argue that people with ecocentric and altruist values are more receptive of news about harmful consequences to nature and to other people than are more anthropocentric or egoistic people, who may simply deny or downplay the seriousness of the harm. These beliefs about harmful consequences to others (AC)

will further facilitate the adoption of proenvironmental norms. To summarize, Stern et al. theorize that values inform behavior, but that these values also inform *beliefs* about AC, which in turn influence personal norms. This value-belief-norm (VBN) theory is more successful in predicting non-activist support for the environmental movement than most other theories are, and the VBN “accounts for 19 percent of the variance in consumer behavior, 35 percent of the variance in willingness to sacrifice, [and] 30 percent of the variance in environmental citizenship” (Stern et al. 1999: 91). These findings suggest that values and norms may be important factors in explaining PEB, although they are always moderated by barriers.

2.6 Summing up

In this chapter we have seen how theories from different disciplines together form a basis towards better understanding proenvironmental behavior. We have seen that certain genetic predispositions shape our behavior in the face of environmental issues to the extent that there is actually a mismatch between our cognitive abilities and the new world of distant, global, future threats. Some, like Hardin, argue that inherent human egoism makes voluntary behavior changes impossible, whereas others, like Simon, Kaplan and Schwartz, see possibilities for altruism.

Other scholars do not stress our natural tendencies, but rather analyze how cultural and societal systems in the West have influenced our environmental behavior. Scholars like White, Ehrenfeld and Polanyi refer to the anthropocentrism inherent in the tradition that stems from Christianity, the Renaissance, and the unregulated market. The environmentalism advocated by this position is mainly economic and the corresponding philosophy is utilitarianism. This anthropocentric position has been termed the dominant social paradigm (DSP). Since the 1970's, however, a new environmental paradigm (NEP) has slowly emerged and is now supported in many countries. The NEP is a more ecocentric worldview that understands the limits of growth and is more aware of the seriousness of environmental problems. Research has shown how support of the NEP results in more environmental concern than support of the DSP.

Deep Ecology has heavily criticized economic environmentalism and argues that a closer contact with nature is necessary to reconnect persons with their ecological selves. Studies support the Deep Ecology standpoint since connectedness with nature is found to predict environmental concern. A value change in this sense might provide for more sustainable PEB than that advocated by government incentives, which are costly, difficult to implement, and often elicit a negative reaction

from consumers. It is even suggested by research on the biophilia hypothesis that people have a genetic need to be close to nature.

Meanwhile, insights from psychology teach us that PEB is not easy to predict. Findings from studies often conflict with each other. Also, correlations are typically under 0.2 and socio-demographic variables account for only a small part of the variance. Rather, factors like values, beliefs, norms, political orientation and other personal experiences seem to play a role combined with many sorts of barriers. Since quantitative studies, although valuable in themselves, have failed to find strong predictors for PEB, there is a need for qualitative studies that look at personal experiences to understand how PEB comes about.

3.1 Choice of Method and Delimitations

In my discussion on the research problem (section 1.1) as well as in the previous section I have noted my reservations about the exclusive reliance on quantitative research to analyze motivations for PEB. These reservations mainly concern the limited capabilities of codes and statistics to adequately reflect the complexities of the development of human values and experiences. We have seen how values and experiences may indeed be important factors to consider in research on PEB, since quantitative analyses have failed to find strong socio-demographic predictors. While even such things as values have been quantified by various researchers, qualitative research presents a more sophisticated way to capture human motivations, as it allows subjects to formulate answers in their own words and according to their own worldview.

Therefore I use phenomenological, qualitative interviews to take respondents back to the different moments, influences and inner processes that were instrumental in shaping their environmental concern and proenvironmental behavior in particular. I am also interested in the type of environmental concern and if respondents perceive any barriers to certain types of PEB. I aim to hear the stories of respondents as they formulate them, and to elicit information which I believe to be relevant to answer the research questions. Semi-structured interviewing suits this purpose best, as it allows for a general interview structure which can be modified in accordance to the course of the interview.

By including theory in formulating some of the questions I believe I enhance the validity of my research, since I account for what is already known or speculated about motivations. In this sense the research could be called deductive, but I would not go so far as to say that I am testing theory since this is not in accordance with the set-up and aim of this study. The purpose is to create theory, although I am also modest in this respect. All small-scale research projects can contribute to the pool of knowledge, which can then contribute to creating more firm theory. Thus, this study aims to generate insights about motivations of PEB as a contribution to existing and future quantitative and qualitative studies. At the end of this work I will identify what this contribution has consisted of.

3.2 Selection of Respondents

The sampling method for this study is based on purposive sampling, in which the researcher seeks to ensure that “persons displaying certain attributes are included in the study” (Berg 2009: 51). In the present study the specific attributes needed were a high awareness of environmental problems and, specifically, a high level of PEB. A suitable place where such people may be found is environmental organizations, and it was there that I commenced my search for participants. I contacted several environmental organizations through email with the request to help disseminate the call for participants amongst their members. Through this method two respondents were gained, both active members of *Naturskyddsföreningen* (the Swedish Society for Nature Conservation). Overall, however, I found that people are hesitant to cooperate when they are approached by e-mail, which can be considered a quite impersonal way of making contact.

However, through replies gained through this method I quickly learned of the organization of an environmental summer camp close to Gothenburg called *Klimatsommar* (“Climate Summer”). It was organized by seven different environmental organizations and two schools, and focused on seminars and workshops on environmental issues. I decided to attend several days of the camp in order to try and find participants there. This method paid off very well, as people proved much more willing to participate when they were approached in person. People were randomly approached with an explanation of the research and the request to participate in a short interview about their PEB, upon which almost all of them agreed. Interviews usually lasted for about 30 minutes. Over the course of three days, ten interviews were conducted.

To ensure that the participant would indeed have a high level of PEB, one question in the interview asks what kinds of things the participant does to help conserve the environment. All the respondents came up with an impressive list of environmental acts, and they were generally very knowledgeable and concerned about environmental problems. All but one of the ten respondents were members of environmental organizations, with *Naturskyddsföreningen* (Sweden's biggest and oldest environmental organization) and *Jordens Vänner* (the Swedish branch of Friends of the Earth International) as the most frequently mentioned. For a complete list of organizations, see appendix A.

As was briefly mentioned in section 1.4, it is not possible based on this small sample to make generalizations about all Swedish environmentalists; yet it may be relevant to have variety in the sample. One reason for this is that too few variety can give an unnecessarily one-sided perspective,

for example if only students are interviewed, or only persons from the same city. Also, studies have already identified that certain other characteristics if overrepresented give a too narrow and specific explanation for PEB. For example, studies have found that activists often experience some specific influences in their behavior. They are usually “recruited” by a friend, and after that the extensive social contacts they build up with others from the activist movement play a big part in maintaining the proenvironmental behavior (Manzo & Weinstein 1987, Stern 1992). The implication may be that if only activists were interviewed, their motivations for PEB may reveal similar patterns specific to this group.

For these reasons, I attempted to increase the heterogeneity in my sample. After *Klimatsommar* I had an interesting sample since it included respondents from both genders, from different locations, both active and inactive members of organizations, and who gave a lot of information. Still I felt like my sample was not diverse in one important sense: that most of the respondents were very knowledgeable about environmental issues and belonged to some organization. Since the views of these people could be quite influenced by the contact with the organization, I wanted to complement the sample with people that were not that much in the circles of environmentalists but that were still very aware privately. Since such people should be no members of organizations, the best way to locate them was through more personal social circles. In order to avoid bias, I refrained from interviewing my own friends, and instead aimed for people that friends recommended since they knew them to be very environmentally aware. Through this method an additional five persons were interviewed in the city of Gothenburg. Two of them were students, and three were employed. None of the persons in this group were members of environmental organizations, and some of them had somewhat less knowledge than the environmentalists that were previously interviewed.

Thus, from the three different groups of interviewees (the active members of *Naturskyddsföreningen*, the respondents from *Klimatsommar*, and the five additional respondents) in total seventeen people were interviewed, of which eleven were male and six were female. Average age was 33, with the youngest respondent being 22 and the eldest 60. Although several were from Gothenburg, most of them were from other places in Sweden both from the countryside and from smaller and bigger cities (for information about geographical distribution of respondents see appendix B). Interviews at *Klimatsommar* were conducted in quiet rooms or in outside areas of the camp, whereas the other interviews took place in diverse locations like libraries, cafes, or people's homes. All respondents were happy to help in a research about a topic that they felt strongly for, and several said that they had enjoyed the interview as it made them reflect over their own choices in life. I felt like respondents regarded me as “one of them” since they knew I had

knowledge and interest in the topic and we often had more informal conversations about environmental problems right before and after the interview. As respondents were guaranteed anonymity, I will refer to them by their gender and age, for example “F30” indicating a female respondent of 30 years old.

