Deliberations on Nature

Swedish cases of communication and democracy within nature conservation

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Deliberations on Nature – Swedish cases of communication and democracy within nature conservation

Abstract

This thesis investigates the deliberative potential in two communicative initiatives resulting from the 2001 government policy in Swedish nature conservation, *A coherent nature conservation policy*. The two initiatives, which constitute the empirical material in the thesis are, (1) a national competence development programme that the Swedish Environmental Protection Agency ran 2008-2011, *Dialogue for nature conservation*, and (2) the nature interpretation at *naturum,* visitor centres at national parks and nature reserves. Data was generated through qualitative interviews with nature conservation administrators at county administrative boards; participant observation at dialogue courses and workshops with researchers and nature interpreters; video analysis of recorded nature interpretation sessions at naturums; documentation from naturum exhibitions; and document and literature studies.

The thesis draws from critical theory and clarifies rationales behind communicative practices in nature conservation. The analysis shows that the communicative initiatives are dominated by the instrumental state rationality, circumscribing space for communicative rationality. The 2001 nature conservation policy emphasised communication, but the communicative initiatives did not sufficiently integrate democratic aspects. By identifying the role of meaning-making as a central phenomenon in a communicative process, the thesis indicates how to include democratic dimensions in communicative work. The theoretical contribution of the thesis draws from an analysis of modernity, nature alienation and reconciliation. In the thesis, naturum is identified as a communicative forum with an underdeveloped potential for reconciliatory activities, more precisely deliberations on nature *in* nature.

The thesis contributes to the field of environmental communication through highlighting how communicative practices of nature conservation depend on both communication and materiality.

Keywords: communication, democracy, dialogue, deliberative democracy, deliberative system, nature conservation, nature interpretation, naturum, reconciliation, Sweden

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Samtalsdemokratiska perspektiv på svensk naturvård - Kommunikation och demokrati i dialogkurser och naturvägledning

Abstract

I denna avhandling studeras demokratiska perspektiv på svensk naturvård i termer av deliberativ demokrati, dvs. samtalsprocesser för medborgerlig åsiktsbildning. Syftet med avhandlingen är att undersöka den deliberativa potentialen inom svensk naturvård genom att studera hur demokratiska aspekter adresseras inom två kommunikativa satsningar som 2001 års naturvårdspolicy resulterade i. Dessa utgör avhandlingens empiriska material: (1) Ett kompetensutvecklingsprogram som Naturvårdsverket drev 2008-2011, *Dialog för naturvården*, samt (2) naturvägledning som bedrivs vid *naturum*, besökscentra vid nationalparker och naturreservat. Data har genererats genom kvalitativa intervjuer av länsstyrelsetjänstemän; deltagande observation vid dialogkurser och vid workshops med forskare och naturguider; analys av videoinspelade guidningar på naturum; dokumentation av naturumutställningar; samt dokumentanalys och litteraturstudier.

Avhandlingen bidrar med reflektioner kring motiv bakom naturvårdens kommunikativa praktik med utgångspunkt i kritisk teori. Analysen visar att de kommunikativa initiativ som studerats präglas av myndighetsvärldens instrumentella rationalitet och måluppfyllnad på bekostnad av kommunikativ rationalitet. Naturvårdspolicyn från 2001 gav fokus på kommunikativa satsningar, men dessa har inte fullt ut integrerat demokratiska aspekter. Genom att uppmärksamma meningsskapandet som sker i en kommunikativ process visar avhandlingen hur demokratiska aspekter kan inkluderas i kommunikationsarbetet. Avhandlingens teoretiska bidrag utgår ifrån en analys av modernitet och naturalienation samt *reconciliation*, försoning, som ett svar. En försoning mellan människa och natur förutsätter försoning mellan människor i en samtalsdemokratisk process. Naturum identifieras som ett kommunikativt forum med underutvecklad potential för försonande aktiviteter, närmare bestämt för deliberativa samtal om natur *i* naturen.

För att skapa ökad legitimitet för naturvårdsarbetet och en stärkt relation mellan människa och natur, såväl som människor emellan, behöver kommunikation ses som det kitt som kontinuerligt skapar relationer mellan människor. Avhandlingen bidrar till ämnet miljökommunikation genom att undersöka hur naturvårdens kommunikativa praktik är beroende både av kommunikation och materialitet.

Nyckelord: kommunikation, demokrati, dialog, deliberativ demokrati, deliberativt system, naturvård, naturvägledning, naturum, naturrelation, Sverige

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Ej för de starka i världen
men de svaga.
Ej för krigare men bönder som plöjt
sin jordlott utan att klaga,
spelar en gud på flöjt.
Det är en grekisk saga.

Hjalmar Gullberg, 1939
Ur *Förklädd gud*

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List of publications

This thesis is based on the work contained in the following papers, referred to by Roman numerals in the text:

I *Caselunghe, E. Nature Interpretation as a Democratic Forum for Deliberation on the Future – a Sustainability Perspective (manuscript to be submitted to the *International Journal of Heritage Studies*)

II *Caselunghe, E. & Hansen, H.P. Deliberation for conservation – disruption 'inside the box' (manuscript to be submitted to *Society and Natural Resources*)

III *Caselunghe, E., Bergeå, H. & von Essen, E. Public spheres for deliberation on nature? Democratic qualities of visitor centres in Sweden. (manuscript accepted with minor revisions in the *Journal of Public Deliberation*)

* Corresponding author.

My contributions to the papers included in this thesis are as follows:

I I developed the idea with initial input from Hans Peter Hansen. I wrote the manuscript and did the analysing work behind. Erica von Essen commented on a draft version of the paper.

II I participated in the research design. I planned and completed all data generation, analysis and writing. Hans Peter Hansen has contributed with research design and feedback on methods and analysis. The idea for theoretical framework was developed with assistance from Erica von Essen.

III I participated in the research design and some initial data generation. The main data generation was provided by Hanna Bergeå, Lars Hallgren, Eva Sandberg and David Forssander. The manuscript idea and data analysis are my own work. I developed the analytical framework and I did the writing with input from Hanna Bergeå and Erica von Essen.

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Abbreviations

CAB = County administrative board

DNC = Dialogue for nature conservation

EC = Environmental communication

JIR = Journal of Interpretation Research

NAI = National Association for Interpretation

NGO = Non-governmental organisation

NRM = Natural resource management

SCNI = Swedish Centre for Nature Interpretation

SEPA = Swedish Environmental Protection Agency

1 Introduction

For the past two to three decades, public involvement in natural resource management (NRM) and nature conservation has been a growing issue in policy and planning as well as in research (Reed, 2008; Dearden *et al.*, 2005; Ribot, 2002). Swedish nature conservation policy and its implementing authorities aim for increased local participation in nature conservation and have been working with this for a couple of decades. It is often assumed that the communicative efforts done in the early 21st century both strengthen public participation and contribute to meeting nature conservation targets, for instance by increasing legitimacy and reducing conflict (Westberg *et al.*, 2010; Swedish Government, 2001). Some limitations or failures have been documented (Hansson-Forman *et al.*, 2018; Duit & Löf, 2015), and this thesis contributes with another criticism, yet is oriented towards possibilities for democratisation in NRM. Through investigating two communicative initiatives in nature conservation and applying a normative framework of deliberative democracy, this thesis shows that such communicative initiatives for public participation in nature conservation hold underdeveloped potential to cultivate democratic forums for citizen deliberation on nature and the environment.

By connecting theory on democracy and intersubjective communication and by bridging the motives of instrumental and communicative rationality in the nature conservation sector, this thesis may contribute to central discussions in policy and practice, touching on legitimacy as well as learning. The work may contribute to increased engagement among citizens, increased trust in authorities, and as a result, increased compliance with directives. Concretely, it may be useful for nature interpretation actors who want to position their activities in the centre of society. The findings may also be useful for conservation authorities to find new ways to combine their communicative efforts with democratic criteria. The contribution of the thesis is also theoretical, in connecting democracy and intersubjective communication in innovative

ways, and in particular in using the context of nature interpretation, which has rarely been critically studied before in Sweden.

The basis of this work rests on the empirical investigation of two products from the 2001 Swedish nature conservation policy; Case 1 investigates a dialogue skills training programme among nature conservation administrations for increased local participation, and Case 2 is a study of nature interpretation at nature centres in protected sites.

The thesis starts with illuminating contemporary challenges regarding the environment as well as democracy, arguing that these two crises are connected. The research questions and aim focus on exploring the potential of deliberative democracy to handle these crises and reveal that two central aspects are: how intersubjective communication in nature conservation context deals with democratic aspects, and how we can depict today's crises in the light of modernity. The theoretical framework presents the key categories of communication, democracy, nature and modernity and suggests how they may be connected. The larger context of the empirical research is presented in Chapter 4, where the two case studies are closely described along with some history of nature conservation in Sweden. The shift in nature conservation to more participatory oriented methods is outlined. Furthermore, the thesis proposes how an instrumental rationale behind participation may be complemented by a normative rationale, allowing for justice, trust and reflexivity, which have intrinsic meanings constructed through human discourse.

The empirical material provided in the three appended papers is further analysed and synthesised in Chapter 6. The different communicative and democratic conditions of the two empirical cases are compared and criticised in several ways. The comparison and critique regard the cases in terms of: constraints for allowing for epistemic differences; producing citizens with environmental and collective agency, and acknowledging them as subjects; which in turn may be linked to conditions for *intersubjective* communication. In relation to the contemporary crises mentioned, both empirical cases are interpreted as attempts for nature reconciliation (i.e. bridging the separation between humans and nature) and they hold potential as two different kinds of public spheres in the deliberative system (Mansbridge *et al.*, 2012; Dryzek, 2009). The final chapter of the thesis calls for initiatives that: (a) regard communication as constitutive to society, (b) reconsider the societal role of nature conservation, (c) cultivate deliberative spaces that activate agency, and (d) reproduce continuous conditions for deliberative democratic process. The thesis concludes that by developing public spheres where communicative rationality can be activated, society could enable deliberation between equal

citizens on environment; something that may have transformative potential to support social change that takes environmental and democratic responsibility.

1.1 Background to the research problem

> […] we should also reconsider the essence of today's 'ecological crisis'. The metamorphosis of unseen side-effects of industrial production into foci of global ecological crises no longer appears as a problem of the world surrounding us – a so-called 'environmental problem' – but a profound institutional crisis of industrial society itself. (Beck, 1994, 8)

Using the words by sociologist Ulrich Beck, this thesis takes its departure from two interrelated major societal challenges of our time: the ecological (or environmental) crisis and the democratic crisis. This background section will explain why these crises are relevant to use as frames and in what ways they are interrelated. The environmental consequences of human life is nothing new in history, but what has happened from the 19th century onwards is an exponential increase of environmental effects due to industrialisation, increased consumption, transportation and population increase, but also a qualitative change in the kind and scale of environmental problems. The kinds of effects are becoming more transboundary and less reversible (Ripple *et al.*, 2017; Lidskog *et al.*, 1997; Beck, 1995). The environmental effects are often abstract and long-term, thereby difficult for individuals as well as economic systems to handle. Cause-effect relations are not always easy to track when trying to understand contemporary environmental problems and the social-ecological systems of our time are highly interconnected and complex. Climate change caused by the use of fossil fuels, deforestation and agricultural production threatens to change the conditions for current life on earth. Other large-scale problems like the ongoing extinction of species and decreasing sources of freshwater also need to be taken seriously (Ripple *et al.*, 2017). I refer to these challenges as the "ecological crisis", which includes challenges related to NRM. The thesis does not take a stand on particular environmental problems, but uses as its context one kind of applied mitigation to restore environment: nature conservation. Nature conservation is often applied to protected forest land, but for the aim of the thesis I will not exclude other kinds of nature. Still, protected nature, such as national parks and nature reserves, constitutes the setting for this research.

Furthermore, contemporary environmental problems are also afflicted by "value diversity and fact uncertainty" (Gunderson, 2014a, 642; see also Dietz, 2013). How an environmental problem is perceived and how it can be solved will inevitably vary between people and contexts depending on a person's

worldview and values; there will always be multiple framings and multiple strategies for handling an environmental issue. Fact uncertainty refers to the limited knowledge about what the reference situation for a particular environmental status is and the limited possibility to anticipate future effects of various measures and scenarios. When fact uncertainty prevails, the existing value diversity becomes more crucial. Contemporary environmental problems are often inherently irreversible, systematically prompted, invisible, and usually only exist as an idea after science gains knowledge about them (Beck, 1998).

While the scale and complexity of NRM has grown, our societies demonstrate a similar tendency. Much of the central institutions of our modern society have their origins in the 19th century, with formation of nation states and requests for increased democracy and social welfare. Disregarding its older roots, the Swedish democratic nation state has a history of about one century, with central reference years such as 1905 when the nation state was formed, and 1919 when universal suffrage was enacted. In general terms, however, the nation state is now often described as being weakened due to a transition from governing to governance (Wallin, 2017; Montin & Hedlund, 2009; Bäckstrand, 2006), which is associated with globalisation and indicates that multiple actors are engaged in the economic systems. Hence, the role of the nation state is changing. Societal tasks and responsibilities are shifting and the legitimacy of political decisions are dissolving (Eriksen & Weigård, 1999). There is a "continuing failure of social institutions" (Cox, 2007, 7) to engage sufficiently in handling human induced threats to social communities, which makes it more difficult to arrange agreements mitigating the ecological crisis. The nation state of late modernity has legitimation problems (Habermas, 1984a) and when the political system fails, there is growing disappointment among groups of citizens that experience exclusion, creating risks for political radicalism. The growing distrust, discontent and protests directed towards the political system and its representatives may also be understood in terms of the incapacities of the current system to acknowledge and host "forms of identification around possible alternatives" (Mouffe, 2014, 22). From a radical democratic perspective, the norms that limit certain issues, emotions and expressions from being allowed in the public, contribute to a consensual and depoliticised democracy (Mouffe, 2014). This has provided conditions for the flourishing right-wing populism to grow: "Indeed right-wing populist parties are often the only ones that attempt to mobilise passions and to create collective forms of identifications" (Mouffe, 2014, 22). Modernity, that brought us representative democracy, has also limited our political system to expressions of reason and moderation correspondingly leaving no space to host 'political passions' and popular frustrations. The growing focus on the individual comes with a decreased capacity to construct

collective forms of identification. Mouffe (2014) refers to the democratic crisis as a "crises of representation" and explains it as a consequence of the consensus domination in politics (i.e. when voices of dissent and resistance do not find channels in the established political parties and the representative democratic system, they appear in more extreme and populist manifestations). Importantly, Mouffe's contribution can be used to argue for a public sphere that enables creation of collective identities at the same time as acknowledging that the people are "not one, but divided" (Mouffe, 2014, 24).

The ecological and democratic crises are both products of modernity and are interrelated (see Beck, 2010). I have identified four components to explain their connection. These components involve both the conditions for the environment, such as being the basis for societal reproduction, and the conditions for democracy, for instance the need for a common materiality as a topic for community building. First (1), our capitalistic economic system is based on the use of natural resources, which "undermines its own material prerequisites" (Beck, 2010, 256). Society's dependence on the environment for its material reproduction, means that the state of the environment to a high extent affects the reproduction, organisation and development of society. This indicates that an environmental crisis impacts how society functions and to what extent people (including future generations) are able to live their lives and meet their current needs.

Second (2), organisation of society has varied throughout time but the dominating norm of democracy that evolved in Western countries as a product of the Enlightenment has become a crucial blueprint for society's organisation (Elling, 2008). Meaning, that whenever there is a situation of collective implications, pertaining to public resources and interests, democratic solutions are sought. The discussion of democracy is dedicated a longer section further along in the thesis in Chapter 3. However, at this time I would like to stress that democracy is dynamic. This implies that institutions for representation, elections and rule of law, which are seen as fundamental features of Western democracy, are also dynamic. In times of financial crises, privatisation and populism, the democratic institutions face some erosion (Kelemen & Blauberger, 2017; Ayers & Saad-Filho, 2014). This erosion also impacts the institutions of nature conservation, and the practices for nature management. In the same time, such democratic erosion indicates that nature is the fundamental material component to collective decision-making. Leading to the idea that in order to deal with democratic crisis, we need to work with something that exists, i.e. our common materiality, which is nature. Third (3), environmental problems cannot be satisfactorily managed merely with technology, but need to be addressed from a societal perspective, considering collective goals and value pluralism. Technological advancements only partly assist us in solving environmental problems; the part that often remains to be

resolved is the social aspect – how people decide, interact and behave. Fourth, (4) there are no correct, absolute or unbiased answers as to what nature should actually look like, but competing conceptions and interests. This implies that we can never know that something is an environmental problem as an ontological truth, unless humans perceive, construct and define it in policy. Indeed, natural systems are dynamic through time and space and do not have a standard condition as a reference point. Environmental problems, as well as desired environmental conditions, can only be defined through intersubjective language mediated processes of communication. In other words: these problems are made sense of within various types of public deliberative processes. The role of public deliberation is a crucial feature of democracy, which will be discussed further on in this thesis. Deliberative democracy pays attention to the communicative processes of democracy and such communication oriented processes can take place in multiple formats and places. As an analytical tool, the deliberative system is used to understand how different communicative arenas are linked and how they complement each other. In considering deliberative democracy as a system, it shows the importance of informal public spheres, operationalises democracy into practical processes, enables greater understanding of the place of diverse types of communicative arenas and allows informal spheres to check formal ones.

Although considerably challenging to deal with in practice and policy, the connections between these two crises provide hope for the future, in that it illuminates the need for society to manage both the environment and democracy in integrated processes. Furthermore, it may mean that success in environmental management has a supportive function in democratic development, and vice versa. By opening up public discussions on the need for solving environmental problems on democratic premises, the legitimacy for both may increase.

Another way of conceptualising the reciprocity of ecological and democratic crises, is that environmental problems are sociological problems (see Hansen & Cox, 2015a; Beck, 1998; Vogel, 1996). Society and its forms of interactions related to the environment can be understood and addressed by studies of environmental communication. Both environmental and NRM issues are products of how we collectively govern our society. The kind of NRM preferred is contingent on values and priorities that exist at any one time – NRM is thus political. Since nature is the material base for our common society, these issues are collective in character and necessary for both our primary human needs and for our cultural human reproduction. This implies that the management of nature and the environment should be objects of deliberation and decision-making of our democracy. Since the 1970s there has been a general growing trend of citizen participation within planning generally, but increasingly also within the NRM context, in which interests and goods are decidedly ‘public’ in character. This

trend is reflected both in policy, practice and research. Agenda 21 (United Nations, 1992), the Aarhus Convention (UNECE, 1998) and the European Landscape Convention (Council of Europe, 2000) are examples of how issues of democracy and participation are being integrated into policy to achieve more impact in political decision-making processes. The global turn towards governance and towards bringing public matters to processes of public deliberation, has influenced Sweden to adopt conservation and NRM policies that ostensibly reflect more citizen-based decision-making. The context of this thesis is the nature conservation policy *En samlad naturvårdspolitik (A coherent conservation policy)* that the Swedish government formulated in 2001 (Swedish Government, 2001). In this state policy there is an explicit emphasis on communication as a way forward to manage human-nature relations. I have therefore studied democracy in terms of communication – how this is expressed and with what implications – through two specific products from this policy, which constitute the two empirical cases of this thesis. The first case will be referred to as Dialogue for Nature Conservation (DNC) (SEPA, 2008) and was a large-scale communicative skills development programme operated by the Swedish Environmental Protection Agency (SEPA) and offered to all nature conservation administrators at the county administrative boards of Sweden. The second case is the type of nature interpretation activities taking place at Swedish naturums (visitor centres in national parks), which are coordinated by the SEPA and run by the county administrative boards (SEPA, 2009). For the purpose of this thesis both these cases are regarded in terms of being products from the same nature conservation policy from 2001, emphasising the human and communicative dimension of conservation.

1.2 Research problem, aim and research questions

The ecological crisis can only be defined, understood and ultimately solved through democratic processes that recognise the public stake in natural resources and the natural environment. Indeed, institutions working with environmental issues and NRM today receive explicit instructions from the government to also work with democracy and communication in implementing nature conservation goals. However, nature conservation work does not automatically guarantee that democratic consideration is taken seriously. Rather, there are situations where democracy and ecological targets are regarded as contradictions. How to work to practically combine democracy and environmental targets is not a simple task. The aspiration of this thesis is to contribute with critical reflections regarding the aims and rationales motivating the practice of Swedish nature conservation

work. To do this I study two different cases exemplifying strategic nature conservation work and investigate the democratic basis upon which they rests.

The thesis explores the democratic perspective and the view on citizens in contemporary nature conservation, particularly from the outlook of societal institutions and agencies. Sweden is regarded to be a participatory democracy with deliberative qualities and the thesis reflects upon which ways the two cases fulfil these qualities. Enabled and restricted by the selected cases, the thesis aims to study if there are possibilities to establish forums for citizens to meet under meaningful, but also government-critical democratic formats to engage in conversations on nature conservation through methods that allow them to learn from each other. The SEPA invests in communication in order to meet requirements of democratic procedure within nature conservation. Without taking a closer look at these communicative efforts it is difficult to know if, or to what extent, they fulfil democratic criteria. There is a need to investigate how the authorities' attempts turn out, addressing democracy through communicative work.

The aim with the thesis is to investigate the deliberative democratic potential within nature conservation in Sweden. I undertake this task by studying how democratic aspects are addressed within public communicative initiatives in nature conservation. The following research questions guide this study:

1. How are deliberative democratic ideals lived out in the intersubjective communication between nature conservation authorities and citizens in recent years (2001-2015)?
2. Which are the openings and limitations of these communicative initiatives to create democratic deliberation, and how can these openings and limitations be understood in relation to:
    a. the construction of subject and the intersubjective?
    b. the expressions of modernity?

The analysis of these communicative initiatives within nature conservation also generates an image of how the contemporary relationships between humans, nature and society are expressed through, and reflected in, schemes of nature conservation. The theoretical part of the thesis involves the concepts of communication, democracy, nature and modernity in relation to each other and interpreted through a deliberative democratic analytical lens. The empirical material consists of two case studies of democratically motivated communication initiatives within Swedish nature conservation. Both were results from the 2001 government white paper, *A coherent nature conservation policy* (Swedish Government, 2001). These two initiatives created communicative encounters

within the context of nature conservation, where nature conservation authorities, together with society and citizens, construct interpretations of the human-society-nature interface.

1.3 Contributions and limitations of the thesis

This thesis is a piece of work within environmental communication and contributes to discussions that are relevant even to a larger field beyond environmental communication. Environmental communication studies how humans communicate regarding environmental issues. Central to this area is how communicative processes look in the administrative system, where public participation is a key feature. Public participation, in turn, is closely related to democracy. In this sense, much of environmental communication touches on both democracy and communication, but this thesis more explicitly engages in how the relationship between communication and democracy is manifested. The thesis is placed in an interdisciplinary research landscape, where epistemologies, methods and research topics meet from strands of communication studies, sociology, NRM studies, environmental history, museology, visitor studies and planning. Even if the thesis touches on political philosophy and even political science, it is not intended as a political science contribution in terms of governance regimes. Rather it relates to 'the political', in terms of "the antagonistic dimension which is inherent in all human societies" (Mouffe, 2014, 17). This is distinguished from 'politics' which refers to institutions "which seek to establish a certain order" (Mouffe, 2014, 17). While the thesis does engage with 'the political', it does not regard consequences to the bureaucratic mechanisms, which are central components to political science. The interpretations of democracy, or state and citizens, are thoroughly done in light of communication – i.e. any political science elements in this study are restricted to aspects of communication.

What the thesis does is to bring together theories and contexts that are not conventionally combined and identifies fruitful combinations of areas for further exploration. The contributions of the thesis are of particular importance for researchers engaged in the communicative or democratic perspectives of NRM, but also more generally for researchers in NRM as well as in visitor studies. The empirical work contributes to studies of policy implementation in NRM, to studies of environmental administrators' professional perspectives, to studies of visitors in protected areas, and to communicative studies of environmental education. The thesis also prepares the ground for critical voices in the nature conservation sector outside academia who work with public participation in a non-instrumental way. Hopefully, the thesis provides sufficient and significant

empirical findings and critical reflections that have relevance to policy makers, administrators within nature conservation, nature interpreters at state founded visitor centres, as well as other interpretative organisations that aim to broaden their societal commitment.

Theoretically, the thesis contributes in:

1. illustrating one state-initiated path – and its shortcomings – towards nature reconciliation in contemporary society;
2. pluralising the way we think about how and where democracy is practiced today (i.e. new arenas);
3. showing the relationship between materiality and symbol and how this may be concretised in physical deliberative spaces;
4. examining the potential for deliberative contexts within NRM to act as interfaces between expert and citizen perspectives;
5. highlighting the role of personal change in bringing about structural transformations in practice and organisational culture; and
6. increased understanding of the role of meaning-making as a fundamentally democratic practice.

Contemporary societal discussions that this thesis contributes to are about: (a) limitations and threats to democracy, (b) balancing between procedure and outcome in democratic processes, which is linked to debates about the prioritisation of sustainability dimensions and (c) the societal role of nature conservation and visitor centres.

The PhD project is limited in terms of time frames, including practical limitations due to other commitments during the time of my PhD process. Ideally the empirical material would be richer in quantity for the second case, and optimally I would have participated in and documented all guided sessions at naturum in person. However, the material is still very rich, and the attached articles, for instance, only use a small fraction of the total empirical material generated; no additional empirics are supplemented to the compilation part of the thesis in order to follow the standards.

1.4 Outline

The outline of the thesis is a product of the research and writing processes. The first chapter offers an epistemological and methodological framework, including my own pre-understanding. The second chapter presents the methods applied during all phases of this PhD project. During the project it became apparent that the two most central theoretical concepts to my PhD thesis are communication

and democracy, and those concepts are also what connects the two empirical cases. In the theory chapter each of the concepts are explained and unpacked and then explored in relation to each other in the research context. To further understand democracy, communication as well as human-nature relations, the concept of modernity has been fruitful. Indeed, modernity provides an umbrella under which such concepts are configured and operationalised in NRM.

The fifth chapter presents the contexts of this study (i.e. nature conservation in Sweden), and introduces the two case studies that contribute empirically to the thesis. There are three papers attached to the thesis and each of them is described in Chapter 5. The first (I) is a conceptual paper on nature interpretation as a forum for deliberation on the future. This paper has an orientating purpose and clarifies the normative premises of this research and its perspective on democracy. The second paper (II) describes and analyses the empirical data from the first case study, and the third paper (III) does the same for the second case study.

The synthesis is a chapter where I integrate the findings based on the empirical data in the papers, with literature studies and reflections on what the two empirical cases altogether mean in terms of communication and democracy. There is a short framing discussion chapter that situates the research in a place and time, including generalising findings. Finally the conclusions follow with implications for theory, practice and future research and policy.

2 Research design and methodology

This chapter presents the epistemological and methodological platform for my PhD work, and leads to the research design and methods applied. I explain how the epistemological traditions of critical theory, social constructionism and hermeneutics, in a context of interpretive research, have coloured my understanding of knowledge, science and the relationship between theory and empirics. The epistemological section enters into critical theory and the Frankfurt School through presenting 'knowledge-constitutive interests' (see Habermas, 1987a). Just like other interpretive social science traditions, critical theory requires reflexivity regarding knowledge, scientific findings and the researcher's role. Relevant to critical theory, hermeneutics and social constructionism contribute to my epistemological platform. The methodology section in the middle aims to connect epistemology to methods, while the last part of this chapter is a thorough account of the method used.

2.1 Epistemological platform

Three main epistemological traditions are presented that have coloured my research; however distinct, they share some features and connections. They contribute in focusing various components of my research, like three angles to a triangular epistemological platform: (I) critical, change orientation that sheds light on the larger societal system, (II) qualitative and interpretive enquiry on a level that takes the perspective of the individual subject, and (III) a fundamental approach to knowledge as socially constructed and mediated through language.

2.1.1 Critical theory to illuminate nature relations in modernity

Social science can be said to contribute in three directions, by (1) explaining, (2) understanding, and (3) changing society (Månson, 2006). These correspond to the epistemological traditions of (1) positivist, (2) interpretivist, and (3) critical social science (Östman, 2003). Given that all three levels of inquiry are needed, my research approach centres on an interest in social change, emancipation, human rights and environmental responsibility – corresponding to the third category. The early writings by Habermas (1987a) on *knowledge-constitutive interests* are what first interested me in the tradition of critical theory. Knowledge-constitutive interests as a concept illustrates how knowledge development is motivated by human interests of work, interaction and emancipation which are the basis for human existence. These correspond to three main scientific branches – natural science, human and cultural sciences, and social science.

The thesis conveys theories and concepts from the Frankfurt School tradition of critical theory. Critical theory aims to generate knowledge to be used for emancipating humans from repressive and irrational social structures (Alvesson & Sköldberg, 2008). As a theoretical direction, critical theory not only offers an epistemological perspective that is adequate for my research interest, but fundamentally engages in problems around democracy, communication, modernity and relation to nature (Jay, 2016) – which are central concepts in this thesis. Some of the useful parts from my reading of critical theory come from its combination of historical materialism with human emancipation, knowledge interests and human domination over nature, and what these three contributes to in terms of social structures. Parts of the literature from the early Frankfurt School are slightly conservative, considerably deductive and mainly dystopian or pessimistic (e.g. Horkheimer & Adorno, 2002). However, later generations of critical theory are more nuanced and future-oriented, or even utopian (Alvesson & Sköldberg, 2008). The early critical theorists that are cited in this thesis, Horkheimer, Adorno, Marcuse and Benjamin, are mainly referred to in terms of their criticism of modernity and related human-nature alienation. Later critical theorists cited are Habermas, Fraser and Sennett, who all provide the discussion with constructive proposals as a response to the previously expressed criticism. Fraser's (1990) writings are examples of how the theoretical space for pluralism and conflict within communicative and democratic processes is acknowledged.

2.1.2 Interpretive and reflexive research that problematises the role of the researcher

In an interpretive research approach, the researcher gives attention to the level of meaning and considers the aim as ascribing meaning and significance to different societal phenomena (Alvesson & Sköldberg, 2008). As in all interpretive research, the oscillation between closeness and estrangement is crucial, and perhaps the ability to distance and estrange oneself may be even more important in critical theory (Alvesson & Sköldberg, 2008).

