To do or not to do?
Dealing with the dilemma of intervention in Swedish nature conservation

Anders Steinwall
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List of papers

This thesis builds on the work described in the two appended papers listed below, referred to by the corresponding Roman numerals in the text.


Paper II  Steinwall, Anders. manuscript. What should we do with the threatened species: Discourses, institutions and the Swedish action plan to save the white-backed woodpecker.

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Abstract

Nature conservation is often seen as being primarily about shielding parts of nature from human intervention, e.g. by protecting areas. Over the last decades, however, intervention is increasingly being seen as necessary for nature to regain or retain its values, through ecological restoration and active management. This complicates simple assumptions that ‘nature knows best’ and raises dilemmas which are hotly debated in the scholarly literature around ecological restoration, protected area management, environmental ethics and green political theory. However, how these dilemmas are dealt with in actual policy struggles among the conservation professionals who make management decisions is less studied.

This thesis explores how issues regarding active intervention in nature are represented, debated and institutionalized within Swedish nature conservation, and to what effect. The empirical focus lies on policy struggles around the designation and management of protected forests and around efforts to save a nationally threatened bird species, the white-backed woodpecker. My analytical framework is informed by Argumentative Discourse Analysis and Political Discourse Theory, to which I contribute a further elaboration of the notion of discourse institutionalization. Based on documents and interviews with conservation professionals, I identify competing articulations of the ends and means of conservation and relate these to scholarly debates around ecological restoration and interventionist conservation management. The analysis further focuses on how elements of the different policy discourses are institutionalized in rules, routines or official policy documents.

Two main competing policy discourses are found: one focused on leaving pristine nature to develop freely, and one focused on active, adaptive management for biodiversity. While the former has previously been said to characterize the Swedish conservation bureaucracy, my analysis shows it is now widely seen as outdated. Arguments which in the scholarly literature are associated with an ethically informed defense of nature’s autonomy are here dismissed as emotional, aesthetic and thus unscientific concerns, delegitimizing them within the rational, science-based public administration for nature conservation. In contrast, biodiversity is broadly forwarded as a self-evident goal for active intervention, in line with both science and policy requirements. Adaptive management for biodiversity is in that sense the dominant discourse. Still, the older discourse is institutionalized in the purposes and management plans of existing nature reserves, and its defenders have also succeeded in strengthening that institutionalization through new and more restrictive guidelines. The findings suggest that this has been possible not only because of the gatekeeping role of a few centrally placed actors, but also because their restrictive stance resonates with the outside threat of exploitation which organizes the common order of discourse. Naturalness, a term described as irrelevant by some proponents of adaptive management for biodiversity, is also shown to remain a shared concern in several ways. The results thus highlight the importance of both entrenched common sense and institutionalization of certain logics or arguments in authoritative documents. The main theoretical contribution of the thesis consists in clarifying the effects of such discourse institutionalization — using the terms durability, legibility and leverage — and showing how the processes of negotiation, re-interpretation and modification of institutions are more dynamic than some accounts of discourse institutionalization suggest.

Rather than trying to resolve (and thus remove) the dilemma of intervention, the thesis points to the importance of keeping open discussion of the ultimately unanswerable questions about intervention in nature alive in both theory and practice.

Keywords
Protected area management, conservation, ecological restoration, biological diversity, discourse, institutionalization, forests, white-backed woodpecker, policy struggle
Svensk sammanfattning


Denna licentiatavhandling utforskar hur frågor om aktivt ingripande i naturen representeras, debatteras och institutionaliseras inom svensk naturvård, och vad detta medför. Empiriskt ligger fokus på debatter kring bildande och skötsel av skogliga skyddade områden och kring insatser för att rädda en hotad fågelart, den vitryggiga hackspetten. Studien baseras på dokument från och intervjuer med naturvårdare och tjänstemän inom Naturvårdsverket, Skogsstyrelsen, länsstyrelser, den ideella naturvården och skogsbolag. Ett diskursanalytiskt ramverk används, där begreppet diskurs syftar på de historiskt och kontextuellt specifika system av språkliga konstruktioner som tillskriver världen dess mening och legitimerar vissa typer av kunskap och argument. Genom detta analyseras konkurranterande sätt att konstruera naturvärdenas mål och medel och sätts i relation till idédebatter i litteraturen. Analysen fokuserar vidare på hur element från de olika policydiskurserna institutionaliseras i regler, rutiner eller officiella policydokument. För detta syfte görs också ett teoretiskt bidrag i form av en precisering av begreppet diskursinstitutionalisering.


Snarare än att försöka lösa och därmed avlägsna de dilemman som ingripande i naturen innebär, pekar avhandlingen på vikten av att diskussionen om dessa frågor hålls levande i både teori och praktik.
Acknowledgements

Many years have passed since I started my Ph.D. studies — and then quickly took another job, continuing my research half-time, interspersed with longer breaks for parental leave or periods of full-time work at my other job. Dividing my time like this certainly has had many drawbacks, but also some advantages; not least, it matched the rather drawn-out character of the policy debates that I have studied. When, six years ago, I started looking into the case of the white-backed woodpecker (barely visible against the birch on the front cover), an updated action plan for the species was already delayed by a year or two; if all goes well, it will finally be in place by the summer of 2017. Anyway: here, now, are the fruits of my labor thus far. I have many people to thank for making this possible.

First to all the interview participants who generously gave of your time and knowledge, making this study possible and teaching me about this fascinating world of nature conservation. You have been more important than the few quotes I could squeeze in here can convey.

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Thanks also to everyone at the Umeå University Planning Office and beyond for being such nice colleagues, and not least Per Ragnarsson, for being flexible and giving me room to pursue this project.

Thanks finally to friends near and far and to my family: my own parents and siblings (I include you here, Yvonne) as well as the second extended family that I have gained through my wonderful wife, Kristina. Especially of course to you Kristina, and our beautiful children Gustav and Herbert – thank you for bearing with my periodic absences due to this work and giving me so much meaning and joy in every way. I love you.

Anders Sturk Steinwall
Umeå, December 2016
Acronyms and abbreviations

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<th>Description</th>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<tr>
<td>ENGO</td>
<td>Environmental Non-Governmental Organizations</td>
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<td>EPA (SEPA)</td>
<td>Swedish Environmental Protection Agency <em>(Naturvårdsverket)</em></td>
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<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<tr>
<td>IPBES</td>
<td>Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services</td>
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<tr>
<td>SFA</td>
<td>Swedish Forest Agency <em>(Skogsstyrelsen)</em></td>
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<tr>
<td>SSNC</td>
<td>Swedish Society for Nature Conservation <em>(Naturskyddsföreningen)</em></td>
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<tr>
<td>WBW</td>
<td>White-backed woodpecker <em>(dendrocopos leucotos, Vitryggig hackspett)</em></td>
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1. Introduction

To do or not to do — that is the question in focus of this thesis: whether to undertake active efforts to maintain, restore or create different aspects of nature in order to make it more natural, healthy, whole, or biodiverse — or whether to leave it be. More precisely, the focus is how this question of intervention in nature is dealt with within the nature conservation field. This is explored through a study of debates within the Swedish ‘conservation community’ from 2007 onwards around the designation and management of protected forest areas and around efforts to save a nationally threatened bird species, the white-backed woodpecker. In doing so, the thesis engages conceptual and normative scholarly debates with relevance for the political-theoretical foundation of nature conservation and asks how they play out at the level where conservation policy is implemented — and, to an important degree, formulated. Thereby, the thesis also sheds light on the ‘implementation level’ as a locus of policy-making, and the discursive work that goes into articulating policy problems and solutions and institutionalizing these in various ways.

In both public and scholarly debates, nature conservation is mainly seen as an issue of how we weigh the use of nature and natural resources against the preservation, management and care of nature ‘for its own sake’ (i.e. for non-instrumental values such as biodiversity, wildness etc.). Typical policy conflicts studied are ones between conservation and non-conservation interests. So for instance when a Swedish Action Plan for the white-backed woodpecker was launched in 2005, some questioned the amount of funds devoted to a single species or saw it as a threat to forest owners (Skogseko 2006). However, the conservation field is also an arena for internal struggle over the ends and means of conservation: what constitutes ‘valuable nature,’ and how should we deal with it? Although rarely in the public eye, this conflict dimension is every bit as political, with important consequences for which (and whose) natural values that are protected, preserved or restored; as will be seen, the white-backed woodpecker Action Plan is also an example where such internal debates have been intense.

If conflicts between conservation and use/exploitation of nature are about removing or minimizing harmful human intervention in nature, conflicts within conservation often concern the need and appropriateness of active intervention in nature to maintain or improve its values. This is an issue that has come increasingly to the fore over the last decades. One impetus for this is the rise of ecological restoration, ‘the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed’ (SER 2004). As an active approach inevitably involving choices on what to strive for, it has spurred debate on whether, when, why and how such active intervention in nature is appropriate (e.g. Baldwin et al. 1993, Heyd 2005). Another contributing development is the paradigm shift in ecological theory in which ecosystems are no longer seen as having single equilibrium states (Botkin 1990, Pickett and Ostfeld 1995), which challenges both the traditional use of non-intervention as central guiding concepts for protected area management (Aplet and Cole 2010) and the quest for a historical reference point to which ecological restoration tries to return an ecosystem (Clewell and Aronson 2007: 27 ff, Hilderbrand et al. 2005).

Both protected area management and ecological restoration are also challenged by the increasing recognition that human activities have shaped even supposedly ‘pristine’ areas in important ways, historically (e.g. Denevan 1992) as well as by the modern, global impacts of human activities. These impacts — ranging from the spread of toxic waste to climate change — are now so pervasive as to have warranted the declaration of the End of Nature (McKibben 1990) and the advent of the ‘Anthropocene’ (Crutzen 2002) — a new geological era defined by human impacts, in which, according to some, nature is completely in our hands. Rather than Mother Nature caring for us, we must now care for her (Ellis 2011 in Baskin 2015) — we are ‘the God Species’ (Lynas 2011). For others, the notion that we should control, sustain or improve nature is the very cause of our problems, and to the extent that we do restore habitats or re-engineer the climate, the result is no longer nature (Hettinger 2012, Maier 2012, Heyd 2005). The issue of intervention, then, touches on basic views of nature and the human-nature relationship; indeed, on what has been proposed to be the indispensable ‘green theory of value’ that lies at the core of a green political program (Goodin
1992: 15): that things have value by virtue of ‘having been created by natural processes rather than by artificial human ones’ (Goodin 1992: 27).

The present time thus provides much fodder for discussion both for ecologists with a policy interest and for political theorists with an environmental interest. But actual policy making and implementation is not a theoretical endeavor starting from first principles. Nor is it, as rationalist policy analysts would have it, only a matter of finding optimal solutions to obvious ‘problems’, by recourse to scientific evidence or cost-benefit analyses. Both scientific paradigms (e.g. certain understandings of ecological processes) and moral value premises (e.g. more or less articulated views on the proper human relationship to nature) matter, but they do so in an interpretive, discursive process that takes place within a certain context. Policy is made, implemented and debated within a specific institutional context (of laws, regulations and policy goals at both international, national and sub-national levels, agency structures etc.), as well as within a certain structure of dominant notions, ideas, concepts and categories, i.e. discourse (Hajer 2009). At the same time, policy struggles shape these structures, as actors connect issues, ideas and concepts into a particular kind of policy discourse or paradigm in which certain ways of thinking and acting makes sense, and also attempt to institutionalize elements of this into rules, categorizations, official guiding documents etc. It is with such processes of discursive-institutional struggle that this thesis is concerned.

Lars J Lundgren (2009a) talks about the Swedish nature conservation ‘field’ (in the Bourdieusian sense) or ‘policy segment’ (Olsen 1978) as one where various actors struggle around what nature should be deemed valuable and worthy of protection and care, and who should be allowed to determine this. This field has long featured a ‘green triangle’ consisting of the conservation bureaucracy at central and regional levels, university researchers and environmental NGOs, with close connections and a high degree of movement of people between the corners of the triangle. This creates conditions for a shared worldview, and a tendency to try to keep the heated debates and conflicts that occasionally do arise within the group (Lundgren 2009a). This thesis provides a window into such a heated debate, which flared up during the latter part of the 2000’s.

In stylized versions of the policy process, the conservation bureaucracy would be seen as the ‘implementation level’, and the role of researchers and NGOs would solely be providing input in the form of scientific knowledge and a certain interest group perspective, respectively. However, this view is dated (see e.g. Baker and Eckerberg 2013, Burton 2006, Howlett et al. 2015, Barrett 2004), and it is recognized that a lot of policy making also goes on at this level. In the Swedish system of government, for instance, agencies — while the executive, implementing arm of the government — enjoy a great deal of autonomy, departments or Ministers being constitutionally forbidden to give instructions on how to deal with specific cases. In theory, this means an institutional separation of policy and administration; but since the agencies often significantly outnumber departments in terms of staff and hold a lot more policy expertise, agencies are in practice often important sources of policy, de facto designing the objectives that the government then tells them to pursue — the Swedish Environmental Protection Agency (Naturvårdsverket) being a clear example of this (Pierre 2004). Furthermore, issues such as how a certain type of nature should or should not be managed is likely to be seen as a question of scientific or administrative expertise with which the political level should not meddle. But as hinted at above, such issues are still profoundly political.