3.3 Interview Design

Before approaching the actual respondents, a few pilot interviews were conducted. These helped me identify questions that needed to be rephrased since they were unclear or too difficult to answer, and it also gave me a first insight in the way I could expect people to interpret my questions. Particularly, the pilot interviews taught me that questions need to be straightforward and specific in order to avoid confusion.

In the interviews some socio-demographic information like gender, age and profession were recorded as well as whether the person was a (inactive/active) member of an environmental organization. Further questions deal with environmental concern and with the influences that may have shaped PEB. The questions are quite exploratory and are sometimes informed by the theories about environmental concern, ethics, etc. For example, we have seen in Chapter 2 that anthropocentrists usually do not think that the extinction of species that are not needed for humans is a problem, whereas ecocentrists do. Therefore, asking the respondent's opinion about the human practice of driving other species to extinction is a good way to learn more about the value orientation of that person. Depending on the situation of each interview, often questions were spontaneously added or the order changed. The interview guide is attached in appendix C.

When designing the interview questions I have also critically reflected on how my own views and experiences might influence the research. As Marshall and Rossman (2006) argue, “The participant’s perspective on the phenomenon of interest should unfold as the participant views it [. . .], not as the researcher views it” (101). To ensure that this would happen, a great deal of attention was given to the formulation of the questions, and any leading questions were removed. I found this very important since I certainly did not want to steer the conversation to fit my own thoughts, or the theories I had studied. During the interviews themselves I took care to refrain from making remarks about my own experience and to give the respondent ample time to develop their answers.

3.4 Analysis of Data

With the permission of the interviewees, all the interviews were recorded and subsequently transcribed by myself. The transcriptions reproduce the interviews on a verbatim (word-by-word) basis and also account for the subtleties of conversation like laughter, sighing, pauses and specific gestures.⁵ The transcriptions were then approached with a qualitative content analysis. This refers to repeated reading of the texts with the goal to extract relevant patterns and themes. For example, some questions unexpectedly elicited certain recurrent ideas or views such as a dislike for the Western lifestyle. This pattern was then recognized and identified as a theme. Some of the other themes were identified through a combination of immersion in the raw data and the help of theory. For example, norm-activation theory helped in identifying the theme of personal norms in the transcriptions. Finally, more categorical themes such as types of PEB performed and barriers perceived were more or less set up in advance since they were integrated in the interview questions.

After the themes were identified, the findings were analyzed according to the focus of the research questions. The theories discussed in previous sections were applied to the findings so that the findings may be placed in a holistic explanatory framework from which they may be better understood. Reversely, the findings also helped to understand what the use and validity of the theory is in relation to the case of Swedish environmentalists. The analysis is followed by a final discussion which will make conclusions, present the contributions of this study to research on PEB, and make recommendations.

3.5 Critical Side Notes

In conducting and analyzing the interviews several difficulties and limitations emerged that need to be accounted for here. The first concerns the situational context of the interviews and the language in which they were conducted. The interviews at *Klimatsommar* were rather spontaneous, and took place during shorter or longer breaks in between seminars. Although respondents were very willing to tell their stories, it is possible that time pressure might have influenced the length or content of responses, especially of those individuals that were actively involved with organizing the camp and were therefore continuously quite busy. The interviews that took place outside of the framework of *Klimatsommar* were planned and allowed for a possibly more relaxed conversation in a location chosen by the respondent. Different from *Klimatsommar*, these respondents also seemed to have

⁵ For a discussion on transcription quality and verbatim texts, see Poland (2003).

given more thought to their answers prior to the interviews, since they had more time to already reflect on their proenvironmental behavior and possible influences to it.

Furthermore, most interviews were conducted in English since it is the language in which I have an acute understanding and can easily come up with relevant probes. Although most respondents were very comfortable speaking English, it was not their native language and it is probable that the language barrier to some extent posed restrictions to the unhindered expression of their opinions. One respondent, M47, indicated having difficulties speaking English and the interview was therefore conducted in Swedish. Since my knowledge of the Swedish language was sufficient to do this, the interview was conducted without too much trouble. In this case however, the disadvantage was that it restricted my ability to introduce probes in a more spontaneous manner. When quotes from this respondent are used in this thesis, they will be displayed in translated (English) form.

Regarding the analysis of the interviews, at least two further factors are of importance. The first is the possibility that information given in interviews is incorrect or incomplete. As Smith (2003) argues: "In common with other types of evidence, interviews contain a mix of true and false, reliable and unreliable, verifiable and unverifiable information. Details of accounts can often be incorrect" (348). In the case of my topic, respondents are required to explore their past for the influencing factors of their PEB, and to make quite complicated connections. Therefore, it might be difficult for respondents to recount precisely how their PEB came about. I have attempted, as Bryman (2008) also suggested, to help respondents search their memories by using relevant probes, and in that way assist them in making connections they may not have made before. Although it is unavoidable that inaccuracies are still present, I attempted in this way to reduce them.

A second complication in analyzing the interviews is related to identifying values and norms, which are quite subjective constructs and are not always clearly identifiable even by the respondent him/herself. It was mentioned in section 3.3 that strategies were employed to elicit information about value orientations, for example by asking a respondent's view on human-induced extinction of species. Still, it is not evident that values can be fully accessed. They are also fluid in the sense that there are many mid-way positions in the classification of anthropocentric, biocentric or ecocentric as discussed in section 2.3 on environmental ethics. Therefore, although qualitative analysis arguably often gives a better interpretation of values than quantitative analysis, it must be remembered that it is still difficult to identify them concretely. Also, in analyzing values and norms there is always a possibility that norms implicit in the interview situation itself may have an influence on the way the respondent chooses to frame the response.

Interview Analysis

In this chapter I will present and analyze the results from the interviews. I will firstly discuss which types of proenvironmental behavior were prominent amongst my respondents, and which barriers were perceived to other types of PEB. Then I will turn to the different events and influences that affected the respondents' decision to choose a green lifestyle. After that I will analyze another theme that emerged from the interviews, which is a dislike for the Western lifestyle as a cause of behavior change. Subsequently we will take a closer look at the perspectives of respondents on the human-nature relationship. This will be followed by an extensive discussion about personal norms. The chapter will be concluded with reflections on environmentalism in Swedish society as emerged from the interviews. In the following sections, when presenting direct quotes from respondents, corrections may be made in the language for the purpose of readability.

4.1 Types of Proenvironmental Behavior and Barriers

As mentioned in section 3.2, one question asked respondents to name the environmental acts that they perform in daily life. Besides the purpose of deciding if the person was indeed “proenvironmental” enough, it also gives a good idea of the kind of things that typically constituted PEB. The following pie chart presents the results of the frequency of different acts in relation to each other:

Types of Proenvironmental Behavior



As can be seen in the chart, recycling was the act that featured most frequently. In fact, all 17 respondents indicated that they recycled. Many of them regarded it as so natural a thing that they initially forgot to mention it as one of the environmental acts they perform. They all voiced that recycling is very easy in Sweden because the framework to do it is present. Many of them spoke of recycling stations being located very near to their homes so that it was not much trouble separating and disposing of the trash.

Many interviewees had also changed their meat consumption, as some were vegan, others were vegetarian, and yet others had significantly reduced their meat intake. This happened both because of a concern for animal welfare and the wish to reduce one's impact on climate change:

First vegetarian was just animal welfare but I was consuming milk and so on. But then climate started to be one important cause that I was feeling, and then climate was what made me reduce also milk (M39).

Other frequently mentioned forms of PEB were buying organic food, using environmentally friendly transportation, and consuming resources in a responsible, moderate fashion. Respondents expressed great thought and awareness about the things they consumed and avoided buying products that contained too much plastic, or unnecessary items like clothes. Several individuals were active in an organization or volunteered for environmental causes. Respondents felt it was easier to keep up this behavior if one has friends that have somewhat the same lifestyle and views as them. Otherwise proenvironmental behavior felt quite easy and natural to most respondents.

Despite the impressive extent to which respondents attempt to conserve the environment, they could all think of further possible acts that they were not doing at the moment. For some it concerned financial barriers, as they would like to donate more money to charity or buy more organic food. Although the availability of organic food has grown considerably in Sweden, respondents also indicated that for some products the price difference is simply too high, such as for vegetables, fruits and meat. Other respondents had difficulty reducing their meat consumption, while yet others had dreams about becoming more active in environmental movements and influencing other people. Overall, though, one might say that the attitude-behavior-correspondence (ABC) is quite strong amongst these environmentalists. We have seen in section 2.5 that ABC gets stronger when an environmental act is easy to perform. Indeed, the societal provisions offer relatively few barriers towards PEB, since recycling stations are at hand and organic variants are available for many products. Also, the desire to act according to their beliefs is strong amongst the environmentalists in this study. In upcoming sections we will take a closer look at why this desire is so strong (particularly sections 4.4 and 4.5).