Working with critical research entails a certain reflexivity of the researcher, simultaneously being a citizen and a subject. The reflexivity needs to be applied in understanding other people involved in the research process as well; they are not merely research objects or informants, but subjects, citizens and respondents in a communicative situation of social co-construction. Subjectivity is inescapable, even as a researcher, and therefore the most transparent and scientific approach is to be explicit with one's subjectivity. The complex role of researcher-citizen-subject also entails searching for consistency between the different roles, although hundred percentage consistency would be utopian. A certain distance from personal viewpoints is certainly needed for being scientific; to be able to fully describe and analyse other diverging images of reality. During interviews I therefore strive for an approach that looks at what is true according to the respondents' subjective perspectives, almost like a phenomenological perspective (Kvale & Brinkmann, 2009; Alvesson & Sköldberg, 2008). My intention is to investigate a phenomenon or a story from its own premises. When doing research on society one cannot completely remain outside. There is a continuum regarding the positioning of the researcher as 'inside' or 'outside', as well as a regarding the positioning of the research subjects as 'objects' or 'co-researchers'. I place my research somewhere in the middle of these scales. Except for their relation to the respondents, the reflexivity that a qualitative, interpretive researcher commits to also considers the role of language, interpretation and selectivity throughout the research process (Alvesson & Sköldberg, 2008).

My normativity in this PhD work is mainly attached to communicative procedures, and there I have a Habermasian perspective, viewing outcomes as subordinate to the process. The normativity regards how the process functions and what the premises are for communication and decision-making. In that sense, it is a democratic normativity that does not concern the very materiality of the environment, although my point of departure includes that communication and procedures are crucial to what happens to the environment. I also have a normative approach to communication, which is not just *any* interesting topic to study, but is also a determinant of our societal and environmental problems.

While I would potentially not agree or disagree with the outcomes of a particular environmental communicative process, I do see risks regarding outcomes. One reason that outcomes may disregard important environmental or social perspectives is the inherent communicative distortion that is realistically inevitable in any communicative situation. The 'ideal speech situation' (Habermas, 1994) is utopian, even if worth striving for. While prescribing and having trust in deliberative procedures, I do so with the precaution that they are never totally safe for human life and the planet. I find these thoughts resonate well with principles in the field of environmental communication.

This PhD process, but also the previous years of working as a research assistant in environmental communication, has substantially enriched my epistemological journey. Searching for an epistemology that could better serve the environmental social sciences of my interest, and coming from a background in natural sciences (biology, ecology, environmental sciences and nature resource management) and pure positivism, I have brought these perspectives with me as part of my pre-understanding, while landing in a social construction perspective.

2.1.3 Social construction of nature and knowledge

When I explain social construction to people outside social sciences, I usually start by saying that nothing we know about reality can be known unless it is processed by human senses or the brain. Since every human subject has a unique perspective, the interpretation will vary accordingly. This is a basic premise that most natural scientists will agree with. The consequences of such an approach are that concepts of reality and knowledge are dependent on specific social contexts. An immediate consequence of this perspective is that considerable attention needs to be paid to the sociology of knowledge which has to be concerned with the investigation of what is taken for granted as knowledge in particular human societies. In the words of Berger and Luckmann (1991) who 1966 wrote their seminal book *The Social Construction of Reality*, the social construction approach sheds light on the "processes by which *any* body of 'knowledge' comes to be socially established as 'reality'" (p.15). A social construction perspective implies that both knowledge and research outcomes are products of social and political conditions, and should be regarded as constructed – not pre-existing before any inquiry about truth is made (Alvesson & Sköldberg, 2008). Moreover, social constructionism offers a focus on the individual as prior to structure, which was the dominating perspective at the time for Berger's and Luckmann's book (Alvesson & Sköldberg, 2008). Whereas the individual constructs their reality, institutions and legitimations for these, this constructed

reality (through socialisation) constructs the individual (Alvesson & Sköldberg, 2008). Our worldview is continuously confirmed and re-produced through social interaction, with language as the most essential part. Both subjective cognitions and intersubjective language and discourses are social constructions (Berger & Luckmann, 1991).

The variation between different degrees of social constructionism has been described along a scale as 1) a critical perspective that questions what is regarded as natural, 2) sociological theories on how social reality is constructed and how society works, 3) an epistemology that regards knowledge as socially constructed, and 4) an ontological position that considers reality itself as a social construction (Alvesson & Sköldberg, 2008; Barlebo Wenneberg, 2001).

In the context of this thesis, it may be relevant to comment on social constructionism in relation to the environment. A social construction perspective emphasises that environmental problems are defined by humans; in other words, nature is not able to define any limits or categories for what an environmental problem is. Still, these challenges exist on an ontological level. It may be a dilemma for social constructionism if environmental problems are reduced to social constructions – since society could just choose to re-define or re-construct them (Barlebo Wenneberg, 2001).

Barlebo Wenneberg (2001) uses social constructionism to argue that nature and culture are interdependent entities – or exist in a dialectic relationship. Nature can only be acknowledged as a reality, through social processes; and the social reality presupposes human behaviours on a physical level.

In his updated version of social constructionism, Barlebo Wenneberg (2001) also proposes the more radical suggestion that social institutions do not merely exist, but have to be investigated from a normative perspective. Furthermore, a normative perspective on social institutions should lead to an ethical standpoint from the researcher. This normativity includes that the research formulates suggested actions, for instance on how to improve the institution of science.

This thesis, though, does not explicitly engage in a meta-discussion on research as institution. However, it does predicate the importance of reconsidering nature conservation as a public concern. It invites a reflection on nature as belonging to everyone – and that everyone belongs to. It also investigates the need for institutions that actively take responsibility for increasing access to nature, discussions on nature, and decisions on nature. It encourages a reflection on different motivations for nature conservation and nature interpretation, given that these two are institutions that society favours but with limited discussions as to why, or if there is a need to change the premise.

2.1.4 Hermeneutics to enable understanding of the particularities in relation to the context

The interpretive research approach in this thesis is also inspired by hermeneutics, which is closely related to critical theory. For instance, Habermas speaks of 'critical hermeneutics'. Returning to the knowledge-constitutive interests, hermeneutics would largely correspond to the interpretivist category (Ödman, 2001), stressing the societal aim to construct knowledge in order increase understanding of how humans and societies work. Hermeneutics as a methodology has a long history, originating from the Renaissance interpretation of texts in the Bible. It is usually defined as the theory and methodology of interpretation and nowadays applies broadly to a variety of academic fields.

One fundamental idea in hermeneutics is that meaning-making is always done in context and the interpretations are only possible to comprehensively understand when placed in that particular context. Hermeneutics is devoted to the relationships between the parts and the whole. The hermeneutic circle, or rather spiral (Ödman, 2001), is a model to display the dynamic movement between the whole and the parts, or between the interpreted phenomenon, our pre-understanding and the context. When motivating a certain interpretation of a phenomenon we cannot exit the hermeneutical circle, because we are trapped in understanding the parts in relation to the whole, and understanding the whole in relation to the parts. Similar to a puzzle, we are dependent on the whole picture to understand the role of the single piece, and dependent on interpreting each single piece to find its place in the whole (Ödman, 2001). Another example is how we understand words in relation to meanings when learning a new language (Ödman, 2001). There are levels of meaning that inform us what is relevant for interpretation: first the factual, then the meaning for the actor and then what this means to the interpreter (researcher) (Gilje & Grimen, 1993).

Gidden's extended version (i.e. double hermeneutics), points out that the researcher needs to relate to the world and interpretations of the actors, but also needs to reconstruct the interpretations of the actors in a theoretical light to be able to understand how society works (Gilje & Grimen, 1993). The researcher needs to relate to concepts both close to and distant to reality (Gilje & Grimen, 1993). The work of hermeneutics lies in how to integrate both of these spheres.

Critical theory, in turn, has been described as a triple hermeneutics. The first level of understanding responds to the interpretation of the individual subject in their situation, the double hermeneutics (second level) involves the interpretive process of the researcher, and the triple hermeneutics (third level) extends to include interpretation of the social processes and structures that may affect both the subject and the researcher in their interpretations (Alvesson & Sköldberg, 2008).

A central methodological tool in critical theory is to enable critical interpretations though dialectic thinking (Alvesson & Sköldberg, 2008), something that is applied throughout this thesis, for instance in Section 3.1.1. Dialectic thinking involves searching for contradictions, negations and alternative interpretations. This may contribute to constructing contrasts, which could be pedagogical tools for questioning the established or presupposed conceptions about reality (Alvesson & Sköldberg, 2008). One central application of hermeneutic thinking is the procedure of not only searching for contradictions throughout the empirical work, but also in regarding these contradictions as productive. Thus, the task is to harbour the contradictions without hesitation, since they are both highly valid representations of reality, as well as the procedure to achieve information on reality.

The methodological framework in the following sections is a foundation for the case studies and includes layers of research design, empirical data generation and analysis.

2.2 Research design and analytical approach

This PhD project follows critical theory and hermeneutics research traditions and is also influenced by environmental communication as a field of study. The larger aim behind the research is not only to describe the democratic conditions of communication within nature conservation, but to a higher extent to generate increased understanding of the professionals in this sector, and understanding of how these practices can be interpreted in terms of deliberative democracy. This originates from an even larger agenda – meeting the knowledge interest of critical theory – which is no less than to contribute to emancipatory change for humans and nature. Consequently, to achieve an increased understanding and possibility for alternative interpretations, qualitative methods have been used, such as participant observation and open-ended interviews. The workshops with nature interpreters are examples of how the change-oriented critical aspiration has been expressed through interactive research activities.

A case is “a unit of human activity embedded in the real world; which can only be studied or understood in context; which exists in the here and now; that merges in with its context so that precise boundaries are difficult to draw” (Gillham, 2000, 1). The two case studies that this thesis builds on are two unique cases within one common larger context. The cases contribute to understanding of communication on democratic premise within Swedish nature conservation, after 2001 with a focus on the years 2008-2015. The cases are two examples of how the environmental authorities try to increase legitimacy for nature conservation work and policy by involving citizens and stakeholders in

communication about nature conservation. As the thesis will claim, the communicative projects are based on the perceptions and needs of the authorities rather than those of the citizens. Thereby, it may be argued, this kind of communicative initiatives pertain to a representative democracy, which hesitantly tries to find deliberative moments, and partly fails in this matter.

While the cases were chosen due to their uniqueness, together they form a broader picture (cf. Stake, 1995). To capture the complexity of each case, multiple methods have been used (Johansson, 2012). The case studies may be said to be instrumental in the sense that I was looking for democracy and communication in nature conservation, particularly aspects of deliberative democracy. They may also be said to be intrinsic (cf. Stake, 1995) in the way they were part of two separate, larger research projects, where the overall aims were disparate to my research questions. In that sense, my case studies were open to wider aspects beyond the ones represented by my research questions in the PhD-work, allowing the cases to contribute with dimensions outside my pre-defined interests.

My first case study was done within a larger research project on multiple rationalities within nature conservation administration, through the study of a skills development programme, its origin and implementation. The title of this larger project was *Minimizing the blind spot of public institutions: Recovering multiple rationalities for public deliberation of sustainable development*. It was funded by the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS) and ran from 2010 to 2015. My second case study was done within a larger research project called *Planning of heritage interpretation – meaning-making and systems thinking* which ran from 2014 to 2016 with the aim to develop, apply, evaluate and describe a planning model for heritage interpretation with focus on meaning-making, deliberative democracy and context. This project was funded by the Swedish National Heritage Board.

2.3 Data generation and analysis

To give context to the methods used, some introduction to my cases is necessary. The full case descriptions are found in Chapter 4. The first case study (1) is a skills development programme for nature conservation administrators called Dialogue for Nature Conservation (DNC). It was a large-scale educational investment by the SEPA that run between 2008 and 2011. Although it was voluntary to participate in, it was taken by most of the administrators in the target group, which implies its impact might have been considerable. The aim of the

programme was to teach administrators to implement conservation policy in combination with local participation.

The second case study (2) is nature interpretation at three Swedish naturums (i.e. visitor centres in national parks and other protected natural sites). Nature interpretation is increasingly mentioned in nature conservation policy as a tool for environmental authorities to inform the public about nature conservation. Case 1 and 2 together make up a good example of how the conservation policy from 2001 was implemented. The conservation policy emphasised the human dimensions in nature conservation and highlighted aspects of communication, dialogue and local participation in order to improve nature conservation.

To investigate the two cases as well as the larger context in which they are situated, multiple methods were used, though limited within the frame of qualitative research. The data generation (Table 1) and analysis were mainly divided between the two case studies. In the following, the methods are described.

Table 1. Data sources for the empirical cases

Data generation	Case 1	Case 2
Main data	21 interviews with administrators who participated in the DNC (2012)	6 video recorded guided tours at naturums (2014)
	Policy documents and programs	Policy documents and programs
Contributing data	Course evaluations from 36 courses 2008-2011 with approximately 500 participants	Participant observation at a course for Danish nature interpreters (2 days, March 2011)
	Participant observation at one DNC basic course (4 days, fall 2011)	Participant observation at two courses for Swedish nature interpreters (3 days, 2015)
	Transcripts from previous interviews with persons deciding about and implementing the DNC programme	Study visits, naturum exhibitions (2014-2015)
		Interview transcripts with 2 guides (2014)
		Participant observation at 3 workshops (6 days, 2014-2015)

2.3.1 Interviews with CAB administrators (Case 1)

The primary source of data for the first case study is interviews with county administrative board (CAB) administrators. Qualitative semi-structured in-depth interviews were carried out with 21 course participants in five counties, as mentioned in Paper II. The selection of counties and respondents is also described in Paper II. The aim with these interviews was to understand how the participants at the DNC perceived the course and in what terms they thought it addressed the central challenges of current nature conservation. Thus, there are two main questions that this set of interviews intended to answer:

1. Why did the administrator take the DNC course and how is that related to their perception of challenges in nature conservation administration?
2. Was there any kind of change due to the course, and do the participants think or act differently afterwards?

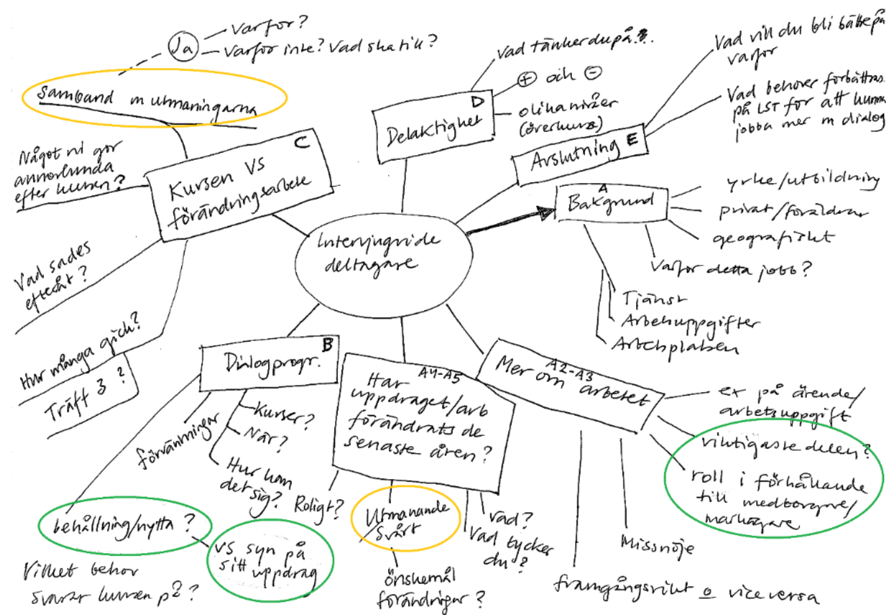

Figure 1. The mind map used during the interviews for Case 1, covering the themes and questions in the interview guide, in Swedish.

The interview guide was developed and applied in Swedish. A mind map was used during the semi-structured interviews (Figure 1) with the freedom to adjust the interview to the logical order of the respondent's story, maintain focus on the research objective, which enabled me to cross out themes that were covered or appeared irrelevant in the specific interview situation. An English translation of the interview guide can be found in Appendix 1. In this case, semi-structured means that the main themes of the interviews and a suggested order were proposed in the interview guide (Dunn, 2005). However, there was flexibility during the interview that allowed the respondent to move between the themes, and allowed me to adjust to the situation and exclude minor areas, re-formulate questions or ask new questions, in order to make sense of the intersubjective situation and of my research objectives.

In doing interviews there are a number of considerations since the way you ask and listen will affect the story told by the respondent. The method applied follows the recommendations by Kvale and Brinkmann (2009) having a life-world perspective, where the respondent may give meaning to certain themes, and the interviewing person mirrors these; focusing on specific and concrete experiences; purposive naivety in order to be open for new perspectives; allowing the respondent to be ambiguous as humans may be; and cultivating the interview situation as an *intersubjective* meeting where the respondent should have a positive communicative experience (Kvale & Brinkmann, 2009). In the following passage, the interview technique is described in detail. First, concrete language and accessible interview questions were sought that describe everyday situations, both when constructing the interview guide and during interviews. I used the interview guide freely, not keeping strictly to the order, but trying to create space for the different topics. I started like, "Could you tell me about a recent case that you have been working with?" Rather than asking, "What do you think about working at the CAB?" The reason was that concrete questions would make it easier for the respondent to recall experiences, thereby making it easier to respond. During the interviews I applied mirroring and summarising techniques to avoid misunderstandings. Leading questions were avoided by first giving the opportunity to the respondent to make their own formulation or definition. In the introduction of every interview I mentioned the possibility for the respondent to try different roles, and not only their role as CAB administrator (e.g. what would you think as a citizen?). My aim in doing this was to avoid forcing the person to become their role and defend it. I have tried to bring up and show the inherent contradictions in their perception of the DNC and their working tasks, because contradictions can be used to detect where openings for change can be found and my research is concerned with finding space for

change. I ended the interview with some type of visionary question to allow for possibilities and space for action.

I conducted the interviews face to face in order to create trust and show commitment. Only one interview was done via telephone. Each interview was between 65 and 135 minutes, with the average taking one and a half hours. The interviews were carefully documented through voice recording and notes.

The interviews were performed in Swedish, and later translated into English. The transcripts were proofread and then sent to each respondent with a request to comment on any misunderstandings and to mark sentences that I should treat extra sensitively, in order to maintain confidentiality. By this stage, the transcripts were not yet decoded, and names and places remained in the original form. Since the respondents were promised confidentiality, the transcripts were then roughly processed by removing or replacing all personal and geographical names with codes. Other personal data was distorted in subtle ways, in order to remove apparent connections between transcripts and individuals. This data did not have importance to the research project.

The pre-analytical phase, which has an informal character, is an important part of the analytical work, although it is chronologically before the main analysis (see Figure 3). By pre-analysis I mean different activities that bring up themes, key points and questions, which are vital input to the analysis, yet may appear in a less structured way. These activities comprise project meetings, interviews, transcript reading, and conversations and thoughts that happened to take place – still providing the analytical work with crucial evidence. Such clues were collected in analytical memos (described below), and later transferred to the actual analytical documents.

Before accomplishing the thematic coding the research questions were related to the empirical data, which was assisted by keeping a three tiered level in mind (Saldaña, 2011, 90). The first level of analysis consists of the respondent's factual information, i.e. data that could be verified. This data captures how the CAB works, what the nature conservation administrators do, and their participation in the DNC. The second level of analysis deals with the respondents' own interpretation of the first level information, which means how the respondent makes meaning of their experiences. This indicates how different individuals balance between aspects of their roles, their needs and wishes. The third level of analysis is the researcher's perspective. Conclusions were drawn from the level 1 and 2 analysis, and the empirical findings were connected back to the theoretical framework.

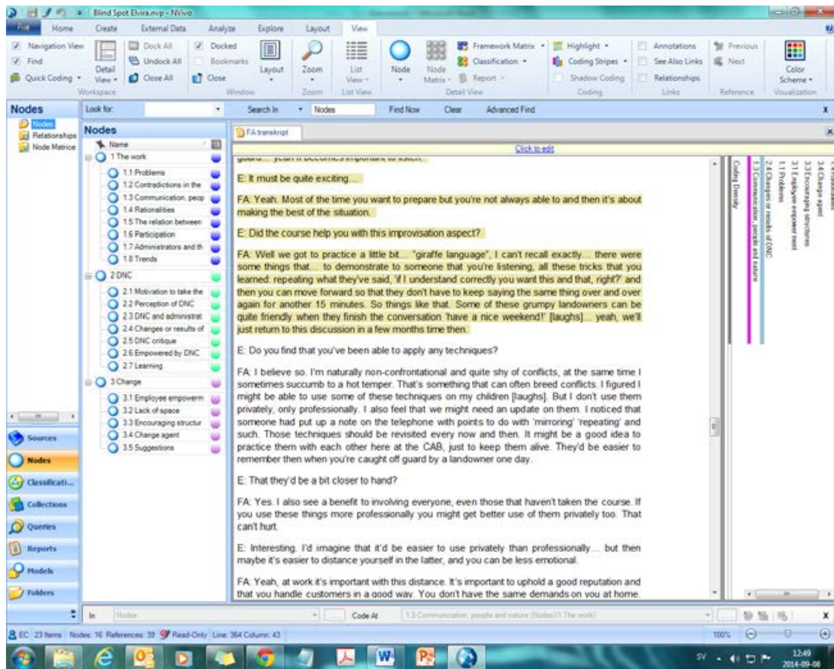

Figure 2. Example from the coding process in NVivo. Nodes equals what I call categories or themes.

By coding in this stage is meant, the procedure of reading through a transcript and applying different themes or categories on a sequence of the transcript (Figure 2). The themes or what I call categories are partly constructed before coding, and partly as a heuristic throughout the process. Episodes where the respondent talks about their role as an administrator, about the CAB as an organisation, about relating to external actors such as landowners and citizens, were allotted their own categories. I also looked for sequences where the respondent hints their understanding of communication, dialogue, participation and democracy. Everything that is directly connected to the DNC programme was coded and special attention was directed to any contradictions. I created three main categories containing 20 sub categories (Table 2). The units that were coded varied from a couple of words to a few sentences. The analysis was initiated during the coding through memo writing (method described below), and then repeated after coding was completed. A two cycle analysis process was applied through thematic analysis (Saldaña, 2013, 175-183) using the software NVivo. The result from this analysis is presented in Paper II.

Table 2. Categories for interview analysis in Case 1

1 The work
1.1 Problems
1.2 Contradictions in the work
1.3 Communication, people and nature
1.4 Rationalities
1.5 The relation between administrators and citizens
1.6 Participation
1.7 Administrators and their CAB
1.8 Trends
2 The DNC
2.1 Motivation to take the course
2.2 Perception of the DNC
2.3 DNC and administrators' blind spot
2.4 Changes or results of the DNC
2.5 DNC critique
2.6 Empowered by the DNC
2.7 Learning
3 Change
3.1 Employee empowerment
3.2 Lack of space
3.3 Encouraging structures
3.4 Change agent
3.5 Suggestions

2.3.2 Complementary data Case 1

Empirical data that contributed to the complete analysis of the case was also generated through participant observation at one of the DNC basic courses in 2011. My focus was to look for (deliberative) democratic aspects regarding both the content and format of the course and the interactions. In participant observation the researcher has to balance between passive observation and active participation. My approach to maintaining this balance was to participate when active involvement is "essential to acceptance" (Taylor *et al.*, 2015, 66). I also see an ethical reason for some active involvement since the respondents would likely prefer to be treated as social subjects and therefore deserve that the researcher also acts with social responsiveness as absence of response may be stressful (Olofsson *et al.*, 2003; Israel, 1988). This aside, I have still undertaken a relatively distant role as a "limited observer" (Anzul *et al.*, 2003, 45).

I was also informed about the DNC courses by administrating course evaluations from 36 courses from 2008 to 2011. Transcripts from my colleagues' interviews with the key persons initiating and implementing the DNC programme have also informed my analysis (see Hansen & Peterson, 2016). This data should be regarded as background information, and was not as systematically investigated.

2.3.3 Video recorded guided sessions at naturum (Case 2)

The primary source of data for Case 2 is made up of six video recordings of guided tours at three naturum sites (further described in Paper III). This method was used to document interactions between guides and visitors where more than one conversation may take place at a time, and where the nonverbal communication as well as the physical surroundings might be significant to understanding the communicative situation. The selection of naturum sites was decided at an early stage of proposal writing in the larger research project, based on the interest of the naturum directors and guides asked. Among the tasks of the research project was to study context and connection between nature and culture. Subsequently, three particular naturums were selected due to their location on sites rich in both natural and cultural heritage. The selection of the particular guided sessions were a random representation of the sessions offered at naturum during a week in the middle of the summer. Summer time was selected to conduct field work because there are the largest number of visitors that season; but the weather conditions were unpredictable and not always favourable. However, I found this selection representative of the kind of guided sessions offered to the public. This project was limited to non-captive (i.e. voluntary) audiences (Ham, 2013), since we wanted to specifically study the broader community of Swedish citizens, and were uninterested in school activities.

The guided tours were recorded by research colleagues on the project team and lasted 32 minutes on average. Each tour was recorded with two cameras to enable documentation of the interaction from two angles. The recordings were transcribed partly by a colleague and partly by myself. I have analysed the video recorded sessions thoroughly independently as well as together with the research team and for limited episodes the interpreters were involved in a joint analysis session for validation and interpretation forming a so-called interpretative community (Taylor *et al.*, 2015).

To be able to analyse ambiguous theoretical concepts empirically I have developed a method that was unlocked through generating analytical categories. The procedure was as follows: Starting from four major themes that emerged through the discussions with colleagues in the research project, four

major points of interests were used as points of departure when analysing the transcripts: democracy, format, content, societal relevance. During the transcript reading, a pre-analysis was done through analytic memo writing (Saldaña, 2013) in connection to specific text segments of the transcripts. The six transcripts were analysed using Microsoft Word and the function for commenting. Qualitative, thematic analysis was used (Saldaña, 2013, 175-183), involving "reflective, analytic memo writing as both a code- and category generating heuristic" (Saldaña, 2013, 209)[1]. Analytic memo writing is a simple method with a large capacity in interpretive research, both to grasp data content and meanings, as well as reflections on the meta-level:

> An analytic memo is a "think piece" of reflexive freewriting, a narrative that sets in words your interpretations of the data. Coding and categorizing are heuristics to detect some of the possible patterns at work within the corpus, and an analytic memo further articulates your deductive, inductive, and abductive thinking processes on what things may mean. […] It is not intended as the final write-up for a publication, but as an open-ended reflection on the phenomena and processes suggested by the data and their analysis thus far. As the study proceeds, however, initial and substantive analytic memos can be revisited and revised for eventual integration into the report itself. (Saldaña, 2011, 98)

The analytic memos expand the meaning of the coded sections and they may, for instance, be about the research questions, how the researcher relates to the participants, code choices, themes, connections, patterns, research dilemmas etc. (Saldaña, 2011, 102). Analytic memo writing in this thesis functioned to connect the different phases of the data analysis process. What may be envisioned as a linear process is in reality non-linear. However, the chronology is, in general terms, represented as pictured in Figure 3.

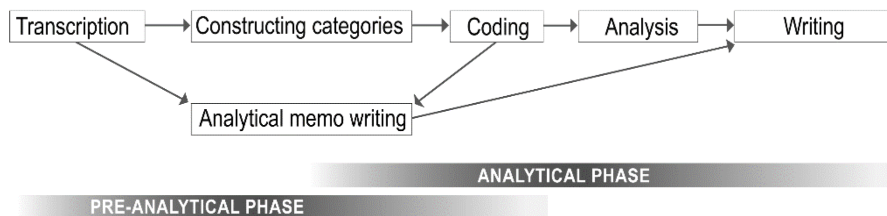

Figure 3. Chronology of data analysis process, displaying how memo writing links the different phases.

[1] The word reflective is here understood interchangeably to reflexive, as used in the both quotes by Saldaña, meaning to reflect or think carefully about something.

While reading through the transcripts to become more familiar with the data, 14 (empirical) categories were developed to code the material. These 14 categories were both derived from my research question and from the data – both repeated patterns and exceptions/rarities. The text segments defined during the coding varied in length from one line to one paragraph. These coded text segments are also what later became the unit of analysis. I wanted to avoid an overly detailed level or splitting the entity by focusing on details. Additionally, I aimed to include the interaction as a scene of initiative and reply. I have also been aware of themes that pop out, which in that aspect reminds of the procedures in *in vivo coding* (Saldaña, 2013, 93).

Table 3. Categories coded from video recorded sessions in Case 2

Introduction of session	Why naturum or nature interpretation?
Content and how it is presented (related to purpose of the session)	Experiences with nature
Who sets the topic?	Public spheres
On controversial topics	Societal relevance
Legitimate topics	Focus on design of exhibition and naturum building
Conversation dynamics and the role of the guide	Artefacts, objects, items and the visual
Welcoming new participants joining	Overall impression of session

The analysis was done in a two cycle process. Whereas the first cycle of analysis resulted in a large number of categories (a process of data segmentation), the second cycle of analysis aims at finding overarching patterns and submerging subcategories into larger units (Saldaña, 2013, 207). With the list of 14 categories at hand (Table 3), some categories were selected that were more central to the research questions and the theoretical framework. Some of the categories were combined to form larger units. In parallel to this inductive procedure the analytic work was also performed from the opposite direction. The deductive part of the procedure implied that some theoretical categories were identified from the theoretical framework regarding deliberative democracy and public spheres, and joined into four analytical categories (context, content, format, critical potential). The deductive and inductive categories partly overlapped, and the analytical categories were created with consideration for the empirical categories, implying that these analytical categories linked theory and coded empirical categories. The analytic process started broad, then narrowed down to more focused material (Saldaña, 2013). Only a portion of the data is

used for Paper III and the thesis, and what is selected is directed by the research questions of the paper and concentrated through a funnel of analytic work.

2.3.4 Complementary data Case 2

Participant observation was done at a total of six workshops with researchers and nature interpreters, for a total of 34 hours involving six interpreters from three different sites (i.e. 2-3 nature interpreters were present at each workshop). Workshops were held at the naturum sites between October 2014 and October 2015. The themes discussed correspond to the larger research project. In the larger research project as well as the workshops, my research questions on democracy and communication in nature interpretation were one sub-question. I have used the transcripts from the workshops and interviews as back up information. I was also informed about the case by visiting the three naturums, the surroundings and their exhibitions (figure 4).

During the PhD project I also learnt about nature interpretation practice by doing participant observation on courses for nature interpreters, both in Sweden and in Denmark. These events were documented but only extensively analysed. The complementary data has provided an understanding about nature interpretation and its challenges, and therefore crucially contributes to the thesis.

Figure 4. To the left, naturum Hornborgasjön and to the right, two photos from the exhibition at naturum Vänerskärgården. Photo: Elvira Caselunghe.

2.3.5 Policy and programmes

The government policy from 2001, *A coherent nature conservation policy,* is a central document to this thesis and is the link that connects the two case studies. The document has been analysed through highlighting all sequences that contain writings on the following key words: democracy, participation, communication, dialogue, local, citizen, conflict, deliberation, legitimacy, information, anchoring, guided. All relevant sections have been pasted in a document where analytic memo writing was applied. The same procedure was also done for the SEPA documents of the DNC programme (SEPA, 2008), Guidelines for naturum (SEPA, 2015a; SEPA, 2009; SEPA, 2004a) and *Protect, Preserve, Present – Management for protected areas* (SEPA, 2005). The policy analysis, which is integrated in Chapter 4 and 6, did not follow any pre-designed procedural standards but was adjusted continuously to the material and research questions.