In spite of the central importance of the conservation bureaucracy, it has been called one of the least studied group of stakeholders in environmental issues (Head and Regnell 2012, but see Emmelin and Kleven 1999, Aasetre 2000), and this thesis aims to contribute in this regard. Earlier studies have shown how the ideal of original, ‘untouched’ nature and a preference for hands-off management has had strong currency among Nordic conservation professionals at least until recently (Emmelin and Kleven 1999, Aasetre 2000, Mels 2002, Skjeggedal 2005). However, some of these studies have also hinted at a possible shift in later years toward more management (Aasetre 2000, Head and Regnell 2012). As will be seen, this has indeed been the case in Sweden, but it has also spurred efforts to check or revert this development. These struggles have been taking place within the conservation bureaucracy, but also the wider ‘green triangle’ of environmental
NGOs (ENGOs) and the research sphere (including ‘bridging’ organizations such as the Scientific Council for Biodiversity or the Swedish Species Information Center).

This can be conceived as a struggle over the ‘policy paradigm’ (Hall 1993), between competing policy discourses (Hajer 1995) with different representations of what the problem is, what the solutions are and how responsibility is allocated (Winkel and Leipold 2016). That struggles over meaning are an essential feature of politics is a key point for discourse analysis and other forms of interpretive analysis of policy and politics (e.g. Yanow 2000, Wagenaar 2011); at one level, it can be seen as an extension of Schattschneider’s (1965) ‘mobilization of bias’ with a focus on how some definitions of issues are organized into politics and other definitions organized out (Hajer 1995: 42). Politics is then conceived of as ‘a struggle for discursive hegemony in which actors try to secure support for their definition of reality’ (Hajer 1995: 59), and an environmental conflict not only ‘a conflict over which course of action should be taken . . . [but also] a conflict over the meaning of physical and social phenomena’ (1995: 72).

Aim of the thesis
The overall aim of this thesis is to explore how issues regarding active intervention in nature are represented, debated and institutionalized within Swedish nature conservation, and to what effect. More specifically, the empirical focus is on policy struggles around guidelines for the designation and management of protected forests and the action plan for the white-backed woodpecker — struggles where different views on the need and appropriateness of intervention have played an important part. These will be analyzed through a discursive framework, and in light of scholarly debates regarding ecological restoration and interventionist conservation management.

The contributions of this thesis are both theoretical and empirical. Empirically, the thesis adds insights into how some of the dilemmas raised by intervention in nature – which are well rehearsed at a theoretical level in environmental philosophy, protected area management and ecological restoration literatures – play out in actual policy debates within the conservation bureaucracy. Theoretically, the thesis contributes both to the discussion around intervention in nature and, more significantly, to the study of policy struggles generally by highlighting and clarifying the importance of discourse institutionalization.

The research is guided by the following questions:

1. How are the ends and means of conservation represented in the debates studied, and how are these representations defended, contested, modified or taken up by different actors?

This question is addressed in both articles, but more in detail in article I, and in the concluding discussion. The question involves identifying the main policy discourses (representations of problems, solutions, responsibilities etc.), but also looking more closely at the discursive articulation of certain elements. What is taken for granted, what is openly questioned, what is left out? Focusing on the argumentative interplay allows identification of points of contention and attempts to impose a certain definition of reality, but also common points of reference, revealing the discursive structure that sets the terms of the debate.

2. How do the dilemmas and points of contention found in the debates under scrutiny relate to scholarly debates around the question of intervention in nature?

This question, which is partly addressed in article I but more fully in the concluding discussion, seeks to draw connections between the conceptual/philosophical/normative discussions in the literature and the policy struggles under study. This question serves a dual purpose: the concepts, principles etc. in the literature point to issues to explore in the analysis of the policy debates under study, which in turn can shed light on how these issues are discussed in conservation practice.
3. What role does the embedding of certain representations in institutional arrangements (discourse institutionalization) play?

This question, which is primarily addressed in article II (and in the concluding discussion), draws attention to how discourses may become ‘institutionalized’ in the form of official rules, classifications, policy documents etc. Pursuing this question also involves a theoretical contribution through elaborating the notion of discourse institutionalization. It involves looking both at the effects of such institutionalization in terms of enabling or constraining action and debate, and at the processes of (re-)interpretation, modification or formation of institutions.

4. What are the implications of the outcome of the debates?

This question is partly touched upon in the articles, but addressed more in the concluding discussion. It consists of assessing and trying to understand the outcome so far of the policy struggle, in the sense of what elements of policy discourses seem to have ‘prevailed’ in various ways, why that might be, and what it might imply for the future.

Outline of the thesis

This thesis consists of six chapters and two appended papers, this first chapter having presented the focus and aim of the thesis. The second chapter elaborates on the debates and dilemmas around intervention in nature with which the thesis is concerned, describing and discussing how these have been addressed in various literatures, and making the case for studying these issues in discursive terms and in actual policy debates. The third chapter lays out the discourse-theoretical concepts and tools used, which together with the different approaches to intervention identified in chapter two provide the analytical framework of the thesis. Chapter four gives more detail in how this was applied, addressing case selection, material and methods. The fifth chapter presents a background to the empirical setting, an overview of the events studied in the appended papers and a summary of these papers. The thesis concludes with a discussion of the main findings and their implications in chapter six. Of the two appended papers, paper I is published and reprinted with permission from the White Horse Press.
2. Intervention in nature: debates and dilemmas

What is nature conservation? What is it that is valuable with nature, what threatens these values, and what can be done to protect nature against these threats? One answer is that nature is that which is not human; human intervention hurts or diminishes nature; the solution is to remove harmful human intervention. At least from the establishment of the first national parks in the US, an important policy has thus been to find areas we have not yet destroyed and then set them aside to preserve them in their pristine, original state, uncorrupted by human activities. In the US, this preservationist approach, advocated by John Muir, famously came into conflict with the conservationist approach advocated by Gifford Pinchot, founder of the US Forest Service (Meyer 1997). However, since nature conservation is useful as a term for many forms of concern for natural values, including preservation (this wider use of the term is the one used in this thesis), let us try to restate Pinchot’s position. One way of doing that is calling it utilitarian, more concerned with the wise, sustainable use of natural resources for human benefit (Callicott 1994). Or, to use a dichotomy that would later dominate environmental ethics, we could contrast Pinchot’s anthropocentrism to Muir’s ecocentrism (Norton 1986, Passmore 1974). But instead of looking at motives, one might look at methods. From this perspective, Pinchot could be called a restorationist (Hall 2005: 5), or more generally, interventionist (Hull et al. 2002).

It is with this latter divide that this thesis is concerned, leaving arguments about managing nature for maximum human benefit (e.g. through agriculture or production forestry) by the wayside. Starting from the point of wanting what is ‘best for nature’, what are we to do? Can we somehow actively help nature ‘on its own terms’, rather than either destroying it or removing ourselves from it completely? As this chapter will reveal, this is a difficult and much debated question, and one that goes to the heart of the specific policy debates studied in this thesis. It also goes to the heart of much green political theory, where the dictum ‘leave nature alone’ has long held a central place. As the human impact on the planet has expanded and become better understood, the questions of our capacity, right or obligation to actively help or improve nature have become ever more poignant.

In the following, I discuss the sometimes fierce debates between a preservationist stance and ecological restoration, but also how new understandings of ecological functioning and past and present human impacts on ecosystems have challenged the assumptions underlying both of these approaches, leading to a lack of firm ground for choices. The seeming impossibility to find solid answers in nature does not remove the conflicts, but rather, I argue, reveals their political nature. This not only concerns the processes whereby we make politically legitimated decisions about collective courses of action, but also the discursive struggles through which we construct our collective understanding of what various aspects of the natural world means to us and what that implies for our actions.

To protect and preserve

Our views of nature and ourselves have differed in time and space. Environmental historian Marcus Hall (2005) shows how, up until the 18th century, nature was generally seen as degenerating when not improved by people, returning to the inhospitable and unproductive state in which the first settlers may have found it. Even when environmental damage was clearly caused by humans, most notably pollution in cities, it was seen only as inevitable if lamentable by-products of people living there in large numbers – in other words, people were not to blame for this. From the mid-19th century onwards, however, people began to be seen as the main cause of degradation of nature, and increasingly also morally responsible for it (Hall 2005: 32-37). One early and

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I make no effort here to review the rich scholarship in this field, e.g. Worster’s (1977) history of ecological ideas, Schama’s (1995) history of Western civilization’s ambivalent relationship to nature as both terrifying wilderness and pastoral idyll, or attempts to explain views of nature as friend or enemy in terms of levels of urban development and land use (De Groot 2006). It should also be noted that the focus here is limited to the Western world.
Influential proponent of this view was George Perkins Marsh, who stated that ‘man is everywhere a disturbing agent. Wherever he plants his foot, the harmonies of nature are turned to discords’ (Marsh 1864). Hall also describes how views have differed on different sides of the Atlantic: in many European countries, with a long history of dense human populations, the gardened landscape has been the ideal, while in the US, where European settlers arrived in seemingly untouched nature and then could see much of that nature changing relatively quickly under population pressure, a reverence for wilderness developed (Hall 2005).

In the US, then, the ‘Yellowstone model’ (which also applies to Sweden; Adams 2005) came to mean closing off areas to ‘preserve natural conditions.’ There are two important presuppositions behind this. One is human beings as ‘everywhere a disturbing agent’ to borrow the quote from Marsh above; the implication is that any people present should be removed, as was the case with the Native Americans in Yellowstone and as has been repeated the world over, but also that human influence on ecosystems tended to be ignored or presumed to be detrimental. The other presupposition, to borrow from Marsh again, concerns the ‘harmonies of nature’. From Clements’ (1916) theories of natural succession to Odum’s (1953) Fundamentals of Ecology, the classical ecological paradigm could largely be summed up in the metaphor ‘balance of nature’ (in itself a much older metaphor, of course). In the classical ecological paradigm, ecosystems were seen as closed, self-regulating and dominated by single equilibrium points or climax states to which they would develop along predictable series of succession. This paralleled classical protected area management: closed systems could be cordoned off, self-regulating systems could be left alone, and the expected end-points of succession were assumed to be desirable (Pickett and Ostfeld 1995).

However, preservationist assumptions have been challenged by a paradigm shift in the late 20th century, with a new flux-centered paradigm dominating ecological theory in which ecosystems are seen as open, regulated by outside events or disturbances and lacking any single equilibrium (Botkin 1990, Pickett and Ostfeld 1995). This presents a problem: ‘How do you manage something that is always changing?’ (Botkin 1990: 10) Especially if species and their interactions ‘are all part of the flux of nature, none more intrinsically desirable than another’ (Pickett and Ostfeld 1995)? This also affects the view of humans as the ‘disturbing agent’: if many kinds of ecosystems that we wish to preserve are dependent on ‘disturbances’, and if natural disturbances such as fire and flooding no longer occur, perhaps we can compensate by mimicking their effects? Moreover, it has turned out that much of what was previously viewed as ‘pristine’ examples of pre-human nature had in fact been shaped by human activities in important ways, so taking humans out of the picture they had been in for centuries meant taking with them the ecosystems they had co-created with nature. The Native Americans are a case in point (see e.g. Denevan 1992); likewise in Sweden, the supposed ‘wilderness’ of the mountain range has been shaped by centuries of reindeer herding by the indigenous Sami (Moen and Danell 2003).

And of course, human impacts have done nothing but increase. Protected areas are generally small in the sense that they are affected greatly by human activities in the surrounding landscape—and globally, since toxins spread in the atmosphere or in waterways do not stop at protected area borders. Climate change is a real game changer in this respect, implying that there is literally no unaffected place left (McKibben 1990).²

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² As already hinted at, in European countries such as Britain or the Netherlands, early conservation efforts aimed to preserve more ‘semi-natural’ landscapes representing a pastoral idyll rather than wilderness, acknowledging past human influence. However, the balance-of-nature paradigm, assuming a predictable and controllable nature, still governed their management (Adams 1997, van der Windt et al. 2006).

³ This ‘End of Nature’ (McKibben 1990) and advent of the Anthropocene (Crutzen 2002) form the basis for a lively debate around the implications for environmental policy and green political theory, with reactions ranging from grief (McKibben 1990) to exuberance (Ellis 2011) or efforts to find a new way forward for environmentalism in a post-nature age (Arias-Maldonado 2012, Wapner 2010, Symons and Karlsson 2015). The focus in this thesis is on rather more limited interventions than the planetary management that pervades the Anthropocene discourse (Baskin 2015), but there are of course clear parallels.
These developments amplify an inherent ambivalence in the goal to ‘preserve natural conditions.’ Naturalness has been a central guiding concept for nature conservation and protected area policy (Aplet and Cole 2010). But the trouble with naturalness, according to Aplet and Cole (2010), is that it is used in several, not necessarily compatible meanings. They identify three such meanings that have guided protected area management – lack of human effect, freedom from human control, and connection to the past (historical fidelity). In the US, the Leopold Report’s goal to preserve ‘vignettes of primitive America’ (Leopold et al. 1963) signaled historical fidelity and lack of (at least visible) human effect, while the Wilderness Act’s (1964) goals of areas ‘untrammled by man’ signaled freedom from human control. If in the past managers have treated these meanings as congruent and compatible, they are now often clearly at odds with each other: ‘in altered ecosystems, neither historical fidelity nor lack of human effect can be achieved without human control’ (Aplet and Cole 2010: 21). This has led some to argue for the abandoning of ‘naturalness’ as a guide (Cole et al. 2008), while others still stress its importance (Angermeier 2000).