4.2 The Development of Proenvironmental Behavior

The previous section has described the proenvironmental acts of respondents, and this section aims to analyze how they came to arrive at these. Which points in life were identified as having a big influence in the way respondents think about the environment and have been instrumental in bringing about behavior change?

For some, consideration for the natural environment has been with them for as long as they can remember. These individuals grew up with parents that were quite environmentally aware and tried to instill similar values in their children. For example, F26 recounts:

My mother's been really environmentally concerned. She hasn't been an environmental green wave hippie or anything, but she's been like "don't throw garbage in the forest or in the nature", and you know, always been taking care of the nature [. . .] I've been growing up in that way and I've never been consuming that much for example for clothes and stuff like that, so it's been a natural step for me (F26).

For interviewees like F26, upbringing laid a basis for PEB, as it is something that has "always been there". It was clear, though, that PEB of these interviewees did not come solely from replicating behavior taught in their childhood. Instead, more independent thinking about environmental problems was necessary at a later stage in order to consciously choose environmentally responsible ways of living.

Other respondents voiced how their attitudes were shaped partly by a childhood spent surrounded by animals and nature. One respondent relates:

My father was a forester. And we had a lot of animals, you know, cats and dogs and guinea pigs and so. So I think it started out with a great concern for the animals and then it changed [to other environmental issues] because it's all connected to each other (F37).

Similarly, a 39-year-old environmental health officer traces his affinity with nature to his youth. He remembers that he actively sought out nature already then: "When I was a child I was going in the forest especially at night because I knew there were no people there". It is possible that if connectivity with nature started at an early age like with these two respondents, the impact on the way nature is viewed in adult life can be considerable. Indeed, several studies (e.g. Bingley & Milligan 2004, Thompson et al. 2008) have found that people who frequently visited woodlands and green spaces as children are much more likely to be close to nature as adults than are those people

that did not experience close childhood interaction with nature. Close contact to nature, as we have seen in our discussion of Deep Ecology, has been found to be predictive of ecocentric attitudes (Berenguer 2010, Dutcher et al. 2007, Kals et al. 1999, Schultz 2000). Ecocentric attitudes, in their turn, may play an important role in influencing PEB.

Another way of getting acquainted with environmental issues during childhood was through education at primary and secondary school. For some respondents, the environmental education at school taught them few things, and they felt it was in no way the main cause of their PEB. For several other individuals, however, their school time was quite encouraging of their interest in environmental issues. This was for example the case when the school organized projects in the framework of environmental awareness, or offered the opportunity to create environmental clubs. For example, one 22-year-old male respondent traces the origins of his consumption of organic food to a project he had in school which was related to the production of food.

Some other respondents remembered certain teachers that had been very inspirational to them. For example, one respondent recounts one teacher in particular that she had when she was about 9 years old:

And then in a few years, he took us all to ecological farms and to look at wind power mills and you know, all that. And yeah, I think that's been affecting me a lot actually (F26).

For a 60-year-old female respondent, school was a place where discussions were held about political and environmental issues:

In the 60's it was "in" to be politically aware and then also the environment was one of the issues that you were concerned about. [. . .] I had a very good teacher who was encouraging us to start things and so on. So that was when I was in high school (F60).

For this respondent, environmental awareness was something that was almost "automatically" there since it came with the counter-cultural spirit of the 60's, and proenvironmental actions were further encouraged by her teacher. She also describes this era as a time when many new threats against the environment became known, and there were constantly plans to construct new highways and parking garages: "So there were lots of things happening in the environment that you could go out and protest against [laughs]".

Although some respondents talked about childhood environmental awareness, a considerable number of respondents disclosed that they had not grown up with such values or education at all. For them, awareness came not from their family or direct education at school but from a number of

other sources. One such important source was other people. Many respondents mentioned discussions and conversations about the topic with friends and acquaintances as influential, although they did not identify anyone in particular that was of great influence. Some other interviewees, however, were exposed to quite specific environments or identified key persons as being influential. M33, for example, remembers the time when he was living in a new city as the start of increased awareness:

I had a girlfriend that was a biologist, and she was vegetarian. That was several years ago when I was living in Uppsala, and I think – And then, yeah, and the friends I had up in Uppsala, they were all more or less vegetarians, so the thoughts came around and, yeah... So it started to evoke something. And the awareness grew more and more (M33).

Another respondent, M31, had a somewhat similar experience. Living in a small town as a teenager, he got together with several other people with whom he would have discussions about political and social issues. He explained that many of these people were vegans or vegetarians, and how discussions would often also center on eating meat:

We were in a group and we maybe discussed why someone didn't eat meat and then I realized I didn't have anything – I didn't have any arguments against it, so... It started like that I think. And then I started to think about it more and then we talked about it a lot (M31).

Here the friends that the respondent interacted with intensively were instrumental in triggering thoughts about environmental issues, and their vegetarian or vegan lifestyle set a good example of how one can change one's behavior. In general, respondents identified key persons as those they were in close contact with, like partners, family members, and friends. The same would go for teachers, since they repeatedly return to the class to teach the same children.

Another source that played a big role for some in triggering interest and awareness was work. Some respondents would see their concern and engagement grow extensively after being involved in a specific work assignment related to the environment. M46, for example, became an active member of Jordens Vänner after he had a shorter work assignment in that organization. Subsequently, his membership of Jordens Vänner was an important trigger to his PEB:

Interviewer: You told me you buy organic food, you recycle, etc. I would like to know why you started to do these things. Can you remember when that started?

Respondent: Well that was probably a couple of years after I joined Jordens Vänner. I really got loads of information through Jordens Vänner, through their magazines and brochures. I became more and more aware of which concrete things you can do (M46).

A further influencing issue named by several respondents is traveling. F26 recounts visiting the city of São Paulo, where millions of people live close together, and where she could not help but think “what if something would happen there?”. Another respondent, who is a vegan and a fanatical conservationist, had the following traveling experience:

Interviewer: So you seem very environmentally concerned and aware in your actions as well. I would like to know how come you started to feel the need to perform these actions. When did that start?

Respondent: I think it started with the animal issues and then... When I was traveling in Asia and saw how animals were treated and then it sort of grows.

Interviewer: What exactly did you see in Asia that made you upset about that?

Respondent: Like I saw an eagle chained to a car on a market in Laos and that was very sad of course. And chickens being transported in like, in a pick-up truck where it really looked like they had kicked in the last hundred chickens or so, they were like [makes a choking noise]. So... yeah.

Interviewer: And how many years ago was that, that trip to Asia?

Respondent: Oh, thirteen, fourteen years. Fourteen years maybe.

Interviewer: Because you saw it with your own eyes you started to feel more...?

Respondent: I started thinking about it yeah. And also I came in contact with Buddhist culture. So I started thinking more about compassion and these kinds of topics (M36).

The effect of the respondent's travels in Asia was twofold. Firstly, he got to experience the mistreatment of animals first-hand, which made a considerable impact on him. As we have seen in section 2.5, humans are primarily visual creatures and if they do not witness problems themselves they tend to take them less seriously. This respondent was visually confronted with animal cruelties, a sad experience which stayed with him throughout the years. Let us also recall Arne Naess' argument that seeing an animal suffer can trigger a sense of sameness, and make an intrinsic connection in an individual in the sense that he is aware of his ecological self. At the same time, the respondent became acquainted with Buddhist culture which values also made him re-evaluate the proper relationship between humans and animals. It was the start of an awareness that would slowly expand to include a concern for a great number of environmental issues.

Many of the interviewees said that they had gotten a considerate amount of information about environmental problems through the media. For some, the media played an important role in triggering awareness. Consider the following excerpt from an interview with a 39-year-old man:

But then one thing was this Al Gore's movie that made me more into climate. But it was really strange that I *knew* a long time before that it was a problem but before that I was not really *engaged* (M39).

The respondent refers to the 2006 movie *An Inconvenient Truth*, in which Al Gore attempts to spread awareness of the effects of climate change and the moral imperative to act to prevent them. The respondent describes how the movie influenced him to move from shallow awareness (“I *knew* a long time before that it was a problem”) to an active stance on climate change (he became “engaged”). The respondent's engagement took the form of reduced milk consumption and the joining of climate change-related activities in environmental organizations.

Several other respondents similarly indicated that the media played a big role in building awareness of environmental problems. One respondent mentioned that documentaries from the Swedish TV-channel SVT had been instrumental in informing him and laid a strong basis for his further investigations into environmental problems. This was true for several other respondents, who with the help of the media kept evolving their own thoughts about environmental issues, and rethought the correct relationship between humans and nature. Private philosophizing thus played an important part. In this way, several respondents had developed a dislike for the Western lifestyle in particular, an issue to which we will give extensive attention in the next section (4.3).