2.3.6 How the methods complement each other

Whereas the main data generation in the first case (interviews) takes the perspective of the subjects, the main data source in the second case takes an interactional perspective. However, in the second case, the subjects (nature interpreters) were provided a rather large space for sharing their perspectives, interpretations, clarifications and questions in the format of the workshops with nature interpreters and the research team. Both case studies also build on document analysis and are complemented with interactive moments of participant observation. In all, the methods can be said to provide both factual, subjective and interaction-based data that is qualified for interpreting what meanings were in these cases.

The data generation described in this chapter resulted in hundreds of pages of transcripts, field notes, analytic memos, and interpretations. To make sense of the empirical material in relation to the research questions of the PhD, it needs to be interpreted in the light of a theoretical framework – which is presented in the next chapter.

3 Theory

This chapter presents and elaborates on the core concepts in the thesis, which are communication, democracy and nature. Modernity as a conception is used to frame how these three concepts are connected. Finally I place my work in the field of environmental communication, where I find a space where my perspectives on communication, democracy and nature can be reconciled to enable a critical understanding of social-ecological challenges, supporting change for sustainability.

Prior to explaining the mentioned core concepts of the thesis, I give an account of what is meant with subject, since that is a term that will occur throughout the thesis. Here, subject is used more frequently than for instance actor. Actor brings a connotation of instrumental rationality connected to being strategic (cf. Eriksen & Weigård, 1999), which I wish to avoid since that concept involves a relatively higher degree of predetermined and inflexible opinions. In the empirical cases of this thesis deliberative processes are in focus, and the concept of subject brings greater attention to processes that generate understanding, rather than strategic action. Furthermore, a subject is formed through self-reflection, but also through societal forms of socialisation (Alvesson & Sköldberg, 2008). Often a prefix is used to specify the context for the creation of the subject, such as political subject (Mouffe, 1989), social subject (Horkheimer & Adorno, 2002), moral subject (Habermas, 1984b), thinking subject (Horkheimer & Adorno, 2002), speaking and acting subject (Habermas, 1984b), knowing subject (Adorno, 1990), sovereign subject (Horkheimer & Adorno, 2002) or free subject (Horkheimer & Adorno, 2002). This is helpful since subject may be regarded as something dynamic and versatile. An individual may be found at several subject positions according to the circumstances. Central to my use of subject is its capacity for meaning-making (Ödman, 2001) and interpretation through language use (i.e. in a social context). Thus, meaning-making is something social, but is owned by the subject. The subject has agency and space for action and the subject-level is

crucial to further understanding conditions for the *intersubjective* and communicative rationality.

Having explained my understanding of subject, which is a common link between the other concepts, the theory chapter now proceeds with the concepts of communication, nature, modernity and democracy, respectively.

3.1 Communication

Communication in this thesis is understood as an interaction between human subjects through use of symbols, such as language, images and gestures. Both direct and mediated communication are included within the remit of this term, as well as communication between few participants and mass communication, even if the focus here is primarily on communication with a small number of participants. This is determined largely due to the sorts of communicative arenas and their characteristics, of which the studied interactions form a part. To start with, the need to communicate is deeply rooted in human nature and it is the cement that forms society (Peterson *et al.*, 2004; Bryson, 1948). This disposition is so integrated in human subjects, that we cannot easily avoid communicating (Moser, 2015; Chang & Butchart, 2012). That said, communication is transforming and evolving in modern society and new communicative arenas are likely to arise and merit closer examination. In an environmental context, naturum is one increasingly important place that is devoted to information and communication about the environment and provides an informal public arena where everyone has access.

A premise for communication to take place is that the subjects take each other's perspectives, which in turn is an expression of the fundamental character of the collaboration component to communication. A communicative situation can be described in terms of initiatives and responses, but it is not as simple as one subject providing initiative and the other subject countering with a response. In direct communication all parts are co-creating the situation – its process and its outcomes. They do so embedded in a societal context and are affected by structures and institutions, but there is also agency in co-creation on the ground.

The understanding of communication in this thesis, and also the understanding of democracy, is largely inspired by Habermas' theory of communicative action (Habermas, 1987b; Habermas, 1984b) and his writings on deliberative democracy (Habermas, 1998). Moreover, Habermas' writings on the public sphere (Habermas, 1989; Habermas, 1974), modernity (Habermas, 1993; Habermas, 1984a), legitimacy (Habermas *et al.*, 1997) and knowledge constitutive interests (Habermas, 1987a) have provided input to the work. In all,

the thesis draws from Habermasian perspectives in an undogmatic manner, and readily supplements them with interpretations from other scholars.

3.1.1 Dialectics in communication

From a more theoretical perspective, there are a few central dialectics that characterise communication. To start with, dialectics, in the most concrete sense, stand for two contradicting interpretations that have a mutual relation, where the understanding of each interpretation is dependent on the understanding of the other. Applying dialectics displays the nature of human thought: where there is one possible standpoint, there is a contradicting (and possibly ignored) view. In searching for dialectics we may increase the likelihood that we have discovered something about reality, which is never one-sided. What we put into words and concepts always leaves something out, and what is omitted is a social product, which may have something important to tell us (Adorno, 1990):

> Dialectics is the consistent sense of nonidentity. It does not begin by taking a standpoint. My thought is driven to it by its own inevitable insufficiency, by my guilt of what I am thinking. (Adorno, 1990, 5)

In this way, dialectics may be regarded as a method of theoretical enquiry. The dialectics of communication presented are constructs that may assist a nuanced perspective on the characteristics of human communication.

First, (1) any communicative situation has both a symbolic and a material dimension (Alarcón Ferrari, 2015; Peterson *et al.*). We cannot say anything without saying it in a particular way and though the use of symbols (Tomasello, 2008). Tomasello uses an example with a tree (Tomasello, 2008, 89): When I point at a tree I not only want you to notice the tree, I also want you to notice that I want you to notice the tree. In this way the meta-level is always present in a communication situation. To communicate is to direct someone else's attention towards something (cf. Tomasello, 2008, p 76). This brings us to the component of intentionality or purpose (see (Mead, 1948)). Communication may not require intention to take place, but subjects usually project intention in a communicative act. Making an utterance also requires talking about *something*. This can also be described in terms of the communication subject being separate from its object, since communication would be redundant if subject and object were the same. This sheds light on the role of materiality to the process of communication, which is particularly relevant to this study as it deals with the material-environmental features of nature and natural resources in society. Further, if subject and object would be totally separate, communication would be impossible (Liu, 2007). Communication as such constructs differences (non-identity) between subject and

object (Liu, 2007), meaning for a subject to be able to make a spoken claim about something, it has to be something that can be visible or observable – something separate from the subject itself. It may of course still be something about them as a person, but to be able to speak about it, the speaker has to view it from the outside – making it into an object. A key feature of communication is this dual shift between closeness and distance, or "sympathy and estrangement" (Liu, 2007, 54). This insight is important inasmuch as it affects the communicative situation in formal nature conservation administration and in informal situations of nature interpretation; the communicating actors make use of both the closeness and distance as communicative approaches and tools. The inherent shift between closeness and distance as the way communication is possible, is an understanding that may also serve communicators in the researched contexts and be used through tools of meta-communication. In a deliberative democratic perspective, the aspect of oscillation of closeness-distance not only between subject and object but also between different subjects, is one way of enabling perspective taking and distance to one's own perspective, allowing to try on other's perspectives and thereby reaching a joint understanding.

Second (2), our reality is *mirrored* in how and what we communicate, and on the other hand our understanding of reality is *constructed* through communication (Milstein, 2009). The material generates the symbols, and the symbols construct the material (Milstein, 2009). Through naming and pointing we negotiate what is real and what is important. Communication is able to construct reality, interpret it, de-construct it and re-construct it. In the studied empirical cases the power of phrasing (communicative experiences) and naming (species and environmental features) are key assets in communicative situations.

Third (3), communication is a constitutive element of society (Moser, 2015), while at the same time it is also an instrument to fulfil other purposes (than communicating itself). Sometimes communication is defined as "the link between information and action" (Oepen, 2000, 43) but I would rather regard communication as a sort of action itself and not only instrumental to other kinds of actions.

This constitutive role of communication is reflected in the theory of communicative action by philosopher Jürgen Habermas. Communicative action is based on communicative rationality, which is characterised by understanding in contrary to (cognitive-) instrumental rationality, which directs strategic action (Habermas, 1996). Instrumental rationality can also be understood as focused on the subject-object relationship, whereas communicative rationality is oriented primarily towards subject-subject relations (Eriksen & Weigård, 1999). To picture communication as a message pursued by a sender to a public, directs a stronger focus towards the instrumental component of communication, whereas a communication concept based on intersubjective meaning-making puts emphasis

on the constitutive role of communication (Moser, 2015; Cox, 2010; Craig, 1999). Habermas' communicative theory rests on a procedural approach to rationality, where the primary issue is not *what* we find out but rather *how*. This leads to a continuous reconsideration of previous knowledge and a persistent readiness to reconsider the answers (Eriksen & Weigård, 1999). Habermas' perspective not only regards the process for its own sake, but also the deliberative process as the way to decide what content is true and which solutions are best (Eriksen & Weigård, 1999). To achieve understanding of a particular statement in a speech act, an actor needs to fulfil three tacit validity claims in establishing a relation to their own inner world, the social world and the material world: sincerity, rightness and truth (Habermas, 1996, 126). Sincerity means that the statement must correspond to the inner intention of the speaker. Rightness means that the speech act needs to be socially appropriate. Truth represents the condition that the speech act claims to say something about the physical world. My understanding of Habermas' theory of communicative action alternates between regarding it as a prescriptive utopia and as an analytical ideal type for understanding communicative reality. Although the thesis focuses on the constitutive role of communication, the dialectics provide a reminder that the social interaction aspect of communication never comes alone, but that communication is inherently being practiced to fulfil instrumental objectives.

The fourth (4) dialectics of communication – the communicative situation – is both a precondition for change processes, such as learning, as well as the communicative situation in itself is a process of change. In other words, a communicative act implies that a subject gains knowledge about the prevailing conditions and attempts to accomplish desired conditions (Habermas, 1996). Speaking of change, it may also be the right occasion to mention power, in relation to communication. Power makes things happen, and is present in all human relations. Indeed, communication can be seen as a tool to exercise power (Foucault, 2012). Whether speaking in terms of power or not, communication (about nature) is indeed something political (Milstein, 2009; Craig, 1999), and the past decades of de-politicisation of environmental issues has obtained an effect of exclusion, maintaining status quo and preventing debate about alternative futures (Maeseele, 2015). The discussion on de-politicisation also brings attention to the role of expert knowledge versus democratic deliberation within environmental management (Maeseele, 2015).

3.1.2 Meaning-making

Meaning is central to communication and without involving the whole tradition of symbolic interactionism, I invite the idea of the co-construction of meaning,

or *meaning-making*. This concept is particularly useful when investigating what is taking place in communicative situations and I will later come back to why I regard meaning-making as a crucial conception for exploring democratic potential in a communicative setting such as nature interpretation.

In contrast to Weber's theory on rationality and action as something rising from the internal purposes of the individual, Habermas meant that reconstructing society regarding individuals' actions should pay attention to how subjective meaning does not originate from a separate individual, but from a social situation of co-construction (Eriksen, 1999). Meaning-making is a theoretical construct that puts weight on the interpretive parts of social construction. "Social conditions [...] are produced, maintained, and changed through interpretive processes" (Maines, 2000, 577). Meanings are never pre-existing and fixed, but are always constructed, negotiated, reconstructed or abandoned in a social situation, where meaning is both uncovered and assigned in a dialectic way (Ödman, 2001). Meaning-making is driven by humans' need to understand something. The act of meaning-making may also be referred to as 'interpretation', not to be confused with the practice of nature interpretation, yet mentioning the semantic relationship; Nature interpretation implies acts of 'interpretation' in terms of meaning-making – even though this is not always focused on in the practice.

Humans make meaning of, for instance a text, by combining what is read in the text itself and the preconceptions that they bring to the reading (Kent, 2008). As I see meaning-making, it is the communicative and cognitive process when subjects perceive a piece of information and not only relate it to their previous knowledge, but also subscribe the information a certain level of relevance to their own subjective perspective. The process of interpretation is unique in every situation, yet it can be observed to involve both predictable and unpredictable elements (see Maines, 2000). For instance, this may be considered when trying to understand the communicative situation in nature or heritage interpretation:

> Meanings are formed by the individual and the process that takes place within the context of the social groups that surround them. The experience takes form from the meaning the tourist places on her/his own acts and the acts of others, and it is the act of interpretation that gives interaction its symbolic character. (Archer & Wearing, 2003, 18)

Some meanings become dominant cultural meanings and significant parts in the construction of collective memory, for instance when construction of meaning is used to link the collective and the personal (Maines, 2000). Meaning-making refers to the processes of making sense of something and thus refers to learning processes (Kent, 2008). "The meaning that they make is their developing

understanding" (Kent, 2008, 4). For instance meaning-making has been used in research to see how students understand a particular text. The students read the text, but also make sense of the texts through conversation, or "interpretive discussions" (see Kent, 2008, 19). Another aspect of meaning-making is that it requires the subject to be in relationship to what is interpreted (Kent, 2008). "Meaning is the product of the interaction between three partners, two people and a text" (Kent, 2008, 71-72). Meaning-making acknowledges the subject as well as the *intersubjective* and is therefore inclusive and pluralistic, as I understand it. It may also provide an explanation for processes of how communication and learning take place. Therefore, meaning-making bridges communication, democracy and social change and it will be further discussed in relation to the empirical cases (i.e. how authorities involve the citizens in communication on nature conservation).

3.2 Nature relation and modernity

To understand how the two empirical cases of communication in conservation context relate to democracy, I will work out what nature is and why this is an important category for democracy. This is done by tracing modernity, the rise of risk society, alienation and the de-politicisation of nature, which all inevitably lead toward a contemporary need to reconcile with nature but also with society. The studied contexts in the thesis are manifestations of these conceptualisations of our relationship with nature. Relations between humans and nature have always been crucial to society, but have been dynamic throughout history, reflecting paradigms, societal goals and resource scarcity. How people of today view nature, environmental problems, the need for nature conservation and the purposes of conservation may be said to be products of the modern project (i.e. the development of Western civilisation following the Enlightenment from the 17th century and onwards) but with some postmodern or 'late modern' influences.

3.2.1 Nature

Nature (or the environment) is a third central category in this thesis, since it is the very materiality that societal reproduction is based on. Nature as a category and human relations to nature, are also central to environmental communication studies in general. To this thesis, nature as a category carries double meanings, and they are interconnected: First, nature in general as the resource base on which society rests (i.e. to understand how reproduction of society works and how this can be changed we need to look at nature and our relation to it) and second, as a more urgent and specific threat to the life conditions on Earth.

Nature is the physical concrete matter that we use when we sculpt what we call culture. The material aspect of life and society is crucial for all social and communicative processes taking place between humans. Humans, by their existence, change their surrounding environment. Humans are not only affecting nature; humans are also part of nature:

> […] we cannot do without technology, which means we cannot do without changing the world. We are part of nature, but *actively*: we make our environment human by remaking nature, and we have done so since the very first use of tools. (Vogel, 1996, 171)

The materiality is fundamental to communication. We cannot speak without having topics to speak about, and in particular we cannot arrange societies without involving materiality. The materiality is sometimes rather implicit in social studies, but the concept of *environmental* communication in itself provides a platform to give space not only to the symbolic but also to the material.

3.2.2 Modernity

The modern project is characterised by reason, industrial and technological advancements and trust in continuous progress, based on the ideas from Enlightenment (Horkheimer & Adorno, 2002; Thompson, 1995). Reason, or particularly instrumental rationality, is a key motif of the modern project, but rationality is also a driving force. Modernity brought new freedoms and a new societal role for the individual. It has also contributed with certain norms for governance as well as expectations on citizens.

The modern project started out of certain premises and has throughout the journey been transforming its own preconditions. The latter part of the 1900-hundreds and forward has been coloured by the post-industrial society – dominated by the information society, epistemological relativism, deconstruction, affirming of ambivalence and transboundaries, and ideology criticism (Alvesson

& Sköldberg, 2008). It is sometimes discussed whether these later trends and characteristics should be labelled as postmodern (i.e. as a definite break with the modern), or rather as a later stage of the modern, since the ideas of modernity based on reason, freedom and progress are still alive. Together with more recent expressions, I choose to relate to our time as late modernity, advanced modernity or second modernity (Bauman, 2000). Taking this standpoint means that although being aware of the problems caused by modernity, I carry a fundamentally optimistic view on the ideals founded during Enlightenment.

So, what did the modern project first do? One consequence of Enlightenment was that previous authorities, be they religious or political, lost influence. Modernity also changed our ownership relations and power structures, encouraging labour division and specialisation.

Enlightenment was striving for the liberation of humans, or the individual, and to acknowledge human dignity. The same process of Enlightenment has also offered science precedence and reduced legitimate rationalities in favour of science and instrumental rationality. This has implicated restrictions on human freedom and rights. The same Enlightenment that gifted us our rights, also deprives us of them (Horkheimer & Adorno, 2002). Another contradiction of Enlightenment is that everything is reducible and can be derived from the same principle. This means that we are able to construct the future through the models of history with the consequence that the future is already predetermined, which is further discussed in Paper I. However, Enlightenment, at the same time, critiqued the established relations and traditions in favour of the emancipation of the individual. Thus, while Enlightenment liberates towards action, it also generates predestination (Horkheimer & Adorno, 2002). Furthermore, the individual freedom produced by Enlightenment also causes needs to subsume people in society, to monitor and correct them. Freedom and force go hand in hand.

Returning to the late modernity of the early 2000's, Bauman (2000) speaks of *liquid* modernity, which points exactly at the unrestrained and relativistic features of our time. This involves changes to the institutions that have been the sign of modernity, such as the welfare state (Beck, 1998). When it comes to human-nature relations, education and information flows are dominant features of the late modernity, which have even further imparted distance to the material conditions of life as found in nature. The late modern era also brought insights of post colonialism, contributing to new patterns of unequal distribution of social and environmental risks (Beck, 1998). Environmental degradation was not only revealed but also increasingly understood as a societal problem (Beck, 1998). Individualisation and weaker collective institutions have led to an increased burden on the individual to handle uncertainty and risk on a personal level (Beck, 1998), which may increase stress as well as a sense of distance between premise

and capacities. This is one way to understand alienation, and the need for reconciliation at different levels, including to nature. Contemporary popular trends involving Palaeolithic diets, agritourism and urban farming, may be interpreted as mirrors of different degrees of a new romanticism with nature, reproducing dichotomies of civilisation and wilderness (Samuelsson, 2008; Jones, 2002), assuming nature as good and humans as bad; nature as the original, pristine, authentic and innocent:

> Nature is the place where we go, both imaginatively and physically, to escape from this modernity, as well as the place from which we seek to protect it. In providing this sense of refuge, though, our ideas of nature too often lead us away from where we actually are, promoting a model of Romantic imaginative escapism and autonomous individualism that in many ways actually supports the same modern consumer order that it claims to oppose. (Hess, 2010, 85)

Further, late modernity hosts decreased ecological literacy on the one hand, and increased awareness of environmental risks and a global crisis on the other. This gap between estrangement from nature and dependence on nature, and the associated uncertainty has created a reflexivity; meaning society has become a "theme and a problem for itself" (Beck, 1994, 8; Lash, 1994, 112).

3.2.3 Modernity, nature and alienation

How then has the modern project affected humans' relation to nature? First we can talk about a separation of human-nature, or nature-culture. Urbanisation has separated humans from primary production and the very nature that is a precondition for our civilisation in terms of practical work with natural resources for survival. Before industrialisation, nature almost completely determined the conditions for humans to build, thrive, extract and live; whereas modernity has brought a change, so that humans increasingly impinge upon nature (Giddens, 1994) and actively shape it. The separation also enabled human domination over nature (Vogel, 1996). Although humans are admittedly not independent of nature, there has been a marked shift towards isolating ourselves from the immediate feedback of the environment. The effects are environmental degradation and overuse of natural resources, and a separation and dichotomy between humans and nature, where nature is perceived in categories in terms of 'otherness' (cf. Liu, 2007; Horkheimer & Adorno, 2002).

At the same time as nature and humans are separated, there is also a process wherein nature is increasingly becoming a social product or a societal project; "a utopia that is to be reconstructed, shaped and transformed" (Beck, 1994, 27).

Nature and culture are clearly socially constructed categories and nothing that exists from an ontological perspective (cf. Samuelsson, 2008). They have become central categories to our civilisation and it is not easy to unravel how they are interrelated. Nature can, on the one hand, be seen as a socially constructed category, and the human subjects who inhabit nature are active and change their surroundings. On the other hand, humans can be regarded as part of nature. What we see as nature today is far from pristine, but rather a product of human action. What we regard as nature is practically a result out of our own human activity (Vogel, 1996). Thus, social practices enable nature. To regard nature as socially constructed, both in concrete terms and as a conceptual category, implies a human responsibility for nature (Vogel, 1996).

By using the categories of nature and culture, or nature and human, we reduce the nature-human relationships and connections and interdependence. The alternative – to not distinguish between human and nature – would inhibit reflections on environmental degradation and the large ecological effects that are produced by the human species. Also, a discussion on the need for humans to return to nature takes for granted this dualism, which such a discussion in the first place tries to bridge. Indeed, we reproduce the problem while we are trying to repair it.

What happens then, if we have a society with increasing problems of segregation on multiple levels while humans are estranged from the natural conditions of life that used to govern their actions? Such a development results in distance between people, but also more complex, and alienated human-nature relations. The mutuality becomes lost and the feedback between the components of the system fail. However, this phenomenon is not unique to our contemporary time but is a pattern throughout history. Even if every era is historically specific, the thought of living during a historically specific era, is not specific:

> There has never been an epoch that did not feel itself to be “modern” in the sense of eccentric, and did not believe itself to be standing directly before an abyss. The desperately clear consciousness of being in the middle of a crisis is something chronic in humanity. Every age unavoidably seems to itself a new age. The “modern” however, is as varied in its meaning as the different aspects of one and the same kaleidoscope. (Benjamin, 1999, 545)

The Enlightenment and the modern project contain several paradoxes that have implications for how we understand nature. While Enlightenment aims for humans to increase their control over life (nature) it may also accomplish the opposite (Beck, 1994). In other words, “human beings purchase the increase in their power with estrangement from that over which it is exerted” (Horkheimer & Adorno, 2002, 6). This illustrates that nature is something we dominate, but conversely something wild and dangerous (Vogel, 1996). The implication is that

our domination of nature creates environmental problems, which in turn puts us in an inferior position to nature. “Any attempt to break the compulsion of nature by breaking nature only succumbs more deeply to that compulsion” (Horkheimer & Adorno, 2002, 9).

Alienation is a central concept in critical theory and as indicated, it is used to explain the distance occurring between the human and the human life conditions as a result of modernity. Alienation from nature and our biological pre-conditions has a range of effects. Alienation from nature also means alienation from our own human inner nature (Vogel, 1996). Since Marx (1992) there has already been ideas on the human estrangement of nature and the need for reconciliation with nature, which I will return to shortly.

3.2.4 Modernity and communication

Instrumental rationality as constructed out of Enlightenment ideas is based on a centrally located subject and its relation to an object. Habermas’ theory on communicative rationality instead shifts the focus to subject-subject relations (Vogel, 1996).

Whereas Horkheimer and Adorno (2002), and others within the early generation of critical theory, represented a rather culture-pessimist perspective and a critique towards Enlightenment and modernity, Habermas has a more optimistic view and indicates how modernity can be embraced and refined (Habermas, 1993). Indeed, he sees the modern project as essentially well-meaning and salvageable. In this, Habermas has been criticised by environmental social scientists to be too anthropocentric and having moved too far away from the first generation of the Frankfurt School (Gunderson, 2014a).

How then does Habermas’ communicative rationality relate to environmental concerns? According to environmental philosopher Steven Vogel, Habermas is ambiguous on this matter (Vogel, 1996). On the one hand, Habermas’ theory of communicative action only considers acting subjects. Though, there are cases where animals are regarded as quasi-subjects. Habermas does not see environmental ethics as something that can be derived from a scientific rationality or even an ethical rationality, but possibly from an aesthetical rationality (Vogel, 1996; Habermas, 1994). Although Habermas does not include environmental ethics in his discourse ethics, Vogel means that his discourse ethics leaves the possibility to include environmental concerns, since humans in terms of being the only “language users” are the only “moral subjects”. In other words, anything that has value gets value through human discourse, and therefore humans have a responsibility.

Ethical considerations, norms and values depend upon language use. Those excluded from language use cannot raise validity claims. In this sense, the inability to use language means a lack of moral responsibility. Likewise, it means that linguistic competence entails a moral duty (Vogel, 1996), which leads to the question of representation. However, discourse ethics indeed offers pathways towards broader considerations beyond the very socio-centric, since ascribing meaning to discourse also increases reflexivity. This in turn involves a greater understanding of the human categories, such as nature and culture, being discursively and practically constructed, and thereby variable and falls within the responsibility of us humans (Vogel, 1996).

3.2.5 Risk, alienation and reconciliation

Modernity has produced repercussions on the preconditions for the modern society, not least in terms of the environmental effects that presently envelop human life. This gives rise to a response of *societal reflexivity* (dissimilar to reflection), within a broader setting of *reflexive modernisation* (Beck *et al.*, 1994; Beck, 1992). These effects and imagined potential effects cause a growing obsession among people and society to relate to and deal with the risks and threats that are generated by civilisation itself. Whereas the industrial society was orientated around meeting human needs, the risk society, as described by sociologist Ulrich Beck, is busy handling civilisation risks which are,

> […] a bottomless barrel of demands, unsatisfiable, infinite, self-producible. One could say along with Luhmann that with the advent of risks, the economy becomes 'self-referential', independent of the surrounding satisfaction of human needs. (Beck, 1992, 23)

The latest decades we have seen a de-politicisation of many societal questions. Environmental issues are indeed political but have often been treated as non-political, primarily left for expert handling (see Maeseele, 2015) and outside the remit of public deliberation. Environmentally relevant scientific findings are assumed to be value-neutral and are seldom reflected upon as relevant to the fundamental priorities of the dominating ideologies causing the environmental problems. Uncertainty and risk are difficult entities for non-expert citizens, which contributes to strengthening the role of expert knowledge. At the same time, the late modernity experiences legitimacy challenges, since institutions and political structures lose legitimacy and become dependent on the subjects' loyalty.

With society being perceived as a risk generator, people's actions are also impacted. When, according to Beck (1994), society is perceived as a risk this potentially reduces the capacity to act for change. Risk obsession may be

understood as one effect of the larger phenomenon of alienation and also something that sustains alienation.

As mentioned, alienation from nature also implies alienation from ourselves. The ways humans handle risks may not lead to improved change if we remain alienated. The response and remedy to alienation is reconciliation:

> An interest in reconciliation flows naturally out of concern with alienation. 'Reconciliation' as Hegel uses it, is a technical term referring to the process of overcoming alienation. (Hardimon, 1994, 2)

Central to reconciliation is humans' tendency to "collectively *remember* that they are part of nature in a state of critical reflection" (Gunderson, 2014b, 49). Reconciliation with nature is, according to the Frankfurt School, connected to reconciliation between rationality and human passions (Gunderson, 2014b). Another aspect to reconciliation witch conceptual potential is 'authenticity' (see Benjamin, 1969, IV). The discussion by Benjamin on the need for authenticity takes place on a rather philosophical and abstract level, but my conclusion is that authenticity is essential when we look for reconciliation. If authenticity is the possibility to participate as a subject with first-hand experience, then to attend nature interpretation sessions in a national park should be considered an authentic experience. Authenticity in Benjamin's work is contrasted to cultural mass production and mechanical reproduction of art. Much of the work from the Frankfurt School (in general) has relations and connotations to Jewish culture, implicitly alienation and reconciliation as a dualism relates to religious terminology. Reconciliation – practically signifying the restoration of friendly relations – is referred to as the highest concept of Judaism. Reconciliation with nature was a common theme among the authors of the Frankfurt School, even if often in poetic and implicit terms (Gunderson, 2014b). Subsequently, the concept does not have a single agreed upon definition (Alford, 1985).

As human alienation from nature implies an alienation from self, nature reconciliation means not only restoring relations with the outer nature, but also to restore the human relation to the self (Vogel, 1996). In line with the legitimacy crisis of modern society, which is explained more in Paper I, reconciliation may also be said to proceed along the line of citizen-state relations. Simultaneously then, reconciliation may be spiritual, physical and constitutional. What kind of democratic setting cultivates these aspects of reconciliation? In my PhD work I have identified deliberative democracy as significant, but it needs special qualities to fulfil the interconnected dimensions that reconciliation calls for. Before exploring the ideas of deliberative democracy, I will outline the meanings of democracy in the following section.

3.3 Democracy

3.3.1 Democracy as dynamic

Democracy is a norm for deciding on common issues, implying that all affected actors should have the ability to influence the outcomes that concern them. Democratic aspects are present in any situation where decisions are to be made that affect several subjects. Democracy regards all levels and scales and the concept of democracy is given different meanings depending on context (Dahl, 1998). Further, democracy is something we do. It is not an end product, but it is a dynamic procedure of learning and negotiation for a pluralist society. As Hurley writes, "the concept of democracy may not be static, but may itself demand dynamic adaptability" (Hurley, 1999, 129). Hence, what is regarded as democracy or democratic will shift throughout time and space. This is something internal to the concept of democracy itself. It is not absolute, but relative, although resting on some absolute foundational values such as human rights, equality and freedom of individuals (Held, 1997). Within this, we can infer also that democratic arenas will change and evolve, so that new fora may emerge that possess democratic functions.