The promise or hubris of ecological restoration

Beginning in the 1980’s, a new challenge to preservationism emerged: ecological restoration (Baldwin et al. 1993). For William Jordan III, one of the co-founders of the Society for Ecological Restoration, restoration introduces ‘a positive factor in the conservation equation’: against the doom and gloom of much environmentalism during the 1960’s and 70’s and the passivity that goes with that, restoration offers a way to interact with nature without damaging it (Jordan 2003: 2-3). For Jordan and many other restorationists (e.g. Clewell and Aronson 2007: 105-106, Light 2000), restoration is then about both restoring a degraded ecosystem, and – through our active, humble engagement with that ecosystem — a more healthy human-nature relationship.

If the restoration movement was partly formulated as a critique against preservation, it also met vehement resistance from the preservationist camp. And the debate continues, with differing views of nature and the human-nature relationship. Concerning the views of nature, one of the most prominent critics of ecological restoration, Eric Katz (1992, 2000, 2012, 2014), claims a fundamental ontological difference between natural entities and human artifacts – and places ‘restored’ nature in the latter category. Following an earlier critique by Robert Elliot (1982), Katz likens ecological restoration to art forgery, since the origin, historical continuity and authenticity is violated by human intentionality. Relying on the same line of argument, green political theorist Robert Goodin (1992) defines the ‘green theory of value’ that he sees as indispensable to a green political program in terms of naturalness, as the value of ‘having come about through natural rather than through artificial human processes’ (Goodin 1992: 30). Concerning the human-nature relationship, assuming a capacity to restore nature is seen by some a dangerous hubris, viewing humans as the ‘Lords of Creation,’ tolerating no enclaves free of human domination and control (Kane 1993); far from promising a healthier human-nature relationship, restoration is a ‘manifestation of the insidious dream of the human domination of nature’ (Katz 1992: 232). This is also framed as a strategic issue – that an embrace of restoration will inevitably be abused as a justification of continuing destruction of nature in the assumption that we then can put it back as good as new (Katz 2000).

Restoration – to what?

Apart from the preservation-restoration debates, restoration is also challenged from within, as it were, on the same grounds as the challenges against preservation. The ‘re’ in ‘restore’ suggests a going back to a previous state, or at least bringing back some aspect to a ‘proper’ condition. But what previous state, or what proper condition? In the US, restoration has often aimed for a supposed pre-human state, setting the restoration benchmark to when white settlers arrived in large numbers to the specific area, or the arrival of Columbus in 1492 – while some have even suggested that the arrival of the first Americans from Eurasia 13 000 years ago would be ‘a less arbitrary baseline’ (Donlan et al. 2005). Just like with preservation, past human presence has sometimes been mistaken for ‘wilderness’, including Aldo Leopold’s restoration of the Curtis Prairie in the 1930’s – called the ‘Kitty Hawk’ of ecological restoration (Jordan 2010) – prairies now being
widely recognized as one example of the many profound effects that Native American practices such as burning had on the landscape (Denevan 1992).

Apart from the difficulty of ascertaining historical conditions (which of course increases the further back in history one wants to get), the new flux-centered ecological paradigm mentioned above frustrates the identification of a single end point for an ecosystem (Clewell and Aronson 2007: 27 ff, Hilderbrand et al. 2005). And now that we cannot assume climatic conditions to be the same in the future as they are today, how relevant are any historical reference states (Harris et al. 2006, Hobbs et al. 2009, Peters 1985)?

One response has been to instead envision returning the ecosystem to its 'historical trajectory,' in other words, not to the pre-disturbance state, but to the state the ecosystem might have been in now had the disturbance not occurred (Clewell and Aronson 2007). But even with this more nuanced concept, one is still faced with both with serious issues of defining and ascertaining that trajectory as well as – more fundamentally – the question why, if a historical reference or trajectory is knowable and achievable, is it thereby the most desirable? If 'many possible, equally likely, equally valid natures could have existed at a given place and point in time' (Hull and Robertson 2000: 101), then how does one choose between them?

Other candidates for restoration goals have been ecosystem 'health' — defined as a state in which the dynamic attributes of an ecosystem are 'expressed within “normal” ranges of activity relative to its ecological stage of development' (SER 2004) — or 'integrity' — defined as a state that displays characteristic biodiversity and is capable of sustaining 'normal ecosystem functioning.' But again, the present understanding of ecosystems as (unlike organisms) lacking coherence, clear boundaries or any particular evolutionary imperative such as reproduction makes talking about ecosystem health or integrity as ecological imperatives that justify particular restoration goals spurious (Davis and Slobodkin 2004). Talking about health also hides the process of defining the patient: '[s]hould we burn a forest to save a prairie, or do we suppress the fire to save the forest?' (Hull and Robertson 2000: 106).

The difficulty of defining the patient also goes to the notion of degradation which is still key in the official definition of the Society for Ecological restoration (after several permutations wherein the notions of ‘indigenous, historic ecosystem’, ‘ecosystem health’ and ‘ecological integrity’ have been used and discarded): ‘the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed’ (SER 2004). As recently pointed out by e.g. Hobbs, there is no easy answer to whether a changed ecosystem is ‘degraded or just different’; ‘degradation is in the eye of the beholder’ (Hobbs 2016: 4).

We see, then, that the foundations of restoration are at least as shaken as those of preservation. Two different approaches in response to this can be discerned within the ecological restoration community. One is to stay as true to the original tenets as possible, still upholding the virtue of a reference ecosystem to which one should aim to restore the target ecosystem in its entirety: even though the vision is ultimately unattainable, it is essential as it serves to foster ‘a mindset of environmental sanctity’ (Clewell and Aronson 2007: 87). In such ‘holistic’ (Clewell and Aronson 2007) or ‘ecocentric’ (Jordan and Lubick 2011) restoration, the flux-of-nature paradigm is taken as all the more reason to focus on a ‘self-sustaining system’ and not insist on a certain outcome: continually manipulating species populations is not restoration, but imposing an intentional design resulting in ‘human artifice rather than a recovery of nature’ (Clewell and Aronson 2007: 86). Or as William Jordan put it:

restoration that is faithful to the ecology of a place generates values for the practitioner that no other protocol generates. It is an act of selfabnegation, of deference to nature as given. ... That doesn’t happen if you say, “we’re going to make this beautiful,” or “we’re going to make this more productive,” or “we’re going to increase biodiversity.” That’s not deference — you’ve got an agenda. (William Jordan III, interviewed in Friedericici 2004)

A similar approach in its focus on natural, unmanaged processes, but different in terms of reference point and intensity of intervention, is the recent movement of ‘rewilding’ (Soule and Noss
1998, Vera 2000). If holistic/ecocentric restoration has taken the flux-centered and disturbance-oriented ecological paradigm to mean that ‘determining the original “wild” state is irrelevant’ (Clewell and Aronson 2007: 45), rewilding is about going to the deep past, to pre-human (‘Pleistocene rewilding’, Donlan et al. 2006) or at least pre-agricultural times (Keulartz 2016). This involves much grander interventions to start with, including introducing ‘proxy’ species to stand in for extinct ones, e.g. lions and elephants in the US (Donlan et al. 2005) or Heck cattle in Europe (Lorimer and Driessen 2014) — in other words, a very clear ‘agenda’ about what to achieve, but then also stepping back to let natural processes turn it into whatever it becomes.

Another, more future-oriented (Choi 2004, 2007, Keulartz 2016) conclusion from the impossibility to restore to a previous static state has been to at least partly let go of restoration and rather talk about ‘intervention ecology’ (Hobbs et al. 2011). This blurs the line between conservation management and restoration, including actions to maintain a current state or to move it towards a more desirable state, with an eye both to the past and to the future — which, due to the flux of nature and our pervasive human impacts in the anthropocene, means we must accept and even help bring about ‘novel ecosystems’ (Hobbs et al. 2009). Still, even many proponents of intervention ecology caution against becoming too comfortable as ‘active agents’ (Harris et al. 2006), letting restoration become ‘just another managerial interference with nature’ (Allison 2007).

**Biodiversity**

If ‘naturalness’, ‘health’ or ‘integrity’ cannot determine action, what about *biodiversity*? After all, it is arguably the leading paradigm for nature conservation (Farnham 2007), and has been for some time — although not so long a time as its present ubiquitousness might suggest. It was only in the 1980’s that nature started to be framed in terms of ‘biological diversity’, and — after the 1986 US National Forum on BioDiversity (Wilson and Peter 1988) — in the compound *biodiversity*. Championed primarily by the newly emerging discipline of conservation biology, ‘biodiversity’ became a tool in their openly mission-oriented program to halt the loss of species, habitats, genetic diversity, ecological and evolutionary processes — basically, any aspect of nature that one may think of (Takacs 1996). And this new term took on quickly: enshrined in the Convention on Biological Diversity (United Nations 1992; henceforth CBD), by the mid-90’s readers had to be reminded that this ‘buzzword’ and ‘rallying cry’ for the environmental movement had not always been around (Grumbine 1996).

In its established three-part, Russian nesting-doll-like definition (Youatt 2015: 27), biodiversity encompasses diversity at ecosystem, species and genetic level, thus becoming in effect ‘a scientized synonym for nature’ (Takacs 1996: 106). According to Takacs, its broad appeal is based both in this ‘scientization’ (lending a scientific ring to ethical arguments for conservation) and in the very difficulty to define it precisely, in spite of calls for conceptual clarification (Swingland 2001). Indeed, it is not just a ‘concept’, nor only a ‘measurable entity’ but also a ‘social and political construct’ (Gaston 1996). Or, as Rafi Youatt (2015: 1) puts it, ‘as it circulates in the world, biodiversity is at once a natural fact, a species-extinction event, a scientific field of inquiry, a political referent, a moral discourse, an abstract pattern, and a tool of governance.’

Biodiversity does seem to provide a goal for management and restoration, as indicated by the wide usage of terms like ‘biodiversity management’ or ‘restoration of biodiversity’. But this easy association with active intervention has also been a cause for concern for some. Even early on in the term’s history, there was uneasiness with the abstraction of biodiversity from actual places with its history and the implications it would seem to have for action (Angermeier 1994, Angermeier and Karr 1994). For instance, might we even have a moral obligation to synthesize new species (Boldt 2013)? Commenting Callicott’s (1996) suggestion that the troubled ‘wilderness’ term should be dealt with by making wilderness areas ‘biodiversity reserves,’ Keeling (2008: 402) notes that this would imply ‘a much greater willingness to take interventional action if that biodiversity is threatened ... The artificiality of the system—the extent to which it is actively controlled and manipulated by humans—is not in itself a moral issue, on this view.’
And of late, it has even been suggested that the term ‘undermines genuine conservation efforts’ and should be removed from its privileged position (Morar et al. 2015: 24). One highly outspoken critic is Donald Maier (2012), who considers and dismisses any number of possible definitions and values of biodiversity, to conclude the ‘biodiversity project’ or ‘neo-conservation’ is ‘nature’s undoing’ (Maier 2012: 406). This ‘disvalue’ in Maier’s view lies precisely in active intervention through restoration and management – restoration derogatorily renamed ‘fragmentary historical re-enactments’ (ibid.: 405) and management ‘biogeoengineering’ (with reference to geoengineering of the climate; ibid.: 387). Especially adaptive management is derided as ‘a kind of restless, aimless, undirected meddling’ to create ‘bio-warehouses stocked from bio-parts’ (ibid.: 401). Although this sounds similar to Katz’ arguments against the domination of nature, Maier dismisses not only ‘biodiversity’ but any state-based notion of nature, including ‘pristine,’ and explicitly denies that nature could have any kind of interest. Yet, the conclusion is the same: ‘let it be’ (ibid.: 428).

Nevertheless, biodiversity so far seems to remain the main name of the conservation game, though now increasingly coupled with ‘ecosystem services’, such as in The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) established in 2012. Like ‘biodiversity’, ‘ecosystem services’ emerged as a concept rooted in ecological science but directly aimed at raising public awareness and acceptance of the need to address the loss of species and ecological functions (Danley and Widmark 2016), from the Erlich’s classic on extinction (Ehrlich and Ehrlich 1981) to the Millenium Ecosystem Assessment exercise (MESAB 2005). Ecosystem services has been criticized as too limiting for ecological science (Norgaard 2010), and the link between biodiversity and ecosystem services unclear (Lele et al. 2013). At any rate, this link – forwarded also in the intervention ecology literature (Hobbs et al. 2011) – is one of Maier’s main concerns: that we care only for what we get out of nature.

**Summing up so far**

Table 1 sums up some of the above; it is of course a simplified overview, by no means exhaustive and not discussing all nuances. Commenting in order of appearance in the table, and using the letter numbering within brackets to point to the relevant row in the table, we start with the question of what causes degradation of nature (a)? Everyone can agree on exploitative activities such as mining or intensive, mono-culture based agriculture or forestry, but the recognition of valued ecosystems of cultural origin and the role of disturbances complicates the picture. Rewilders does not care for cultural ecosystems, intervention ecologists may consider also natural processes (when bereft of natural disturbances that we have prevented) as causes of degradation, while wilderness preservationists see even restoration and conservation management as degrading.