Besides giving the opportunity for philosophizing about moral issues, information from the media or books also helped to inform respondents of the seriousness of the problems. In that way it laid the basis for rational thinking about the environment. Several respondents had come to realize that the current way of living is simply unsustainable and will have effects on everybody and everything. One respondent, M55, describes the belief in unlimited growth as a “crazy idea” since rationally and mathematically speaking it is clear that this is not possible.

We have thus seen that upbringing, education, other people, travels, work and the media were identified as important factors towards developing PEB. However, this does not mean that a single factor led directly to behavior change. Rather, most respondents describe it as a gradual process where the awareness grew more and more. To illustrate the way PEB may evolve, I will reproduce the short stories of two respondents, a 31-year-old male and a 30-year-old female.

The male respondent is the person that was described previously, who grew up in a small town where a group of mostly vegan and vegetarian friends had a big influence on his thinking. This respondent did not grow up with values of sustainability, but rather only started to think about them as a teenager, as he started to discuss them with his friends. This group was formed based on people having similar views on politics, suggesting that the respondent was already interested in the topics that were generally discussed. He also appeared to share his friends' views on the moral imperative

to be a vegetarian, since he could not find any counter-arguments to their view-points. Although he was 16 at the point that he realized these things, he still did not change his behavior until he was 23 years old. He gives the following explanation for his decision to become a vegetarian at that age:

Interviewer: So you waited until you were 23 to be a vegetarian. Why do you think that *then* you decided that you wanted to do that?

Respondent: I think I felt like a hypocrite. Because it felt so wrong when I couldn't find anything to - I mean, when I presented *my* views of everything it was the views of a vegetarian but I didn't do anything about it myself. So... I felt like a hypocrite, so I think that's why I just said "I have to start doing something" (M31).

The views of this respondent were heavily shaped by the interactions he had as a teenager with his friends, but the actual behavior change took many years to take place. In the meantime he evolved his own ideas and talked to other people about them until the point where he felt like he could no longer refrain from acting according to his beliefs. The point where he realized "I have to start doing something" may seem sudden, but it was the result of an aggregate of events and thinking, the basis for which was laid in his teenage years.

The 30-year-old female respondent can be characterized as a dedicated environmentalist. She avoids car use, consumes with moderation and buys organic products ranging from clothes to skin care. Yet she was not brought up in this way at all, and she describes the process through which she arrived at her PEB as "really long". She identifies her boyfriend, who is a quite fanatical environmentalist, as one source of influence. Another important event was her internship with an NGO in Brussels that focused on urban interventions and was related to mapping gardens in the city: "it was more like a feeling that I was like, 'well this is really exciting', and I was like 'wow, this is really something that I want to be a part of'". Her interest sparked by her internship experience, upon her return to Sweden she found an existing movement where people were growing vegetables together and decided to join.

Since the respondent got more involved in gardening, she said she rediscovered nature and the "harmony" it brings: "I realized that I really do enjoy being close to nature; I didn't know that I *want* this, since I've always been living in a city". Here we see how the respondent reconnected to nature after a long time of absence. As Deep Ecologists would have it, she may be in the process of realizing her ecological self, where the individual starts to identify him/herself with the natural environment. According to Deep Ecology, this would also lead a person to have a renewed understanding and respect for nature, and make proenvironmental behavior more natural. Indeed, this respondent's perspective had changed radically since her not so proenvironmental upbringing.

Yet this was also very much the result of years of growing awareness, as she slowly started to realize the effect that food consumption has on her body and on the natural environment: “I think it's just knowing that the food that we eat has actually no nutritional value and it's polluted, it's filled with chemicals and I think we have just moved so far away from the food. You just go buy it in the supermarket wrapped in plastic”.

The above two stories have attempted to put into perspective the main factors that were identified as influential in the decision to adopt PEB. Although these factors were important, they alone did not cause behavior change. Rather, certain key factors may cause others and set in motion a process of gradual learning and awareness-building. Also, as we will see later on in the analysis, values played an important role. Another very important point, which we will return to in section 4.5 on norms, is that my respondents were all open to hear about environmental problems, and sometimes sought this information out themselves by watching documentaries, reading reports, etc. Therefore, a certain amount of interest and time needs to be available.

4.3 Moving away from the Western Lifestyle

In the previous sections we have seen which type of proenvironmental behavior is common amongst Swedish environmentalists, and we have seen which kinds of factors helped shape PEB. As was briefly mentioned, several respondents had developed a dislike for the Western lifestyle and its ethics, perhaps through private philosophizing or discussions with friends. This dislike became an important motivation for the PEB of these respondents, and it will be analyzed separately in this section since it was a prominent theme in many interviews, and can give us insight into the way these respondents view the existing structures of Swedish society.

In the theoretical discussion we have seen Polanyi's objections against a society driven by profit and commodification, and the moral implications of a utilitarian value orientation. Several respondents voiced concerns similar to these. They wish to retreat from a lifestyle that centers on consumption and money and is devoid of ethical considerations. Let us consider the perspective of the respondent whose travels to Asia had a big impact on his thinking about environmental issues. He came to realize that the Western way of living is quite unethical. He relates:

I think basically the core problem is consumption today and the vast amount of stuff that is wasted along the way. It's pointless consumption just driven by advertisement and commercial interests. So it's just totally unnecessary. Basically it's a shift of

awareness for me and other persons to focus more on things that are not connected to resources but rather you know, happiness on the personal level like sharing things in the community and building networks and having a good time together instead of sitting in a room alone and consuming goods or something. And it doesn't really make you happy in the long run anyway (M36).

This respondent points to the negative aspects of consumer culture, such as its wastefulness and its wrong ideas of what constitutes personal fulfillment. As an alternative, the respondent explores Buddhism, in which he finds more morally desirable ideas of what is important: caring for the collective, and for other living creatures on the planet. He strives to live a more simple, ethical life.

Another respondent, M24, has similarly distanced himself from the ideals of the consumer society. He describes himself as “naturalistic” since he gives preference to undisturbed natural settings and dislikes the frenzy of commercial culture. Particularly, he sees difficulties for environmental awareness because the fast and stressful life in Western society limits the time that people have to think about the state of our natural surroundings. When asked to share his opinion about what the cause of environmental problems could be, he gives the following answer:

Money, and how the whole society is built. Because it's built on stress and it's built on working to get more work. So people don't have time to sit down and think what's going on at all. They just have to keep going, it's like a rat race, you know, always running, running, running, never reaching [makes circles with finger] – like a hamster wheel. It just goes faster and faster and faster until you can't do anything and then you just spin around and don't know what's going on (M24).

The hamster wheel metaphor is an interesting illustration of the stressful, never-ending striving for material goods that several respondents see in the Swedish society. This possibly forms an important barrier to PEB in the sense that many people simply do not have the time and energy to devote to separating trash, or being aware of which fish species are red-listed. The respondents in my study do not seem to experience these barriers since they have consciously distanced themselves from many of the values inherent in a consumer society, such as materialism and social alienation. Another interviewee explains her stance in the following words:

The economy is based on that people continue consuming things, but we don't really *need* it. And this leads to not only environmental issues but also leads to social issues, like that people get stressed because they don't have – maybe they go shopping instead of hanging out with their friends, and, you know, there are all these aspects of that you need to look in a certain way because all the commercials say you have to consume “these” clothes to fit in in society. So I think it's not only environmental issues, it's so much more to it. And I kind of want to take a step away from that (F26).

This respondent makes clear that her decision for PEB is not only motivated by environmental concerns but by social ones as well. For her the present society advertises that happiness must be sought in consumption, and leads attention away from things that are really important in life. By consuming less she tries to lead a lifestyle that she believes to be more ethical.

Of course, the above responses also hint towards certain political views. Respondents were not asked directly for their political affiliation as this was considered to be too sensitive. Nevertheless, their beliefs, which are basically anti-capitalist, suggest that these respondents would be placed on the left side of the political spectrum. This was particularly true for the respondents from *Klimatsommar* but also for some of the other interviewees. We have seen in section 2.5 that political orientation has a certain correlation with PEB, with egalitarianism and (left) radicalism predicting PEB (Olli et al. 2001). Although I cannot guess whether my respondents were radically left, I do believe their more leftist orientations make them more likely to engage in PEB, since they are more interested in changing economic and political structures including environmental policy than conservatives are.