3.3.2 Fundamental categories to democracy

Originating in Ancient Greece and bearing various forms throughout history, sometimes in the shape of a concrete practice and often as a philosophic idea, democracy is created and regenerated featuring different qualities. Democracy is not a standardised practice developed through one continuous tradition, but history shows examples of various interpretations including periods of long interruption (Dahl, 1998). Often what is meant by democracy is a societal governance approach that includes representation as well as conversation[2]. Democratic norms can also be applied to smaller groups and informal

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[2] Conversation is here used as a translation of the Swedish word *samtal* [talk together], which is the concept used for deliberative democracy in Swedish, i.e. *samtalsdemokrati* and *demokratiska samtal*. 'Conversation' as the complementary part to representative democracy also occur in international literature (Bennett, 2003). Other possible terms would be 'deliberation', 'discussion' or 'dialogue', but in this thesis these terms are used in more specific notions: Deliberation is restricted to a setting where deliberative democracy is already an established fact, discussion where the more dialectic or agonistic dimensions are searched for, and dialogue to represent the kind of conversation where (1) knowledge and subject is constructed *through* communicating, and (2) where the dialogic dimension of communication is the point of interest, cf. Section 3.3.4. Conversation may also be used to denote a communicative situation which is an end in itself in distinction to any purpose activity of communication, and has connotations to analysis of turn-taking within the tradition of Mead (see Habermas, 1984b).

interactions. Political scientist Robert Dahl's criteria for democratic processes are influential and based on necessary conditions for all participants to be politically equal, including efficient participation (the possibility to have a say), voting equality, enlightened understanding, control of the agenda, and inclusion of adults (Dahl, 1998, 37). Dahl uses the concept of polyarchy to label the Western representative democratic systems that fulfil criteria of certain basic institutions such as suffrage, elected representatives and freedom of speech (Dahl, 1998, 92). Three fundamental qualities for this kind of liberal constitutional democracy are rule of law and the freedom and equality of the citizens (Morlino, 2004). The understanding of democracy behind this thesis embraces these norms, and relates particularly to the current democratic system in Sweden. Given that the democratic system of Sweden is a fundamental representative democracy it is also a "participatory democracy with deliberative qualities" (Premfors & Roth, 2004; SOU, 2000:1). This thesis mainly deals with the deliberative dimension, which is an increasingly popular theme among both advocating and critical scholars. Since the 1990s we have seen a general *deliberative turn* in democratic theory (Dryzek & Niemeyer, 2010; Dryzek, 2000) for instance in the contexts of planning, public participation and natural resource management. The deliberative dimension of democracy takes place between equal citizens, which means it may be seen as a horizontal process.

Accountability is crucial to the quality of democracy and applies both vertically (to actors that have different political power) and horizontally (to actors that are politically equal) (Morlino, 2004). A representative (or vertical) democracy ruled by law does not, however, guarantee respect of democratic values, such as freedom and equality among citizens and human rights. Horizontal democratic processes are therefore essential to not only protecting and developing democratic values, but to creating stronger accountability and a second pillar to the constitutional democracy. The experiences of fascism and Nazism during the 20th century proved that democratic systems are indeed difficult to establish and maintain (Held, 1997) and cannot rely solely on the representative dimension. Horizontal democratic processes are those run by bodies or movements other than politically representative organisations and do not compete with the formal ones since the horizontal ones are somehow external (Morlino, 2004). Examples vary from opposition movements to independent media and organised citizens. Horizontal democratic processes depend on what could be called "intermediary structures" (Morlino, 2004) and could be investigated in terms of public spheres.

Democracy can be studied in terms of procedural qualities as well as in terms of substantial achievements. Substantial achievements imply that the results of democracy should meet certain values, such as human dignity, civil

rights and equality (Morlino, 2004). Another categorisation is based on the different formats or levels, such as representative, participatory and deliberative democracy (Lidskog & Elander, 2007; and for a critical stance cf. Oscarsson, 2003).

3.3.3 Reasons and conditions for deliberative democracy

When working with my two empirical studies, I find the mutual connection between communication and democracy important. In order to explore these concepts I made use of Habermas' theories on communicative action, discourse ethics, deliberative democracy and public spheres. These models provide some clues to the larger meaningful puzzle on how communication is manifested in relation to democracy within nature conservation. Although the thesis works with the intersection between communication and democracy (i.e. deliberative democracy), communication is to me the primary category and communication (i.e. environmental communication) is the lens I use to study democracy. This lens affects my interpretation of democracy, which is namely investigated from a communication angle.

In *The theory of communicative action*, Habermas (1996) develops a theory of society from a linguistic point of departure. Communicative action and communicative rationality are connected to discourse ethics (i.e. that what is true and right is learned through conversations). The theory on communicative action has implications on his early work on the public sphere and with his later perspectives, the meaning of public sphere and its relation to democracy is in particular connected to the need of common opinion formation and deliberative democracy. In his work *Between facts and norms*, Habermas (1998) explains the foundations of constitutional democracy, ruled by law, and that the foundations need to be legitimated through the norm generating acts in communicative situations. Through communication claims are tested according to conversation related criteria of what is true and right. Habermas' discourse ethics is a reformulation of Kant's categorical imperative and states that those norms are valid that can be approved in a public discourse (Habermas, 1998; Rehg, 1998). In this way Habermas connects the preconditions for democracy and communication on an intersubjective level. The connection between democracy and communication on intersubjective level is something the empirical cases in this thesis aim to test.

Dryzek defines deliberation as "the contestation of discourses in the public sphere" (Dryzek, 2001, 659), which is a definition that highlights the role of discourses, though not as much the role of subjects. Still the definition works in this thesis because it reminds of the qualities of the ideal speech situation where

not the personal but the common is important, and where not the person but the argument is what should be evaluated. Accordingly, Dryzek conceptualises public opinion as the "provisional outcome of the contestation of discourses" (Dryzek, 2001, 659). The term *deliberative democracy* is sometimes used interchangeably with *discursive democracy* (Dryzek, 2000). Discursive democracy was obviously the term used by Habermas. Dryzek (2002) distinguishes between two strands within deliberative democracy, namely "constitutionalist deliberative democracy" and "discursive democracy". Although they are not mutually exclusive categories, Dryzek relates them to their origins, which are different. The constitutionalist deliberative democracy is mainly related to and from the United States, coloured by their constitutional system and tradition and contains the underlying assumption of individuals having predetermined and profit maximising interests (Dryzek, 2002). The other strand, discursive democracy, originates from critical theory and assumes that individuals may be transformed by democratic participation to become more distanced from their own interests and more attentive to others' interests (Dryzek, 2002). In this sense, it may be said that discursive democracy is a critical subcategory to deliberative democracy (Dryzek, 2001, 668).

While representative democracy is connected to the state and its organisation, the public spheres of deliberative democracy are characterised by their independency in relation to the state (i.e. its freedom to criticise the state as well as the market system) (cf. Habermas, 1984). The public spheres in which these deliberations take place need to be free arenas, meaning that they are not connected to any of these systems, but rather relate to the shared domains of the lifeworld, with communicative rationality as the prevailing logic. Fraser (1990), on the other hand, argues to not separate the state institutions and the publics, but rather to let them overlap (see also Paper III).

The processes and procedures of deliberative democracy are crucial to its qualities. Sometimes the concept of deliberative democracy stands for the actual protocol behind this kind of participatory processes. However, what is meant by deliberative democracy in this thesis is rather a societal quality, implying that these societal deliberations are taking place every day and at many places, in many kinds of settings, and that they are constitutive to a well working democratic system as a whole (Silberman, 2013; Dryzek, 2009). This interpretation is close to what political philosopher Nancy Fraser (1990) calls *weak publics*, as opposed to *strong publics* (see Paper III). Public deliberation in strong publics means that the public deliberation is more or less connected to a binding decision-making process (i.e. linked to a more formal, public participatory process) (Fraser, 1990). Weak publics are not bound to a market logic or an instrumental steering logic of the system whereby policies are predefined and

presented as ready-made 'packages' to citizens who become consumers of sorts. In weak publics, citizens are paradoxically stronger in relation to the market and the state. Weak public spheres are essential and important to explore and develop since these are the very places and circumstances for deliberative democracy to take place.

The demarcation of weak and strong publics, or formal and informal publics, is fluid and sometimes arbitrary given that various publics can exhibit numerous characteristics at different times. However, the division rests upon an often helpful conceptualisation of society as a ‘deliberative system’ comprised by diverse publics working in parallel or together. Indeed, informal publics and formal publics interconnect and inform each other within the deliberative system. The deliberative systems approach is an instructive heuristic for deliberative democratic theory, often applied by John Dryzek (Dryzek, 2016) and Jane Mansbridge (Mansbridge *et al.*, 2012; Mansbridge, 1999) to make sense of several interdependent publics ranging from decision-making arenas to informal everyday deliberative fora (Dryzek, 2009). Indeed, informal everyday conversations are preconditions to more formal public deliberation (Zhang & Chang, 2014; Marques & Maia, 2010; Kim & Kim, 2008). Kim and Kim (2008) talk about *instrumental deliberation*, which aims at fulfilling a special objective, while *dialogic deliberation* is aimed at the dialogue process in itself. In other words, informal deliberations contribute to constructing citizens who are interested in certain things related to the commons. This kind of practice is an important function of the public sphere.

Furthermore, as discussed in Paper III, informal deliberations are a way to involve a larger sector of the public, compared to more formal deliberations restricted to elected representatives (Himmelroos, 2017). Such informal deliberations also provide a civic education (Conover & Searing, 2005). One crucial component to the deliberative process is increased self-understanding (i.e. that citizens identify themselves as a member of a group, be it a nation or a municipality), and what traditions and cultural norms they want to adopt and how they want to treat each other. In other words, through deliberation, citizens identify what kind of society they want to live in (Habermas, 1997).

A deliberative system’s approach extends the width of conceivable actors, spaces and impacts from public deliberations beyond the Habermasian ideal, as pointed out in Paper III. Such an approach enables the acknowledgement of the political agency of often overlooked actors, such as children (Nishiyama, 2017). The deliberative system includes multiple spaces, functions and connections. First, deliberation is taking place in different kinds of spaces, or public spheres. It involves physical forums as well as mediated spheres such as social media, newspapers and television. The larger the public gets, the greater the role given

to the mediated public spheres. As I will come back to later, personal direct communication has properties that may have effects on the quality of the interaction as well as on the quality of the outcomes. In a physical public sphere, there is a possibility to activate *intersubjective* dimensions absent in mediated communication, which may influence perspective-taking, empathy and reciprocity. A physical public sphere may also activate the material aspects. The type of public sphere affects the content and format of the deliberations, as well as their transformative potential.

Habermas may have pioneered systemic deliberative democracy through his rudimentary outline of the public sphere as including e.g. 'radical' publics on the fringe that bring issues of public importance into more central, formal publics (Mansbridge *et al.*, 2012). Since then, scholars have taken the heuristic further and seen a complex interlinked system of deliberative arenas supporting, though sometimes also undermining, one another (Mansbridge *et al.*, 2012). In their ideal form, weak publics employ the truer form of deliberation, unconstrained by accountability to constituencies and decision-making timelines. The cases in this thesis sit along the spectrum, representing a more formal and a more informal deliberative setting. However, both cases take place more or less in weak publics of deliberation on nature conservation.

3.3.4 Implications and contradictions of democracy

Democracy contains a few basic dilemmas or contradictions. For instance the opportunities and limitations regarding representative democracy in relation to direct democracy and the balance between representation and participation, which is related to scale (Dahl, 1998). Another binary is democracy as both discussion and decision or as both culture and constitution. Additionally, democracy depends on opportunities to reach an agreement as well as on the processes of agonism – much like communication itself (see Section 3.1).

If democracy is both constitution and culture – which one comes first? Can we have one without the other? And how can one be maintained without subsuming the other? Deliberative democracy can actually be both decision oriented (constitutional deliberation politics) and oriented at collective opinion formation among citizens and further will formation in more formal assemblies (informal deliberation politics) (Habermas, 1998). These can be resolved as occupying different positions within the same deliberative system (Mansbridge *et al.*, 2012). As I will discuss further in Section 6.2, I suggest that there are considerable reasons to identify and construct nodes where informal public deliberation meets the formal institutions of our constitutional democracy. I also

illustrate that deliberative democracy needs to have spheres on its own that are not burdened with decision-making:

> Deliberative politics thus lives off the interplay between democratically institutionalized will-formation and informal opinion-formation. It cannot rely solely on the channels of procedurally regulated deliberation and decision making. (Habermas, 1998, 308)

The opportunity that lies within the kind of public spheres that are disconnected to forums of formal decision-making is that the opinion formation and the development of common understanding is given space. Such a configuration allows,

> […] the spontaneous flow of communication unsubverted by power, within a public sphere that is not geared toward decision making but toward discovery and problem resolution and that in this sense is nonorganized. (Habermas, 1992, 451)

The difference between democracy as decision-making versus discussion, can also be understood in terms of dialogic or dialectic in the meanings defined by sociologist Richard Sennett (2012, 24):

> Dialectic and dialogic procedures offer two ways of practising a conversation, the one by a play of contraries leading to agreement, the other by bouncing off views and experiences in an open-ended way.

While dialectic paradigms involve competing perspectives, dialogical paradigms include the alternative interpretations that are available. A dialectic process implies that different perspectives are confronted to achieve a compromise, which results in communicative closures. A dialogic process, contrastingly, is based on listening and openness towards intentions behind the lines, which gives a communicative exchange (or co-construction) less directed to competitiveness and more towards collaboration. In the context of this thesis deliberative democracy is referred to primarily as an open-ended *dialogic* process and secondarily as a *dialectic* process. Still I do acknowledge that certain deliberative processes might need a dialectic approach, for instance in order to make a majority decision within a particular legislative framework. This is certainly the case within formal NRM administration at the CABs.

There are also practical reasons for working with deliberative democracy outside of the formal political system controlled by the state, to "relieve the public the burden of decision making" and leave the decisions for the institutional political process (Habermas, 1998, 362). Significantly, all decisions need deliberation, but all issues that need deliberations do not need decision-

making (Habermas, 1998). Difficulties may also occur in recruiting participants to institutionalised public deliberation forums (Jacquet, 2017), which would then call for complementing forums where various groups of citizens meet uncoerced.

How deliberative democracy is related to constitutional democracy and the formal political system is a decidedly relevant question. It could be discussed whether deliberative democracy could and should permeate the entire political system or remain external to it (see Habermas, 1998).

Another contradiction within deliberative democracy that is important to address is the issue of consensus versus agonism. While consensus and deliberative democracy have utopian connotations, agonism may be a more realistic model. While agonism allows for democratic community building on a humanistic basis (Mouffe, 2014), it risks neglecting opportunities for social learning that may lead to durable agreements. The emphasis on diversity may neglect the possibility of building on commonalities in order to form common identities. If we regard democracy as *doing*, without an end product, it makes sense to emphasise the dynamic ongoing negotiations (or struggle), between adversaries – or what is often referred to as agonism. With an agonistic democracy perspective, there is a risk of becoming deadlocked in disagreements and confirming and consolidating those binaries that pre-exist or are constructed throughout the process. Interest groups and political wills are also dynamic and political subjectivities are shifting. With the emancipatory domain of human interest characterising critical theory, it might be counterproductive to get locked into agonism as a superior principal. According to Habermas' theory, the change potential within democracy is carried by the communicative rationality and the *understanding orientation* of ideal communicative situations. At the same time as I dismiss agonism as an optimal model for deliberation, I am also aware that Habermas' theory builds on some premises that are unrealistic and partly utopian. For instance, communicative consensus builds on the idealised assumption that the symbols of the language would hold the same meanings to all subjects, a simplification that Habermas points out himself (Habermas, 1996).

The advantages of agonism as a conceptual model for deliberative democracy is partly that unlike consensus-oriented processes it allows openings for questioning procedures, meanings and rights of participation instead of discursive closures or the suppression of particular conflicts (Thackaberry, 2004). However, weak publics (Fraser, 1990) also offer discursive openings because of their informal settings, which do not aim for decision-making but rather collective opinion formation. This is valuable insomuch as they allow for *both* dialectic and dialogic perspectives. The diversity of viewpoints and opinions can indeed be acknowledged and used constructively even if agonism

is not proposed as the way to understand public deliberations, but rather as a reminder of tolerance and value diversity.

In our pluralistic society, decisions are made at different decentralised points and deliberation also takes place in multiple public spheres (see Ercan *et al.*, 2017, about how multiple spheres can be studied). The deliberative qualities and outcomes are affected by the forums where they take place. The societal democratic needs include developing new communicative spaces (Hendriks, 2016). One main argument in this thesis is that certain kinds of communicative spaces may need to be developed to cultivate democratic deliberations on nature.

3.4 Environmental communication

In this final section of theory, I position my analytical approach within environmental communication (EC) as a field of study that subsumes many of the previously mentioned theoretical perspectives, namely communication, modernity, democracy and nature. Through combining theory on communication and theory on democracy, we can link an intersubjective and a societal perspective, which I see as increasingly necessary for navigating the environmental communicative challenges of today.

In this section, I also demarcate the legacy of risk society in the emergence of environmental communication as a 'crisis discipline' brought forth to address the environmental problems of today. Indeed, I ask how EC can function as a simultaneously change-oriented *and* analytical discipline in addressing democracy in the context of nature conservation. A rather general definition is that "environmental communication refers to social interactions among humans regarding the biosphere" (Peterson *et al.*, 2004, 17). Accordingly, environmental communication studies (EC) is a field of research that explores social interactions between humans regarding the biosphere. I make a distinction between environmental communication practice and the meta-discourse of environmental communication studies – the latter is what is referred to as environmental communication (EC) in this thesis. Environmental communication as a communicative practice includes various types of social interaction where environment is the theme, such as environmental conflicts, social learning, nature interpretation, environmental debates in social media, etc. (Cox, 2010). It may be said that this thesis engages in nature interpretation and a dialogue programme for conservation administrators as two environmental communicative practices. Environmental communication as a field of study regards research on these practices and their discourses. The field of EC is rather heterogeneous and a multidisciplinary synthesis of various schools of thought. Scholars with EC interests emerged and organised increasingly during the 1980s

and 1990s (Cox & Depoe, 2015). The field is growing internationally and is still heterogeneous regarding epistemology and methodology. This thesis relates to a particular part of the EC research field, and the central features considered are described below starting off from the theoretical directions in previous sections.

The two components of the concept represent both a communicative aspect (a) and an environmental aspect (b). To me EC contributes with a few central perspectives that are connected to the mutual dependence of materiality and symbol, constituting the practice of communication (a). The environmental aspect (b) of the EC concept is not only that the environment is the material aspect to communication, but in particular that the environment is under pressure. In the following, I will describe my understanding of EC (summary in Figure 5) which has implications for how the thesis relates to communication, nature and democracy.

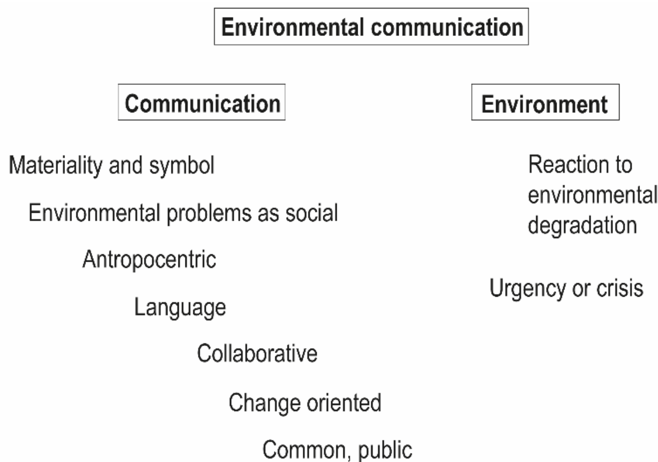
3.4.1 Environmental communication as symbol-materiality interface

As mentioned, environmental communication processes involve both materiality and symbol (e.g. Peterson *et al.*, 2004), and I recognise that EC aims to critically study the relation between both. The potential of EC is in that interface. Thus, EC is both within and beyond the discipline of communication studies (e.g. Cox & Depoe, 2015; Hansen & Cox, 2015a).

EC regards environmental problems as social. This is arguably for three reasons: first, because environmental problems are *effects* from our societal life; second, because the environment is the material *base* of our social reproduction; and third, because environmental problems are socially constructed through *language*, and subsequently the only way environmental problems can be handled is through communicative processes. Environmental problems are characterised by complexity, uncertainty and disagreements or conflicts of interests (Gunderson, 2014a; Dryzek, 2005; Swedish Government, 2001; Beck, 1995), and with references to the previous sections on communication and democracy, these issues require a communicative handling.

My approach to EC is anthropocentric, and I mean that the anthropocentric perspective is inherent to the field due to the very two-word construction of the name. In the word communication, with its linguistic dimension, there is an anthropocentric foundation. Likewise, in the concept of environment there is also an anthropocentric connotation (Milstein, 2009). To extend the environmental communicative subjects to animals for instance, would require another take on EC. In distinction to environmental sociology, EC is closely related to communication as a concept. Sociology without communication as superordinate category would involve much more and various research

perspectives. EC assumes communication as constitutive to society as well as the very processes through which change is made. Even if the research in this thesis partly could be labelled environmental sociology, the focus on communication as a critical category is determinative. On this argument, communication represents a direction and implies a sociology of change. Communication also emphasises the common. The etymologic meaning of communicate comes from Latin *communis* and means 'shared' or 'common' and communication accordingly means 'to make common' (Online Etomology Dictionary, 2018). Moreover, communication relates specifically to the linguistic meaning and thereby collaborative nature of environmental communication processes. As described by Hansen & Cox (2015a), environmental communication relates to something common, taking place in the public. This includes interactions that take place in the border between public and private, but does not involve completely private matters. On the other hand, what is being regarded as private or public are indeed dynamic



categories that are subject of negotiation (Fraser, 1990).

Figure 5. Summary of the components to EC and its subcategories communication and environment, as described in the text.

3.4.2 Environmental communication as a "crisis discipline"

In my view, EC has an agenda beyond reporting objective studies of 'reality'. In the wake of reflexive modernisation and risk society outlined above (Beck *et al.*, 1994; Beck, 1992), EC emerged as a response to environmental problems and with the agenda of addressing these problems from a communicative angle (Cox & Depoe, 2015; Cox, 2007). The field was largely a product of its time. The

environmental crisis has made the research field evolve and continuously motivates it. To refer to *one* crisis is actually a simplification, since there are multiple environmental crises taking place (Schwarze, 2007), and especially as one particular environmental problem is presently dominant (i.e. climate change), we must not forget other urgent ecological issues. Even though it is interesting to study how people talk about an issue, the case of EC is committed to a particular task; it is not a research field that is devoted to musing about *any* kind of human practice. The topic – our environment – is urgent and important to everyone and necessary to address on the common level (see Peterson *et al.*, 2007). Hence, I would argue that all EC research projects are part of a change process, even if there is variation in how strong, explicit or elaborate the change component is.

Furthermore, working with an explicit change dimension could be referred to as an instrumental approach to EC. I have taken on this particular PhD research not only because it is intellectually interesting or because I have a personal interest in the field, but because I believe that the process and the outcomes can be useful to adjust environmental disorder on the planet (see Moser, 2015). The scholarly debate regarding EC as a crisis discipline highlights different aspects of the crisis issue. Cox (2007) advances four arguments for commitment among conservation biologists, which he compares to EC: (1) first, to acknowledge there is a human-induced crisis; (2) humans can do something about the crisis; (3) humanity is responsible to remediate this crisis and (4) research can contribute (Cox, 2007, 8). Comparison can be made to other research fields that have emerged similarly, such as cancer research and conservation biology. The consequences of regarding EC as a crisis discipline is two-fold and includes both analysis of failures in human communication on environmental concerns as well as identification of alternatives to enable restorative responses to environmental threats (Cox, 2007).

There might also be challenges in referring to EC as a crisis discipline. How do EC researchers manage to balance between the role of activist and scientist? How does the knowledge of EC relate to other domains of research? If EC commits to environmental change, then how does the EC researcher ensure that the 'right' environmental outcome is reached? Since my scholarship involves a perceived responsibility for the environmental crisis, I need to reflect upon if the researcher also has an ethical duty regarding the substantive outcomes of the research; something that is difficult to control if the researcher only makes normative stands in procedural aspects and does not engage in the substantial outcomes. Indeed, the role of the researcher will need to be continuously discussed within the EC community. Schwarze (2007) responds to Cox (2007) on the matter of EC being a crisis discipline, and indicates that labelling EC a

crisis discipline might risk creating an image of EC as too much of a strategic instrument for informing about scientific findings. Schwarze (2007) discusses whether EC is a discipline to *address* crisis, or is a discipline that stems *from* or is *about* crisis. This touches on my previous discussion about what communication is, and that it is simultaneously constitutive and instrumental. Schwarze (2007) promotes EC as a field of crisis research, through developing environmental crisis as a concept.

Therefore, in the sense that EC being a "crisis discipline" and there is a reaction to and a need to remedy environmental degradation, the meaning of materiality is central as it is the whole purpose of the EC effort (cf. Moser, 2015). However, there is another direction to it; to regard the environment or nature as a way or a means to organise society and human relations. This perspective touches on historical materialism, which will not be further described here, but mentioned since it forms a background to the tradition of critical theory.

The concept of the environment in the sense we use it today was developed through the public awareness of environmental degradation events taking place during the 1960s (Lidskog *et al.*, 1997). Hansen and Cox (2015a) who edited *The Routledge Handbook on Environment and Communication*, indicate that mass media was actually a central actor and forum in the conceptualisation of the environment. The historical role of mass media in raising awareness of environmental problems also contributes to a close relationship between environment and communication and accompanying research interests. While EC is much more than mass media studies and journalism, these fields still play a key role in the EC research tradition. Not surprisingly, communication is in general a more central concept than democracy within EC research. For instance, the concept of democracy only has a minor role in *The Routledge Handbook on Environment and Communication* (Hansen & Cox, 2015b), e.g. Chapter 32 by Maeseele (2015), and is mentioned only in terms of political dimensions to practice and research.

How opportunities for social change are perceived is strongly connected to the individual, society and materiality. Materiality is represented by the objective physical reality, which humans may only achieve knowledge about through interpretation. Furthermore, according to the previous section on communication, the individual subject can only interpret something through being socially connected to other individuals. Communication mediated by symbols, enables thoughts and interpretations within the individual. Only through interaction can we know something about an object or a situation, and only through interaction can we change. This thesis attempts to, on both a theoretical and a pragmatic level, bridge a democratic perspective and a communicative perspective in the environmental context. To do this, both macro and micro levels are involved. In

particular, my research tries to create understanding on how the communicative micro perspective can contribute to the democratic macro perspective, and how meaning-making and communicative rationality can assist in the promotion of deliberative democracy.

This chapter has presented the core concepts of the thesis and how they are connected. It points towards how they can be useful in understanding contemporary challenges in nature conservation. The concepts are different but interlinked and can be brought together under the analytical framework of critical theory.

In summary, the sections in this chapter establish a call for reconciliation, within and between people, between people and state and not least – between people and nature. Deliberative democracy is suggested as a means by which reconciliation is to be delivered. Still, the pathway is quite vague and utopian, especially if restricted to the Habermasian ideas, which work well as blueprints but less so as tangible guides. Hence, there is a need for a deliberative system theory and the third generation of deliberative democrats to take this theory into praxis. Indeed, these concepts raise the question of what sorts of fora could approximate the qualities needed for reconciliation. Because it brings an important materiality and policy relevance, EC is a disciplinary nexus in which these sorts of linkages and discussions can fruitfully be held.

Having presented the theoretical framework, the following chapter will continue with giving a description of the empirical context of the study.

4 The context: Communication and democracy in Swedish nature conservation

This chapter presents and describes the societal and the scientific contexts for the two case studies. It starts with a general praxis-based research overview of nature conservation, with relevance to democracy, participation and communication, then moves on to a review of nature conservation research in Sweden, which also gives a picture of the policy development during the last few decades. Following, nature interpretation is introduced, reviewed, analysed and criticised using policy documents, instruction literature, and research literature related to interpretation in general and nature related interpretation in particular. Thereafter, the two case studies are described, complementing what is already presented on the cases in Paper II and III, respectively.

4.1 Nature conservation literature review – from command and control to active management

Nature conservation has traditionally been oriented towards protecting some kind of "ideal state of nature" against human impacts through central management (Fauchald *et al.*, 2014, 240) or top down "command and control" (Pieraccini, 2015, 559; Holling & Meffe, 1996). During the last decades there has been a shift regarding the need for active management (i.e. human intervention) to retain ecological values and to meet the need for local participation in conservation management. This is an effect of international conventions, conventions at the European level as well as Swedish policy. One component of this shift in Sweden was the nature conservation policy of 2001, which emphasised the human role in nature conservation.

The literature review in this chapter summarises current research on democratic aspects of nature conservation, with a focus on Swedish and

Scandinavian contexts. The literature search was done in Web of Science in May 2018, pairing the topics nature conservation, protected area or national park with the topics of democracy, collaboration or deliberation. Cross-reference and references cited searches were also applied. About 500 potentially relevant records were scanned through, and about 50 were selected for further readings; about half of them are from Scandinavia and half of them involve international research. The literature is not limited to any single discipline, but involves sources from journals on nature conservation, ecology and environmental management, political science, communication, geography and philosophy. However, my aim was to focus on the state of the art regarding the praxis and research on nature conservation and democracy, with a particular interest in deliberative democracy. The majority of the existing research, however, does not specifically link deliberative democracy and nature conservation in protected areas, which motivated a wider scope. A rough categorisation shows that the literature can be said to focus on three different units of analysis: (1) the administrative/political system of nature conservation (e.g. governance approaches, adaptive management), (2) actors involved (e.g. citizens, visitors, landowners, planners), or (3) the resource (e.g. biodiversity, environment, climate, water, forest)[3]. A second dissection of the literature is (a) research that is instrumentally oriented towards public participation versus (b) research that regards public participation as an end in itself. In the following, I will first mention a few examples of these research directions and then outline some specific subthemes that are relevant to my cases in terms of addressing issues such as the shift to public participation in nature conservation and the societal role of nature interpretation.

4.1.1 Studies on the administrative/political system in nature conservation

While the paradigm of nature protection has shifted towards a decentralised practice, there have been some different pathways for understanding and organising this decentralisation. Adaptive management is one approach, which includes both management and learning about natural resources and often includes a deliberative phase of framing the problem and identifying stakeholders (Hallgren & Westberg, 2015; Williams, 2011). This kind of process involves an iterative phase of "learning about system structures and functions, and managing based on what is learned" (Williams, 2011, 1348). This decentralisation turn through which

[3] Resource is used broadly, not restricted to economical or technical use, but rather as within heritage interpretation, where the resource is the site, object or nature phenomenon that provides the substance to the interpretive activity, see Section 4.3.2 (e.g. NAI, 2009).

adaptive management originated has taken part not only in the environmental sector but in the whole of society and is often referred to as *governing shifting into governance*, implying a new, less central, role of the nation state (Wallin, 2017; Montin & Hedlund, 2009; Bäckstrand, 2006). Environmental governance "includes the actions of the state and, in addition, encompasses actors such as communities, businesses, and NGOs" (Lemos & Agrawal, 2006, 298). Other related models are adaptive governance, collaborative governance and deliberative governance. Governance as a concept has been criticised to be vague and to conceal a neoliberal ideology, and is often used in a general sense to explain a shift in the location and format of politics (Eagleton-Pierce, 2014). The governance lens has been embraced by policy and planning theorists, but has yet to provide analytical utility for communication scholars.