This is related to the question of whether nature can take care of itself (b), or whether we can somehow help and improve it (c). This is partly a question of ecological theories, but also involves moral judgements (d) concerning (from a preservationist or holistic restorationist point of view) nature’s right to ‘follow its own course’ and our corresponding lack of entitlement to ‘fix’ nature, or (from an interventionist or restorationist point of view) rather our obligation to redress the damage done and nature’s corresponding right to reparation. Wilderness preservationists and holistic restorationists then agree (in spite of the harsh tones of the preservation/restoration debates) on a value of ‘deferring to nature’, and also that this is important both for nature and for the values it instils in ourselves, but disagree on whether some kind of intervention can be positive in this respect (e, f).

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4 I specifically wish to mention one strand of research which has identified different visions or representations of nature (van der Born et al. 2006, Swart et al. 2001, Keurlartz et al. 2004, Buijs 2009, Buijs et al. 2011): ‘wilderness’ focused on self-regulating nature with minimal human influence, ‘inclusive’ focused on individual plants and animals, ‘arcadian/aesthetic’ focused on cultural landscapes, and ‘functional’ focused on nature-as-resource. Since the debates studied here can largely be situated within the ‘wilderness’ representation as elaborated in those frameworks, I have not used the frameworks as such, but they have been an important source of inspiration in the classification.
<table>
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<th>Table 1. Overview of some principal approaches to intervention in nature.</th>
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<tr>
<td><strong>Wilderness, preservation</strong></td>
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<tr>
<td>a) Causes of degradation</td>
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<td>b) Nature’s ability to take care of itself</td>
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<td>c) Our ability to help nature</td>
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<td>d) Moral obligations</td>
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<td>e) Value of intervention</td>
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<td>f) Intensity and type of intervention</td>
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<td>g) Naturalness (Aplet &amp; Cole)</td>
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<td>h) Biodiversity</td>
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<td>i) Response to flux-centered paradigm</td>
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<td>j) Basis for action</td>
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<td>k) Time perspective</td>
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In terms of the different meanings of naturalness (g), wilderness preservationists and rewilders emphasize freedom from human control, intervention ecology lack of negative human impact, while holistic restoration could be seen to design restoration informed by both historical fidelity and lack of human impact, but eventually aiming for freedom from human control. Biodiversity (h) can be a goal for intervention ecologists, but not for holistic restorationists except in terms of ‘original’ biodiversity (having ‘all the cogs and wheels’); rewilders emphasize ‘trophic diversity’ (having all levels in food chains) rather than the standard components of biodiversity, while wilderness preservationists are skeptical to biodiversity due to its association with management.
Concerning the response to the paradigm shift in ecology (i), wilderness preservationists deny that it implies we should control nature, while holistic restorationists have abandoned the idea of historical reference in favor of the more open 'trajectory' and intervention ecologists let go of the notion of restoration altogether. All shades of restorationists see ecological knowledge as an important basis for action (j), but holistic restorationists and (even more so) intervention ecologists also stress that this cannot in itself determine action but must be combined with other values such as social needs. Finally, there are differences in time perspective (k), with rewilders looking to the deep past and intervention ecologists primarily looking to the future (Keulaart 2016).

We will revisit these aspects in chapter 6, in the context of the second research question regarding connections between the scholarly debates reviewed here and the policy debates that constitute the empirical material of the thesis.

A search for firm ground

If in the new ecological paradigm one is left not with clear 'original' and 'degraded' states but rather a vast array of 'differences' in everything from successional stages, stochastic changes, responses to natural or anthropogenic disturbances of various degrees, then one somehow has to choose which of these differences we see as degradations, improvements or 'just different' (Hobbs 2016) — and why. Any answer — say, 'biodiversity' — leads to new questions. In a field supposedly working 'for nature' on a scientific basis, this can cause a lot of anxiety:

Clearly, to abandon a belief in the constancy of undisturbed nature is psychologically uncomfortable. As long as we could believe that nature undisturbed was constant, we were provided with a simple standard against which to judge our actions, a reflection from a windless pond in which our place was both apparent and fixed, providing us with a sense of continuity and permanence that was comforting. Abandoning these beliefs leaves us in an extreme existential position: we are like small boats without anchors in a sea of time; how we long for safe harbor on a shore (Botkin 1990: 188-189).

Much of the literature on ecological restoration, protected area management and environmental ethics can be read as attempts to find that safe harbor on some kind of shore. Oftentimes, even those declaring the old moorings of e.g. historical fidelity to be defunct suggest we should not abandon them completely, as when proponents of intervention ecology still see them as necessary guards against hubris or surrendering to 'human needs and desires' (Allison 2007). Others urge letting go. Reflecting on the alarm and outrage raised by intervention ecology ideas about accepting 'novel ecosystems' and non-native species, Hobbs (2013) suggests that it might be best understood as phases of grief: denial, anger, bargaining, depression, and, finally, acceptance (intervention ecology representing the phase of acceptance).

Or one claims that science can still be that safe harbor, as Botkin does. Although concluding that 'nature does not provide simple answers' and that '[p]eople are forced to choose the kind of environment they want', this does not seem to necessitate either existential angst or promethean hubris; all we need to do is 'lift the veils that prevent us from accepting what we observe, and then to make use of technology to study life and life-supporting systems as they are' (Botkin 1990: 189). Armed with this knowledge, we can proceed to 'engineer nature at nature's rates and in nature's ways' (Botkin 1990: 190). Others are less sanguine about the promise of ecological knowledge, e.g. Worster (1994: 11), who stresses that the flux-centered view of nature 'gives us freedom from dogma but no guidance to belief'.

If the ecological literature increasingly invokes 'human' choices or 'social' or 'cultural' values, exactly whose values these are is less clear. From a social science perspective, insights that values and choices cannot be avoided by reference to some sort of objective ecological facts are of course not very revolutionizing, and suggestions that 'the question of desirability is reduced to one of human values' (Clewell and Aronson 2007: 46) or that we 'can’t not choose' (Allison 2007) point forward (or should) to questions such as which values are promoted by whom and how choices are made in collective processes and how that depends on power relations, resource distribution, institutional arrangements, dominant discourses etc. – in other words, political questions. As Baker, Eckerberg and Zachrisson (2013) have argued, while ecological restoration has been the
subject for scholarly debate within parts of the ecological sciences as well as the humanities, there has not been enough political science engagement focusing on ‘the politics of policy’, studying how the above ecological or philosophical dilemmas are debated and dealt with in policy work (Baker et al. 2013, Baker and Eckerberg 2013, 2016).

This study attempts such an engagement within the broader framework of interpretive policy analysis, a family of approaches to the analysis of policy and policy processes that share a focus on the meanings of policies for various interpretive communities (Yanow 2000), how these meanings are contested and articulated in response to each other, and how some of them are institutionalized in policies and practices while others are marginalized or silenced (Feindt and Netherwood 2011, Wagenaar 2007). More specifically, the approach taken here is discursive, i.e. focused on the enabling and constraining effects of the linguistic-practical frameworks that constitute the categories and objects of our world (Wagenaar 2011).

The anxiety and attempts to find ‘safe harbor on a shore’ (Botkin 1990: 188-189) depicted above is the ontological and epistemological starting point within the discourse-theoretical framework further described in the following chapter. Nature itself does not provide a ‘transcendental determining centre’ (Torfing 2005: 13) – in other words, no essence of nature determines the identities that we ascribe to it and to ourselves in relation to it. Nor does science provide an ‘extra-discursive instance’ to settle issues – while truth claims can certainly be assessed within a certain vocabulary, that vocabulary is not determined by reality but is itself constructed5 (2005: 13-14).

While this thesis thus works on the assumption that nature is socially, discursively constructed (in spite of blithely talking about ‘nature’ without any inverted commas above),6 it should be stressed that this does not imply denial either of material reality or of the ability of science to show aspects of that reality that are inaccessible by other means. It only means that the material reality which we may refer to as ‘nature’ (or as ‘biodiversity’ or as any number of other things) ‘does not carry the means of its own representation’ (Torfing 2005: 18). In other words, when nature ‘talks back’ – as it does – it can only be interpreted in and through different discourses, both scientific and otherwise. And in making these interpretations and conveying them to others, we are taking part in a discursive construction, reproducing particular understandings or perhaps challenging or modifying others. We now turn to how to analyze these discursive struggles.

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5 This is something that ecologists may also point out, e.g. Rob Lenders who, recognizing the ‘essentially subjective ecological basis’ of conservation strategies, states that ‘divergent choices made in nature conservation strategies can all be underpinned with ecological research results’ (Lenders 2006: 206). However, a hope in science is revealed in his further statement that this ‘probably will remain so for a considerable period in the future’; from a discourse perspective, if ever this were not to be the case, it would not be because the essence of ecological systems had finally been understood but because one specific scientific truth-regime or paradigm (cf. Kuhn 1962) had become hegemonic.

6 If the reader is surprised I have not until now mentioned the big debates around the social construction of nature, which have caused so much uproar among ecologists, environmental philosophers and environmentalists generally (see e.g. Demeritt 2002, Macnaghten and Urry 1998, Proctor 1998, Vogel 2002), this conspicuous absence has been deliberate, to highlight how the problematization of and agonizing over what ‘nature’ can and cannot tell us are so widespread even among ‘non-constructivists’ — the field is ripe with ‘lay deconstruction’ as it were.
3. A discourse-analytical approach

This chapter outlines the discourse-analytical tools used, combining elements from Argumentative Discourse Analysis (ADA) and Political Discourse Theory (PDT; sometimes called post-structural discourse theory). The chapter (along with paper II) also contains a theoretical contribution through elaborating the concept of ‘discourse institutionalization’, found in both ADA and PDT but in my view lacking the analytical specificity needed to fill its potential as a useful concept in the study of policy struggles.

Discourse analysis is an ensemble of approaches that are attentive to ‘how language shapes reality’ (Hajer 2003: 103), or, more broadly, that focus on the social, constructive and constitutive role of human meaning-making activities (Wetherell et al. 2001). It is neither a unified theory nor merely a methodological approach; rather, different discourse approaches constitute theoretical-methodological packages (Jørgensen and Phillips 2002). Though approaches differ with regards to ontological orientation, analytical focus and purpose, they can in many respects be regarded as ‘different yet compatible’ (Glynos et al. 2009: 36), and combining elements from different approaches to create one’s own package ‘is not only permissible but positively valued in most forms of discourse analysis’ (Jørgensen and Phillips 2002: 4). One reason forwarded for this is taking a problem-driven approach, recognizing the need to articulate the analytical framework in relation to construction of the research problem (Glynos et al. 2009).

ADA and PDT both build on Foucault (1989, 1990, 1995), but have emerged differently in response to their respective fields of research. ADA originates from the policy sciences, and was elaborated by coupling aspects of Foucauldian discourse analysis to work by social psychological discourse analysts on positioning and rhetorical analysis of argumentation, with a view to find more space for agency, change and the study of concrete political events. PDT instead departs from and criticizes the structural determinism of Marxism, and removes what they see as an untenable distinction in Foucault between discursive and non-discursive aspects of social life (Howarth 2000, Torfing 2005). But in spite of this difference in starting point and outlook, there are also similarities. Both emphasize contingency and change and give much attention to discursive struggle over and through floating, ambiguous signifiers or storylines in order to temporarily fix meaning, within certain sets of practices, that are themselves constituted through this discursive struggle.

What is a discourse and how is it delimited?

A discourse could be broadly conceived as ‘a particular way of talking about and understanding the world (or an aspect of the world)’ (Jørgensen and Phillips 2002: 1), or similarly but with an important addition to clarify that it is not individual cognitions or idiosyncrasies that are in focus, ‘a shared way of apprehending the world’ (Dryzek 2013: 9, emphasis added). Yet another addition is the emphasis in PDT on discourses as ‘historically specific … relational systems of signification’ (Torfing 2005: 14, emphasis added); that is, meaning is not ‘found’ in the world but contingent upon the relations that are forged, at particular times and places, between words, agents, objects and actions. To add a certain level of concretion to this, Hajer’s definition — which is widely used especially in the environmental field — can serve as a working definition in this thesis: ‘an ensemble of notions, ideas, concepts, and categorizations through which meaning is ascribed to social and physical phenomena, and that is produced in and reproduces in turn an identifiable set of practices’ (Hajer 2009: 60).

When it comes to defining particular discourses in the analysis, I will follow Jørgensen and Phillips in treating discourses as analytical constructs delimited by the specific research question rather than ‘entities that can actually be found reality’ in a delimited form (Jørgensen and Phillips 2002: 1). It should be noted that other researchers often cite Hajer’s 1995 version of this definition, which he later revised in two ways. One was the inclusion of the term ‘notions’, intended to convey less cognitive associations than the terms ‘ideas, concepts and categories’ (2009:59-60); the other was a change from defining discourse as something that is ‘produced and reproduced’ in particular practices to something that ‘is produced and reproduces in turn’ these practices.
2002: 143). I will also follow their suggestion to take as starting point an ‘order of discourse’ which different discourses compete to fill with meaning in their own way (Jørgensen and Phillips 2002: 143ff).8 In this thesis, I am focusing on the Swedish nature conservation field, with a particular focus on the conservation management of protected forest areas (see chapter 5), within which I identify competing discourses. One important point brought out by thinking in terms of competing discourses within a common order of discourse is how opposing constructions are consistent with, or even presuppose, many shared elements. Evoking the image of Chinese boxes stacked within each other, Ole Waever (2005) has talked about a layered structure of ‘Foucauldian boxes’. This relativizes the concept of a ‘dominant’ discourse, in that what is ‘marginalized’ at the level of manifest politics most likely shares codes at a deeper level, and these deeper levels are more difficult to change (Waever 2005).