What we have also seen in the accounts of these respondents is their common disbelief that material possessions make them happy, or can lead to happiness for anyone else. This is opposed to the philosophy of utilitarianism, which aims to create pleasure or happiness resulting from satisfying desires. For my respondents, however, happiness from consumption is a rather hollow notion. Much research into subjective well-being supports this idea. In the classic work *The Joyless Economy* (1976), Tibor Scitovsky argues that a consumption society may offer short-lived comfort and pleasures, but fails to offer an important source of happiness which is stimulation. As Scitovsky explains, mental stimulation as emerges from recreation, philosophy and culture, is not sought when consumption is believed to remove all discomfort and unpleasantness. Therefore we see how a lifestyle which strives to seek comfort in products and does not seek further can be quite unfulfilling. Also, more recent studies have found weak correlations between happiness and income, and stronger correlations between happiness and social relations, meaningful work and leisure time (Argyle 1999, Kahneman et al. 2006).

4.4 Views on the Human-Nature Relationship

In the theoretical discussion on environmental ethics we have seen that there are different ways in which people may look upon the relationship between humans and nature. In the West, the

traditional view, called “anthropocentrism”, has been that nature is there to serve human needs. This idea is currently being challenged by the new environmental paradigm, which is more ecocentric in orientation. In this study many respondents brought up the topic of how humans should treat nature, either spontaneously or as a reaction to a certain question.

The main question which I intended to be inviting of moral philosophizing was related to human-induced extinction of animal species. The following excerpt from an interview with a 55-year-old civil engineer is illustrative of the typical reasoning in the reply to this question:

Interviewer: What is your opinion about animal species going extinct? Is that something that should be avoided?

Respondent: Yes.

Interviewer: Why?

Respondent: Because we are dependent on them. We don't know that for example if the tigers will disappear, if that will harm us, but there are other small animals and other things which might be very bad if they disappear.

Interviewer: Right. And what if they – like tigers if they disappear you said they don't really have an impact on human life, but do you think then it should still be avoided?

Respondent: Yes.

Interviewer: Why do you think so?

Respondent: Well, they [humans] do not have the right to have other species disappearing (M55).

The response reveals two notions which many other respondents also expressed: firstly, a concern for the stability of ecosystems, and secondly, the conviction that it is not our right to cause the extinction of other species. Let us start with the first notion. As we have seen in section 2.4, Deep Ecologists stress the interrelatedness of all natural things in ecosystems. This awareness seems widespread amongst my respondents since many of them referred to concepts like “balance”, “the whole”, and “functioning” of ecosystems. Also, the above excerpt reminds us of the more conservative, intuitive attitude towards disturbing nature that David Ehrenfeld advocated. As the respondent says, it is possible that bad things might happen to humans if ecosystems are disturbed too much. We do not know enough about them to predict the consequences.

The second notion questions the right that people have to cause damage to other species, and is therefore a moral question. It was taken up by many respondents, and some of them were found to feel a quite deep respect for the natural order. For example, a 26-year-old electrician states: “I think it's our duty to preserve what nature has had for so many years, and we just get on top of the food

chain and [makes a destructive sound]”. Another respondent, F22, voices: “It’s just quite sad to think that us humans are doing so much damage in so many different ways. I don’t think we should have that much impact on our environment and on other species”. The replies of these respondents suggest the presence of an ecocentric outlook on environmental problems, since the focus is on the disturbing and immoral behavior of humans towards the natural world. The fact that these respondents consider it wrong that humans destroy parts of nature suggests that they believe nature and species have intrinsic value and do not need to serve any use for humans in order to deserve protection.

The moral issue also came up outside the framework of the question about the extinction of species. Particularly, respondents were often very concerned about animals and the way they are treated in the meat industry. With one respondent the conversation brought us to the topic of animal rights:

The whole topic of rights has to be largely expanded because today, human rights are supreme to every other species' right and you have the right to kill an animal just, you know, at your whim, both domestic animals and livestock animals. Most of the way the environment is treated, always human interests are at the top of the pyramid and I find that disturbing (M36).

Here the respondent takes an active stance against anthropocentrism which he views is dominant in society (“always human interests are at the top of the pyramid”). In chapter 2 we have seen that the anthropocentrism that the respondent sees has probably been a product of the philosophical (and religious) tradition in Western society that sees humans as supreme and as the only species that can have moral standing.

The mental boundary between humans and the rest of nature is an issue other respondents took up too. They find it alarming how urbanized people are in their minds, and how little we understand about nature and our place in it. F26 explains how people are not aware of environmental problems because they are quite disconnected from nature. She herself seeks to go out in nature because it helps her become more aware about how nature works: “I need to be there *more* because I think then you get in contact with what is important, you understand what it is... You feel like you're part of something a little bit *bigger* than just a city”. Here we see again the notion of rediscovering nature and feeling one with it, which Deep Ecologists refer to as the realization of an ecological self. Another respondent expresses the oneness of life thus: “Animals are living things. They're not so different from us” (M22).

Finally, when asked to think about the cause of environmental problems, my respondents readily identified humans as the culprits. In doing so, they admitted several of the wrongs of human behavior. Greed was an often mentioned cause, sometimes linked to the consumer society which tells people that they should always want more. Our lifestyle was identified as another cause, in the sense that we are comfortable, we like to travel, and we do not wish to give any of it up. Finally, the Industrial Revolution was identified as the start of environmental problems. In short, the respondents take the impact that humans have had on nature very seriously and look with critical eyes on where we have placed ourselves in the natural order of things.

4.5 The Activation of Norms

In previous sections of this chapter I have described the PEB of respondents and which events and factors influenced them. We have also seen that many respondents shared a dislike for the Western lifestyle, and held views that might be described as predominantly ecocentric. We now turn the analysis to another topic that could be discerned from interviews and which we have already encountered in the theoretical discussion: the activation of norms.

Let us recall from section 2.5 Schwartz' norm-activation theory of altruism (Schwartz 1968, 1977). According to Schwartz, people will act upon personal norms (those norms that are internalized and strongly affect the emotions of an individual) if the following two conditions are present. Firstly, the person needs to be aware of the consequences of his/her acts to others (Awareness of Consequences, or AC). Secondly, the person should ascribe some responsibility for these negative consequences to him/herself (Ascription of Responsibility to self, or AR). If both conditions are present, norms are activated and the person will behave in altruist ways. Stern et al. (1999) adjusted Schwartz' framework to understand how the activation of norms would work in relation to proenvironmental behavior. They did this by introducing the value-belief-norm: AC must concern something one values, and values also influence beliefs about environmental problems. The value-belief-norm theory or VBN uses norms to explain how PEB becomes possible in certain people.

4.5.1 The Presence of Personal Norms amongst Respondents

Many respondents of this study appeared to be strongly motivated by their personal norms. Whereas sometimes this finding was interpreted from the interviews, often respondents brought up these

norms themselves (albeit implicitly) when they tried to explain the motivations behind their PEB. For example, consider the following excerpt:

I think I'm quite aware of what I eat and I think a lot about what I consume. I have some principles and sometimes I break them but mostly, if you have them, I'm quite aware of them in my everyday life, I think. I wouldn't buy meat or dairy products and I wouldn't buy new things, like new clothes (F22).

This respondent explains that she is guided by certain principles which she tries to follow up on in everyday life. These principles carry normative value and help her in deciding whether certain things should or should not be consumed. Another respondent, F37, similarly expresses how she wants to live according to her morals and beliefs, which lead her to act in a consistently proenvironmental manner. The same is true for a third respondent, who describes the process of her moral decision-making in the following words:

I'm thinking a lot about the things that I consume and the things that I don't consume and things like that. So I try to make ethical and environmental choices in my life. And I've been doing so for a long time, so I'm not really thinking about it in that way now, but it's things that I actually like really thought about a lot when I was younger, and then I took [decisions] like "I'm not gonna consume this, I'm not gonna eat meat, I'm not gonna..." So I guess it's things that I actually chose to do (F26).

Here we see what could be said for other respondents as well, which is the way in which the person actively sets up principles or norms ("I'm not gonna consume this, I'm not gonna eat meat, I'm not gonna...") which later become so normal that the respondent is "not really thinking about it in that way now". In other words, after active decisions are taken about which types of PEB ought to be performed, the respondent keeps to them without much further thought. PEB has become a lifestyle and has come to feel "natural" for many respondents.

Several respondents also revealed that acting proenvironmentally makes them feel "good", since they know they are doing the right thing. This suggests that these respondents would feel less good if they would refrain from doing so. One respondent states concretely that one of the reasons for his PEB is his own conscience: "not feeling guilty, doing my share" (M25). We can explain why respondents feel good when performing PEB and less good or guilty when not doing so by bringing in personal norms. Let us recall from the theoretical discussion (section 2.5) how personal norms are internalized, and will therefore elicit heavy emotions related to self-evaluation when they are acted or not acted upon:

"Anticipation of or actual conformity to a self-expectation results in pride, enhanced self-esteem, security, or other favourable self-evaluations; violation or its anticipation

produce guilt, self-depreciation, loss of self-esteem, or other negative self-evaluations” (Schwartz 1977: 231, quoted in Widegren 1998: 79).