4.1.2 Actors involved in nature conservation

In what follows, studies are summarised on the basis of their unit of analysis: actors, resources and institutions, respectively. To begin with, citizens are involved in the planning and conservation of natural resources in different ways and for different reasons. Two rationales of citizen involvement will be further discussed below. A recent review on participation in forest policy making by Kleinschmit *et al.* (2018) shows that the role of citizens in policy processes is very limited on supra-national level and national level but stronger, and growing, on the local level.

Notably, the area of citizen science and public participation in research is growing. Lay people are also research objects in their role as visitors to protected areas or consumers in terms of tourists. Their enjoyment and experience are to be either optimised or deconstructed as to their conservation potential. Such research regards the visitor's preferences as well as their behaviors. Studies often build on motives and norms to increase tourism income, to improve the visitor experience or to prevent damage to protected areas. For instance, Wolf *et al.* (2018) applied public participatory GIS mapping to manage visitor conflicts along a trail in a protected area. This kind of research is commonly found mapping and monitoring visitors in protected sites, and often involves counting visitors and evaluating instructions to visitors, and is published in tourism journals (e.g. Fredman *et al.*, 2009). It is uncommon, though, that this kind of research also involves democratic considerations, although I expected to find such participatory monitoring techniques applied in democratizing management of protected areas – which I did not. The reason for the need to resolve conflicts is not articulated, but could be related to either democratic or economic reasons. It may be pointed out that these kinds of studies often rely on a simplistic model

of the linkage between knowledge-attitude-behaviour (e.g. Wolf *et al.*, 2018), and they do not overlap with studies on citizenship. Outdoor recreation studies take a similar perspective on participants, but often with the normativity of public health or sustainability, sometimes linked to environmental education.

Researchers involve citizens in nature monitoring and conservation in various ways as well as in documenting ongoing conservation initiatives. One such non-state actor initiative in nature conservation governance is the partnership between a nature conservation NGO and network of farmers collaborating on meadow bird protection (Runhaar & Polman, 2018). Similar partnership initiatives have been documented from Britain (Smallshire *et al.*, 2004) and Sweden (Josefsson *et al.*, 2017; Caselunghe *et al.*, 2010). However, the bird protection outcome is prioritised over the communicative process and democratic aspects are absent in this kind of initiative.

The field of citizen science is rapidly growing (Ellwood *et al.*, 2017). McKinley *et al.* (2017) put hope for conservation to citizen science, defined as,

> […] the practice of engaging the public in a scientific project […] that produces reliable data and information usable by scientists, decision makers, or the public and that is open to the same system of peer review that applies to conventional science. (McKinley *et al.*, 2017, 16)

Ballard *et al.* (2017) found natural history museums to be a significant setting for bridging citizen science and education that promotes engagement in biodiversity conservation through partnerships between science, educators, organisations and new groups of citizens. Dillon *et al.* (2016) contributes to the field by accentuating citizens' agency and distinguishing between science-driven instrumental *citizen science* and emancipatory transition-driven *civic science*, as the way towards managing wicked conservation problems.

Common to the fields of visitor, tourism but also governance studies, is the assignment of predefined roles to citizens: visitors, tourists, consumers, and within planning contexts, stakeholders are of particular interest. The problem with locking citizens into the particular role of representing stakeholders in nature conservation was analyzed by von Essen and Hansen (2015) who found that the stakeholder approach in conservation management limits the agency of the citizens participating. They argue that the legitimacy deficit in nature conservation reveals,

> […] a need to move away from the instrumental process of stakeholder co-management toward the active and meaningful engagement of 'citizens' rather than 'stakeholders' in what is termed 'deliberative democracy' in order to neutralize the anti-deliberative inertia posed by predetermined stakes and, with

> them, a systematically distorted communication. (von Essen & Hansen, 2015, 333)

The stakeholder approach further risks overemphasising the decision as the outcome (von Essen & Hansen, 2015), which may reduce the democratic process in its transformative function regarding social learning, collective opinion formation among citizens and further will formation feeding into more formal assemblies. Groulx *et al.* (2017), in their review on learning outcomes from citizen science studies on climate change, found that more effort is needed to study learning outcomes on a collective level, linking that to the collective sense of nature and place.

4.1.3 Studies with focus on the resource

When looking for literature on the democratic aspects of nature conservation, I have primarily been searching for research on protected areas. Other related contexts or materialities that occur are, for instance, biodiversity, forest, climate, water and the environment in general. These kinds of studies are commonly published in nature conservation, interdisciplinary or natural science journals, implying that the social dimensions of conservation are in the background. The literature search has not found an abundance of studies on the *meanings* of the resource or the particular materiality in relation to the communicative aspects of governance. There are many writings on forest policy, governance and management, not least when looking at a Swedish or Scandinavian context (e.g. Wallin *et al.*, 2016; Beland Lindahl *et al.*, 2013; Ångman, 2013; Appelstrand, 2012). Biodiversity is another topic that is commonly studied (e.g. Engen, 2018; Blicharska, 2011). Climate change is, for instance, the topic for Fazey *et al.* (2018), who identify nine challenges for the transformation of society. However, they do not problematise the climate from an epistemological point of view. Climate change mitigation is likely, even to larger extent than nature conservation, to be characterised by a complex system of actors and a high degree of uncertainty (Roelich & Giesekam, 2018). Essl and Mauerhofer (2018) share a case study to identify opportunities for mutual implementation of climate-change policy and nature conservation policy, which are not combined in practice. They find that climate and conservation policies could be framed as overlapping, but that it is seldom done in practice (Essl & Mauerhofer, 2018). Forestry is linked to both discourses of biodiversity conservation and climate change through its role in the growing bio-economy approach to sustainable development (Johansson, 2018).

4.1.4 Instrumental or normative rationale of participation

When framing participation in nature conservation, there is often a palpable instrumental motivation behind the rationale for going towards governance. The instrumental motive means that efficiency, compliance, institutional legitimacy and various outputs are seen as valuable outcomes that justify decentralising decision-making. The reason for participation is hence to fulfil a societal or any other kind of (pre-defined) objective. A fundamental condition for a system of representative democracy, is that authorities need to continuously re-establish their legitimacy among citizens to be able to exercise authority. Particularly, they need to find new strategies in conservation since "coercive means and top-down governance […] has reached a dead end" (Borg & Paloniemi, 2012, 152). As mentioned in the initial chapter of this thesis, we may talk about a legitimacy crisis. Some studies regard participation as a tool to address legitimacy challenges, and yet other studies contribute by problematising that. As Marshall and Goldstein put it, "increasing citizen involvement can be viewed as a means for resource agencies to prevent, or at least delay, a crisis of legitimacy" (Marshall & Goldstein, 2006, 221). The same authors also make a distinction between authentic participation, where the substance is used by the authorities, and non-authentic participation where only the process is used by the authorities. They also indicate that somewhat authentic participation is needed for the authority to gain legitimacy and trust (Marshall & Goldstein, 2006). Even if the primary purpose of citizen involvement is effective management, there are secondary benefits to society. The authors conclude that "the democratisation of environmental decision making is, in part, an adaptive response by natural resource agencies to avoid an environmental legitimation crisis" (Marshall & Goldstein, 2006, 227).

An influential framework by Scharpf conceptualises legitimacy as composed by complementary *input-legitimacy*, which is process-oriented or referred to as "government by the people", and *output-legitimacy*, which is results-oriented or referred to as "government for the people" (Scharpf, 2009, 7-11; Scharpf, 1999). Whereas output legitimacy refers to problem-solving capacity (Bäckstrand, 2006), and is the more instrumental part in this framework of legitimacy, it could be argued that actually the whole framework of input- and output legitimacy is instrumental. The instrumentality denotes that legitimacy is regarded as a means for government and not acknowledging public deliberation as a societal quality in itself. Although both Bäckstrand (2006) and Scharpf (1999) refer to deliberative democracy, they seem not to value deliberation independent from implementing policies produced by representative democracy. In this sense, the instrumental notion of participation may be said to be associated with a reductionist, economist understanding of humans, limiting the available rationalities

to instrumental rationality (cf. Habermas, 1984b). Scharpf speaks of "a pre-existing 'thick' identity" that I interpret as the level of community to which humans extend their identification (Scharpf, 1999, 30). The chosen stance on whether such a 'thick' identity may pre-exist will remain a question of negotiation. But it certainly may be a useful idea when discussing ecological citizenship.

How then can participatory processes oriented towards output legitimacy be reconciled with normative virtues of participation? That is, how can participatory schemes that are clearly steeped in an instrumental logic also allow for the promotion of citizenship, public opinion formation, autonomy and sovereignty? Although these virtues may also be seen as 'outcomes' of sorts, they are held to be intrinsic values of democracy and emphasise process rather than product. To be sure, the dichotomy between procedure and substance can be questioned, since procedural theories are always substantial at some point (see Meinard, 2017, 116). Meinard argues that a legitimate conservation policy is one that "benefits from a continued enacted readiness to argue to justify it" (Meinard, 2017, 122). In that way he turns towards communication, and combines the theoretical criteria of Rawls and Habermas with criteria of practice. I see this as a balanced way between the instrumental and non-instrumental perspective on participation and legitimacy.

Natural resource management (NRM) professionals apply policies on participation in environmental decision-making with different motives: to improve agency decision-making, to prevent and handle conflict, or as a distraction or burden in slowing down the process to fulfil conservation objectives (Predmore *et al.*, 2011). The implementation of participatory policy is mainly oriented towards legal obligations, and only to a limited extent includes the management of relationships with actors for long-term benefits of participation. Still the kind of studies that evaluate instrumental benefits from participation do not engage in the intrinsic or normative dimensions of participation (see Predmore *et al.*, 2011).

Dietz and Stern (2008) postulate three goals for public participation: quality of outcomes, legitimacy of outcomes and increased understanding and decision-making capacity. Then they conclude by stating that "it should enhance the ability to implement decisions once they are made both by producing better decisions and by producing legitimate, credible, and well-understood decisions" (Dietz & Stern, 2008, 225). According to this perspective, participation, although important to societal relations, is primarily seen as a means to fulfil government decisions rather than generating public will based on communicative rationality.

The opposite of the instrumental rationale of participation can be described as a normative rationale, building on the intrinsic value of participation. On a theoretical level it can be asked whether there is any participation that approximates

only intrinsic values, considering that human beings cannot simply turn their (instrumental) rationality off. On a pragmatic level, I look for participation as cultivation of democratic values and citizenship, supporting public sovereignty and breeding collective ownership of common resources. Roots are found in the writings of Rousseau, Rawls and Habermas (Bohman, 1997).

Where do we then find the opposite to the instrumental rationale of participation? Is there participation in terms of its intrinsic values? That notion of participation would involve the significances of public sovereignty, collective ownership of common resources, cultivation of democratic values and citizenship. By a normative rationale I refer to those kinds of motives or reasons that are not related to fulfilling any predetermined objective, but that are connected to a larger normative idea related to democratic values, ethics, justice, trust and reflexivity. These are entities that do not primarily relate to fulfil goals, but which have meaning in themselves, constructed through human discourse.

Dryzek and Pickering (2017) emphasise the role of reflexivity, or the "ability to question presuppositions and associated limitations" as a prerequisite to environmental governance. They make "the case for regarding deliberation as necessarily central to reflexive governance, mainly because it can hold a series of governance binaries in productive tension, thus yielding reflexivity" (Dryzek & Pickering, 2017, 354). One of the binaries mentioned is public participation versus expertise as a source of knowledge. Here, deliberation is a way to increase the reflexivity of expertise, which is important in the division of epistemic labour between experts and citizens (Dryzek & Pickering, 2017). What this means in practice is a bridging of the expert-lay divide by promoting the deliberative equality of all rationalities.

Another normative rationale of public participation in environmental governance can be found in Dobson's work on environmental citizenship and ecological citizenship (Dobson, 2007), which are two partly overlapping concepts with some analytical differences. These concepts are developed to complement the liberal and the republican forms of citizenship. Dobson's approach is from the perspective of the citizen, who regards their rights and duties as stretching beyond them as an individual, including other beings and environments. Environmental citizenship is used to study the relation to the nation state, and the environmental duties and rights in that context, whereas ecological citizenship is used to denote the global nature of environmental rights and duties, especially considering ecological footprint (Humphreys, 2009). Environmental and ecological citizenship both offer windows to move beyond the implementation of expert defined solutions to pre-defined problems, and evaluating the success as effectiveness in implementation. Instead these concepts have a take on environmental participation as something inherent in

being a human, either by rights or by virtue. This perspective allows citizens to share the same collective responsibility as inhabitants of one planet. In this way, discussion on environmental and ecological citizenship is an important step in cosmopolitan democracy.

Dobson's citizenship rationales for public participation are also helpful in dissolving preconceived notions around property rights. Commonly, the participatory processes in nature conservation are limited to formal stakeholders, which often includes landowners but not individual users and everyday citizens. Further, the signification of formal property rights is often taken for granted, but can be revealed to hold various meanings, such as property attached with rights and freedom and property attached with environmental responsibility and duties (Pieraccini, 2015). These different perspectives on landownership are linked to different political perspectives on natural resources. The discussion on property rights also applies to discussions on protected nature. Protected nature may be conceptualised as a kind of new *commons*, but which often collides with an "orthodox view of property" (Pieraccini, 2015, 567).

Moreover, participation in nature conservation also occurs within market-based methods, such as payment for ecosystem services (Wegner, 2016) and deliberative value formation (Ranger *et al.*, 2016), the latter providing space for communicative rationality – thus positioned somewhere in between the instrumental and the normative approaches to participation in nature conservation.

To sum up, both the normative and instrumental approach to participation are found in conservation literature. These approaches can be seen as complementing one another. Fulfilling democratic virtues will save trouble down the line (e.g. compliance and legitimacy). But it is probably important that this is not explicitly linked in such terms (i.e. both the normative and the instrumental approach need to be legitimate and given space independently). Public participation is not in the service of public compliance, but in the service of democracy. Bearing in mind the above, the next section summarises the nature conservation context in Sweden in terms of its history, organisation and resources. In doing so, we can also see a largely instrumental rationale dominating decisions pertaining to governance in this context.

4.1.5 Nature conservation in Sweden – *"Protect, preserve, present"*

Nature conservation in this thesis refers to the formal institutions of protecting and managing land, run by government/state organisations. The focus of the thesis regards nature conservation in Sweden from 2001 through 2015. The nature conservation in Sweden mirrors international trends, but there are also some particularities regarding its history, organisation, traditions and roles. Just

like in this thesis, nature conservation in the literature is not restricted to, but often associated with protected areas (Fauchald *et al.*, 2014). Site protection in the form of nature reserves are motivated by biodiversity preservation (species and habitats), outdoor recreation and the restoration of environments (Borgström *et al.*, 2013). The Swedish Environmental Protection Agency (SEPA) as the main authority is responsible for implementation of national nature conservation policy and has a central responsibility for protected areas. The County Administrative Boards (CABs) are the regional governmental bodies in Sweden that operate on a practical level, establishing and maintaining nature reserves (Steinwall, 2015). New national parks are suggested by the SEPA and decided by the parliament and government (SEPA, 2015b). At the time of interest for my empirical data generation, there was one unit at the SEPA at the main office in Stockholm working with designating protected areas and another unit at the SEPA, located in another part of the country, working with conservation management and recreation in protected areas (Steinwall, 2015). Steinwall describes how the two units represented opposing discourses regarding intervention in protected areas which involved "fierce opposition" (Steinwall, 2015, 32), both within the SEPA and between the different CABs. The SEPA has undergone reorganisation since then, but still the new organisation from 2017 involves an organisational division between the nature-oriented unit and the society-oriented one, where the responsibility for area protection is within the nature unit and the issues of nature interpretation and outdoor recreation fall under the society-oriented unit (SEPA, 2018a).

4.1.6 A century of conservation history

Nature conservation in Sweden has a formal history of slightly more than one hundred years, initiated by a law on nature protection that lead to formation of the first nine national parks in 1909. Characteristic for that time was that nature represented a part of national identity, and the idealisation of "pristine" nature as promising refuge and health benefits in times of industrialisation and urban pollution (Johansson, 2006). The ideas on how nature best is managed have been shifting throughout the years, and mirror other trends in society. For instance, the first law on paid vacation for workers in 1938 (Fredman & Sandell, 2009) and prevailing ideals of fostering healthy bodies and minds (Sundberg & Öhman, 2000) contributed to trends of nature tourism, which were the most important motive for area protection in the first decades of the 20th century (Wramner & Nygård, 2010). In the 1960s 'nature conservation' replaced the dominant concept of 'nature protection' in the state public report on the same topic (Bladh *et al.*, 2013). This was also the decade when the SEPA was

established (i.e. in 1967) (Wramner & Nygård, 2010). International environmental development, such as the first United Nations Conference on Human Environment in Stockholm in 1972 (Seyfang, 2003) contributed to the Swedish environmental protection work, but it also increased attention to other environmental issues besides nature conservation, such as acidification and transboundary pollutants, which split the focus on other issues aside from area protection (Bladh *et al.*, 2013; Borgström *et al.*, 2013). Environmental problems gained attention in the Swedish public debate during the 1970s and in 1981 the Swedish Green Party was formed. In 1988 the Green Party got their first mandates in the Swedish parliament. Nature conservation received more attention and resources than previously and in the 1990s the dominating nature conservation discourse not only aimed at protecting nature from humans, but also to actively manage protected nature to enhance its biological values through the growing focus on biological diversity (Hongslo *et al.*, 2016; Bladh *et al.*, 2013; Bergeå, 2007). In 1992 the Convention on Biological Diversity (CBD) was signed at the UN conference in Rio, and the year after the CBD was ratified in Sweden (Wramner & Nygård, 2010). During the latter decades of the 20th century the nature conservation discourse was also increasingly being subject to 'scientificity' (Bladh *et al.*, 2013, 236).

As mentioned already in the introduction chapter, a new take in Swedish nature conservation policy was adopted in 2001 with the nature conservation policy *En samlad naturvårdspolitik* (*A coherent conservation policy*). As we will see, this policy emphasised human aspects of nature conservation.

4.1.7 The shift from 2001 – *"A coherent nature conservation policy"*

The shift over time in nature conservation policy in Sweden is mirrored by the document *Protect, preserve, present* in which the SEPA clarifies how they will implement the 2001 policy in terms of "better management and use" of protected areas (SEPA, 2005, 5). Initially conservation was equal to protection. Then preservation, or intervention, was introduced and eventually through the concept of 'presentation', pedagogical and communicative aspects of conservation were integrated in the conservation policy (Arnell *et al.*, 2009; see also Borgström *et al.*, 2013). *Protect, preserve, present* is seen as parallel to another somewhat similar discussion from 1978 regarding the task and role of the museum (i.e. cultural heritage) (Pettersson, 2009). The document *Protect, preserve, present* reflects the separate components to nature conservation, where the division between for instance management and nature interpretation is implicit but distinct. The 2001 policy was labelled 'coherent', which can be interpreted as an ambition to bring together the components of protecting, preserving and

presenting. Still, as will be seen in the empirical cases, this separation between the domains persists and the consequences might be both restraining and promoting participation. The three different spheres of conservation may allow developing diverse forms of public participation and reaching multiple categories of actors. *Protect*, in terms of processes for decision-making on what nature to protect, why and how, is not a topic in this particular document, but implicitly includes landowners and formal stakeholders. *Preserve* may employ participation in terms of recommending local contractors for management (SEPA, 2004b). *Present* represents the communicative activities that are targeted towards citizens, users, visitors or tourists.

Despite some inertia regarding integration of these spheres of nature conservation, Sweden historically has a record of being in at the forefront regarding nature conservation (Borgström *et al.*, 2013). The first national parks in Europe were established in Sweden (in 1909), and Sweden has been relatively good at achieving international protection status (Fauchald *et al.*, 2014). However, compared to Norway, Sweden has been slower in implementing local management (Fauchald *et al.*, 2014).

The 2001 policy aimed at a more holistic approach, involving the communicative *and* participatory components of nature conservation: an attempt, in part, at integration and amelioration of protect, preserve and present. Some of the inspiration for the more participatory nature conservation policy came from civil servants in the sector with experiences from environmental aid in the global South, where Sweden as a development cooperation partner nation had routines for conditioning local participation and equality in a way that was not typically done in domestic environmental projects (Arora-Jonsson, 2012). Requirements for public participation were already implemented in spatial planning, but within nature conservation this had not been the case. At the same time, the state budget on nature conservation was increased from 340 million SEK in 1997 to 2051 million SEK in 2007 and the main part of this budget is spent on site protection through nature reserves and other forms (Sandström, 2008, 32). Figure 6 displays the vast increase in costs assigned to area protection within nature conservation between the years 1997 (201 million SEK) and 2007 (804 million SEK). Between 1996 and 2001 the number of new established nature reserves almost doubled from about 300 in the previous five year period to about 600 in a five year period (Borgström *et al.*, 2013, 69). The remarkable increase in budget required a renewed policy on conservation (Hansen & Peterson, 2016).

This substantial investment in nature conservation combined with the new policy objectives generated several initiatives to establish protected areas with innovative methods, including forms of local participation. A few of these processes have been followed and documented in research and by other actors (e.g. Hela Sverige ska leva, 2015; Fauchald *et al.*, 2014; Sandström, 2008).

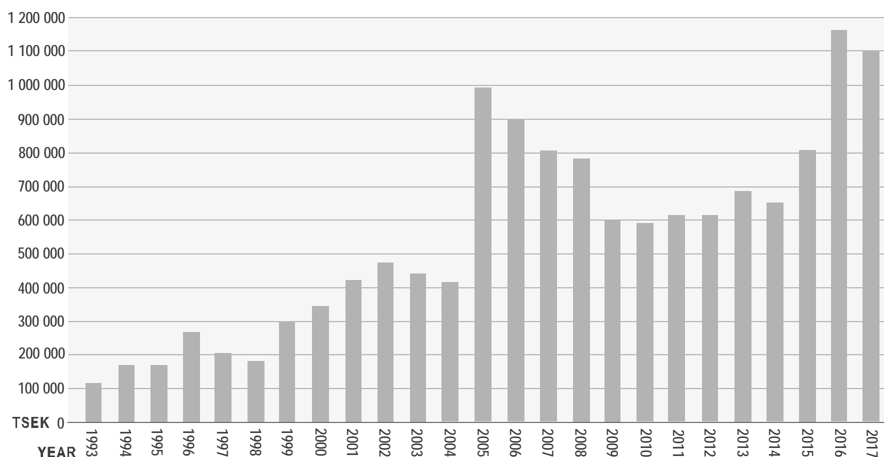


Figure 6. The state expenses for nature conservation from 1993 to 2017, in thousands of SEK. These expenditures contain expenses for management of existing national parks and nature reserves and expenses for land redemption when establishing new protected areas (Statistics Sweden, 2018).

4.2 Public participation in Swedish nature conservation – decades of trial and error

There are a number of international conventions and commitments to protected areas that apply to Sweden and that have been implemented through Swedish law. They range from strict obligations to non-binding commitments and involve Natura 2000, the EU bird and habitat directives, the Ramsar Convention, the World Heritage Convention, the Convention of Biological Diversity and Biosphere reserves under the UNESCO Man and Biosphere programme (Fauchald *et al.*, 2014; Sandström, 2008).

One explanation for what happened around the millennium shift and onwards regarding new objectives for local participation in conservation are the international policies calling for citizen inclusion and public participation, for example the Aarhus Convention (UNECE, 1998), and the European Landscape Convention (Council of Europe, 2000), which were ratified by Sweden in 2005 and 2011, respectively. Another explanation is the experience gained from

implementing environmental projects with participatory components in the global South. Thus, the new participatory approach in nature conservation can be seen as both a product of the national level conversation but also influenced by the international environmental discourse (Arora-Jonsson, 2012; Svensson, 2009).

Much of the research on the decentralisation of nature conservation is done on developing countries. Among the studies on the Swedish context the studies often regard co-management specifically but not the relationship between co-management initiatives and the policy context, according to Hongslo *et al.* (2016) who studied the institutional design regarding decentralisation.

The 2001 policy endorsed outdoor recreation, the role of humans in nature, visitors in protected areas, information, and nature interpretation as vital parts of nature conservation (Sandström, 2006; Swedish Government, 2001). However, there were not clear guidelines for how the new conservation policy was to be practically implemented and the meanings of the key concepts in the policy were unclear (Hovik *et al.*, 2010; Bergeå, 2007). Each different nature conservation sub-area has specific institutional solutions for the decentralisation of nature conservation (Hongslo *et al.*, 2016). Case studies have indicated that much of the decentralisation of nature conservation in Sweden is developed by an ad hoc partnership model (Holmgren *et al.*, 2017). Zachrisson (2009) found that the delegation of authority to partnership organisations was very limited in the cases of Lapponia World Heritage Site and Tyresta National Park. However in the local Swedish programme for nature reserves, authority is fully delegated to the municipalities for protected site management, something that implies a certain degree of systematic decentralisation even if it is within the established administrative system. Along with biological nature conservation projects and processes, the 2001 policy also resulted in an increase of other kinds of initiatives (i.e. communication-oriented commitments on a strategic or systems level). I will present two of them in the following two sections, after having drawn a map of the research on public participation in nature conservation in a Swedish and Scandinavian context.

Compared to Norway, nature conservation in Sweden is (in general) more strictly implemented, more directed towards “wilderness discourses” and restricts user conditions to a greater extent (Fauchald *et al.*, 2014): “Local management in Sweden would appear threatening [to conservationists] since it is usually suspected to lead to increased use and less wilderness” (Fauchald *et al.*, 2014, 249).

The shift to increased public participation in nature conservation can be discerned to involve a width of different governance modes. One theoretical framework taking into consideration actor features, institutional features and policy content, identifies five governance modes: centralised governance,

decentralised governance, public-private governance, interactive governance and self-governance (Hansson-Forman *et al.*, 2018). When this framework was applied to Swedish case studies it was found that Swedish carnivore management corresponds to 'decentralised governance' but that there is a "'misfit' between institutional arrangements and what stakeholders expect from the process" (Hansson-Forman *et al.*, 2018, 846). This finding shows that there is a contradiction between what is meant by participation between the authorities and the citizens, respectively.

In the study by Hongslo *et al.* (2016) on the decentralisation of nature conservation in Sweden, a definition and framework by Agrawal and Ribot are used. Decentralisation is defined as "any act in which a central government formally cedes powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy" (Agrawal & Ribot, 1999, 475), and emphasises the aspect of formal power delegation. Hongslo *et al.* (2016) provide a good overview on the kinds of power that decentralisation of nature conservation in Sweden has implied, such as the power to create new rules, make decisions, execute and monitor, and adjudication. However, their study does not take informal deliberation into account since that is not related to formal power delegation.

Much of the research on participation in nature conservation in Sweden works with the contexts of predator management, water or processes of biosphere reserves. Conflicts on different levels of conservation management and administration have also been studied. For instance Lönnrot (2010) found that the contestation within nature conservation was initially an effect of the shift from the previous objective of acquiring "interesting areas of land" (p.13) to the new objective of conserving biological diversity, which was something that did not concur with the geographical borders of the land ownership, but required the authorities to influence private landowners.

The conservation discourse within the SEPA and the CABs has also been documented and discussed, for instance regarding the debate 2010-2013 regarding naturalness versus intervention (Steinwall, 2015).

The discourses of nature conservation are products of human interpretations and relations and thus vary over time. Due to the essential biological circumstances behind nature conservation, experts often play a leading role. Sometimes expert judgements are regarded as legitimate without any motivation, but equally common is the opposite situation where expert judgements are questioned. In natural resource management, nature conservation and environmental management, there are inevitably multiple knowledge forms and values that meet. Humans are performing various roles and represent various interests. A pluralistic societal view emphasises the advantages with this kinds of diversity (cf. Benhabib,

2002; Mouffe, 1999). According to a pluralistic perspective, conflicts and contestations are functional and do not equal destructivity. In the practise of nature conservation it is, nevertheless, often a challenge to manage these kinds of conflicts. The administrators at the SEPA and CABs do not always have the necessary competence, resources or mandates for this kind of communicative effort.
There is a fundamental contradiction within the new role of NRM professionals, which lies in the double task of achieving national and international conservation targets and doing so through collaboration and local participation (Fauchald *et al.*, 2014; Fauchald & Gulbrandsen, 2012). The role of the professionals is shifting, and has been for a long time. Still, the education of these professional groups is not adjusted to the kind of competence and knowledge the conservation administrators need (Stummann & Gamborg, 2014; Westberg *et al.*, 2010). In general, administrators at the CABs have a natural science education (Westberg *et al.*, 2010). Stummann and Gamborg (2014) show that still after 20 years of recommendations from scientists to integrate communicative and social science in NRM practice, the need for professional training in social science related skills and models remains among administrators. The new role of NRM professionals involves "steering at a distance and facilitating collaboration rather than commanding change" (Fauchald & Gulbrandsen, 2012, 204). Stummann and Gamborg (2014) claim that until 2014 no studies explicitly explored or discussed public NRM professionals' perceptions of continuing professional education that includes social sciences. They further suggest that this kind of competence development cannot be measured objectively, but has to build on the interpretation of NRM professionals in relation to their own practice. However, even those professionals who have taken education in social dimensions of NRM still need continuous practice and competence development (Stummann & Gamborg, 2014), for instance through 'professional learning teams' (Westberg *et al.*, 2010). I will come back to this aspect when describing Case 2 and the way the Swedish administrators would have needed learning that generated renewed conditions for learning.

There is not only a need for communicative competence but also for suitable communicative arenas to support public participation in NRM. Legally mandated processes of public participation do not host the best conditions for dialogue, but must be complemented with collaborative approaches outside the formal participatory processes (Stummann & Gamborg, 2014). With this said, it is time to move over to one type of such informal communicative practices: nature interpretation.

4.3 Nature interpretation in the literature

This section first engages some definitions of nature interpretation and then presents a brief overview of the nature interpretation research that is relevant to the thesis.

4.3.1 Nature interpretation – a term from the practice in the Nordic countries

Nature interpretation is a relatively recent term, denoting communicative activities in sites of natural heritage. Internationally, nature interpretation is most often found under labels of heritage interpretation or environmental interpretation. Heritage interpretation is an inclusive term, comprising interpretive activities regarding both natural and cultural heritage. Whereas there are good reasons not to distinguish between natural and cultural heritage, this thesis, for different reasons, is limited to natural heritage. The reason why the thesis employs the term nature interpretation is because it is the most commonly used translation of the word *naturvägledning*, which is the term used in Sweden, Denmark and Norway, and the term agreed upon by the Nordic Council of Ministers (1990). Since there is not much Swedish research on *naturvägledning* explicitly (if any, at all), the use of the word *naturvägledning* is primarily found in practice and policy. An essential difference, however, between the words *naturvägledning* and nature interpretation, is the sub-units of *natur* and *vägledning*, the latter literally meaning “to lead the way”. This brings connotations of the guide as the one who decides the way and walks before the visitors. Before the establishment of *naturvägledning* at the Nordic Council of Ministers, another Swedish word was suggested (by one of the pioneers in the field), as a more direct translation of nature interpretation – *naturtolkning* (Hultman, 1985). *Tolkning* is the Swedish word for both translation and interpretation. However, it is not used in the practice of nature interpretation.