To characterize a policy discourse, one starting point is to look for representations of problems, solutions and responsibilities (Winkel and Leipold 2016). Certain concepts, notions, etc. — ‘signifiers’ — may play a particular central role (see below). To supplement ‘signifiers’, I use the term logic to denote certain rationales or justifications for a particular policy direction, borrowing from Glynos and Howarth’s (2007: 15) use of the concept as the ‘purposes, rules and ontological presuppositions that render a practice or regime possible and intelligible’.

Tools for analyzing discursive struggle

Discourses are here seen as constructed, maintained, modified and contested through a process which PDT labels articulation. Articulation is defined as establishing a certain relationship between discursive elements (signifiers) which mutually modifies their meaning (Laclau and Mouffe 1985, Torfing 2005). The attempt is generally to make articulations seem ‘fixed’ and credible to achieve discursive closure or hegemony (Torfing 2005, Hajer 1995). Since these articulations are not determined by natural or transcendental foundations, a key factor to stabilize a discourse is the construction of a ‘constitutive outside’ (Torfing 2005: 15), a policy discourse thus often being held together ‘by the policies that it excludes and constructs as an antagonizing threat to its own basic principles’ (Torfing 2009: 77).

Some of these articulatory processes take place in what we conventionally conceive of as the political realm, between actors conventionally recognized as political actors; however, from a discourse perspective articulation is always political in nature due to undecidability of the social world (Torfing 2005: 15). Therefore, to paraphrase Heclo (1974), ‘puzzling’ (people ‘collectively wondering what to do’) is also ‘powering’ in the sense of a struggle for discursive hegemony.

That said, there are times when struggles become more conscious than others. Glynos and Howarth (2007) distinguish between social practices, i.e. ongoing societal reproduction that does not ‘typically entail a strong notion of self-conscious reflexivity’ (ibid.: 104) and political practices, i.e. ‘struggles that seek to challenge and transform the existing norms, institutions and practices’ (ibid.: 105). Social practices still involve articulation, and thus modifications over time; one source of incremental change may be new events or ideas that are integrated into the discourse (Carstensen 2011). Eventually, however, a discourse will reach a limit to what it can domesticate, facing events or ideas that it cannot comfortably explain or represent. PDT refers to this as dislocation, and posits that this will reveal itself through struggles around floating signifiers or elements that are essentially contested, i.e. articulated together with other signifiers in competing ways (Torfing 2005). The struggles attempt to fix these into nodal points around which the discourse can be structured (Laclau and Mouffe 1985, Jørgensen and Phillips 2002: 26ff).

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9 I do not follow their entire ‘logics approach’, with logics at different levels (‘social logics’ to characterize practices, ‘political logics’ to analyze the hegemonic struggles of inclusion and exclusion, and ‘fantasmatic logics’ to analyze driving ideals).
Arguments similar to the idea of intensified discursive struggles following dislocation can be found in the notion of ‘exogenous shocks’ (Baumgartner and Jones 1993) or the accumulation of ‘anomalies’ that challenge a prevailing ‘policy paradigm’ (Hall 1993). These have often been seen to necessarily come from without in some way, but attention is increasingly being paid to processes of incremental change and the discursive articulation and construction involved in these, and the possibility of several (elements of) policy paradigms being able to coexist through processes of ‘layering’ (Mahoney and Thelen 2010) or ‘bricolage’ (Wildler and Howlett 2014). Arguably, a possible internal source of dislocation may then be when different policy discourses that have ‘coexisted peacefully’ within a policy field come into open conflict with each other. During periods characterized mainly by social practices in Glynos and Howarth’s terms, policy discourses may develop side by side, through largely reproductive ‘business as usual’ practices (but in partly different ‘businesses’), becoming increasingly incompatible, but without clashing openly. Inconsistencies between them may be there, visible at least to some in some contexts, but not subject to open struggle. But when events bring them into open conflict, it causes a dislocation and triggers a struggle.

In analyzing the discursive struggle, I also draw inspiration from Hajer’s (1995) focus on argumentative interaction and the practices through which actors seek both to persuade others to see reality in the light of the speaker, and to position other actors in a certain way (Hajer 1995: 53). Of particular relevance for this study is Hajer’s extended use of ‘positioning’ (Billig 1996, Davies and Harré 1990) to include both ‘subject positioning’ (actors ascribing, taking up or refusing a certain role) and ‘structure positioning’, as statements and performances that makes a structural element or institution either seem fixed or open to change (Hajer 1995: 56; we will return to the notion of ‘structure positioning’ in the discussion of discourse institutionalization below).

Focusing on the argumentative interaction not only introduces actors or subjects as ‘actively involved in the production and transformation of discourse’, but is also key to understanding particular discursive constructions and their prevalence (Hajer 1995: 54-55). Looking at what kinds of arguments are being made against which counter-positions — and the reactions they provoke — helps to reveal points of disagreement and competing articulations (contested floating signifiers), as well as to identify key signifiers that are either uncontested or ‘obligatory’. But it also shows what is perceived as legitimate or illegitimate grounds for a claim, and thus reflect discursive formats or established ways of arguing in a specific field (ibid.: 273).

For assessing the strength of a discourse, i.e. degree of discursive closure, I will use Hajer’s notion of discourse structuration. He actually has two different definitions of this: ‘if the credibility of actors in a given domain requires them to draw on the ideas, concepts, and categories of a given discourse’ (Hajer 1995: 60), or (in later writings) ‘if many people use it to conceptualize the world’ (Hajer 2009: 64). The first definition goes more to how self-evidently ‘right’ or ‘wrong’ certain signifiers appear, and how much of a breach it is thus conceived to use or not use them, while the second goes to how prevalent they are. These may obviously be related, but are assessed differently. Revealing prevalence requires a material with utterances from a wide array of actors.

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10 I should note that I leave out the two most well-known features of ADA, namely storylines and discourse coalitions. Concerning discourse coalitions, although many analyses invoking Hajer tend to use the term simply as a term for the different sides in a debate, for Hajer the important theoretical point is how actors who may see the world differently and have different interests may be united in their use of certain storylines which suggest a common understanding that is not ‘there’. With my empirical focus on debates within the conservation field, where the different actors involved prima facie would be expected to have the same general base of knowledge and normative concerns, I concluded that Hajer’s theoretical point with the discourse coalition concept was not particularly important in my case. Concerning the storyline concept, Hajer loads it with so many different definitions and functions that it sometimes seems that almost anything could be a storyline and at other times it is supposed to function in a very specific way. In both Hajer’s own use but even more so other researchers’ use, it is not very clear when or why something is a ‘discourse’ or a ‘storyline’, and so I decided against using it. The general theoretical gist of the storyline concept has been helpful, however, in pointing the direction to the vague and ambiguous as important vehicles for agreement as well as change.

11 He does not, to my knowledge, comment on this difference.
within the field studied, while discourse structuration according to the first definition is best revealed by a certain kind of material, where the ‘argumentative’ in ADA comes into its own: signs of discourse structuration would then be found in the way actors within a domain react when an actor in that same domain ‘speaks out of bounds’ as it were, i.e. does not draw on the ‘right’ ideas, notions, concepts, or categories, or instead draw on ‘wrong’ ones (as will be seen in the next chapter, the material used in this thesis provides both).

Hajer describes discourse institutionalization as a further step to discursive hegemony, consisting of the translation of a discourse into institutional arrangements such as a measuring system, audit routines, departmental divisions etc. — or a ‘traditional way of reasoning’. Discourse institutionalization is in my view an important analytical concept, but one that needs further elaboration than Hajer provides to be helpful in elucidating the events studied in this thesis, elaboration provided in paper II and below.

**Discourse institutionalization**

In Paper II, I argue that discourse institutionalization as presented in ADA (Hajer) or PDT (Howarth 1995) properly accounts neither for the effects, nor for the processes of discourse institutionalization. I will not repeat that argument fully here, but elaborate on certain aspects, not least pertaining to the concept of ‘institution’ in this case.

The nature and importance of the relationship (if any) between discourses and institutions of course depends on the understanding of discourses and institutions, respectively — and whether the issue is approached from the institutionalist or discourse side. In institutional theory, institutions are often said to be ‘the rules of the game’, but the nature of the ‘game’ and what is counted as rules differs. In rational-choice institutionalism, institutions provide the payoff structure of the various ‘games’ that are played, and thereby the strategies of the rational agents that play them. This ‘logic of calculation’ is in sociological institutionalism contrasted with a ‘logic of appropriateness’: people do what is appropriate given their identity or role within different institutions, rather than calculate the optimum strategy based on pre-existing preferences. There is also a difference in scope (which does not necessarily follow the different ‘institutionalisms’), ranging from restricting the notion of institutions to formal arrangements of a certain kind to basically allowing it to include everything, including ‘social norms’ or ‘culture’ (Rothstein 1996).

In general, the more all-encompassing the scope of ‘institutions’ and the more ‘sociological’ or ‘normative’ the institutionalism, the more I would argue it becomes an alternative concept to ‘discourse’ rather than something to combine with it. If institutions are seen as ‘shared meanings and practices’ that ‘organize hopes, dreams, and fears as well as purposeful actions [and] prescribe or proscribe emotions’ as well as ‘constitute and legitimize political actors [and their] conceptions of reality, standards of assessment, affective ties, and endowments … [and e]ven the conception of an autonomous agent” (March and Olsen 1996: 249) — then there is precious little for a (Foucauldian) discourse concept to add.\(^\text{12}\)

In the so-called ‘fourth institutionalism’, ‘discursive institutionalism’, discourse is conceptualized in a more Habermasian way, amounting to ‘talking about one’s ideas’ (Schmidt 2008: 305). Here, discourse in the broader sense outlined above is instead part of the institutional context, specifically the “meaning context” in which ideas and discourse make sense” (Schmidt 2011: 119). Indeed, one may very well see discourses as institutions in the broad sense of the term, i.e. relatively durable regularities that constrain action, communication and thought (cf. Freidenvall and Krook 2007, Danielsson 2010: 103). But if discourses are institutions and institutions are discourses, is it then better to just choose one of the terms and ignore the other? Perhaps, if one stays at the ontological level. But in practice, as Hajer points out, institutions tend to have ‘a high degree of salience’ (Hajer 1995: 58). If one wants to account for this salience in studying policy

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\(^\text{12}\) In terms of scope, that is – as should be clear from my own choice of approach, I to think that the various Foucauldian discourse-theoretical frameworks have a better theorization of these ‘shared meanings and practices’ than normative institutionalism has.
processes from a discourse perspective, one has to somehow say what it means for discourse to become institutionalized.

One route is the one that Hajer and Howarth primarily take, i.e. seeing it mainly as a degree of entrenchment, as when Howarth (1995: 132) insists that ‘there are no qualitative distinctions between discourses, only differences in their degree of stability’, or when Hajer includes ‘traditional ways of reasoning’ and suggests that discourse institutionalization is only something to study over extended periods of a decade or more (Hajer 2009). I argue in paper II, however, that this tends to blur the distinction between discourse structuration and discourse institutionalization (and perhaps inviting the question why we should have just ‘a two-step procedure’ for measuring the strength of a discourse and not e.g. a five-point scale). And, as Hajer’s other examples suggest (e.g. measuring systems or departmental divisions), there is arguably a relevant ‘qualitative distinction’ (in terms of certain kinds or sources of stability rather than just degrees of stability) to attend to.

In the end — not least given how ‘institutions’ in both scholarly and everyday parlance can mean anything from ‘the institution of marriage’ to a specific organization or rule — the delimitation of ‘institutions’ should be adapted to the specific context. And as I state in paper II, my use of ‘institutions’ in this particular study is narrower than Hajer’s, not including ‘normal ways of reasoning’; in practice, things such as laws, regulations, written guidelines, etc.; organizational aspects providing different roles to different entities; indicators, lists, categorizations, measuring systems etc.

I argue in paper II that what allows those things to play a particular role is not only their increased durability, but also their ‘legibility’ (differentiating them from unwritten norms for instance) and — since not just any written text is an institution — their building on (or ‘leveraging’) the legitimacy of a pre-existing institution (such as a rule within a higher-order legal framework). The implications are that what becomes translated into institutions is of particular importance in that it may linger as a constraint after a discursive shift, or it may become a more effective resource to change the discursive structure or challenge other institutions. One might thus expect particularly intense struggles around the (re)formulation of new rules, guidelines, criteria etc., but also around the meaning and importance of existing institutions, i.e. ‘structure positioning’ (Hajer 1995: 56). And in the outcome of those negotiations, it is not necessarily only elements from the ‘dominant discourse’ that become institutionalized (Mert 2009, Mert 2015).

In these struggles, actors may assume roles of ‘change entrepreneurs’ or ‘maintenance workers’ trying to keep existing policy on track (Marcussen, 2009; Torfing, 2009). And some actors are more centrally placed than others; Wilder and Howlett (2014: 195) talk about how institutionally privileged ‘gatekeepers’ may operate institutional ‘locks’ (comparing to a canal system) on policy change, while other ‘structural locks’ are beyond the ability of any one actor to manipulate. Taking Wilder and Howlett’s emphasis on discursive construction and ‘hermeneutic bricolage’ (ibid.: 194) further, we may add that structure positioning around the nature of these locks is also part of the struggle (i.e. whether they should be conceived as operable or not and if so by whom and under what circumstances).