In this sense, choosing proenvironmental ways of living becomes a highly personal affair since acting on one's personal norms is very much tied to how people judge themselves. This is opposed to social norms, where it is generally feelings of shame rather than guilt that are experienced resulting from the fact that social norms are not internalized.

4.5.2 Awareness of Consequences (AC)

In the above we have seen that respondents were strongly motivated by their personal norms. According to norm-activation theory and the value-belief-norm (VBN) this presence of activated norms suggests that respondents must be aware of the consequences of their actions (AC), and must value those things that will be impacted. These values are then expected to predispose them to believe in the seriousness of environmental problems.

Let us first look at the question of whether my respondents were aware of the consequences (AC) of their behavior. With the global trade system in place, environmental impact often occurs in faraway places and is not directly visible to consumers. We have earlier referred to this phenomenon as “visual dependence”, and concluded that it poses an obstacle towards being aware of all the problems and what one can do to decrease one's impact. However, as was mentioned in the methodology section, most of the participants in this research were highly knowledgeable about environmental problems. For example, they knew about the overpopulation of the Earth and the effect of chemicals. They were also very aware about which products should not be consumed, for example too exotic products, or products wrapped in too much plastic. It is thus clear that my respondents were quite aware of the consequences of their actions.

The next question is how respondents became so knowledgeable about these consequences. I have mentioned that respondents got much of their information from the media. What is striking in this is the degree to which they were receptive to the information given; often they would even seek out the information themselves. For example, respondents read a lot about environmental issues and they choose to watch movies or documentaries that focus particularly on environmental problems. Many other people on the other hand would probably not choose such genres, and may tend not to take environmental problems seriously when they hear about them. Therefore it is quite plausible

that – in accordance with the VBN – specific values predispose my respondents to be especially receptive of information about environmental problems, so that such information is allowed in and may actually influence awareness.

This brings us to analyze which things to be impacted were valued by respondents. According to Stern et al. (1999), the specific values needed to be receptive are related to ecocentrism and altruism. In section 4.4 on the relationship between humans and nature we have already seen that respondents express views that are consistent with an ecocentric value orientation (and probably also with the new environmental paradigm). Their concern with the natural world, and with animals in particular, was great. Equally so, however, was their consideration for fellow human beings. This mainly concerned those people in poorer areas that are more vulnerable to exploitation and climate change. For example, several respondents indicated that they buy Fair Trade products out of concern for how their consumption might influence people in other countries. Also, several respondents expressed a concern for the quality of life of future human generations.

Still, it was not exclusively ecocentrism and altruism that guided respondents' environmentally friendly acts. Several of them indicated that another important beneficiary of such acts is themselves. This is particularly true when the act concerned buying organic food, as several participants saw health benefits for themselves in this type of PEB. Some others, especially young respondents, were afraid that the negative consequences of climate change and other environmental problems might manifest themselves in their own lifetime. Yet, the concern about oneself does not mean that these participants did not worry about other people or nature as well. In fact, in them too ecocentrism and altruism can be said to be high, as oneself was only one object out of many which were mentioned.

It can therefore be said that both values related to ecocentrism and of altruism could be discerned amongst respondents, and that it is quite possible that these made them receptive to information. I would suggest that a dislike of the Western lifestyle may equally help in making an individual more receptive. In summary, we have seen that respondents were open to believe that there were negative consequences of their actions for things that they valued (both other humans and natural systems). With this we have captured the AC part of the value-belief-norm. As we recall from Schwartz' model and the VBN, the second component needed to activate norms is AR. In the next section we will analyze the presence of AR in the respondents of this study.

4.5.3 Ascription of Responsibility to Self (AR)

AR means that an individual ascribes some responsibility for the consequences of his acts to himself. As with AC, there are several obstacles to AR. Firstly, as we have seen in section 2.5, Schwartz explains that a person may choose some kind of defense mechanism to downplay their responsibility, so that the situation is no longer perceived as a moral one and therefore does not need to be acted upon according to personal norms. Secondly, we must also keep in mind that Schwartz' original norm-activation model was intended to explain actions that benefit other people only, and not other species or nature in general. It seems that when AR is applied to the natural world and on a global scale, it takes on a somewhat different shape. After all, through the massive global trade system one person's proenvironmental actions can easily be "lost". Hence, if individual PEB is perceived as making virtually no difference in itself, a person may no longer believe that they carry responsibility for environmental problems. Let us also recall Hardin's "tragedy of the commons" (section 2.1), where each person keeps consuming resources since they all believe that their small consumption will not make any impact.

Thus, especially when applied to environmental problems, responsibility can easily be dismissed. Yet this did not seem to be the case for the Swedish environmentalists in this study. Rather, upon becoming aware of the consequences for something they valued, they would perceive that they needed to act to avoid such consequences. For example, M39 said: "I would absolutely not eat chicken because they have a really poor life". He thus sees his actions as directly responsible for influencing the quality of life of chickens. Another respondent ascribed responsibility to himself in explicit terms. Pointing to the threats to animal welfare and the destruction of the natural world, he said that behaving proenvironmentally "is not hard when you think about what the consequences would be if you *didn't* do it" (M24).

How can we explain this tendency to take responsibility for environmental impact? One quite logical part of the answer is that the respondents do not perceive many barriers towards doing so, and also they wish to act in accordance with their beliefs (recall the respondent that felt like a "hypocrite" when failing to do so). Their beliefs are of course influenced by their values, which can be characterized as mainly ecocentric and altruistic. Since the values held are so strong, the desire follows to do something about the things respondents believe need to change. When they found out there are indeed things the individual can do, like becoming a vegetarian or using environmentally friendly transportation, respondents were quite willing to do these things. As one respondent said: "Because people have solutions and if people have solutions then they should do something"

(M24).

This basically leads us back to Kaplan's ideas about control which we discussed in section 2.1. Kaplan argued that humans by nature are inclined to behave in pro-social ways, and have a desire to influence events. Feeling in control generally facilitates such participatory behavior. It is this sort of control that respondents appear to feel; through certain types of PEB it became possible to act and to explicitly avoid making an impact on things they valued. Several of my respondents also voiced this control in different ways. For example, they would state that they believed in consumer power, or that they believed how even small acts can make a difference.

Reversely, a situation can appear where the person may not feel like they are in control. As Kaplan argued, perceived helplessness can impede altruist behavior such as PEB. One example from the interviews is when the topic of the extinction of species was discussed with M33. In his opinion it is a terrible thing when humans drive species to extinction, and he says he cannot bear to read news about it. The reason why he cannot is that it makes him feel very frustrated “because I can't do anything about it, and just... I can't even *try*”. Here we see the frustration that comes with the helplessness in influencing the fate of something the respondent values.

Besides being motivated by strong values and the feeling of being in control, the environmentalists in this study attached one more meaning to AR. Several of them were quite aware that their acts would have only a small impact, but they expected other people to join to create a bigger movement. One respondent explains: “I realized that things that *I* do may not do so much, but when one million people do all this stuff together, it has really an extreme impact” (F30). In this spirit, several respondents reported that they try to spread environmental awareness in their daily interactions with other people. This talking to other people was in fact an important part of their PEB, and could be as simple as explaining to others why or how the respondent would perform a specific environmental act. In this sense respondents could serve as an example while at the same time planting a seed of awareness in others. In other words, they undertake actions to do their share for the environment, but realize the responsibility must lie with other people as well.

4.6 Perspectives on Environmentalism in Sweden

As a final section of the analysis of the interviews I will present the way my respondents view the environmental performance in their country. In the introduction (section 1.5) we have seen that

Sweden scores high in environmental policy as it was ranked fourth in a 2010 worldwide assessment of environmental performance per country. We have also seen that the government has set out a plan to hand over a sustainable Sweden to the next generation (although several of its objectives will probably not be reached). Furthermore, we have seen that quantitative research conducted in the country has found relatively high levels of concern and of NEP support amongst Swedes.

It is thus fair to say that Sweden can be considered an environmental leader on the world stage. To put this notion in perspective, interviewees were asked to share their opinions about the environmental performance of the Swedish government and the Swedish people. Somewhat surprisingly, their evaluation of their own country was much less positive than were the results of the world-wide research. Let us start by looking at respondents' opinions about the government, which is currently composed of center-right parties. When asked whether the Swedish government is environmentally aware in its policies, respondents were always conservative and usually negative in their replies. In particular, the following reply was repeatedly heard: “they say that they are aware, but they are not acting on it”.