Interpretation practice in Sweden, as well as internationally, commonly follows the tradition of interpretive activities in national parks in the United States. Such practices were established in the beginning of the 20th century, and portrayed by Freeman Tilden (1957), although they admittedly have their roots in ancient times and other parts of the world (Silberman, 2013). Tilden’s book *Interpreting Our Heritage* was influential among practitioner during the 20th century and still is. It builds on a number of thesis statements to instruct the interpreter, for instance to *relate* the story to the visitor, to *reveal* and not merely inform, and to *provoke* and not just instruct visitors (Tilden, 1957). The *research* on nature interpretation is not as established, and most often such research is

found under more common labels such as heritage interpretation and environmental interpretation, sometimes even environmental education.

4.3.2 Nature interpretation as environmental education

Environmental education refers to activities with an educational purpose within formal or informal kinds of education. Environmental education focuses on the environment and often has a normativity towards pro-environmental behaviour. For example, the North American campaign 'Leave No Trace' (Simon & Alagona, 2009), which educates visitors as to how they can minimise their footprints when enjoying nature. Both within nature interpretation research and environmental education research there are strands of persuasive communication theory, which, in my view, favours the perspective of the initiative-taking actor, typically the guide or their organisation. Less often this kind of research (and practice as well) focuses on the perspective of the visitor in terms of acknowledging their subjectivity. According to the tradition from Tilden, 'the resource' (i.e. the materiality or the object), of interpretation is the focus for interpretive activities (NAI, 2009; Tilden, 1957); something that can assist in bridging natural and cultural heritage, and indirectly the nature and human dichotomy, mentioned in Chapter 3. A complementary note on resource is given in Section 4.1, Footnote 3.

According to the established definition by the National Association for Interpretation (NAI), interpretation is "a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and meanings inherent in the resource" (NAI, 2007). This definition lifts the "mission-based", which I relate to the implicit initiative of the interpreter, whereas it does not classify the visitor as a subject. The visitor is mentioned in terms of *audience*, which implies the role of the spectator collective, without any visible individual motives, and which does not expect more than a passive role from the visitors. The last part of the NAI's definition– "meanings inherent in the resource" – is a formulation that reveals the positivist foundation of the dominant interpretation paradigm, since meaning from a social construction perspective is indeed nothing physically inherent in the materiality, but something socially constructed through language and interaction. Beyond this criticism, the asset contributed by the NAI's definition of nature interpretation is the notion of 'emotional and intellectual connections', which accommodates the broad kind of learning that involves both sense and sensibility. The Swedish Centre for Nature Interpretation (SCNI) accentuates stimulating the participants' own reflections along with the purpose of affecting the participants' attitudes or behaviours. The SCNI further suggests that

interpretation is the act in which "the interpreter should help participants develop a personal relationship to nature and the cultural landscape" (SCNI, 2018). A useful map of influential interpretation definitions is provided by Shalaginova (2012), who identifies a need to specifically define "understanding" as it is used as a central concept in many definitions of nature interpretation. With this, she points to the shortcomings that a great deal of nature interpretation research and practice arguably builds on: the absence of the visitor as a subject and, simultaneously, the ignorance of *by whom* interpretation is accomplished (i.e. by the visitor themselves as much as by the interpreter).

In Sweden the term nature interpretation (*naturvägledning*) was established in the 1990s, and is becoming more well-known in the new millennium. There has hardly been any Swedish research that explicitly works with nature interpretation. Therefore, to find Swedish research on nature interpretation the scope of the search has to broaden and include a width of surrounding research fields, such as visitor studies, research on management of protected areas, museology, environmental education, education for sustainable development, nature didactics and heritage and cultural studies. Since the Nordic countries share much of their cultures, norms and institutions in regards human-nature (Hansson-Forman *et al.*, 2018; Gössling & Hultman, 2006; Franklin, 2003), or at least are comparable, it is reasonable to include Nordic research on nature interpretation as a second source when searching for Swedish research on related topics. A thorough research review was done in 2012 (Caselunghe, 2012) with a focus on Sweden and the Nordic countries, supplemented with an international outlook. The research review found that, as of that time, no research with the label 'nature interpretation' had been conducted in Sweden. Instead, the report mapped relevant research from other fields such as outdoor recreation, nature tourism, education for sustainable development, outdoor education, environmental history, museology and environmental psychology (Caselunghe, 2012). Since then, some new pieces of research have been published. One highly relevant research project looked at whether visiting a naturum[4], (visitor centre), in a Swedish biosphere area would lead to further direct experiences with nature (Beery & Jönsson, 2015). This study found that the particular naturum, with its urban location (opposed to most other naturums), provided inspiration for the visitors to get outdoors. The authors related their findings to the discussion about the need for people to get direct contact with other living species, or biodiversity, to improve capacity for environmental understanding and behaviour. The study is based on so-called thought listing interviews, a methodology that originates from cognitive psychology and refers to the deviation between the interpreter's

[4] Naturum is a name, and according to the SEPA, it should be spelled without capital letter and preferably in singular form. However, sometimes the thesis uses plural form for increased clarity.

mission and the visitor's response (Beery & Jönsson, 2015; Sandberg, 2014; Ham, 2013). This comparison between mission and response is called "zone of tolerance" and can be used by interpreters to evaluate their activities. However, the method does not regard any aspect of asymmetries in the interpreter-visitor relationship; nor does it consider whether the response of the visitor during the thought listing interview is within or beyond the interpreter's zone of tolerance – it is only determined by the interpreter. To conclude, the method may be problematic if democratic aspects of interpretation are sought. The method could more critically be interpreted as preventing the development of more democratic forms of interpretation.

Another Swedish study involving naturum was done by Hahn and Nykvist (2017), who looked into the accountability in governance networks within the same biosphere reserve area as Beery and Jönsson (2015), during the time of establishing that particular naturum. Hahn and Nykvist (2017) describe the accountability problems faced when the expenses for building the naturum doubled, and how that made the naturum establishment more than "an isolated nature conservation interest" (Hahn & Nykvist, 2017, 18). Discussions on the expenses of naturum investments have been debated in mass media, which is mentioned in Paper III. However, the study by Hahn and Nykvist (2017) does not consider interpretive or communicative activities nor the content or the aim of naturum. By the time of finalising this thesis, Web of Science does not display any other peer reviewed publication with naturum as topic, neither does SwePub, the Swedish national database for scientific publications.

4.3.3 International research on nature interpretation – where constructionist or critical epistemologies are exceptions

When turning towards international research on nature interpretation it is practical to use the terms of 'heritage interpretation' and 'environmental interpretation', which are more established terms internationally. Interpretation literature has grown the last few years, especially considering interpretive planning and interpretive evaluation. However, much of the literature is instructtive rather than research oriented. One of the principal international peer-reviewed journals in the field is the Journal of Interpretation Research (JIR), owned by the National Association for Interpretation (NAI), which is based in the United States but serves members internationally too. Studies published in JIR typically evaluate visitor experiences from national parks or environmental education centres, with attention to the impact on visitors' behaviours (e.g. Harrison *et al.*, 2017; Pennisi *et al.*, 2017) or the needs of the interpreters and their organisations (e.g. Mayorga *et al.*, 2017) and are often confined to

quantitative methods. These kinds of studies are typically located within a positivist paradigm and seldom involve hermeneutical or critical approaches, which may be reflected on in relation to Habermas' epistemological categorisation according to knowledge constitutive interest (Habermas, 1987a), which was mentioned in the methodology chapter.

The study by Beery and Jönsson (2015), also published in JIR, is somewhat different since it articulates phenomenology and the importance of qualitative data to understand visitor experiences. However, when generalising about the research field, the same epistemological limitations as in JIR publications count for visitor studies in the tourism context, such as sustainable tourism as well as management and monitoring of visitors in protected areas. To find research that relates actively to hermeneutic and critical epistemologies, the field of cultural heritage-oriented heritage studies is more fertile. Heritage studies with a cultural orientation are more sensitive to various subjectivities and societal aspects of interpretation. One example is found in Shalaginova (2012), who suggests a constructivism approach to heritage interpretation, and argues for understanding the interpretive process as a communicative one, rather than a cognitive one. Social construction is generally missing in much of (nature) interpretation-related research. When cultural heritage is the context, and especially currently contested heritage, the interpretation is forced to be politically considerate and develop more democratic methods for interpretation. For instance, "facilitated dialogue" (Knapp & Forist, 2014) is receiving increased attention as a method for interpretation about contested topics.

Another example of research that prepares for epistemologies other than positivism, is the work of Archer and Wearing (2003). They request a sociological interactionism perspective in environmental education and suggest working with critical entities such as hegemony and power. Archer and Wearing (2003) not only emphasise the process of meaning-making among participants in interpretive sessions, but also address what is hardly at all discussed in the interpretation literature, namely the meaning of the very act of interpretation. Interpretation involves the act of giving meaning to something through enlarging the self in a social situation of active participation (Archer & Wearing, 2003). Interpretation is often, both in practice and research, casually used for the activity done by the interpreter. Whereas the actual act of interpretation necessarily needs to be done by all participants (i.e. interpreter *and* visitors) in social interaction. By highlighting this understanding of interpretation, the role of meaning-making can take a more central place and thus allow more democratic considerations in the interpretive situation. A similar take on interpretation is done by Ablett and Dyer (2009), who call for hermeneutics as an alternative to the dominating paradigm in interpretation that is focused on

information processing and monological transmission of information. Their paradigm "not only captures the essence of Tilden's definition but construes heritage interpretation as a more inclusive, culturally situated, critically reflexive and dialogical practice" (Ablett & Dyer, 2009, 209).

4.3.4 Nature interpretation as deliberative space

My perspective is based on understanding nature interpretation as a communicative practice, with reference to the section on communication in Chapter 3. Thus, similar to communication in general, I imply that nature interpretation has some sort of contribution to social change. This change orientation is expressed differently by different scholars, but is mainly reflected in didactic and information transfer-oriented methodologies. Relating more adequately to the perspective and needs of the *visitors* would have a larger change potential, since it would invite multiple perspectives and more interaction and social dynamics. One method for involving visitors can be to offer stories instead of facts (Shalaginova, 2012). Although telling stories instead of presenting facts is something that the whole tradition of interpretation is based on since Tilden's (1957) writings, the study of random interpretive sessions anywhere would, based on my experience, manifest how much of the space is actually dedicated to fact giving. Facts certainly have a role in teaching people about nature, but risk to crowd out equally important dimensions of social interaction and experiential learning.

In person nature interpretation, according to the dominating format, with a guide who plans and performs and visitors who listen and deliver some questions at the end, is an asymmetrical communicative situation, since the participating parties have different knowledge, mandates, prerogatives and opportunities to speak. The guide has more power than the visitors to direct the interactions. This praxis is similar to the relationship between teachers and students. The visitors do not expect symmetrical relations, which would imply a resistance if suddenly guides and visitors were to change roles. Similarly, the asymmetric relationship is also connected on the level of interest that the different visitors show each other. Shalaginova (2012) found that people are not primarily interested in hearing other visitors' personal stories, which could both depend on the roles they have but also on a need for maintained personal autonomy.

Shalaginova (2012) aims to explore the significance of culture for interpretation from a constructivist perspective. In so doing, she contributes to what this thesis also identifies as central: a need for both micro- and macro-level analysis in the interpretive situation. Shalaginova starts from the individual level when studying interpretation as communication. She then engages the wider intersubjective and societal perspectives together as 'culture'. In this way,

culture is introduced as an explaining factor for anything that is beyond the individual level; not distinguishing between those patterns and structures that are common in all groups of people, and those patterns and structures that are determinants to differences between groups of people. She demonstrates a need to reconcile micro and macro analysis in the interpretive situation. Problematically, this is without consulting critical theory or any other scholarly directions that allow for pluralism and acknowledge the political dimensions of heritage and interpretation. In other words, a need is highlighted but the necessary analytical resources for meeting this need remain unexplored. The asymmetry in the interpretive situation is not scrutinised. Moreover, Shalaginova (2012) works from a simplified model of communication where one part has a need to be understood and the other part has a need to understand. This, I argue, does not acknowledge the full significance of subjectivities. It eschews further democratic analysis of the interpretive situation, which accordingly limits the societal and democratic dimensions of interpretation.

Interestingly, Schild (2016), in her literature review, identifies the overlaps between the field of environmental education and literature on environmental citizenship, and argues for the capacity of environmental education to provide civic education for citizens to be able to participate in democratic deliberation on the environment. This, she suggests, could be done through a contextualisation of knowledge, content and skills "within an experiential and multidisciplinary learning environment" (Schild, 2016, 28). Crucial to the capacity of environmental education is the involvement of not only the individual perspective, but also for collective action; environmental education should involve both ecological and civics literacy. According to Schild (2016), the place-based character of environmental education also fosters place-making among participants, and the stewardship for place may be extended in space and time:

> Environmental education practices that seek to connect students to their local environment and community while also providing the opportunity to take part in the civic dimension of a place have the potential to cultivate the form of environmental citizenship argued for. (Schild, 2016, 29)

Carolan (2006) contributes from another angle, which is relevant to the argument this thesis aims to convey. Obviously, he does not involve either the concept of interpretation or environmental education. Nevertheless, his principal contribution comes from exploring the role of tactile spaces in public deliberation, using a non-profit seed bank garden as an empirical case. The setting, with visitors learning through embodied experiences in a garden, thus falls within my conception of nature interpretation. The research is additionally highly relevant since it works with deliberation explicitly, unlike other nature interpretation

studies. Carolan (2006) argues for the need for *tactile deliberative spaces*, as a way to bridge the epistemic distance between participants in deliberations. Knowledge is a practice rooted in the body, and therefore learning is highly related to tactile experiences. Those who participate in deliberations need to be prepared to take part in playing roles and ascribe the same weight to other persons' perspectives as their own (Carolan, 2006). At the same time as Carolan argues for the need of deliberation to use tactile spaces, he also complements his perspective with a claim from the other direction; namely that tactile spaces need deliberation: "We should be suspicious when tactile spaces alone are created and used to transform beliefs and attitudes" (Carolan, 2006, 357). This kind of critical stance towards the transformative potential of nature interpretation is absent in the literature that works explicitly with interpretation. However, I see potential for this perspective to feed into nature interpretation, since both researchers and practitioners in the field usually carry a normativity of interpretation as educational in terms of persuasiveness in thought and behaviour, but without critically discussing who should decide the desired thought or behaviour. The persuasive dimension of interpretation is overlooked in terms of democracy and equality. This is related to the overlooked issue of how interpretation is motivated from a societal perspective. This why-question is seldom addressed in interpretation research but should for democratic reasons be subscribed high priority (Silberman, 2013):

> The answer to the "why" question, I believe, lies in heritage interpretation's wider social function – not merely as an effective communication medium, but as a deeper reflection on the rights and proper role of the non-expert public in shaping an ever evolving vision of the past. (Silberman, 2013, 23)

Heritage interpretation around the world in geographic areas of proven political or ethnical disputes most obviously needs to balance contested topics and begin with relaying that there is not one single unproblematic truth (Silberman, 2013). Rather, the interpreter needs to consider different perspectives and different subjectivities, both when planning the format and the content of the interpretation as well as in how to deal with upcoming issues during the interpretive act. In general, within cultural heritage it is recognised that heritage sites and phenomena generate common identity and collective memory (see Shalaginova, 2012) but within natural heritage or nature conservation it is not commonly reflected on the importance of natural heritage sites and places like naturum as a function for common identity and collective memory. This may be remiss, in as much as much national identity is obviously tied to nature and natural heritage (Franklin, 2003). It may be an effect of nature conservation either making distinctions towards cultural heritage or just a lack of attention

towards the cultural significance of nature conservation. In the sector of cultural heritage and contested sites it is obviously important to reflect on whose identities and whose memories are represented in the interpretive activities. With a democratic take on nature conservation, exactly such questions need to be articulated: whose natural heritage, whose identities and whose collective memories are being created by interpretation actors.

Having discussed the literature on nature conservation, public participation and nature interpretation, the two case studies are now introduced. After the two case descriptions, the following chapter presents the three papers included in thesis, and thereafter the findings from the case studies are analysed in the synthesis of the thesis.

4.4 Case 1: Dialogue for nature conservation

The first empirical case is Dialogue for Nature Conservation (DNC), which was a nation-wide programme initiated by the Swedish government and run by the Swedish Environmental Protection Agency (SEPA). It was intended to provide conservation administrators with tools for "implementing nature conservation policies in cooperation with local efforts" and local participation and conflict management were other central themes (SEPA, 2008, 3). This large-scale programme was run from 2008 through 2011, offering regular basic courses, as well as some advanced courses. The DNC was completed by approximately 500 participants, a large majority of the nature conservation administrators at Swedish CABs (Westberg & Waldenstrom, 2016). The findings from Case 1 describe outcomes from the DNC programme and are presented in Paper II. My work was part of a larger research project about multiple rationalities within nature conservation administration, through the study of the DNC. To understand the origin of the DNC programme, my research colleagues made open ended interviews with key persons on different administrative levels to study the development and the implementation of the DNC (Hansen & Peterson, 2016). These interview transcripts have provided background information to my own research on the DNC. Hansen and Peterson (2016) analysed how the programme was developed from policy via ideas to implementation – a process that required a few years and followed how the purpose and content were thereby processed and altered. The thoughts behind the DNC were seedlings already by the time of the Swedish parliament elections of 1998, but the process of realising them took a decade due to internal negotiations within the government, as well as between the government and the SEPA (Hansen & Peterson, 2016).

Hansen and Peterson (2016) highlight the importance of the specific political context of the time, especially the role of particular key actors who made the new policy happen and whose interpretation of the current needs was influential in the policy as well as the DNC programme.

The DNC was intended to "remedy a perceived gap in the education received by natural scientists working in conservation" (Hansen & Peterson, 2016, 157). In the directives from the government in 2006, the SEPA was assigned to develop a programme focused on "dialogue, local participation and local governance and conflict resolution mechanisms" (Hansen & Peterson, 2016, 157), and the SEPA personnel who were appointed this task interpreted it as a communication programme. The instructions from the government were not detailed, but the SEPA team decided that the lack of knowledge in communication and dialogue motivated some kind of competence development programme about communication (Hansen & Peterson, 2016). Moreover, Hansen and Peterson (2016) found that the original instructions in the directives (dialogue, local participation, local governance and conflict resolution) were interpreted in a way that dialogue, participation and conflict resolution were emphasised over governance, since the SEPA team felt anxious about fulfilling agency responsibilities and legal challenges related to giving up some of the central control. Much of the tension between increased decentralisation and maintained control, lands at individual administrator level, which is reflected in this quote:

> Team members were passionate about the necessity of taking an expansive approach to communication, while at the same time they recognized how difficult it would be to incorporate the principals taught by the DNC programme into everyday work situations. (Hansen & Peterson, 2016, 160)

The study of the genesis of the DNC explains how communicative ethics on intersubjective level becomes as important to legitimacy in nature conservation as questions of procedural fairness and accountability,

> […] to the degree that the DNC enables environmental professionals to experiment with new ways of interacting with citizens of communities where environmental conservation efforts are envisioned, it may strengthen democratic legitimacy as envisioned by Westman. (Hansen & Peterson, 2016, 163)

Hansen and Peterson (2016) conclude that the legalistic concerns related to the DNC may have limited the citizen participation outcomes of the programme.

The findings in Paper II show that theory and practice were well combined during the DNC, but that the different models and tools were not integrated in

one common framework, but left as separate tools in a toolbox. They were more or less isolated isles of declarative knowledge (cf. Stummann & Gamborg, 2014, about connection practice and theory). Further on, Paper II shows that the administrators got beneficial training in dialogue skills. This is however, not enough to take them all the way to local participation.

4.5 Case 2: Nature interpretation at naturum

The new conservation policy from 2001 also led to increased investment in naturum, which constitutes the second empirical case of the thesis. Naturums are visitor centres running environmental education and nature interpretation in national parks and other protected sites. Naturum follow the guidelines from the SEPA (2009) and are usually run by the CABs. The first three naturums were established in 1973 after a pilot project at a protected site. In 1980 the SEPA presented a document defining the objectives for naturums. More naturums were founded and in 1994 and the SEPA composed the first instructions or policy regarding naturum. The number of naturums increased yearly and by 2004 there were 42 naturums. At most there were 46 naturums around the country (SEPA, 2016). There was significant variation in quality among naturums which was perceived as a problem by the SEPA. In 2004 formal 'national guidelines' for naturum were formulated, which were used to evaluate existing naturums and resulted in a decrease in the number of approved naturums allowed to carry the naturum registered trademark. When these new, stricter standards regarding functions, provided activities, services as well as aesthetic design were implemented, this caused some of the previous naturums to lose their status. In 2008 there were only 27 naturums. The naturums that lost their approval were some of those that had a non-state principal, (e.g. naturums that were owned and run by a foundation). Then the process of establishing new naturums according to the new, higher standards led to a renewed increase, and in 2015 there were 32 naturums. By October 2018 there are 33 naturums, and three projected naturums in the making (SEPA, 2018c; SEPA, 2018b). The number of visitors has also been increasing over time, and 2016 it was 1.7 million, including both the general public, the visits of schools and other organised activities (SEPA, 2017).

In addition to the "institutionalisation" of naturums the foundation of the Swedish Centre for Nature Interpretation (SCNI) a competence centre financed by the SEPA and located at the Swedish University of Agricultural Sciences, SLU should also be mentioned. The SCNI, has not only the task of serving

naturum and the SEPA in building interpretive competence, but also should gather and support nature interpretation actors in all sectors throughout Sweden.

In one sense naturums are governmental instruments for informing the public about nature conservation work being done. In another sense, and more importantly for this thesis, naturums are not primarily working as authority institutions, but rather as public museums and centres for visitors. This means they have the capacity to exist 'beyond' the state, potentially constituting public assemblies on the environment that can host critical discussions or broader social learning among citizens. Naturums certainly have an *educational* task, but what about their democratic capacities as fora on the environment?

Paper III presents my empirical study of guided tours at three naturum sites. Through deconstructing the material I wanted to understand what nature interpretation is at these sites and in what way it can be analysed in terms of deliberative democratic qualities.

The empirical material reflects the type of nature interpretation that takes place at these naturums and the sessions are not designed to address questions of democracy. The guides and the visitors have not been adjusting their actions to our research questions of deliberative democracy. Therefore, the connections to democracy that we can see in their actions reflect their usual practice. However, the guides and visitors have been informed about their participation in an environmental communication research project and that the researchers are looking broadly for communicative aspects in their interactions. It cannot be ruled out that the participants (i.e. guides and visitors) might have been influenced by this knowledge, but they have not adjusted specifically to the democracy aspects.

The next chapter briefly presents the three attached papers to this compilation thesis. Case 2 is found in Paper III and Case 1 is found in Paper II. Paper I is a conceptual paper, somewhat related to Case 2, but focusing on the reconciliatory potential of nature interpretation.

5 Summary of papers

5.1 Nature interpretation for reconciliation: A critical perspective on communicative activities at Swedish visitor centres in nature (I)

Paper I is a conceptual paper opening up to the research questions of the entire PhD project as well as the two empirical cases. The idea behind Paper I is, that by criticising interpretation at Swedish naturum (nature visitor centres), I will conceptually explore the characteristics of nature interpretation that takes on a societal role. The paper analyses documents from the Swedish Environmental Protection Agency (SEPA) that regulate nature interpretation at naturum and exhibit a historical context of nature interpretation in Sweden.

The role of the paper, in relation to the other two papers and to the thesis as a whole, is to apply theory on how modernity and environmental challenges are connected to contemporary nature conservation discourse, using concepts of alienation and reconciliation. As argued in the paper, deliberation is a prerequisite to nature reconciliation. One central component to the argument is that science and expert knowledge can only handle the future in terms of what is known from the past, whereas objectives for sustainable development demand political action that is more genuinely future-oriented considering ethical and moral aspects (i.e. not limited by how environmental and societal problems have been defined and addressed in the past). Whereas scientific knowledge is acknowledged as necessary but insufficient to handle contemporary ecological and societal crises, the sphere of democracy is needed to both interpret and make meaning of science and to make collective decisions on desired pathways for society.

The paper explores the contemporary needs of facilitated human-nature experiences in relation to alienation and environmental challenges. Nature

interpretation is suggested as a format for deliberations to enhance sustainability, and naturum is the kind of nature interpretation forum that is considered. The paper presents a critique towards the way nature interpretation is being institutionalised in Sweden and at the same time explicates a potential for naturum to be an actor for sustainability on democratic premises.

5.2 Deliberation for conservation – disruption 'inside the box' (II)

The aim with Paper II is to study how communicative skills development among administrators can develop the deliberative capacity in public nature conservation. This is done in a case study of a communicative skills development programme initiated by the Swedish Government and run by the SEPA. Twenty-one administrators who participated in the skills development programme (the DNC) were interviewed about what they refer to as effects on individual, organisational and societal level. The paper presents a central application of the 2001 nature conservation policy in Sweden, and this case placed the administrators in the centre. Therefore, this paper contributes to the thesis by studying the importance of communicative skills, the role of administrators and the implications of this kind of change process on the deliberative system of nature conservation. The conclusions were that the communicative skills development did make a change to how the administrators work by improving their communicative awareness and techniques, but that the communicative skills were not clearly connected to aspects of democracy and legitimacy in the deliberative system. The kind of change that the DNC brought about in the deliberative system regarding nature conservation can be considered as a vitalising disruption for the deliberative system but it mainly affected the system within its current boundaries, by not being able to renew the very premises of the system.

5.3 Public spheres for deliberation on nature? Democratic qualities of visitor centres in Sweden (III)

The aim of Paper III is to study the role of visitor centres in the deliberative system in the context of nature conservation by investigating their role as a public sphere. The paper discusses the qualities of guided sessions at Swedish naturums regarding their potential function as deliberative forums within the public sphere in relation to the environment. Nature interpretation sessions are analysed regarding content, format and societal relevance to identify their

deliberative potential. Naturum does not fulfil the theoretical deliberative ideal, but since few (no) such arenas exist today, it is essential to cultivate the prevailing spaces for in-person communication. An analytical framework is developed and applied to six guided tours at three naturums. Qualitative methods were used, and except the analysed guided sessions, participant observation, documentation of exhibitions and interviews with guides contribute to the background material. Naturum is used as a case study in this thesis since it is a central investment increasingly supported after the 2001 nature conservation policy, and somewhat contrasting to the DNC, the first case in the thesis. The cases can be seen as two branches on the same tree, as two different operationalisations of the same policy, or two different features in the deliberative system regarding nature conservation. This paper analyses naturum's deliberative conditions and argues that there is an underdeveloped capacity for naturum as a deliberative forum regarding the environment. The paper initiates a discussion on how naturum can contribute to the overall capacity of the deliberative system and finds that one unique virtue of naturum is to connect the deliberative process with its materiality, which confirms the potential identified in Paper I. The renewed national guidelines for naturum may contribute to an updated role of the guide and the visitor in interpretive sessions, raising expectations for a larger focus on the citizen.

6 Synthesis

This synthesis presents the findings from the two case studies, as reported in the attached papers, relates them to each other, connects them to the literature, and places them in a larger perspective of communication as an entrance to democracy in nature conservation.

6.1 Constraints and openings for democratic deliberations

The empirical cases study what kind of democratic implications the SEPA's communicative initiatives within nature conservation had. They show that what the authority sees a strategic from a communicative aspect, may not automatically serve democracy. They also show that there are new ways to be discovered and developed that serve democracy better.

6.1.1 Dialogue skills, organisational frames and communicative space

The DNC programme and the naturum case give a sense of the scope and limitations of strategic communication work in relation to democracy. The communicative strategies in the case studies open the scene for deliberative democracy in some regards, whereas they limit deliberation in other ways. As shown in Paper II the opportunities in the DNC lie in shifting norms at the CABs, learning ways to reflect on and talk about communication, the collection of good examples on how to handle difficult communicative situations, but also a better understanding of the premise of communicative acts. Among the constraints towards a change in democratic practice are, according to CAB administrators, resistant or just indifferent/uninterested management; lack of time for communicative activities; specific solutions that were learnt but might not be generalisable; the personal aspects of handling a communicative challenge in

concrete situations were superordinate compared to the societal perspective of the reasons and pathways for increased deliberative democracy. The role of the CAB administrators did not change due to the DNC, but they were directed to handle new perspectives within their old roles at the CABs. Another limitation was that change processes take time and continuous intervention, and the administrators, were only equipped to a limited degree to independently take on development work in their organisations. However, some individuals did take on commitments for change. This indicates how dependent social change is on the person and that the individual subjects are the only ones who can act to create change in a social structure.

As mentioned previously, the administrators in Case 1 improved their dialogue skills, which is beneficial in their work with local participation. While these improved skills and other changes on the individual and relational level are needed, they are not enough. Changes on a structural level are essential as well, including how we view the objectives of nature conservation and public participation. If participation is only applied to achieve a certain number of square-kilometres of protected nature and minimise the public resistance, it will affect the process and outcomes. The outcomes will be different if the citizens would be invited to take responsibility for the commons. Formal site protection does not guarantee achievement of environmental targets if citizens and other actors resist or counteract the authorities' decisions. Dissent and radicalisation may be the outermost reaction in cases where authority decisions are not perceived as sufficiently motivated (von Essen & Allen, 2017). What is needed is a broad process that is anchored among stakeholders as well as the general public, and that is oriented towards deliberations on nature, for the sake of the process itself. A common practical and communicative experience fosters social learning, improved perspective taking, increased empathy and responsibility. According to Scharpf (1998), instrumental public participation is needed in conservation, to achieve instrumental legitimacy (i.e. comparable to out-put legitimacy). What Scharpf ignores is that a non-instrumental and process-oriented broader orientation is needed simultaneously, which builds on horizontal democracy and democracy that by its own procedures renews the very prerequisites for democracy. Public participation reduced to its instrumental reasons risks reducing communication to something instrumental – losing the constitutive dimension (cf. Cox, 2010; Craig, 1999).

6.1.2 Culture as both restricting and enabling communicative rationality

In the naturum case, the kind of communicative situation is different since it does not involve formal authority decisions and does not aim for any practical agreements. The task of the nature interpreter is therefore quite different from the CAB administrators, even if both professional categories are often employed at the same CAB and have similar educational backgrounds. The communicative space for the interpreters is different, but still has limitations, even if the limitations are not formal but rather cultural. As shown in Paper III, the interpreters are often loyal to their guide manuals, even in situations when the manuscript ends up obscuring the relationship between the interpreter and the visitors. The strictness in applying the national guidelines for naturum as well as local naturum objectives might be one reason to why the guides seem inflexible regarding the content of the guided sessions. Another possible explanation is the expectations on the format of guided sessions and the role of guide versus visitors. One limitation to the format and content of the conversations during guided sessions is also that guides are not prepared to handle controversies and political tension. Paper III identifies several possibilities for guided sessions at naturum to have an increased democratic function. The place and the topics deal with nature and our common resources, which creates opportunities to have conversations on conservation as well as on other related societal issues. Compared to the work of CAB administrators, the naturum guides do not have the policy implementation and applications of law as their task, and can use the space fully for communication relevant to themselves and the visitors. In essence, their time is devoted to communication and public relations.