**Summing up**

Table 2 sums up the analytical concepts discussed above, and exemplifies with questions that are put to the empirical material to elucidate and try to understand the discursive-institutional struggle.
### ANALYTICAL TOOLS

<table>
<thead>
<tr>
<th>Policy Discourses</th>
<th>How are e.g. problems, solutions and roles represented?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of Discourse Discursive Formats</td>
<td>What elements are shared within the field where different policy discourses compete? What ways of arguing are dominating the debate? What do these ways of arguing emphasize or exclude?</td>
</tr>
<tr>
<td>Dislocation</td>
<td>Are open struggles emerging over previously fixed meanings?</td>
</tr>
<tr>
<td>Articulation</td>
<td>How are different concepts/signs connected to others, thereby fixing meaning?</td>
</tr>
<tr>
<td>Key Signifiers (Nodal Points and Floating Signifiers)</td>
<td>Do certain signifiers seem to fill an especially important role in organizing the discourse? Are certain signifiers highly contested and invested with competing meanings?</td>
</tr>
<tr>
<td>Logics</td>
<td>What different kinds of arguments or rationalities of action inform or are used to justify a certain policy direction? How do they work together?</td>
</tr>
<tr>
<td>Discourse Structuration</td>
<td>How widely used are certain articulations? How strong are reactions to certain articulations? Are certain articulations uncontested?</td>
</tr>
<tr>
<td>Outside/Antagonizing Other</td>
<td>What outside threat or opponent can be inferred? How does it help stabilize the discourse? What articulations become stronger or more precarious because of this?</td>
</tr>
<tr>
<td>Discourse Institutionalization (effects of)</td>
<td>Are certain signifiers or logics inscribed into rules, policy documents, indicators etc.? How does this condition discussion and action?</td>
</tr>
<tr>
<td>Discourse Institutionalization (struggle over) Structure Positioning</td>
<td>How are existing institutional legacies articulated in competing ways? What do different sides attempt, fail or succeed to institutionalize?</td>
</tr>
<tr>
<td>Subject Positioning</td>
<td>How do actors explain or justify their own stance and that of opponents? What roles/identities are implied?</td>
</tr>
</tbody>
</table>

Table 2. Summary of analytical concepts used.
4. Method and material

This chapter addresses methodological issues, discussing the choice of my empirical focus of study, presenting the material and how it was gathered and analyzed, and reflecting on ethical considerations and my position as researcher.

Approaching the case

To recall, the focus of this thesis is the issue of intervention in nature conservation practice. In chapter 2, I outlined how a number of issues and concepts related to intervention have been debated within the literature, and argued for a discursive take on these debates, presenting a number of analytical tools to study them in chapter 3. Of course, the scholarly debates referenced in chapter 2 in themselves involve discursive articulations of the issue of intervention, but within a very special kind of community — the academic one. As such, they are largely removed from the discursive and institutional contexts where choices in regard to intervention in nature are actually made.13 To address the research questions, I need to find a way to study how the issue of intervention is dealt with in context — and ideally, to take advantage of the argumentative discourse approach, how they are debated in context. This thesis then uses a case study approach, which in Yin’s (2009: 18) definition is ‘an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.’

Why this particular case? As hinted at in chapter 2 and further explained in chapter 5, Sweden is in a way closer to the US than to many other European countries in that nature conservation has historically had a strong emphasis on non-intervention management of supposedly ‘original’ or ‘untouched’ nature, which suggests that the ‘dilemma of intervention’ found in the US (Cole and Yung 2010) can be expected to feature in Sweden as well. And as it turns out, the issue of intervention has been at the core of a protracted and heated debate within Swedish nature conservation over the last decade, which presents just the kind of setting I was looking for.

Now, this brief justification of a case study approach and the selection of this particular case is not a description of how it happened in practice, in that I have not first formulated certain theoretical propositions and subsequently selected a case to test them. Indeed, Yanow and Schwartz-Shea (2012: 70) have suggested that ‘the language of “case selection” is not appropriate to interpretive research design’, since for interpretative research aiming to understand meaning-making in particular sites, ‘choices of cases and access are often intertwined’ and one situation or text cannot readily be substituted with another. Interpretive research requires a flexible design, building as it does on successive phases of learning and where the settings and participants studied are not objects that can or should be controlled (Schwartz-Shea and Yanov 2012: 71-72).

Not that this flexible, iterative and context-dependent view of the research process is only part of the interpretive research family. Ragain (1992: 218) coined the term ‘casing’ to denote the process of ‘making something into a case [in order to] bring operational closure to some problematic relationship between ideas and evidence’. He describes this process, taking place in most phases of a research project, as central to empirical research as an interplay of theory and observations culminating in ‘theoretically structured descriptions — understandings that result from the application of constraining ideas to infinite evidence’ (ibid.).

So to answer how and why I actually approached this particular case, the processes of discovering the case and defining what, theoretically, this was a case ‘of’ were intertwined. At the beginning of my research, my focus was more broadly on ecological restoration in policy and practice. Looking for an empirical focus, my attention turned early on to restoration of habitat for

13 This is not to deny that some of the literature, notably around ecological restoration and protected area management, can be relatively closely related to conservation practice. However, the discussion tends to be either at the abstract level of concepts and principles, or at the site-specific level of a certain protected area or a certain object of restoration.
the white-backed woodpecker. This interest was spurred in no small part by the simple fact that some of the ecologists in the interdisciplinary project which funded my research focused on this threatened species. The large-scale restoration needed to save it also seemed promising from a political science point of view as an example of a project involving many actors of different kinds and at different levels — challenges of multi-level governance and institutional fit in a landscape perspective, perhaps. However, when I first talked to people in the national coordination team for the white-backed woodpecker work, I was struck by how the greatest obstacles they saw were internal to the conservation community rather than e.g. reluctant land owners or lack of funding (though those obstacles also existed). What really hindered their work was described as the administrative framework that the conservation authorities had set up for themselves, and the insistence on non-intervention management by a certain ‘wing’ within the Environmental Protection Agency. These early informants also mentioned a draft strategy for the conservation management of protected forests that had caused a heated and still unresolved debate around the role of intervention in protected areas. Meanwhile, reading up on the restoration literature made it clear that restoration highlights many sometimes uncomfortable questions around nature and the human-nature relationship, but also that there was very little in terms of empirical policy analysis of how such debates play out in practice.

In short, probing into a potentially interesting case revealed a ‘puzzle’ in the form of a conflict dimension I had not expected, and the literature review contained clues as to how this might be understood. The ‘intertwinedness’ thus also included the research question, as well as the analytical framework with which to approach it. Settling first on an interpretive approach, and later on certain discourse-analytical tools, was in no way evident from the start, but a process of trying to find a way to conceptualize these on-going debates.

In terms of generalizability, I agree with Flyvbjerg (2006) who discourages the often vain search for predictive theories and universals in the social sciences, stressing instead that the study of human affairs produces context-dependent knowledge, and that such knowledge is actually essential for our learning and extended understanding. The ‘theoretically structured descriptions’ (Ragin 1992: 218) provided in the present study can be useful for further research as a point of departure e.g. for studying similar debates in other national contexts, or applying theoretical ideas generated to policy struggles in other fields.

**Material**

My primary material has been documents and interviews, further described below. In paper I, document analysis took center stage, although with interviews as an essential supplement. In paper II, interviews played a larger role.

The events studied in this thesis and their background are further described in chapter 5, but a brief overview may be helpful to facilitate the further presentation of the material. Basically, the focus is on three related processes from 2007 to the present date, all concerning documents issued (or to be issued) by the Swedish Environmental Protection Agency (EPA) relevant to the designation and management of nature reserves on forest land. Two of these have already been mentioned: the Forest Management Guidelines and the white-backed woodpecker (WBW) Action Plan. The third, which I learned about during interviews regarding the other two processes, concerned the designation of nature reserves. Paper I focuses on the Forest Management Guidelines. Paper II covers all three processes, but focuses specifically on the WBW Action Plan as a more concrete example compared to the other two guidelines which are of a more general nature.

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14 Personal communication, project managers for work concerning the white-backed woodpecker at the SFA and the SSNC.

15 These online guidelines cover a wide range of issues, but the controversial part of them that are relevant here were — and are — how aims and management plans for nature reserves should be formulated and how such decisions may — or may not — be revised.
Table 3. Three EPA guidelines, debates around which are studied in this thesis. Overview of when the process to produce/update the guidelines was initiated; when drafts were sent out for review (number of responses received within brackets); and when final guidelines were published.

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Initiated, year</th>
<th>Drafts for review, year (number of responses)</th>
<th>Finalized, year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Management Guidelines</td>
<td>2007</td>
<td>2010 (58), 2012 (45)</td>
<td>2013</td>
</tr>
<tr>
<td>Reserve Designation Guidelines</td>
<td>2009</td>
<td>2012 (20), 2013 (21)</td>
<td>2014</td>
</tr>
<tr>
<td>WBW Action Plan</td>
<td>2008/2009</td>
<td>2013 (50)</td>
<td>-</td>
</tr>
</tbody>
</table>

In addition to the written and spoken texts that have been the primary focus of analysis, a range of material has been important to understand the wider context. This includes documents such as Government Bills related to nature conservation, various reports or policy documents from the EPA, the Swedish Forest Agency (SFA) or the Swedish Society for Nature Conservation (SSNC), as well as secondary sources. But it also includes meeting conservationists in other settings than the interviews, such as two seminars concerning the WBW arranged by the SSNC (in 2012 and 2016), the annual Flora and Fauna Conference arranged by the Swedish Species Information Center (in 2013), and an excursion to sites of restoration for the WBW (in 2013). These have all contributed to my understanding and ‘feel’ for the conservation world which, prior to my undertaking this work, was alien to me (see further at the end of this chapter). This also goes for the meetings of the interdisciplinary Formas-funded strategic research environment which this research has been part of, RESTORE.16

**Documents**

The documents used were chosen on the basis of their ability to reflect conflicting representations of the issue of intervention with relevance for conservation policy and practice. Of particular importance here has been the well-established practice in Swedish public administration of sending out draft versions of policy documents for consultation (remissförfarande).17 This provides for an argumentative kind of material that lends itself well to Hajer’s discourse-analytical tools which emphasize the need to consider not only the words themselves but also ‘the positions that are being criticized, or against which a justification is being mounted’ (Billig 1996: 121, Hajer 1995).

**Paper I** focused on the two drafts for protected forest management guidelines sent out for review in 2010 and 2012 and the written responses to them (henceforth termed ‘opinions’; Sw.: remissvar/ytttrande), as well as the final guidelines published in 2013. These documents constitute a rich material with elaborate discussion on the questions of natural value and intervention in nature. Due to the process leading up to the first draft in 2010 (see ch 5), the argumentative character of this ‘round’ was especially pronounced. Counter-positions can often be inferred or directly read from the first draft, reflecting the internal conflicts within the EPA as well as the fact that the more preservationist arguments in the draft stemmed from a perceived need to rectify an overly interventionist and too informal management practice on the part of many County Administrative Boards (counties). And the opinions were unusually elaborated and pointed, reflecting the core issues at stake as well as frustration that had built up during the first years of this process (paper I). Altogether, the material consists of hundreds of pages of text, but not all of it was analyzed in detail. First of all, focus was placed on the relatively more heated debate of the first review round in 2010, then looking more for differences and changes in the second round and the finished guidelines. Secondly, I focused primarily on the opinions of actors that are responsible for the management of nature reserves (the 21 counties and one foundation), two ‘bridging’ organizations between academia and the conservation bureaucracy (the Scientific Council for

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16 ‘Ecosystem restoration in policy and practice: restore, develop, adapt (RESTORE),’ grant no. 2009-196-14225-69, Formas, the Swedish research council for sustainable development (www.formas.se).
17 Within the national government, this practice has a constitutional foundation in the form of a requirement in preparing Government business to obtain information and opinions from the public authorities concerned, and also afford organisations and private persons the opportunity to express an opinion (RF 7:2). Although these rules do not apply to Government agencies such as the EPA, they generally follow a similar procedure.
Biodiversity and the Swedish Species Information Center), and environmental NGOs such as the Swedish Society for Nature Conservation. This excludes more specialized agencies, municipalities, universities and individual responses. There is also considerable overlap in the material since the opinions are so many variations on the same theme, and there had apparently been some amount of coordination given that many opinions not only voiced the same substantial concerns but sometimes did so in highly similar or identical wording. And finally, not all themes were included in the analysis.

In paper II, some of the issues excluded in paper I were picked up on, especially discussions around Action Plans for threatened species. In addition, similar review rounds of two other documents issued by the EPA were included: a draft Action Plan for the WBW and guidelines for the designation of nature reserves. The review rounds around the designation of nature reserves were studied much more cursorily than the management guidelines of paper I. Concerning the WBW, the analysis also considered the Action Plan published in 2005, draft Action Plans not distributed for comments, publications by the SSNC and the SFA, and news articles and opinion pieces.

Interviews

In a discourse analysis of a policy process of this kind, it is appropriate to supplement the textual analysis with interviews (Hajer 2005, Howarth 2005). According to Wagenaar (2011: 251), qualitative interviews provides a crucial way to ‘expose yourself to the world’, as ‘interviews are often required to give context to the texts, particularly contemporary policy texts.’ The interviews have filled several purposes. For one thing, they have been used to generate more information on the sequence of events, which is generally not very detailed in documents. Hajer suggests that although such questions around ‘which led to what’ will normally be assumed by interviewees to be the main point, those lines of questioning can also give a better understanding of the meaning of particular events for the interviewees and help reconstruct the discourse from which an actor approached the situation (Hajer 2005: 306-307). Interviews have been particularly important to capture the internal discussions within the EPA, which are not accessible through the written material.