Several respondents voiced that the government is becoming increasingly aware both of environmental problems but also of the public's desire to see government action in this area. For this reason, respondents argue, the government attempts to appear aware but at the same time no actual policy decisions are undertaken. The reason for this, according to respondents, is that the government is bound in the thinking of economic growth. The following reply is illustrative of many others: “I think they [politicians] are more concerned about the national economy and the jobs and to some extent the welfare of people, and that is overlooking the aspect of nature and sustainability” (M25). The respondent even adds: “So I wouldn't recommend our government to any other country”.

One respondent blames the government's continuing reliance on technology for their reluctance to act on environmental issues:

They don't seem to have realized that there are limits to what technology and physics can do. They seem to believe that – well, I guess they are too optimistic about technology; for them it's just a technical issue, a solution: “We can solve everything with some new technology and then we can keep on going like we always have”. But we can't, at least that's what I realized (M46).

This reply is reminiscent of Ehrenfeld's description of what he calls “humanists”, and the arrogance

they display in believing mankind will find a technical solution to everything. For this respondent, the government needs to realize that real change will be necessary if negative future consequences are to be avoided.

The respondents were slightly less negative in their judgment about Swedish people and their environmental awareness. Some respondents acknowledged that Swedish people are generally concerned about environmental issues, although they added that they may not act on that concern. Others say that Swedish people are good at recycling and tend to do other easy things for the environment, but are generally unwilling to undergo more far-reaching changes such as giving up meat, travels, or their car. Several other respondents thought that Swedes are no better or even worse in environmental issues than are persons in other countries. This perception was generally tied to the consumer society, and the reluctance people may feel to try to live in a simpler, slower way.

A final topic that came up repeatedly in interviews was the degree to which the environment is talked about in society. According to respondents, the environmental issue came up several years ago and has since then been a “hot” topic. Several respondents spoke of a certain trendiness in Swedish society related to ecological lifestyles. Indeed, in a 2008 survey, 69% of the respondents indicated that it is important amongst their friends to be climate-aware, suggesting it is a much-discussed topic in Sweden (Naturvårdsverket 2008). My respondents generally perceived that this “ecopopularity” helps to increase the degree of concern about environmental problems amongst the Swedish population.

The above sections have presented both theoretical insights about proenvironmental behavior and empirical results as emanated from the sample of Swedish environmentalists. In this chapter we will identify the main conclusions of this study and its contributions to the theory that was presented in chapter 2. It will end by making recommendations for further research as well as for practical methods for encouraging PEB.

5.1 Conclusions

We have seen that the respondents in the sample perform a considerable number of environmental acts, and are very committed to maintain these acts. Owing to the good recycling infrastructure in Sweden, recycling was done as a natural act and by all environmentalists. Other acts that were frequently mentioned were reducing meat intake, buying organic food, using environmentally friendly transportation, and consuming resources in a responsible, moderate fashion. Things that several respondents aspired to do in addition to these acts were donating money to charity, buying more organic food, and joining more movements, things that can be said to be fairly difficult if money or time resources are scarce. In other words, some barriers were perceived in terms of financial capacity and demands on one's time and energy. Such barriers aside, acting in basic proenvironmental ways was generally considered to be easy and natural, especially when respondents had friends that had similar views on PEB.

Having hence characterized the proenvironmental behavior of these environmentalists, and thus answered the first sub-question, this study is particularly interested in how this behavior came about. The respondents felt their proenvironmental behavior was easy to keep up, yet we have seen in the theoretical discussion the many seemingly serious limitations to achieving such behavior. We have seen how possible biological tendencies such as alleged lack of altruism and genetic mismatch may pose challenges towards acting on environmental problems. We have also seen how the religious, philosophical, cultural and economic influences in Western society have tended to entail an anthropocentric attitude. How then can we explain the strong presence of PEB in the respondents of this study?

To start with, we may exclude socio-demographic characteristics as essential factors in the explanation. There was no perceivable difference in the nature of PEB amongst male and female respondents, nor in the way they talked about environmental problems. Similarly, for age no important differences were apparent, whereas it is difficult to say anything about income and education since the exact quantitative data regarding these categories was not recorded. It was found that political affiliation probably plays a role since it was suggested that many respondents seemed left-oriented, a hypothesis which is in line with earlier findings (Olli et al. 2001). However, this is not a quantitative study and it obviously did not calculate any correlations. Yet by analyzing the interviews and tracking the elements that may have been influential I did not find it likely that any of these factors (besides –potentially– political affiliation) were important in explaining PEB in my respondents.

The analysis did yield some important results by locating influences for proenvironmental behavior in the past experiences of respondents, which was the focus of sub-question 2. We have seen that upbringing, affinity with nature, education, other people, travels, and work emerged as general influences. We have also seen that the development of PEB was usually long-drawn and gradual, where several different things can play a role.

Reflecting over the influences mentioned, we see that there is something they have in common. They all either offer an aspect of visual exposure (being out in nature, traveling) or of prolonged exposure (attending school, interacting with teachers, friends, family, and performing environment-related work). What this suggests is that such experiences, where the individual is exposed for a longer time period or in a more visually direct way to issues related to environmental problems, can be of great influence in triggering PEB. Traveling and being in closer contact with nature may elicit more understanding and concern for environmental problems and may hence help people overcome limitations posed by visual dependence. I deem it quite possible that contact with nature in particular may lay a firm basis for PEB as it helps a person to realize that humans are not the only creatures of importance in the natural order. Also, a prolonged contact with the topic may lead to less discounting of the problems since the individual has usually become quite aware of their seriousness.

What is more puzzling is that some respondents identified the media as an important - sometimes even the most important - influence. This was especially true for those that lacked like-minded friends with whom environmental topics could be discussed. Arguably, the time exposed to media can also be long and it also offers direct visual aspects, especially in for example documentaries.

Different from the aspects described above, however, this is not an event that one is exposed to more or less involuntarily or coincidentally. This suggests that there must be something already present in the individual, which makes him/her actively look for this kind of information, or at least predisposes the person to be receptive of it.

Further analysis found that part of the explanation for this tendency can be found in values. The first set of values that some respondents were found to have in common were related to a rejection of the Western lifestyle. They share with Karl Polanyi a belief that materialism in itself is not the most important aspect in life, and both seem to reject the idea of a market without boundaries; of consumption without limits. Polanyi particularly warned against natural destruction as emanating from an economic structure that seeks to commodify nature, but this was not the only aspect respondents were concerned about. They also expressed a deep concern for how the fast lifestyle and superficial advertising of a consumption society influences social relations and individual happiness. Other values shared by many respondents were ecocentrism and altruism. These could be derived from their ideas about what constitutes a proper human-nature relationship, and their concern for how their consumption may impact animals and other people in and outside of the production chain. With this we have also answered sub-question 3, which was interested in the nature of concern amongst environmentalists.

It was then suggested that the above mentioned values may influence the respondent's willingness to be receptive of information about environmental problems, in the lines of the value-belief-norm (VBN) theory. Also, these strong values made respondents very concerned about the consequences of their actions to animals and other humans (AC) and made them feel like they needed to act to avoid such circumstances (AR). Hence a situation is created which the individual recognizes as calling for moral decision-making. Interviews suggested that respondents experienced such situations all the time, and they had actively set up principles to guide their environmental behavior in such situations. More specifically, it seemed that after awareness was achieved, decisions were made about which behavior is morally desirable, and the respondent subsequently came to exhibit this behavior in a consistent fashion. I have also suggested that AR seems to have a special character when applied to environmental issues, in the sense that respondents felt both the desire and control to take action, and in the sense that they ultimately aim for ascription of responsibility to a wider group in society.

In the analysis we have also reflected on the role of Sweden in the area of sustainability. Its relatively good performance and the extent to which it is popular to talk about environmental issues

may lead one to expect that the environmentalists in this sample might be influenced by this. Indications of this, however, were not found. In fact, there was a striking discrepancy between Sweden's performance from an international perspective and from the perspective of respondents. Despite high international scores, respondents still perceived the Swedish state and people as being largely opposed to action against environmental problems. Reasons given for this is that it is not in the interest of the consumption society to make people consume less, and that people do not wish to give up everyday comforts.

5.2 Summary of Theoretical Contributions

Various things were learned from this analysis in relation to the theories on PEB that were discussed in the first part of this work. To begin with, the characterization of people as inherently egoistic is obviously simplistic. We have seen how in Hardin's account people only always think about themselves and refuse to change their lifestyle because they think their reduced consumption has no influence anyway. The altruist behavior of my respondents, and especially the shape they give to AR, casts serious doubts on the validity of such argument.

We have also seen that in previous research socio-demographic factors have been used to try and explain the presence of PEB. This study did not deem factors such as age, gender, etc. as very important. Rather, it identified factors of long duration or strong visual content as influential, a finding which I have not encountered in quantitative research. One of these influencing factors was contact with nature, a finding which offers some support for the Deep Ecology standpoint. This study also supports the importance of values as suggested by previous research, since values of ecocentrism and altruism were identified. Further important value sets which emerged were related to a dislike of Western society not merely directed to economics but also very much to mainstream lifestyles and ethics. I deduced that a left political orientation might be of importance. The strong values of respondents can possibly overcome many barriers, including the limitations posed by genetic mismatch.