In terms of deliberative democracy and informal public spheres, the naturum sessions do not offer all the qualities that allow the prevalence of discourse ethics (see Paper III). The temporary situational character of the naturum encounter also affects the type of deliberative democratic process that can take place and can hardly be sustained over time – though they can be important spaces for deliberative events of more informal character, such as everyday talk and micro-negotiations (Mansbridge, 1999). Micro-negotiations should not be conflated with micro-deliberation, though, which applies to formal deliberative assemblies. These strands of deliberations (informal public spheres) deserve more attention, since they are directed to understanding and collective opinion formation (Mansbridge, 1999). Such situations give participants, especially 'nonactivists' the opportunity to "test new and old ideas against their daily realities" which enables small moves and holds characteristics of a political act (Mansbridge, 1999, 407). Actually, these small, informal situations are the scenes for more decision-making than occurs within the formal state apparatus, which takes formal decisions though fewer in numbers (Mansbridge, 1999).

With a deliberative systems perspective, the limited deliberative outcomes from one single informal deliberative situation, such as a nature interpretation session, still contributes to a larger system of deliberation which regards aggregations of deliberative processes in space as well as over time.

6.1.3 Space for multiple rationalities and diverse knowledge

In the case of the DNC the administrators take an instrumental, strategic interpretation of the new conservation directions originating from the 2001 policy. Even if their new tools of creating dialogue and managing conflicts might allow a somewhat broader variation of rationales, the mode of communicating is not oriented towards communicative rationality. The naturum interpreters are not part of the same kind of policy change, since their directions have not, by the time of the study, particularly changed regarding approach and methods due to the 2001 policy. Although, not restricted in terms of legislation or formal authority roles, the interpreters nevertheless may be understood as limited. There seems to exist a sort of informal limitation that prevents the interpreters from letting communicative rationality and discourse ethics infuse the situation. The most common strategy involves keeping to the guide manual and prioritising fact-giving. The empirical data does not, however, speak to what degree the naturum sessions are directed by the strategic efforts of the SEPA to increase legitimacy in their centrally governed conservation work. Both the SEPA, the naturum owner (CAB or foundation), and the local naturum director have influence on the programme of the specific naturum. What remains unclear is exactly how large of a space the individual interpreter has for applying their own preferred methods and content. The data indicates that the space is substantial, but that it varies between naturums and persons.

The outcomes of the DNC programme, as well as the communicative activities at naturums are examples of expert-citizen relations on the environment. Epistemic differences are central to the tension between these categories of people. Whose knowledge counts and what is regarded as true and legitimate knowledge? In both cases this is something obscure. Different epistemologies and different ways of knowing are not a theme that is given any attention in these sessions, and it seems that the experts do not pay attention to epistemic differences and might not have a space or a vocabulary to be reflexive about such distinctions or their implications.

The theory section has called attention to an important and dangerous phenomenon of de-politicisation of issues in modernity. In neither case are the political dimensions of conservation fully explored. Rather, the starting point is that conservation is something “objectively good” and possible to agree on. The

time after the Cold War is sometimes described as post-political, since the roles of political ideologies decreased and since the political decision-making processses are characterised by consensus and a democratic system, where technical-administration expertise has a large role (Maeseele, 2015; Swyngedouw, 2010). This kind of de-politicisation diminishes the available arenas for critical discussion. It has also contributed to ascribing science a higher status than political decision-making. Indeed, the latter may be the mere vehicle through which the former is implemented. Maeseele (2015) relates this to a double dichotomy – between nature-society (ontological) and between fact-value (epistemological). Referring to Mouffe, Maeseele argues that this de-politicisation and the consensus norm creates exclusion, keeps the status quo and precludes debates over alternative futures. The discussion on post-political has an impact on the conservation discourse, and allows agonistic forums and inclusion of dissent, particularly in regards to assumed, unchallenged scientific facts. Outside of potentially suppressing change, there is also a pragmatic advantage to achieving consensus. Consensus processes are not absolute, they exclude pivotal power issues, they do not provide any kind of final solution, and some critics suggest they may not even be worth striving after. Democracy simply does not equal consensus. Democracy is a process and even though there are some normative foundations to it, such as human rights, equality and freedom of individuals, it does not mean environmental responsibility is a given output or an inherent good on the same level as these normative foundations.

Procedural democracy is necessary but not enough, and needs to be complemented with substantive democracy (Ferrajoli, 2011). The dialectics between format and content in democracy is recurrent (Munck, 2016). Through the democratic process important values can be identified in a good society, and those values can only be found through democratic processes, that in turn do not guarantee democratic outcomes (cf. Ferrajoli, 2011). One possible criteria in response to that risk is that a democratic process is only democratic if it generates conditions for continuous democracy. Such a criterion is a way to include the time dimension and provides a sustainability quality to democracy.

6.1.4 Deliberative spaces for conservation

According to deliberative system theory, different deliberative spaces complement each other and constitute important parts of the system even though each part in itself does not correspond to all deliberative ideals (Mansbridge *et al.*, 2012; Mansbridge, 1999). The two cases in the thesis are examples of such entities within the deliberative system. They provide different opportunities and hold different capacities for supporting deliberation on nature conservation.

They also connect to the system as a whole in different ways, considering deliberation as everyday talk (partly between citizens), deliberation among administrators, and deliberation between administrators and citizens.

Neither democracy nor deliberation are present as concepts in the naturum sessions. In the DNC case, democracy as a concept was present during the course, but not in focus among the course participants afterwards. The understanding of communication has a top-down approach in both cases. Communication is mainly seen as a strategic instrument from the system, rather than a socially constitutive practice to form our social and societal relationships from a citizen perspective. In the DNC there are sessions where communicative rationality is trained; however, it seems communicative rationality needs to give way for instrumental rationality in the conservation administration. In the nature interpretation case, the setting offers more space for communicative rationality, but still the format limits the communicative quality. In principle, nature interpretation (especially in comparison to conservation administration) offers a good starting point for experimenting with deliberative formats and features.

The DNC case is used to understand what democracy is in relation to communication and to identify deficits, and these findings can be used when studying the deliberative potential of naturum.

This thesis shows the opportunities within the deliberative system to renew and democratise nature conservation. Communicative efforts are significant but they do not guarantee strengthened democracy. As concluded previously in this section, democracy is about building and rebuilding a robust democratic system that is able to reproduce itself. In that case, representative democracy and elections are not enough, but a deliberative democracy that is vital and viable in itself, produces active citizens, and connects back to the representative democratic system is needed.

So, what kind of citizen is then produced in the two cases? In the naturum case, the citizen corresponds to a group as well as a private individual, family member, self-interested consumer, learner, generally well-read, and perhaps as ethnical Swede. The case study does not however provide a clear answer on whether naturum produces citizens as locally engaged, knowledgeable, responsible and with agency. In the DNC case the citizen is somewhat differently constructed, and the distance between the administrators and citizens is perceived as larger than in the naturum case. In this case the citizen is talked of as ‘other’ – not we, but them. The administrators distinguish implicitly between landowners and citizens.

6.2 Co-construction of knowledge and production of subjects

None of the communicative initiatives problematises different kinds of knowledge. The dominant epistemology regards knowledge as absolute and objective, and there is no space to discuss in what ways several kinds of knowledge, knowing, and perspectives may be valid at the same time. In terms of the co-production of knowledge the cases showed similarity. Connected to knowledge and perspectives is the issue of legitimate subjects. Subjects are regarded as actors who regard themselves as subjects in a particular context. Usually it is citizens, but it may also be stakeholders of different kinds. The way subjects are perceived as part of the nature conservation process is a bit different between the cases. In the DNC the subjects are seen as more political, but also restricted to formal stakeholders only. In naturum the visitors are sometimes regarded as subjects in the communicative situation, but not included as subjects in the wider, nature conservation context. Sometimes the visitors at naturum are treated more like an audience, expected to listen but not to have agency in nature conservation issues. The cases of conservation administration referred to in the DNC (i.e. cases described both during the course occasions and by the interviewed administrators), makes conservation more of an economic-formal-legislative issue. The naturum interaction is characterised by economic independence and therefore less controversial on a private level; but the controversies would more likely occur on societal level. Similarly, nature interpreters are not authority representatives in the same way as CAB administrators are and have a communicative role rather than a legislative one. The interpreters are not appointed representatives accountable to constituencies, which may theoretically free them to allow greater space for critical reflection. The communicative situations the guides find themselves in are strikingly different from the working life of CAB administrators, and their communicative dilemmas are similarly different.

6.2.1 Communication formats

In nature interpretation there is space for aesthetic rationality (for writings on aesthatic rationality, see Fisher & Freshwater, 2014; Adorno, 1997), even if scientific rationality dominates. Examples are the beauty of the landscape, the architectural impressions of the naturum building, and the preferences of guides and visitors. In the DNC, scientific and technical rationality dominate. The openings in the DNC for other kinds of rationalities is through the way the administrators are trained to increase their intersubjective awareness. This could have been a larger ingredient in the course – for instance through creating

situations where differences are confronted, heard and accepted – at the same time as learning about those differences. Such a format would allow for deliberation with space for agonism. Instead the methods during the DNC course were more oriented towards solutions and agreement. For instance, the forum games were often solution oriented, and the interviewed administrators referred to the course leaders as providing the 'right answers' (see Paper II). Nature interpretation, in principle, has more space for agonism since there is no need to reach any decision or closure. Nature conservation administration, on the other hand, is partly authoritative and therefore restricted. The question is why nature interpretation has not yet developed a larger space for agonism. Possible explanations are that the merits of agonism are unclear and that nature interpretation is not in the first place seen as a democratic arena. Rather naturum is characterised by a didactic view of knowledge and change, which may not enhance diversity and understanding, but agreement – which means to some extent a closed outcome.

Even some deliberative ideals stand for a closed outcome, at least in terms of consensus orientation, which means that the communicative situation is closed in terms of diverse and conflicting interpretations. Another way to understand a closed communicative situation is 'dialectic' as opposed to 'dialogic', using Sennett's (2012) construct presented in the theory section. A dialogic situation allows for understanding oriented communication with no expectation on acquiring something else than understanding between communicatively rational participants. A tentative scheme (Table 4) to conceptualise different approaches to communication in a nature interpretation setting, suggests to considering both the orientation of the participants and of the communicative 'outcome':

Table 4. Tentative scheme of possible communicative approaches in nature interpretation

	Outcome orientation	
Participants' orientation	**Open (diverse)**	**Closed (single)**
Open (communicative rationality)	Dialogic	Consensus
Closed (strategic rationality)	Agonism	Didactic

Not to say that there should only be one type of nature interpretation. It could be argued that nature interpretation to facilitate deliberation should consider balancing between different communicative elements, according to needs in the deliberative situation, allowing for both understanding oriented, dialogical, dimensions, as well as dialectic dimensions and even agonism. Even the didactic function has its legitimacy in terms of teaching species names and scientific facts.

Both these communicative initiatives are more result-oriented than process-oriented. As far as deliberative democracy is a matter of process (i.e. the interaction qualities count rather than exact data or results), the case studies show that neither nature interpretation nor nature conservation situations host ideal deliberative processes. Since in reality there are hardly any deliberative forums to find that correspond to strictly ideal criteria, and since it is also difficult to construct new forums that meet deliberative ideals entirely, the fourth generation of deliberative theory applies a more inclusive and holistic perspective by involving the heuristic of deliberative system (Elstub *et al.*, 2016). Both the conversations that take place in nature interpretation settings and in nature conservation settings undoubtedly have some deliberative qualities. In Paper III, a framework is suggested to categorise such deliberative qualities in nature interpretation. In Paper II, the significance of internal disruptions in the deliberative system is discussed in terms of the subjects' ability to reform and criticise the premise of the system. Both naturum and nature conservation, however flawed, are central sites for deliberation on nature. Through such deliberations on nature, we as citizens construct nature and contribute to the construction of society's relation to it. Nature interpretation and conservation conversations take place every day and thereby are active practices in the deliberative system, and likely to an increasingly degree since the new direction from the 2001 policy strengthened the focus on the significance of communication. However, the meaning of communication in relation to democratic governance has not been an issue within these initiatives. One of the contributions I want to make with this thesis is in fact to stress the significance of the conversations as such to the democratic governance of nature conservation in society; or to highlight the constitutive role of communication in society as well as in the particular context of nature conservation.

Since the DNC case is centred on the concepts of dialogue and dialogue competence, it would motivate reflection during the course on what dialogue competence actually is and what democratic functions it has. This meta-reflection was however not a central part of the DNC. In the naturum case, dialogue was not a salient concept. It might have been introduced by the researchers in the larger research project at some point, but in the workshops and guided tours dialogue was neither central in the meaning "through conversation" nor in the meaning "opposed to monologue".

6.2.2 Balancing between formal and informal communicative roles

As mentioned in Section 3.3.4, and with a parallel to deliberative system, which is not only about specific forums but also their interconnections, there is a democratic strength in constructing nodes between the deliberative and representative spheres of democracy. The DNC programme could have articulated the significance of nodes between representative and deliberative democracy, or formal and informal nature conservation communication. In my perception, this was not accomplished. Rather it seemed up to individual administrators to balance between the constitutional, formal component (exercise of public authority) and the communication-oriented, deliberative component of their role in nature conservation. The course introduced democratic models and communicative models but these conceptions were not integrated. This left the administrators with insecurity by having to invent their own way to balance between ecology and democracy, or formal decisions and deliberative processes (see Paper II).

In the nature interpretation case, on the other hand, focus is on informal talk about nature conservation, in the sense of relatively distant and separated from public authority and formal decision-making processes. We only touch decision-making processes when talking about the establishment of a naturum site or new national parks or nature reserves. Local processes about establishing or maintaining the naturum site when engaging the local citizens and organisations are potential nodes for coupling deliberations and decision-making processes. How the nature interpreter regards their own possible role in discussions with local actors and citizens on developing naturum would be an interesting topic for further study.

While both case studies are products from the 2001 policy, and involve CAB employees, the three different categories of nature conservation communication in the policy according to the programme "Protect, preserve, present" (SEPA, 2004b) are kept apart. The DNC case involves communication regarding establishing and managing protected areas, whereas naturum works with the third aim – "present". When studying these two cases, I found that, the policy did not seem to integrate the different activities of conservation, although the title labelled the policy as "coherent". The separation of different communicative tasks within the formal work at the CABs is explicit in the data for administrative reasons. However, bridging that gap could allow for synergies. In fact, there are a few individuals among the respondents, with personal experience from both sides (i.e. formal conservation administration *and* more informal conservation communication), which provided some good points that may be tracked in Paper II and III.

One difference between the cases is how citizens are distinguished in categories, such as landowners and users. Hongslo *et al.* (2016), who also

noticed this distinction, found the origin in the government bills. This distinction was emergent in the DNC case (i.e. I observed that nature conservation administration practice assumes a sharp distinction between landowners and users regarding their legitimate participation in conservation), whereas the nature interpretation context does not make that distinction. Are there any differences regarding rights and responsibilities of landowners, the public, visiting tourists, experts such as administrators and interpreters? In deliberation everyone affected should be able to participate, and thereby even tourists, for instance, could claim a right to participate. At the same time, continuity is needed for long-term nature management, something that displays divergent capacities between visitors and local farmers or school classes. The relationship that a subject has with a landscape has been suggested to depend on a person's spatial and temporal engagement with it (Caselunghe *et al.*, 2010; Gustafsson, 1991). Without being able to solve questions of representation and participation, it can be assumed that time and continuity have a central role in deliberations on nature conservation as well as in discussions on legitimate subjects in these deliberations.

6.3 Change through communication

Democracy is about change. From my point of view, structures do not have agency; individual subjects are the only ones who can act for change, even if they are limited by the structures in which they operate. As mentioned above, we see in the DNC case how person-dependent a change process is in the present context. This study has not allowed me to immerse myself in factors explaining the making of change subjects per se, but there are some components to it that are revealed. Specifically, the DNC was directed towards the CAB administrators, as they were expected to implement some kind of change in their practice and partly in the organisation (e.g. improving unit meetings). From a societal view, these administrators have a certain power and influence vis-à-vis the public. Empowerment and emancipation might be the wrong words to use in this context. But if the DNC should have been an emancipating project, what would that mean? Who is to be emancipated? Administrators? Or citizens? There is a reason to talk generally about the emancipation of the subject in relation to the structure, which in this case is *the administrator in relation to the organisation, norms and practices of the CAB*, and not, in fact, a broader human-nature reconciliation.

The first step to emancipation is self-reflection (see Wellmer, 1976). In this sense, the DNC actually provided some opportunities for the administrators to practice self-reflection even if the focus was to reflect on group-level

communication rather than introspective reflection. What is difficult to see from the data is whether the DNC might have enhanced any self-reflection among *citizens* as a result of more communicatively skilled administrators. The data fails to reveal if reflexivity was internalised among administrators, or if it was a short-lived reaction brought about in interviews and meetings with the researcher and course leaders. The time that passed between when the respondents took the course and the time of the interview was in some cases a couple of years; since those respondents still demonstrated reflexivity during the interviews it is likely more than a temporary capacity. A continuous development of communication among CAB administrators would need continuous education and training in the topic, according to Stummann and Gamborg (2014). This is definitely a constructive strategy to maintain change initiative, but as I suggested previously, a truly sustainable (democratic) process needs to re-produce its democratic conditions. In other words, to achieve continuous communicative development among CAB administrators without depending on external project funds for education and training, the DNC design should consider how to bring about recursive processes of dialogue competence. Instead, as shown in Paper II, the DNC remained rather particular and participants did not internalise the learning on a more general level. Interestingly, the SEPA's evaluation of the DNC programme noted that the participants regarded some parts of the course were to general and therefore difficult to implement (SEPA, 2010). The SEPA's evaluation also mentions the need to maintain the learning and new perspectives. Westberg *et al.* (2010) in particular suggest 'professional learning teams' as a vehicle for continuous development, however the program did not document any such activities (SEPA, 2010, 31).

To study the making of change subjects among the administrators at the CABs we can borrow a concept from humanistic psychology. Self-actualisation is the way an individual realises their full potential and acts to make use of it (see Moser, 2015). According to the course evaluations, the courses were very popular and appreciated on both the professional and the personal level, thus it is my interpretation that the administrators benefitted from the course in that it made them better equipped to carry out their lives even beyond their professional work. The course taught the participants to talk about social interaction in new modes, encouraged them in their professional roles and gave them tools to deal with difficult situations; and it provided recognition that they typically do not receive at work. These are all signs that the course enhanced self-actualisation overall, and for some of the participants that was what was needed to enable them to engage in change processes in their work.

Central to deliberation is the contingency for changed opinions. This is not only the case in regards to the terminology choice between stakeholders (having

a pre-determined stake) or actors (acting with multiple rationalities and flexible to change their mind) (see von Essen & Hansen, 2015). Fixed opinions and interests will bring resistance to a deliberative process, whereas availability for rethinking and questioning one's predetermined ideas will support the transformative potential of the deliberative process.

With a deliberative systems framework, the DNC can be interpreted as a critique from within the system. Both the DNC and nature interpretation may be criticised for not succeeding to proceed outside their own format/limits. At the same time, we see that they both imply a new take on conservation as a result of the 2001 policy shift. The change is subtle but to develop the deliberative system we need subtle changes, to which reinforcing processes can be added.

The fourth communicative dialectic mentioned in the theory section entails the idea that communication is both a tool for change as well as change itself. This suggests that the DNC was (1) a tool for change through implementing a policy, which can be evaluated through analysing the objectives and results of the course. At the same time the DNC can be seen as (2) change, focusing on what the DNC implied as a (learning) process from a neutral perspective. The DNC was not process-oriented and it was to a high degree instrumental (i.e. seeking to solve certain predefined and limited problems such as communication with perceived difficult landowners). A more process-oriented design of the DNC would to greater extent emphasise how administrators could act as change subjects in their organisations. Such a programme could cultivate learning by initiating change through listening and formulating themselves in different kinds of situations internally and externally, and showing how they can interpret their role from a societal perspective considering communicative rationality.

6.4 Nature conservation as an expression of modernity

Part of the premise behind the two implementations of the 2001 policy is taken for granted, and may be understood in the light of modernity. One fundamental question regarding Case 1 that has not been posed yet, is why it is assumed that a course in dialogue competence should create local participation. A broader question, and the premise of Case 2, is why it is believed that naturum can generate environmental awareness, pro-conservation attitudes and restored legitimacy to the environmental authorities and the political system. These questions may assist in reflecting on whether such new communicative arenas help realise nature reconciliation today. Put simply, why do we think that we *need* naturum? Why do we guide people around a building with ostentatious design to enhance their interest for nature?

To understand what kind of communicative initiatives these two cases are in relation to our contemporary society, I have found it useful to look at them from the theories of modernity, alienation, risk and reconciliation. When we live in a world that is growing more distant and the separation between human and nature is increasing, this generates problems of environmental as well as social and governance character. There is increasing insight that the mutuality and feedback between the parts of the system need to be restored. The policy of 2001 tried to address both kinds of problems (i.e. social and environmental). I have certainly not looked at the environmental implications in a biological sense, but rather how the environmental and the social are linked. The case studies are two different branches of the same tree, and I will now explain their commonalities and differences in terms of expressions of modernity.

In one important sense, naturum and its ilk of initiatives may be understood as reconciliatory measures in a nature-alienated modernity. Modernity, per definition, causes skewed human-nature relationships: “In thought, human beings distance themselves from nature in order to arrange it in such a way that it can be mastered” (Horkheimer & Adorno, 2002, 31). The mastery of nature, and alienation, as noted previously, is destined to bring failures. Within this, nature conservation as well as nature interpretation address the explicit purpose of remedying harms. They are attempts to compensate both the social cracks in the democratic system regarding nature conservation, and the material cracks in the natural environment. These cracks are effects of our modern, rational and urbanised way of living. However, simply halting and categorically putting an end to the historical and denying those values and traditions to construct completely new and independent lifestyles is not an option. Post-modernity does not offer any answers, but possibly raise more questions. Rather, a constructive way forward would be to use the fundamental perspectives of the Enlightenment as a guide to continue through the practice of critical theory, developing a late-modern social change towards sustainable development. Simultaneously there is a need to see the parts of modernity that are not sustainably serving humanity. One aspect is the limitation of available rationalities, which restricts the space for democratic process:

> For enlightenment is totalitarian as only a system can be. Its untruth does not lie in the analytical method, the reduction to elements, the decomposition through reflection, as its Romantic enemies had maintained from the first, but in its assumption that the trial is prejudged. (Horkheimer & Adorno, 2002, 18)

Modernity and its prevailing instrumental rationality explains much of why society is placing hope on nature conservation and nature interpretation. Humans are assumed to be rational and to respond linearly to instructions and regulations.

This may also be a contributing explanation as to why the interaction in nature interpretation sessions at naturum are pre-determined by a written guide manual.

However, these communicative cases also display contradictions. The representatives of the administrative system, while serving the system and the instrumental rationality of natural science, realise the need for restoring and complementing the oppressed dimensions of human life, such as communicative rationality. In fact, these communicative initiatives are typical features of late modernity. The very nature conservation discourses they represent are typical products. Yet they are not as fully reflexive (in terms of reflection and consideration) as such initiatives may be expected to be in late modernity. The contemporary need to manage alienation does not afford the domination of experts but needs open deliberation. Even if it would be easier in some aspects to let experts rule, unfortunately nature will not give us an answer, which is what scientific knowledge relies on,

> […] the question of how we are to approach and interact with nature can be answered only by us, in our own discussions with each other; no solution to it can be read off from nature ”itself” in the manner that Marcusean naturalism believed was possible […]. (Vogel, 1996, 165)

There are challenges with public opinion formation due to contemporary communicative patterns. Modernity, in particular the information age and mass culture, has generalised linguistic experience and communication to such a high degree that the perspective of the subject has lost its power (Liu, 2007; with reference to Horkheimer & Adorno, 2002). This impairs the space for subjects to critically work for change. According to Adorno (1993), subjective experience is replaced by being informed. On the other hand, according to Liu, Adorno sees that the difference that emerges between the subject's own experience and their information via mass culture, becomes a forum for the linguistic and ideological struggle for subjectivity. In short, naturum occupies a potentially promising role for reclaiming subjectivity over simply 'being informed', and sets us on a path towards meaningful change.

Within (cultural) heritage interpretation common identity and collective memory are already central. With an integrated view on nature-culture it can be seen that even naturum has a role in forming collective memory and identity. Thus, increased integration of nature and culture may have democratic advantages.

I have touched on how citizens are constructed in these cases, and in a similar way it is relevant to see how the cases construct "human-nature relations". Both cases problematise nature protection as protection *from* humans, but still nature protection and conservation are taken for granted. What is discussed in the DNC

and by the interviewed administrators is not our relation to nature, but rather different nature conservation ideologies within authorities and among the administrators (i.e. what to protect and how). Why and for whom is not a matter for query. It is not explicated who the subject of nature conservation is. In the nature interpretation case it is partly similar, i.e. that the 'why and for whom' is not explained), but with a more external perspective on conservation, where nature conservation is a bit more motivated and explained. The DNC and the administrators do not have the need to explain nature conservation, since it is given and the framework is so formalised. The administrators, in their formal role, work mainly with people who are already involved in conservation issues as colleagues or stake-holders, whereas nature interpreters meet people with a larger variety of insights in the conservation sector.

What can then the DNC as well as naturum tell us about our times and our hopes for nature conservation? First, we believe that nature conservation may heal and compensate for environmental degradation by humans and that there is a certain kind of nature that is best taken care of by protecting it from the human presence. We also believe that nature without human bias exists (i.e. that nature and humans are disparate). Neither the DNC nor naturum involve any efforts to bridge the borders between the categories of humans and nature. That kind of connecting could entail seeing nature in humans or experimenting by seeing humans as merely nature. Both cases build on our conceptual separation between the categories of humans and nature. According to Horkheimer and Adorno (2002) this separation is actually generating alienation and its effects. This means that a reconciliatory approach could try to bridge the categories, for instance, attempting to loosen the categories human and nature in nature interpretation. What is nature without the human? What is nature conservation without the human? Which words can be used not to reify the nature-culture dichotomy? Those kinds of questions could have been integrated in both the DNC and naturum, and inviting a discussion on the role of humans and our right to manage, cultivate or preserve nature.

Human alienation calls for reconciliation. This reconciliation is not motivated by nature, since an anthropocentric worldview implies that nature has no subjectivity. Most people in the Western, industrialised society prescribe animals, plants and ecosystems instrumental values to satisfy human needs, and do not regard them as intrinsic entities comparable to humans. This kind of ethical foundation and how to talk about diversities, in spite of different environmental ethics, could be central components to the development of communication skills as well as nature interpretation activities.

Furthermore, both cases can be interpreted as attempts for reconciliation. First, in the DNC the underlying rationale is that humans become friendly

towards nature through protecting certain areas from utilisation. Therefore, by listening and mirroring landowners and explaining clearly why a site needs protection, the landowner will understand and accept the protection. Nature conservation can restore deprived nature. The underlying rational in nature interpretation is that providing facts on nature motivates people to appreciate and protect nature.

When looking at (more or less) formal nature conservation administration, the human component of reconciliation is not really present. Nature conservation does not include humans as nature and likewise human interaction is not considered as a prerequisite to nature conservation. Communication is not seen as a process through which nature conservation is constructed, but as an instrument to implement a predefined plan.

6.5 Two different public spheres in nature conservation context

Having talked about how the two conservation cases may be understood in terms of reconciliation in the light of modernity, let us now conclude the chapter with yet another modernity aspect, namely the distinction of *public*, which was a central theme to early Habermas (1989) who gave a historical account in *The Structural Transformation of the Public Sphere*. To be able to discuss and manage nature resources sustainably we need to relate to the 'public'. The public could be a location or a topic but also a quality of discussion (cf. Habermas, 1989). Arguably, people enter *the public* if and when they start talking about the broader politics of material issues, like nature and how these issues affect more people other than themselves. In other words, *public* is the quality of a communicative situation when subjects' interests are abstracted to a level of the commons. To elevate subject's interests to a public level, people need contexts that help bring out these public characteristics for their dialogue, otherwise the generalisation above their personal interests is difficult and they tend to remain in their private roles.

To understand what kind of deliberative space naturum is, I have used the concept of public spheres. How does this concept assist the analysis of naturum? Let me start with the meaning of 'public'. The distinction between public and private as well as the integration of the two categories has importance in the way I understand both cases. The field of environmental communication works with communication that mainly focuses on the *public*, and is typically concerned with 'public communication about the environment' and 'public spheres' (Hansen & Cox, 2015b; Cox, 2010). To me this indicates that communication studies have an orientation towards public conversations, which in turn signifies

(a) conversations held in public spaces and (b) conversations about topics pertaining to public concerns. It may not need to be both, but at least one or the other. I also want to make the point that ‘public communication’ does not need to involve mass communication, but it can take place on a micro level, such as a conversation between three persons.

What is private and what is public, topic wise, has been discussed for instance by Nancy Fraser, who states that the very distinction of private and public needs to be an issue for deliberation (Fraser, 1990). While acknowledging Fraser’s claim, however, I contend that there is a limit to what kind of issues should be regarded as public, and thereby topics for deliberation. The context for the thesis is the environment, and hence, can we even imagine what sort of phenomenon private environment would be? Even if I talk about water quality of the well on my own property, or invasive slugs on my farmland, the environmental aspect of those confined situations is still connected to the commons. What I find most interesting is where the private realm connects to the commons within the environmental context. How the connection between private and public (or the commons) is done, affects the way the environment is managed, which has vast consequences on the environment. In this way nature (or the environment) constitutes a common materiality where communication about democracy can take place. To be able to have conversations on democracy, or to create democracy, we need a common materiality and ways to define it. Nature or the environment is the object to the democratic processes and, at the same time, it constitutes the premises of both our private lifeworld, the public sphere and the system. The findings in Paper III, which see the characteristics of naturum as a public sphere, could also be used to discuss in what regards naturum is an intersection of the public and private spheres. The DNC case makes a sharper distinction between public (or collective/societal) and private.

Since alienation regards both the relation to nature and the relation to humans, reconciliation accordingly needs to be directed both towards nature and towards humanity (see Vogel, 1996). Nature interpretation is a place where the visitors are neither in roles as professionals or consumers, two dominating roles in the system, but where they can be citizens and act in their individual capacity. This opens the possibility for human reconciliation or space for humans as social beings, humans in relation to the materiality (outdoors) and humans in relation to the biological life conditions on Earth (even evolutionary). Then again, nature interpretation presupposes a distinction between humans and the nature visited. This is especially evident when choosing a site that we have agreed on calling nature apart from those sites where human and nature components are more obviously integrated such as urban environments, highway landscapes, windmills or hydroelectric plants.