Furthermore, interviews were important to help clarify, corroborate or supplement my interpretations of the written material. This was explored both by open questions such as what the most important points of contention have been, and more specific questions referring to what certain written opinions had stated. Interviews have also been a way to explore silences in the material. One example in paper I is the ‘ethical aspects’ mentioned in the Project Plan for the management guidelines, but then completely absent in the rest of the material; asking about this in interviews could then provide insight into how different actors perceived that exclusion, which in turn helped me develop a possible interpretation of its workings and effects. Combining multiple interviews with written material thus allowed for ‘triangulation’ in the sense of using multiple sources to validate (or question) my interpretations, providing a fuller picture and extending understanding (Ritchie 2003: 44).

In all, I interviewed 19 people between 2011 and 2016. In addition, I had access to eight interviews carried out by a research assistant, focusing on the white-backed woodpecker action plan but with a partly different focus than my own. These have not been extensively cited, but were all helpful in providing a broader background and overview. The interviews are here referred to in footnotes, numbered by date of interview. An appendix lists all interviews and indicates how they have been referenced in the two appended papers.

The interviews lasted between 25 minutes and 2 hours, with most lasting around 1 hour. They were semi-structured in character, using an interview guide for different topics to cover, but not insisting on a certain order or that questions be put in the exact same way in different interviews, thereby leaving room for — and encouraging — the interviewees’ associations (Bryman 2004, Kvale and Brinkmann 2009). Following Wagenaar’s advice, I attempted not to worry too much about keeping the interviewees on topic but rather monitor the quality of the interview material through keeping an eye out for certain characteristics of normal conversation that are detrimental to a
useful interview material, such as talking in broad generalizations, loosely stating opinions or good intentions, distancing e.g. through generalized accounts (cf. Weiss 1994: 72-73), or asking closed questions (Wagenaar 2011: 253-258).

I generally started the interviews with a ‘grand tour’ question such as ‘could you tell me about the process around X from your point of view?’, and then having a list of prompts, both specific (details that I wanted to make sure were covered) and general ones aimed at helping the interviewee develop the material. For example, I might ask ‘can you develop that’, ‘can you give an example’, ‘what was your reaction’... Apart from questions around the process (when, who, how etc., including particularly important events or triggers), the topic guide contained main areas of debate or disagreement, changes over time, and list of key concepts/terms that had been identified through the written material and informed by the theoretical literature.

Most of my interviews were conducted by telephone. Apart from reducing costs and time for travel etc., getting access in terms of finding a suitable time for the sometimes very busy interviewees was of course immensely facilitated by using telephone interviews. Although telephone interviews are often described as inferior to face-to-face interviews (e.g. Alvesson 2011), this bias against telephone interviews in qualitative research has been questioned as lacking support (Novick 2008). Indeed, many researchers who have compared face-to-face with telephone interviews within the same study have found no discernible differences in terms of the quantity, nature and depth of responses (see e.g. Sturges and Hanrahan 2004); others have found telephone interviews to be shorter and relatively more dominated by the interviewer, but suggested that this might primarily be a problem when the purpose is narrative analysis or in-depth phenomenological exploration (Irvine 2011). Visual cues are obviously absent in telephone interviews, but such visual cues are not always analyzed as such, and the telephone mode may sometimes allow both respondents and researcher to be more relaxed (Novick 2008). In my own experience, I found that I tended to be more at ease over the telephone, and as far as I could judge, that was also true for one of the two interviewees that were interviewed both face-to-face and over the telephone (in the other case, I could not note any difference). I also found the possibility to take notes and check the interview guide unobtrusively during a telephone interview to be helpful (as also found by e.g. Sturges and Hanrahan 2004).

Apart from a few early-stage interviews, all interviews were tape-recorded. Of the interviews I conducted myself, two were transcribed by an assistant; the others I transcribed myself, which then became part of the process of interpretation and analysis (Kvale and Brinkmann 2009: 180). However, in most cases, I did not do a full transcription, but rather listened repeatedly to the interviews and successively and selectively transcribed certain passages in detail (cf. Alvesson 2011: 67).

Selection of interviewees was a mix of snowballing (ending interviews by asking what other people might be useful for me to talk to) and purposive sampling aimed at ensuring that different sides were included. To an extent, the selection had affinities to ‘theoretical sampling’ in the sense of a continual, iterative process of interplay between data collection and analysis, rather than a discrete stage of data collection followed by analysis (Charmaz 2014). Of course, drawing the line in terms of which documents to include or which people to approach for interviews has been influenced by the limited scope of this thesis as much as by the achievement of ‘theoretical saturation’ (ibid.); although later interviews tented to repeat or confirm much of what I had already come to conclude, there continued to be nuggets of new details or insights, and that would probably have been true if I had continued to expand the material.

Analysis
Analysis of documents and interviews has been guided by the analytical concepts presented in chapter 3 (see table 2 at the end of that chapter), as well as by the different approaches overviewed in chapter 2 (as summarized in table 1 in that chapter). The latter can be seen as a form of

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18 This, of course, is a lot easier said than done!
comparison, consisting of ‘projecting “ideals” into the phenomena we wish to explain’, allowing a focus of attention on absences or presences (Howarth 2005: 334-335).

Analysis of documents started out with reading, sorting and writing notes; I eventually acquired a software package (MAXQDA 1989-2016), in which additional coding was done. No complete line-by-line coding of the whole material was attempted, however; and since not all interviews were transcribed, coding could not cover all material anyway. Getting back to the material in its context (e.g. by re-listening to interviews) was important in order not to lose touch or get stuck in an initial interpretation that might, later in the process, seem less plausible (Spencer et al. 2003).

To provide an example, take the question of assessing discourses. We saw in chapter 3 that one way of assessing discourse structuration was the reactions against certain articulations, or the absence of questioning, contestation or problematization of others. Looking for strong reactions is perhaps the most straightforward, looking at what the opinions are explicitly arguing against and how; here it was, for instance, clear that the notion of ‘untouched’ nature in the draft provoked strong reactions, as did the relative absence of references to ‘biodiversity’. Looking for what is not contested may seem more tricky. To continue with the same signifiers, one ‘trick’ used in paper I was looking at inverted commas — while the opinions repeatedly questioned or distanced themselves from the terms ‘untouched’ and ‘natural’ by this orthographic means, this was never the case for the term ‘biodiversity’. Neither did the opinions show any trace of the difficult questions around the meanings and values of different aspects of biodiversity (Johannesson 2009, Mayer 2006), and although some referred to biodiversity as a stated goal in legislation etc., others just argued it should be the overriding goal, apparently without any need of justification.

Ethical considerations and the role of the researcher
In spite of every effort, the account I can give of the events I am studying in a thesis such as this will inescapably be limited, superficial and biased. Not only is any knowing and understanding always conditioned on certain presuppositions which, to use the permutation of ‘know’ that Rumsfeld didn’t, can be ‘unknown knowns’20 that structure the analyst’s (my) understanding in ways I may not see. And not only will I inevitably have missed many important aspects (both the ‘known unknowns’ that I know I have not inquired into and the ‘unknown unknowns’ that are completely off my radar). There is also no way I could fit even the ‘known knowns’ into this (or perhaps any) format; it would become a maze of caveats, qualifications and on-the-other-hands. This is of course a fact of writing up research or any other narrative or communication. But this then may also have ethical implications to consider.

One such question is the fact that I am studying a conflict within the Swedish conservation community. In order to discuss this, I will tend to make this conflict more accentuated than some of those involved would like to describe it, and many nuances will be elided. This could carry the risk of damaging relationships or worsening the conflict unnecessarily; to guard against this, I have attempted not to make too much hay out of especially pointed comments or the mere fact of disagreement, as well as offered interviewees the opportunity to see direct quotes. One might also question whether making such intra-conservation conflicts visible may be hurtful to the cause of nature conservation, or to the public standing of its profession and institutions. As noted in the introduction, there is a tendency within the conservation field to try to keep heated debates and conflicts within the group (Lundgren 2009a: 286). Given all the opponents to conservation, it is important to keep a united front.

The risk of ‘hurting the cause’ could also apply to my approach to studying this conflict. As laid out in chapter 2, I am connecting the debates studied here to wider scholarly debates that question

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19 This would sometimes seem to be ‘sneer quotes’ to signal disdain (more common with ‘untouched’), sometimes to relativize or indicate different possible interpretations (more common with ‘natural’).

20 Note that this is not in the sense that Stephen Colbert later asked Rumsfeld about, namely ‘the things we know, and then we choose not to know them or not let other people know we know’ (referring to not disclosing publicly the poor quality of the evidence for WMD in Iraq), which might be better termed hidden or denied knowns. https://youtu.be/4Z3r7Dv0A-M?t=4m35s
many of the foundations on which preservation, restoration and nature conservation generally are based, from ideas of pristine nature to more ‘modern’ ideas like ecosystem health or biodiversity. Furthermore, discursive approaches and more broadly the literature on ‘the social construction of nature’ has met with much resistance from conservationists worried that such equivocations are a distraction from our necessary response to the on-going degradation of nature, or worse, ammunition to the forces that strive to weaken nature conservation’s claims regarding the need to halt or reverse that degradation (e.g. Proctor 1998).

I certainly have no intent to weaken nature conservation, and I do not believe that making intra-conservation disagreements visible or problematizing conservation concepts necessarily has that effect. As Lars J Lundgren has stressed, the researcher from the social sciences or humanities is not out to throw a spanner in the works of conservation, but to understand what is going on; no field should be exempt from scholarly scrutiny, and outsiders can ask questions that insiders do not (Lundgren 2009a: 297, 302).

Which brings me to the question of the role of the researcher. Since a discourse approach does not picture the researcher as objectively observing but rather as implicated in data generation and interpretation (Wetherell 2001), I should briefly comment my own starting point. I entered this field as an outsider, without any background in environmental groups, animal rights, ornithology or the like, or, for that matter, any ecological or biological education to speak of. I did grow up in a very small countryside village, with the forest as part of my extended playground, but this did not give me any particular knowledge about plants, animals and ecosystems. Being an outsider to the field of study is not uncommon, of course, but I have found that many (perhaps most?) people studying environmental or conservation issues tend to have some sort of background in the field. There are of course potential drawbacks to lacking background knowledge, or the concern for the issues on a personal level that may be a driving force. But there are also, I think, advantages in the outside view. Lacking any particular inclinations or loyalties in the conservation sphere may help maintain what Vromen (2010) calls ‘empathetic neutrality’, trying to ‘understand the complex social world with empathy, while also attempting to be non-judgmental’. 

27
5. The issue of intervention within Swedish forest protection and conservation

This chapter sets the scene for the policy conflict studied, giving a brief historical background to Swedish forest protection and conservation. It then presents an overview of the events and debates studied in the two papers, and makes a summary of these papers.

**Preservationist legacies, ascent of biodiversity**

Sweden was the first country in Europe to establish national parks. These were to constitute ‘a scientific object of study’, but also provide images of a mythic past and foster a national identity (Mels 2002, Lundgren 2009b), in ways similar to the history of national parks in the United States (see e.g. Cronon 1996). For both of these purposes, national parks should be representative of as many types of typically Swedish nature as possible (Lundgren 2009b: 228ff), and consist of supposedly ‘untouched’ or ‘original’ nature.21 These ‘gifts of inheritance to posterity’ were to be ‘conscientiously preserved for the future in their natural condition’; in these areas, ‘nothing may be disturbed ... but everything shall develop freely, protected from every intervention by humans’ (Sernander 1935, 1904, in Lundgren 2011: 419, my translation)

One of the Swedish national parks established in 1909, Ängsö National Park, became emblematic of the consequences of assuming that human impacts are necessarily detrimental to nature. The meadows and open deciduous woodlands at Ängsö were to be protected for the future by leaving them untouched, banishing the farmer’s scythe and axe. Since the wooded meadows were not the kind of ‘original nature’ that many conservationists assumed but instead a product of the now banished scythe and axe, the result was overgrowth and thus disappearance of the object of protection (Sundin 2005, Lundgren 2011). Active management then had to be included for nature types, such as wooded meadows, of ‘cultural’ origin (Sernander 1935 in Lundgren 2011: 427). Still today, a national park in Sweden is to be preserved ‘in its natural state or essentially unchanged’ (Swedish Environmental Code ch.7, s.2), encapsulating the ‘dilemma of intervention’ mentioned in chapter 2 above (Cole and Yung 2010).

Ängsö and other similar cases are oft-cited examples of early mistakes in nature preservation, and the role of traditional agricultural practices in the development of certain ecosystems is now widely recognized. This has led to a duality in management approaches, where ‘culture-nature’ is a form of nature shaped by (pre-industrial, ‘traditional’) human activities which need to be actively maintained or replicated, while ‘nature-nature’ should primarily be left alone (Aasetre 2000, Head and Regnéll 2012). Importantly, *forests* have long tended to be associated with prmeval nature in Sweden in spite of increasing evidence of historical human impact (Head and Regnéll 2012).

In the first half of the 20th century, the official Swedish term for conservation was *naturskydd*, ‘nature protection.’ With the new Nature Conservation Act of 1964, this was replaced by *naturvård*, literally ‘care for nature’, in order to signal that passive protection was often not sufficient but had to be combined with various forms of active management (Wramner and Nygård 2010). The Act also introduced a new form of area protection, nature reserves, that has since become the dominant mode of protection, and a new organization of public conservation efforts that is broadly similar to the present-day organization, with a central national authority (today *Naturvårdsverket*, the Swedish Environmental Protection Agency) but operational tasks performed at the regional level by the County Administrative Boards (see table 4).