We have also seen that these values were important in the activation of norms. We saw that personal norms rather than social ones featured prominently. This suggests that PEB in the environmentalists emerges from strong personal values rather than pressure from society. This study found the value-belief-norm theory of particular use in explaining PEB in my respondents. It was found that besides ecocentrism and altruism, a more general dislike for the Western lifestyle may also be important to explain moral behavior. Furthermore, I have suggested that when AR is linked to environmental

problems, concepts of control and widened ascription of responsibility may be important.

Finally, from this study an important observation can be deduced about influences to PEB. We have identified work, other people, travels, etc. as important influences, yet they seem more related to triggering *awareness* than direct action. For actual *action* it seemed that something in addition was necessary: specific norms, values, and beliefs. Hence, although being aware of the problems is a necessary condition to develop PEB, it is probably values and norms that make a person enter into deeper engagement with environmental issues.

5.3 Recommendations

Based on the above findings, various further recommendations may be made for future research as well as for practical ways in which PEB may be encouraged. To begin, I have suggested that prolonged and direct contact with environmental issues helps shape awareness. I believe the benefits from this can be especially extensive if this is encouraged from a young age. School projects seem to make a big impact on environmentalists in this study since they call for active engagement with environmental topics on a prolonged basis. Also, both schools and caregivers should do more to bring children in contact with nature.

Furthermore, the fact that there were many relevant influences ranging from upbringing to friends reflects that the shape of PEB depends on specific experiences in life which differ from one person to the next. This might explain why quantitative research has failed to find strong correlates for PEB. Therefore I suggest that the knowledge emanating from qualitative research may be employed to strengthen the research design of quantitative studies more frequently. It is also possible that quantitative studies would yield somewhat stronger correlations if they focus on only one environmental act at a time, since this would make the focus more specific and possibly help reduce variations.

Moving to values as influencing factors, two things are suggested by the findings. Firstly, values seem of greater importance than sometimes emerges from quantitative research. This may be because no good instrument has been devised to measure values (and it is the question if it ever will), but also because people's different circumstances and barriers may stand in the way of achieving more firm attitude-behavior correspondence (ABC). This problem may be partly overcome if, again, future quantitative research focuses on one act at a time. Secondly, the apparent importance of values also brings up the issue that maybe we should move from trying to change

awareness through information to trying to change attitudes and values. An important question, then, to be researched further, is whether it is possible to change values. Gardner & Stern (2001) suggest it is a very difficult and slow process. Deep Ecologists on the other hand see possibilities for value changes in more frequent communion with nature and the realization of an ecological self. These and other options must be thoroughly researched.

Ultimately, a change in value orientations would mean the rejection of the dominant social paradigm (DSP). In other words, a society must appear in which caring about environmental issues and acting accordingly is normalized. Based on accounts of respondents, in Sweden this already seems to be occurring to a certain degree: talking about sustainability is trendy, recycling is normalized and the availability of organic food and vegetarian alternatives is increasing. Furthermore, as ABC gets stronger when an act is easy to perform, it is also important that barriers of all kinds be removed so that PEB is encouraged. More research must be done to design schemes that may remove such barriers.

At the same time, it is clear that much of these incentives and regulations are the responsibility of the government to implement. However, since the road to a greener lifestyle will require huge alterations in current structures of production and consumption, politicians will likely be reluctant to take on this huge and possibly unpopular task. In the meantime, therefore, it is probably the people that will have to create a broader movement to then press the government to change. That is why the private (and public) PEB of environmentalists like the ones from this study is very important. Even though their actions may seem like a small contribution towards solving the problem, it is clear that they may have big consequences in the long run.

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Appendices

A. Membership of Environmental Organizations

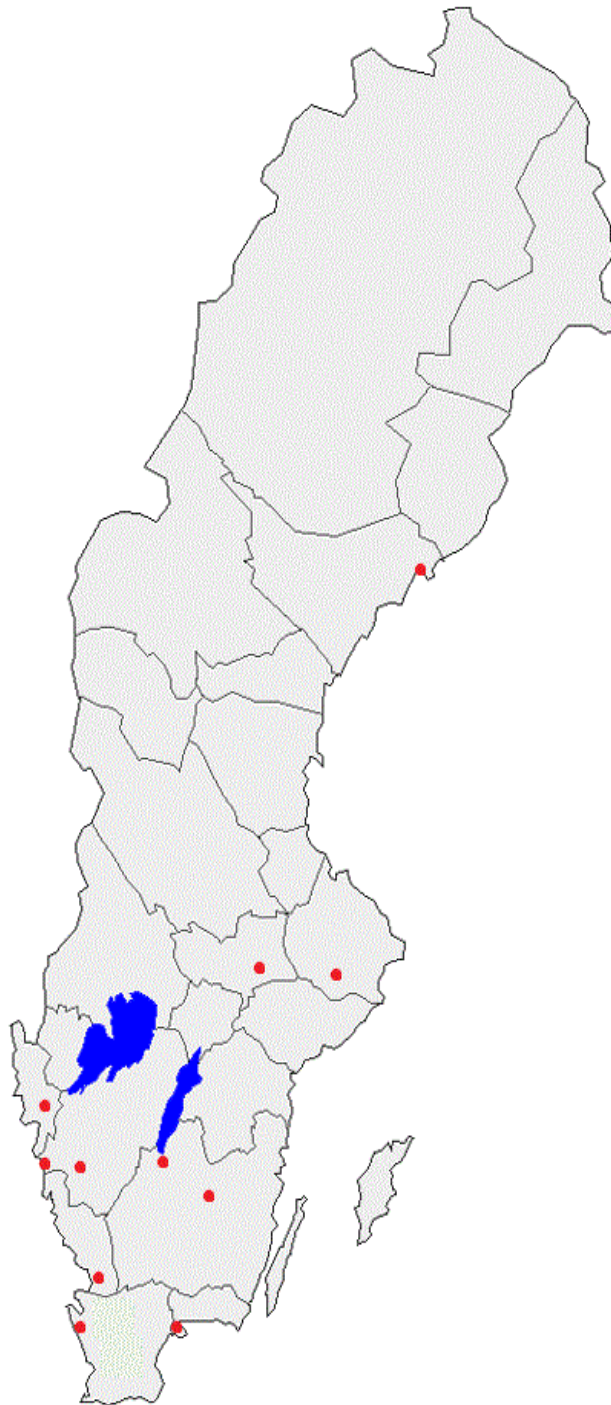
Frequencies of Membership of Environmental Organizations amongst respondents:

Jordens Vänner (Friends of the Earth)	8
Naturskyddsföreningen (the Swedish Society for Nature Conservation)	7
WWF	2
Greenpeace	1
Fältbiologerna	1
FIAN	1
Framtidsjorden (Future Earth)	1
Latinamerikagrupperna	1
Odlingskooperativet	1

B. Geographical Distribution

1. Map

The distribution of respondents according to place of origin in Sweden:



2. Population Size

The size of the population in the places of origin of respondents:

Number of Inhabitants in Place of Origin	Frequency
<1000	1
1000-5000	2
5000-10000	3
10.000-50.000	0
50.000-100.000	3
100.000-500.000	2
500.000-1.000000	6

C. Interview Guide

Guide for the semi-structured interviews:

1. May I first ask your age and profession?
2. Where are you from originally?
3. Where do you live currently?
4. Are you a member of any environmental organization?
5. If yes: how active are you in this/these organization(s)? What are the main kinds of activities you do within the organization(s)? How did you come to join that/these organization(s)?
6. Many people think about the environment when they live their everyday life. Can you think of any things you do in daily life to help conserve the environment?
7. Do you find it easy to keep doing these things?
8. Are there any other things you would like to do but that are maybe too expensive or too difficult to do?
9. You mentioned in everyday life you do [type(s) of PEB] to conserve the environment. Can you tell me why you do [type(s) of PEB]? What is it you are concerned about?
10. There are many environmental problems. Can you tell me some of the problems you are most concerned about?
11. What is your opinion about animal species going extinct because of people's actions? Is that something that should be avoided? Why/why not?
12. So you do [type(s) of PEB] in everyday life because you are concerned about [object(s) of concern]. I would like to know how come you started to feel the need to perform these actions. - Can you remember when you first started to do these things? - Was there anyone that influenced you to do start do these things? - Was there any specific event or experience that made you environmentally aware?
13. What do you think is the cause of environmental problems?
14. Do you feel that in Sweden people in general are environmentally aware?
15. Do you think that the Swedish government is environmentally aware in its policies?