We need to develop new communicative places (Hendriks, 2016) (see also Paper III), which I interpret as either create new places or use existing places and renew their communicative preconditions. To facilitate public deliberations on the commons, any arena that can help is beneficial to cultivate, particularly if the spaces are close to everyday and informal conditions. Naturum is a context that is relatively new (contemporary) and dynamic and its mission is developed according to the policy ambitions of public participation in nature conservation. New naturums are also being constructed with contemporary features that have the possibility to extend their communicative arena. Nature conservation at the CABs is founded in a much older administrative tradition. Still, conservation administration at the CABs does imply conversations with deliberative significances. However, the DNC involves a new take on nature conservation and holds the potential to develop new communicative places. To endure, the DNC programme would need to include components of self-reproduction of the programme, something which I have not found it did nor in my empirical material or other sources (e.g. SEPA, 2010; Westberg *et al.*, 2010).

Public spheres should, according to the literature, be independent from the state. I agree this is important, but nevertheless argue that the state definitely has a responsibility in creating conditions for public spheres as well as creating public spheres that are independent from the state. This is part of what I see as the basic task of democracy – to reproduce conditions for democracy.

6.6 Environmental communication to frame the empirical cases

Considering the description on environmental communication in the theory chapter, and the empirical cases described in Paper II and III, I conclude that the SEPA is a central actor for environmental communication practice. As discussed previously, environmental communication is not about "information on the environment" but about reciprocal acts of influence through communication that affects people's relationship to nature. There is no communication about the environment where the political dimension is absent. What can be said and be considered as neutral or legitimate depends on cultural context. Communication is always related to materiality and symbol, and aims towards some kind of change, be it learning, sharing perspectives, opinion formation, convincing, action etc. There is, of course, communication that is merely directed towards understanding, but even that is change-oriented in terms of the desired transformation in understanding. In that sense there is no communication that just exists without intention. All types of talk have a social function.

Based on the meaning-making among the public we could approach an understanding of communication as constitutive to society and community. Regarding meaning-making on an intersubjective level, and placing this process in a public sphere within a larger deliberative system may be a fruitful way to bridge communication and democracy.

What kind of environmental communicative perspective did I see in the two cases? Where there openings for communication as meaning-making rather than transmission oriented perspectives? The DNC assisted the administrators to observe and formulate communicative aspects in their work, often in terms of challenges or problems to solve. Communication is a central task in their work, and even if the administrators knew that beforehand, the course encouraged them articulate that task and formulate their communicative experiences, challenges and opportunities. In the course they learnt how to use meta-communication as a tool to visualise perceiving the situation and moving forward in an instance of conflict or misunderstanding. This can be seen as an application of one of the communicative dialectics proposed in the theory chapter; meaning that communication is simultaneously substantial and intentional, which can be made explicit though meta-communication.

Initially I stated that the connection between democracy and communication on the intersubjective level is something the empirical cases in this thesis aim to test. To start with, in the DNC case it was not very clear connection between on the one hand theories on democracy and on the other hand communication on intersubjective level. In the naturum case democracy was not mentioned at all, but the practice that I studied nonetheless contained connections to the commons, and in that sense an indirect connection to democracy. On the intersubjective level there was no explicit connection to democracy in the naturum case, but I would attest that the physical gathering of citizens in one location in nature, brings a framework to the intersubjective dimension. Not only could naturum cultivate the deliberative potential in this setting, but also activate "the common third" (Vasstrøm, 2014), or the particular relation to the commons, which occurs when people in nature simultaneously build relations to each other and nature.

Environmental problems are socially constructed in a sense, as mentioned in the section on social construction. Neither the DNC nor naturum problematises our understanding of environmental problems on a meta-level. A hint in that direction might be discerned though, such as when the DNC admits discussions on the nature conservation discourse "free development" or "hands-off" in contrast to active management (cf. Steinwall, 2015). A parallel in the naturum case are the islands in the Djurö Archipelago that the guide discusses that they are sometimes considered pristine nature although they are a heritage product from earlier farming.

This chapter concludes with an account of the role of meaning-making in the case studies. First, in the naturum case meaning-making was not at the heart of planning the guided tour. However, during the workshop series of the larger research project, the concept was introduced by the researchers and increasingly gained acceptance among the interpreters (cf. Bergeå & Hallgren, 2015). It appeared that the possibility to plan guided tours from the basis of meaning-making does exist. Meaning-making as the basis for interpretive planning is also what is argued by Ham (2013), albeit within the conventional framework of thematic interpretation where meaning-making remains defined by the interpreter.

In the DNC case, meaning-making is not discussed. It does not occur in the printed course material. As could be expected, no respondents talk explicitly about meaning-making, since that is an analytical construct. But it may be a relevant idea whether there would be differences in the effects of the DNC if meaning-making would have been described and discussed in relation to democracy during the course. Perhaps that could have emphasised the importance of the intersubjective aspect to individuals' learning and subsequent possibility for change. My suggestion is that meaning-making is a competent link between communication and democracy. Since meaning-making is the act that the subject owns, it can never be taken away from them, which grants equality – a substantive component to democracy. Meaning-making must also occur on the individual level but through intersubjective communication. This essentially links the individual with the collective. Therefore meaning-making is a key to attaching communication to governance, or democracy. Meaning-making is also always reciprocal. One single part cannot independently 'make meaning', but it is a process of collaboration; while meaning-making is intersubjective, it is owned by the subject. By operationalising ideas of meaning-making, both interpreters and administrators may create links between communication and democracy in the field of nature conservation.

7 Discussion and conclusions

The following discussion of the findings explains how the thesis addresses the research questions of the PhD project. The research questions are addressed in Section 7.1 and 7.2. Further, the methodological choices are discussed and the theoretical and practice relevant contributions of the thesis are presented.

7.1 Instrumental use of communication limits its democratic quality

The government's new, 'coherent' nature conservation policy did indeed consolidate the role of humans in conservation, but Chapter 4 shows that the implementation of the policy was not coherent in integrating the different strands of conservation – "protect, preserve, present". Instead the directive maintained separate disconnected strands within conservation policy, where dialogue competence among administrators was one strand, and increased investment in naturum was another. This separation is possibly advantageous in terms of increased diversity of deliberative spaces, but limiting in terms of uncoordinated deliberative spheres, which may inhibit the flow from informal and deliberative to representative democratic structures. The thesis shows that there are deliberative elements in different areas within nature conservation, and these deliberative spheres can be developed both individually as well as in one common context. Strengthening the different parts as well as strengthening the deliberative system on the whole are fertile pathways for increased democratisation of nature conservation. The separation of the different functions such as site protection, conservation management and nature interpretation, at the conservation authorities may on one hand increase separation between man and nature (i.e. increased alienation), but on the other hand allow for different deliberative spaces with different spaces for agency and emancipation through deliberation. Whereas the thesis renders criticism towards the two

implementations of the 2001 conservation policy, this critique is not to be interpreted as indicating large-scale failures, but rather as a constructive critique to the underdevelopment and neglect of communication as constitutive in society and nature conservation. In other words, these two communicative cases demonstrate the challenges for the administrative system to reflect the full range of communicative activities that construct society through building understanding and community.

The thesis demonstrates that both cases investigated were strategic communication efforts and not optimised to achieve democratic outcomes. The democratic connection to communication seems to be taken for granted by policy makers, the SEPA, administrators and nature interpreters, although the pathways are implicit and partially non-existent. Communicative efforts where state representatives and citizens meet under formats that allow all parties to listen and speak, provide capacity and space for deliberation, yet do not necessarily promise democracy. What is phrased as public participation is transitioned to political legitimacy through the instrumental use of communication. This is close to Scharpf's (1998) perspective, which regards public deliberation as a way to connect input-legitimacy and output-legitimacy, although Scharpf does not acknowledge deliberative democracy as an intrinsic societal quality and he strongly doubts the deliberative qualities commonly referred to within critical theory:

> These requirements are met by concepts of "discursive" or "deliberative democracy" which insist on procedures of "will formation" that are supposed to lead to "reasonable" conclusions (Habermas 1996). However […] Habermas and others tend to insist on extremely demanding "procedural" preconditions that would assure a very high degree of moral and intellectual sophistication in public debates. In the tradition of "critical theory," these demands are not meant to be practicable – and if they could be approximated, political discourses would be restricted to a small elite of philosopher kings. (Scharpf, 1998, 12)

To meet this kind of un-nuanced criticism, I would first like to invite a broader conception of deliberative democracy, such as the account given in Chapter 3, to involve a larger deliberative system as well as extend the notion of deliberation to more informal settings (Marques & Maia, 2010; Mansbridge, 1999) beyond the ideal type developed by Habermas. Then I would like to reclaim a humanistic perspective that allows for equal rights as well as for a notion of humans as competent, social and communicative. Scharpf's criticism leaves no place for the power of communicative rationality but assumes that strategic rationality is the only legitimate rationale. His reasoning is just one example of the system colonisation of the lifeworld (Habermas, 1987b). From

my perspective the instrumental and strategic use of communication may have a certain societal value. However, when societal actors neglect the intrinsic and constitutive role of communication, they risk the same legitimacy that they were trying to build.

Expectations on the legitimacy enhancing effects of the kinds of strategic communicative efforts studied in this thesis are high, but unclear from a scientific perspective. The empirical data in my case studies does not reveal how the legitimacy enhancing effect more exactly is assumed to arise. Still, it is likely that there may be legitimacy enhancing effects, which are out of the scope of this thesis.

Epistemic differences between experts and citizens or between different citizens are not considered in either project (i.e. epistemic differences are undervalued as preconditions to democratic processes). By clarifying epistemic differences in all kinds of public deliberation, the space for communicative rationality would increase, which would support a higher deliberative quality (Carolan, 2006).

Subjects are constructed differently when comparing the two cases, depending on legal frames and who is regarded as a legitimate actor. In other words, there may be a distinction between subject, as defined by the subject themselves, and actor, as defined by the system. In the case of Dialogue for Nature Conservation (DNC) the legitimate actors are legally constructed and exclusive; in the naturum case they are communicatively constructed (i.e. those acting as participants in the interpretive situation are regarded as participants). In the DNC case the way the system defines and possibly excludes actors may contribute to the subject's own construction process. At naturum, the construction of legitimate actors is less restricted and may allow a larger breadth of subject constructions.

Both cases are considered responses to modernity-related separations and attempts to bridge these separations, although they fall short as has been demonstrated in the thesis. For instance environmental ethics are not touched on, and the *subject* of nature conservation (i.e. conservation for *whom and why*), is not discussed in either case. This, I consider important to take further in the future since it contributes to making the citizen more present in the management, and thereby helps to acknowledge wider knowledge spheres and rationalities outside the administrative system.

7.2 Deliberative spaces that are formally unrestricted, activate agency and reproduce their own conditions nurture democratisation

To sum up Paper III and Chapter 6, a few central conditions are identified that create space for establishing communication on democratic criteria in nature conservation. These deliberative settings are characterised by:

- unrestricted relation to authorities;
- activating agency and reflection among subjects;
- integrating humans and nature; and importantly
- facilitating deliberation that reproduces its own conditions.

The 2001 policy opened the door for a new take on democracy and communication in nature conservation. The two policy responses studied were different expressions of the same policy and coloured by their different inherent communicative preconditions (i.e. institutions, actors, format). The findings show that in spite of limitations in communicative rationality, both cases, but especially naturum has potential for deliberation. Deliberative systems theory assists in finding the deliberative functions for the two cases, respectively.

The DNC was instrumental mainly in terms of relating to democracy and communication as tools rather than intrinsic societal qualities. Further, the DNC had a lack of process orientation in its design, but was limited to the time frames and rationales of the programme. Naturum offers, through its wider scope of communicative activities and relatively unrestricted relationship to the authorities and formal decision-making, a larger space for communicative rationality, which allows a larger deliberative potential. In other words, naturum has a potential to work with communication more intentionally with inter-subjective meaning-making directed towards increased understanding – in contrast to strategic communication. Still this space is rather unutilised.

The communicative situations in nature conservation administration involve a need for closure and processes that need finalisation or a decision. These were some of the preconditions that the DNC-course content was designed to meet and situations that the DNC aimed to qualitatively enhance.

Nature interpretation, contrastingly, has more space to allow for agonism and diversities, and unsolved questions (i.e. to be process-oriented, cf. Sennett, 2012). Still, naturum does not fully make use of that opportunity; partly because the interpreters and their organisations have not identified the societal need or the potential space they could offer, and partly because they belong to the same discourse as the nature conservation rationale.

Change requires agency, which requires emancipation of the subject in relation to the structure. To some limited extent the DNC can be seen as enabling the administrators to gain agency when they face how communicative rationality needs to be defended against the instrumental rationality of the system. Both cases actuate the discussion on agency and subjects' space to make a change. This is seen in how the SEPA puts hopes in improved dialogue competence among administrators as a way to make nature conservation policy implementation more successful. It is also seen in how the SEPA, but also individual nature interpreters, regard nature interpretation activities as a space where individuals can experience and learn about nature, thereby increasing their likelihood to support nature conservation projects as well as consider pro-environmental behaviours.

The kind of change induced by the 2001 policy through the two cases studied is subtle and primarily remains within the frames of the existing administrative system, rather limited by conventional thinking. However, it can, in a more positive light, be regarded as a (first) step for increased democratisation in nature conservation. To progress further, one idea is to identify reinforcing (amplifying) options of the initiated movements of change. In the DNC case that could mean that the SEPA or the CABs create reflective networks of interested administrators or collect cases of best practice in democratic work within the nature conservation sector. In nature interpretation centres it could mean to connect the interpretive activities to ongoing democratic deliberations in proximate sectors. Projects such as local spatial planning and strategies for protected areas could be incorporated, but also larger environmental contexts such as global warming, water resource management, and waste management. Deliberation requires spheres that not only facilitate deliberation in the moment, but also continuously reproduce the conditions for deliberation. The DNC, in the time period studied, did not fulfil that. Creating occasional communicative spheres is not sufficient to mobilise change in the system or the bureaucratic landscape. Deliberative democracy needs to reproduce itself to be long-lived and continuously updated.

Human-nature relations could be restored by finding overlaps between what we regard as human and nature respectively, and the way to do this is by public deliberations on nature. The previous discussion in the synthesis chapter refers to the need for reconciliation on different levels. As long as humans are defined as outside nature, the human-nature separation will continue to cause alienation and environmental degradation. By acknowledging nature in humans, the connection between humans and nature would emerge and this would facilitate both an understanding of our nature dependency and identify strategies for human-nature reconciliation. The effort of identifying the human-nature overlaps needs to be

done by the citizens – through deliberation – but can be facilitated through a communicative catalyst, something that the nature conservation institutions such as the SEPA, the CABs and naturum could provide.

Bevir (2010) claims that the *theories of modernity*, within social science, have contributed to hollowing out democracy and produced today's democratic challenges: "Modernist social science has restricted democracy. Interpretive social science may be a cure" (Bevir, 2010, 2). Whereas interpretive social science is necessary, it also needs to be complemented by critical theory to induce the changes needed for emancipation and reconciliation. Reconciliation, according to critical theory, can bridge and restore all three kinds of alienation. Nature interpretation holds the potential to bridge separation in three aspects: (1) between subjects, (2) between subjects and system, and (3) between human and nature. The reconciliatory act in the DNC can be understood as (a) trying to meld citizen and system, but on the conditions of the system, and (b) to confirm the expectations on nature conservation and site protection as crucial for the future of the human-nature relation, but based on the knowledge of the administrators rather than the users. The capacity to manage complex environmental issues expands not only by access to multiple disciplines of expert knowledge (i.e. ecologists, climatologists, geologists and limnologists), but also by access to a diversity of lay knowledge and access to multiple rationalities. Furthermore, in the process of reconciliation we cannot avoid the question of environmental ethics and therefore such attempts need to facilitate reflection on our environmental ethical approach as individuals as well as a collective of citizens.

7.3 Methodological considerations – in retrospect

The selection of cases for this PhD project was partly affected by practical circumstances, but turned out successful in several ways. The cases were complementary and rich in data, but since they are on different levels within the system of nature conservation they are not easy to compare straightaway. Even if some comparisons are done anyway, comparing was not an initial purpose. One advantage of the cases being divergent was that they provided insights from different parts of the deliberative system, such as (1) more formal settings where dialogue and communicative format are explicitly reflected on, and (2) informal settings where the communicative space is less restricted. Since this is a qualitative study, the variation of perspectives and practices is more useful than repeated cases of the same art (cf. Stake, 1995). The DNC case was very well planned in terms of research design and the data was relevant and easy to obtain. Constraints were related to the fact that the empirical work was also part of a larger research project, with research questions that only partly overlapped with

my PhD project. The advantage of this was that the larger research context provided a rich perspective on the situation including the most central questions to be asked. One example was that I learnt about the variations between different CABs and common administrator perspectives already before doing the interviews, which was helpful when planning the interview questions and facilitated my contextual understanding during the interviews. The naturum case was complementary to the DNC case not only because it covered another policy product, but also because it applied other methods. Whereas the interviews in the first case generated knowledge about how people *thought* about their practice (or said they thought), the workshops and recorded interpretive sessions in the second case provided more knowledge on what *happens* in practice and why. The total picture of a phenomenon may never be fully grasped, but through using combined methods, the qualitative understanding of the phenomenon widens.

In the ideal situation, the naturum case would have involved a few more guided sessions, which would have enabled more variation but also more generalisable findings. However, I have used all the sessions available at the selected naturum sites at the time of the study. If I would have done participant observation in person during the guided sessions, that may have contributed in terms of vitalising and situating the data, and achieving a closer connection between the case and me as a researcher. With the particular video-recorded tours that I studied, however, I do not have reasons to suspect any significant data loss due to not being able to attend in person. Importantly, I was still very familiar with the three naturum sites due to my participation in workshops and study visits there together with interpreters and co-researchers. The second case was also carried out within a research team who had a larger scope of interest than the specific research questions for my PhD. However, my questions were still part of the main project and the way I have been able to pursue the naturum case study in a very independent manner.

7.4 The contributions of the thesis

The empirical contributions of this thesis are the description and analysis of nature interpretation at Swedish naturum, a practice that has not yet been the focus in Swedish doctoral dissertations. Another empirical contribution is the analysis of the way the SEPA and the CABs engage in communicative efforts as part of their work on increased public participation. The thesis takes a critical point of view in the tradition of critical theory, which aims at revealing gaps for societal development that serves human emancipation (Alvesson & Sköldberg, 2008; Habermas, 1987a), which we will come back to soon.

7.4.1 Theoretical contributions

Promising ways to link communication and democracy in nature conservation may be identified by consulting the field of environmental communication, which allows for theories on intersubjective and societal level to connect. Democracy is the rule by the people, but as representative democracy is not solid enough to solve environmental problems or to restore political legitimacy of authorities, democracy also needs to vitalise multiple components in the deliberative system (cf. Habermas, 1984a). Basically, democracy requires political deliberation (Silberman, 2013; Dryzek, 2009), and since democracy is by nature dynamic, it requires supporting the conditions for its own reproduction in order to persist. In this sense, my conclusion is that deliberation requires spheres that in particular reproduce deliberation. Policy initiatives, programmes and projects to serve democracy therefore need to be designed with critical regards on their conditions for *re-producing* the democratic or deliberative premise.

A vitalised democracy involves allowing the agency of subjects involved. Further, in relation to communication, this means that using a subject perspective on communication highlights the intersubjective process of meaning-making, which links the subjects to each other, but also to their common life conditions, the commons. Only through managing the commons, can humans reconcile their alienation with nature, as well as with themselves. Protected nature has a significant role to function as the 'new commons' (Pieraccini, 2015).

Similar to the natural instinct to communicate (Moser, 2015; Chang & Butchart, 2012), humans are inclined to meaning-making. This implies that even if we try to direct people's learning or thinking for strategic reasons, we may lose the individual subject on the way to our aim. It also means that meaning-making is a constitutive process that, beyond its function of enabling society, carries an intrinsic value, part of the shared experience of being human. By focusing on meaning-making we will be able to reconnect the democratic macro level of society back to the subject level throughout the processes. Meaning-making together with space for communicative rationality will help reconnect the large scale democratic processes back to the constituents, avoiding increased legitimacy deficit. While moving towards attaining environmental objectives, we have the option to start looking for long-term approaches to handle sustainability issues through citizen deliberation on nature, and outermost even, *in* nature.

Theoretically, the thesis contributes in:

1. illustrating one state-initiated path – and its shortcomings – towards nature reconciliation in contemporary society;
2. pluralising the way we think about how and where democracy is practiced today (i.e. new arenas);
3. showing the relationship between materiality and symbol and how this may be concretised in physical deliberative spaces;
4. examining the potential for deliberative contexts within NRM to act as interfaces between expert and citizen knowledge/perspectives;
5. highlighting the role of personal change in bringing about structural transformations in practice and organisational culture;
6. increased understanding of the role of meaning-making as a fundamentally democratic practice.

Within the scope of a thesis that draws from critical theory, it is certainly desirable not only to point out theoretical contributions but also to identify some practical implications, which is how the thesis more directly contributes to society.

7.4.2 Implications for practice and policy

The emancipation imperative in critical theory implies that emancipation is partly connected to the challenge of reconciliation (i.e. bridging of constructed barriers between humans, and humans and nature). Emancipation is furthermore reflected upon in the thesis in terms of questioning:

- who is regarded as a legitimate subject (participant);
- established roles (such as administrators, guides, visitors, users etc.);
- dominating objectives, whether there is space for communicative rationality;
- what knowledge is considered as legitimate (with an emphasis on knowledge as co-constructed and owned by the subjects);
- nature as something exclusive.

To specify the last point about nature, this double critique regards questioning nature as something exclusive both in the sense of being remote or pristine and in the sense of excluding the human. Thereby enabling greater agency for citizens in relation to nature: we all own a relation to nature, and we all belong to nature.

The practical implications from the thesis address not only nature conservation policy but also planners and practitioners along the implementation line. What is often taken for granted can be reconsidered through the aspects of emancipation just mentioned. According to the above bullet list, such emancipatory reconsideration involves questioning the “who” and “why” as well as the “how” in any kind of dialogue-oriented or participatory communication initiative. In other words, what needs to be considered in policy and project design is the objectives and reasons for democracy or participation. This consideration involves how the project or process is intended to produce instrumental legitimacy as well as intrinsic democratic values. Additionally, the democratic aspects may be reinforced through reflection on how the instrumental and intrinsic components of democracy in the project are inter-related through communication – if they concur or counteract each other. Also the subject needs to be considered throughout the dialogue process: who are the subjects in the processes of public participation, what space is there for the agency of these subjects, but also who are the subjects of nature conservation? In practice these insights may be translated to guidelines where the subject (i.e. user, landowner, citizen, administrator or guide), has acknowledged space in relation to the structure. One application for naturum would be to work with interpretation as learning processes of co-construction of meaning, where the visitor is the interpreting subject as much as the guide. One application for formal nature conservation management at the CABs could be to invite citizens to local participatory processes in their roles as citizens or users, irrespective of formal ownership or stakeholder-ship. Allowing participants to be citizens would be strengthened by creating informal deliberative spaces that complement the more formal participatory processes that the authorities are obliged to run. Yet another application could be to create reflective networks of practitioners at the CABs. Such networks, as mentioned previously, would be able to gather best practices within dialogue programmes in nature conservation. Since the CABs often are the employer of both conservation administrators and nature interpreters at naturum, such a network could actually be used to integrate dialogue perspectives of both nature conservation administration and nature interpretation. In this way, it would also integrate the separate strands from the nature conservation policy (i.e. “protect” and “preserve” versus “present”).

7.5 Conclusions and outlook

This study argues that communicative and democratic components to Swedish public nature conservation are important to the management of contemporary society's environmental effects as well as the gap between citizens and authorities, and between fellow citizens. The thesis shows why public deliberation on nature is needed and in what kind of institutions it can take place. The deliberative process and outcomes are related to the kind of forum where they occur. In this thesis the context of formal nature conservation and improved dialogue skills among regional conservation administrators was used as the first case (the DNC). This case displayed deliberative limitations by restricting legitimate participants to stakeholders, by primarily relating to formal authority decisions in conservation with minor space for public opinion formation, and by relating to communication as a strategic tool rather than a societal glue with inherent democratic functions. The glue metaphor is used to underline the role of communication as constitutive to society and human community and the importance to avoid reducing communication to an instrumental tool to serve a bureaucratic system.

The first case, the DNC, displayed some worthy aspects to support developing more democratic communicative processes in nature conservation; the dialogue competence programme helped the administrators develop increased awareness and readiness for acting towards the public and developing ways and structures to talk about communication in their work. In contrast to the first case, the second case study used more informal communicative situations in the nature conservation context (i.e. nature interpretation sessions at naturum visitor centres). The naturum sessions are underdeveloped as arenas for public deliberation on nature, but with a large potential due to their relatively informal setting and relative independence from direct state and authority decision-making. Another deliberative strength of naturum is their openness for everyone to participate, something that increases the chance for different citizens to meet and contribute to public opinion formation, which is crucial for the democratic system as a whole, and one of the key functions of deliberative democracy. The arenas for public deliberation on nature are limited, and naturum is a place that can make use of nature as both the context and topic for deliberation, which may have a transformative function (see Paper III). To understand how Case 1 and 2 hold different deliberative functions it is useful to apply the analytical framework of deliberative system, where various components are seen as contributing with different functions, all contributing to supporting democratic functions.

The study concludes that institutions of nature conservation need to create arenas where communicative rationality can be activated. This could be done by creating new, deliberative arenas, but also by developing existing ones, such as

naturum. Models can be found in the heritage sector, museums and libraries, which are arenas that are to a greater extent used for public deliberation, democracy and multiple voices. Research from these sectors also offers fertile theories for exploring the potentials and duties for public deliberation on nature. An implication of the study is connecting how conservation actors relate to democracy with how they relate to communication needs. This can for instance be done by public discussions on ethics and environmental citizenship. It can also be done by increased focus on different kinds of knowledge and the inherent democracy in the act of meaning-making. Finally, a societal transformation to a more sustainable relation with nature also needs the nature-culture dualism to dissolve. That is done by acknowledging humans as part of nature, but also by acknowledging nature as a cultural product, both conceptually and physically. I will give the last word to environmental philosopher Stephen Vogel, who beautifully grasps both the need for multiple rationalities and the need for reconciling nature and culture:

> Only in such a society would there be a chance for the world we inhabit – the one world that includes the "natural" and the "social" both – to exhibit the beauty, the meaning, and the value we have always dreamt of finding there. (Vogel, 1996, 173)

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Experiencing the cycle of nutrients in granddad's garden – growing food, composting the refuse, nurturing the plants – is what coloured my perspectives.

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Appendix 1. Interview guide 2012-03-31

Note to reader: This is the English version of the initial interview guide for the interviews in the first empirical case. The actually used interview guide during the interviews was the mind map in Swedish as displayed in Figure 1.

<table>
<tr><td colspan="2">Introduction</td></tr>
<tr><td colspan="2">Introduce myself and project
Interview: 1-2 h, confidentiality, ok to record? Possibility to comment transcript.
Possibility to take a break. Ask if something unclear.
Format: conversation, covering themes rather than particular questions.
Aiming for holistic perspective. Not only you as a civil servant, but also as a person.
Any questions?</td></tr>
<tr><td colspan="2">A Background</td></tr>
<tr><td colspan="2">A1 Can you tell me briefly about your background?
Profession, education, experiences, geographical, parents’ professions.
Your role, working tasks
Why did you select this profession/work?</td></tr>
<tr><td>A2 More about work and routines
Tell me about a typical case that you recently worked with.
Objectives, purpose
How do you see your role in relation to the citizens?
How to handle people’s dissatisfaction?</td><td>A3 More in relation to working tasks
Characteristic for a successful case?
And the opposite?</td></tr>
<tr><td colspan="2">A4 Did the work as administrator in some way change during the past few years? If so, what did change and what are your thoughts about it?
A5 What is enjoyable, challenging or difficult with your job?
Any overall problem within natural resource management?</td></tr>
<tr><td colspan="2">B Dialogue for nature conservation</td></tr>
<tr><td>B1 When did you take the basic course? Any more courses? Did you have a third course session at your CAB?
Tell me how it come you took the course.
What do you remember (best) from the course?
Did you know anyone else who took the course before you? Or with you?
What were your expectations on the course?</td><td>B2 Did you gain anything from the course? Was it beneficial, if so, how?

To grasp: In what way is the respondent’s view on their work connected to their expectations and benefits from the course? What needs does the course address?
What tasks do you have today that the course helped you to handle?</td></tr>
</table>

<table>
<tr><td colspan="2">C Reflection on the course in relation to change</td></tr>
<tr><td>C1 How many took the basic course with you, and how many after that?
Do you remember if you talked about the course afterwards?
Do you think you and others have changed your way of working (or thinking) as a result from the course? Is there anything that you at the unit do differently?</td><td>C2 Ask about in what ways any effects of the course might be related to A5 (challenges and needs for change).</td></tr>
<tr><td colspan="2">C3 If course effects connect to answers below A5 (needs, challenges):
Why do you think the way of working or relating has changed? Or if it has not changed, what would be required?
What significance do you think the DNC program might have for Swedish nature conservation?
What significance to the administrator’s self-understanding (professional role, self-confidence to solve problems in daily work)?
What does the implementation success depend on? (culture, climate, leadership, attitudes, courage, mandate….)
Do you think the DNC made a different effect on different CABs regarding for instance work with forming nature reserves? Why then?</td></tr>
<tr><td colspan="2">D Questions on how the respondents regards participation (for instance remember the exercise about criteria for participation)</td></tr>
<tr><td colspan="2">What does participation mean according to you? A process without participation? What criteria for participation? Different levels of participation? Positive and negative effects (risks) with participation?
To grasp: Does the respondent see the existence of public participation as something up for negotiation? What aspects of participation are negotiable? What is minimum and what is too much? Where is the limit for participation that an administrator does not wish to transcend?</td></tr>
<tr><td colspan="2">E Concluding questions</td></tr>
<tr><td colspan="2">Relate back to A5 (challenges, difficulties). Is there anything related to your work that you want to improve at? Why? What kind of changes would you like to see at structural level and why?
What can be improved with the course? Anything that should be more focus on?
What needs to be improved for the CABS to strengthen their work with participation and dialogue?</td></tr>
<tr><td colspan="2">F Closing of interview</td></tr>
<tr><td colspan="2">Anything you want to add, comment or clarify?
Anything you want to ask me about?
Thank you.
Possibility to comment the transcript.</td></tr>
</table>