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21 This being a determining factor for whether something was worthy of protection or not, the early 1900’s saw debates around whether certain types of nature — e.g. wooded meadows — or specific areas were, in fact, ‘original’ or not (Lundgren 2011).
The respective roles of the Swedish Environmental Protection Agency and the County Administrative Boards with regard to nature reserves. County Administrative Boards (‘counties’ in the text) are regional-level agencies of the Swedish state.

<table>
<thead>
<tr>
<th>Swedish Environmental Protection Agency ...</th>
<th>County Administrative Boards ...</th>
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<tr>
<td>- Distributes state funding to county level</td>
<td>- Makes county-level plans for area protection and management</td>
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<tr>
<td>- Provides general guidelines</td>
<td>- Designates individual nature reserves</td>
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<tr>
<td>- Receives planned designation of new nature reserves from County Administrative Board for review</td>
<td>- Writes management plans</td>
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<tr>
<td>- Can appeal county level decisions to the Government</td>
<td>- Carries out management</td>
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Table 4. The respective roles of the Swedish Environmental Protection Agency and the County Administrative Boards with regard to nature reserves. County Administrative Boards (‘counties’ in the text) are regional-level agencies of the Swedish state.

After the new Conservation Act, the number and area of nature reserves expanded quickly, but initially consisted mainly of mountain or coastal regions or remnants of the old agricultural landscape. A number of larger forest tracts were set aside for recreational purposes, but did not exclude production forestry (Wramner and Nygård 2010: 86). By the mid 1970’s, there was still very little protected forest outside the national parks. Meanwhile, forestry practices were rapidly intensifying and transforming the forest landscape faster than before (Beland Lindahl 2008). This spurred the launch in the late 1970’s of a national old-growth forest survey (urskogsinventering) to identify the remaining examples of this nature type that was in danger of disappearing (SEPA 1982).

An important indicator in these surveys was lack of evidence of human impacts in the form of stumps. While this ‘stump counting’ was criticized as too simple, an alternative approach — using indicator species to identify forests that had been untouched for long periods of time — was not deemed feasible since it required hiring a lot of expertise (Naturvårdsverket 1982 in Wramner and Nygård 2010: 156). However, in the late 1980’s, a local chapter of the SSNC in Jokkmokk calling themselves One Step Ahead started training activists in identifying indicator species for old-growth forests, in a sense harnessing amateur botany for activism (Lisberg Jensen 2002). This turned out to provide a kind of scientific argument for protection that was more effective than the more emotional arguments previously employed — especially since it dovetailed with the new organizing concept for conservation that took hold in the late 1980’s and early 1990’s, namely biodiversity. Initially a rather technical term from ‘value-neutral science’, it broadened to a concept that could stand metaphorically for all the values that environmentalists had always fought for — and soon became the overarching political goal of nature conservation (SEPA 1997, Wramner and Nygård 2010: 158).

Starting in 1990, the use of biodiversity-focused surveys became institutionalized through the surveys of woodland key habitats (Sw.: nyckelbiotopsinventeringar) that ‘can harbor rare plants and animals’ (Swedish Gov. Bill 1989/90:100, in Wramner and Nygård 2010: 157). A first wave of surveys were done 1993–98, a second 2001–2006, and since then woodland key habitats surveys are part of the regular, on-going activities of the Swedish Forest Agency (SFA), which is responsible for promoting both production forestry and the environmental objectives for forests. Most of the structures, elements and species listed are connected to continuity in some way, while species with larger landscape requirements such as the white-backed woodpecker were explicitly excluded (SFA 1997, Wramner and Nygård 2010: 158).

Both the old-growth surveys of the 1970’s-80’s and the woodland key habitats surveys, together with increasing pressure from environmentalists, led to large state budget increases in order to protect the valuable forest areas thus identified. The total area of protected forest land increased from around 100 000 ha (1 000 km², around 250 000 acres) in 1980 to over 800 000 ha in the mid-90’s (SEPA 2010, appendix 3). In 1999, a new target was set as part of a new framework of

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22 The closest translation of ‘urskoq’ would be ‘primeval forest’, the prefix ‘ur-’ connoting original or prehistoric times. Cf. ‘urfolk’ = indigenous peoples, ‘urtiden’ = precambrium (or time immemorial).

23 One step ahead, that is, of the forestry machines, seeking to identify valuable forests before they were about to be felled. Sw. Steget Före.

24 Woodland key habitats have also become part of the Swedish FSC certification system, and similar surveys of woodland key habitats have been introduced in several other European countries.
national Environmental Objectives (Swedish Gov. Bills 1997/98:145, 2004/05:150, 2009/10:155) to formally protect an additional 400 000 ha of forest by the year 2010. The EPA and the SFA were assigned by the government to formulate a strategy for reaching this target in a cost-effective way. This National Strategy for the Formal Protection of Forest (SEPA and SFA 2005) set down a ‘value-based approach’ in which forest protection should always center on a ‘forest core site with high nature conservation values’ (Sw.: skogsbiologisk värdekärna) as identified in a comprehensive spatial analysis based primarily on the woodland key habitats surveys and databases on red-listed species (2005). The strategy thus prioritized areas with very high current nature conservation values, and explicitly argued against including restoration needs in the selection of areas for protection.

Swedish environmental historian Lars J Lundgren (Lundgren 2009a: 290, my translation) has asked whether

conservationists, when it comes to area protection, have been working on realizing a program that in its main features was formulated a century ago? Or is it rather that (some) national parks and nature reserves are monuments over a nature conservation based on other ideas of which areas should be protected than those prevalent today?

The account given here is meant to suggest both: one can see a certain continuity in terms of representativity and absence of human impact as central motives for area protection from the first national parks, over the old-growth forest surveys to the present strategy for formal protection of forests; at the same time, the protection of areas has become increasingly interwoven, and supplemented, with a more species-centered approach inspired by the new field of conservation biology, the notion of biological diversity, and the importance of disturbances.

One early development in Sweden was the initiative in 1984 to develop a database of threatened species, what is now the Swedish Species Information Center. In 1990 (while the CBD was under preparation), the Swedish EPA published an action plan for nature conservation in Sweden with the overarching goal of ‘preserving biological diversity, genetic resources and natural resource functions’ (SEPA 1990b). The goal of biological diversity was specified as a situation where ‘all naturally occurring species can persist in viable populations’. The EPA also launched a long term action plan for its work specifically concerning threatened species, which included a goal of successively developing a number of action plans for individual threatened species (SEPA 1990a, see also Swedish Gov. Bills 1987/88:85 and 1990/91:90). While a number of such plans were produced during the 1990’s, the work increased rapidly after the launch of the Environmental Objectives in 1999, which included a goal that action plans should be produced for all threatened species by 2005.25

Action plans for threatened species by definition have a different focus than ‘pristine nature’. Many threatened species already have too little habitat to survive in the long run, and the only way to save them is to re-create such habitat. A prime example of such ‘extinction debt’ is the white-backed woodpecker (henceforth WBW), of which only a handful of individuals exist, in spite of decades of active conservation efforts. It needs large areas of deciduous forest with a high proportion of dead or dying wood – habitat that has become rare because of production forestry favoring coniferous trees, leaving virtually no existing habitat to protect. What is more, that kind of habitat most often does not persist even if it is protected, due to spruce taking over when previously operating natural disturbances are no longer there, e.g. because areas no longer burn or are no longer regularly flooded now that rivers are heavily regulated by hydropower. Therefore, not only area protection but also large-scale restoration and/or maintenance — including in protected areas — is crucial to improving the conservation status for the WBW. This not only made the white-backed woodpecker Action Plan published by the EPA in 2005 (SEPA 2005b) the largest single-

25 Sweden was also among the first countries to use the IUCN standardized criteria for national level red-lists of threatened species (Gustafsson and Lidskog 2013, Gärdenfors).
species action plan so far, but also sent it into direct conflict with the traditional way of managing forest reserves (see paper II and below).

As already noted above, it has long been recognized that habitats of ‘cultural’ origin require management that maintains or mimics e.g. certain agricultural practices. However, ‘natural forests’ have long had non-intervention as the default management option — or ‘free development’ (*fri utveckling*) as it is literally called in Swedish. The increased emphasis in ecological theory on disturbances, however, has important management implications. One early Swedish proponent of this ecological paradigm compared the lack of recognition of management needs with the early mistakes in Ångsö, stating that the elimination of fire in protected natural forests ‘betrays the same lack of knowledge that once led to the erroneous protection that first characterized our wooded meadows in southern Sweden’ (Zackrisson 1981). Efforts to intentionally burn areas for the sake of biodiversity started in the 1990’s (Wramner and Nygård 2010: 165), but given the many complications surrounding it there has also been a growing interest in methods that mimic effects of fire or other disturbances (e.g. flooding), such as killing trees, removing spruce to favor deciduous trees, etc. Such mechanical interventions were to become part of the debate described in the papers and below.

With a rapid increase in protected forest land since the 1980’s onward, questions around how to manage these areas increasingly came to the fore — at least for the County officials that were to manage them. For those working with area protection at the EPA, however, the management of protected forest areas was long a ‘non-issue’; most of the attention was on the steady increase in protection. But that was about to change.

**Clashing conservation concerns: Overview of studied events**

The processes under study in this thesis were triggered in 2007 by a number of concurrent events. First, discussions between the EPA and the Forest Agency around a new interim target within the Environmental Objective ‘Sustainable Forests’ for the conservation management of protected forest land highlighted divergent views between the two agencies concerning how much and what kinds of management might be appropriate, and they therefore committed to developing strategies for the conservation management of protected forest. Second, a number of counties that had applied for EU (LIFE) funding were denied the necessary co-funding commitment from the EPA late in the application process because of objections that the proposed management was inappropriate. Parts of the EPA had also recently been relocated from Stockholm to Östersund (in the north-western part of Sweden), causing concerns that this might lead to a less coherent policy. But perhaps the most dramatic trigger was an EPA field trip to a number of nature reserves in the spring of 2007, where some representatives of the EPA reacted very strongly to what they saw. These officials considered the management carried out way out of line, e.g. the removal of spruce to favor deciduous forest in an area which they saw as ‘near-primeval forest’. In some cases, restoration and management was carried out even before the designation processes had been

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26 Interview 27, EPA official, 2016.

27 Interview 3 (EPA official, 2012). Initial ideas about producing a joint strategy between the agencies — like with the Forest Protection Strategy — were quickly ruled out due to the large initial disagreements (ibid.). And the guidelines produced by the SFA did end up emphasizing the need of intervention much more strongly — starting out with the example of Ångsö National Park and stating that ‘a century later, we are facing a similar scenario where many of our ... protected forest areas are changing in a negative way. ... What was supposed to be preserved for the future risks being lost through spontaneous densification and succession.’ (SFA 2014: 6)

28 Interview 3, EPA official, 2012; Interview 32, County official, 2016.

29 Interview 5, EPA official, 2013.

30 When asked in 2016 if there were any particular events that triggered the debates, one EPA official immediately replied ‘Absolutely! I still remember it as if it were yesterday’, going on to describe the field trip, referring also to a former colleague who still gets upset whenever that event is brought up (Interview 27).

31 Though all involved agreed that there were flaws in the management, the level of outrage varied (Interview 3, EPA official, 2012; Interview 5, EPA official, 2013). Apparently, one of the reserves was considered ‘one of the finest’ areas identified in that County in the old-growth forest surveys (Interview 27, EPA official, 2016).
completed, raising questions also around the legal basis for the management. These events all pointed to the need to develop clearer guidelines concerning both how intensively and by what methods protected forests should be managed, and the formal, legal requirements for doing so. They also accentuated the fact that the views on this issue were widely diverging not only between the EPA and the SFA, or between the EPA and counties, but also within the EPA, between officials responsible for protecting areas and those responsible for management and recreational issues.

And this was not just any issue. The disagreements around intervention concerned ‘core,’ ‘ideological’ issues of what protected areas are for. The disagreements were also central to the relationship between the EPA as a central coordinating authority and the counties being responsible for the designation and management of individual protected areas: can counties be trusted to know what is best, or do they need to be held in a tight leash? In the early and mid-2000’s, the EPA did not exert much control over the designation and management of nature reserves; there was a 2003 handbook produced by the EPA (SEPA 2003), which the counties were assumed to follow. The events in 2007 — and not least that field trip — made area protection officials at the EPA ‘wake up’ to the fact that a lot of management was going on in forest reserves around the country, and that the 2003 handbook did not give sufficient guidance. One reason for this, from their point of view, was the increasing work with Action Plans for threatened species, which, as one interviewee put it, had caused a break-up of a previous ‘community of values’ about what protected areas are for. Others rather describe it as a ‘paradigm shift’ that had taken place from the 1990’s onward where County officials have increasingly taken on board new ecological knowledge and theories regarding the need for disturbances to preserve biodiversity and the possibility to achieve those by active management methods, while some had not yet come as far in that paradigm shift.

To try to reach a consensus, work began in late 2007 on developing a strategy for the management of protected forests (Forest Management Guidelines). Initially, the hope was to complete the project within the year 2008, so that it could feed into revised guidelines concerning the formal procedures of designating nature reserves. It quickly became clear that this would not be possible, and work started in parallel on new Reserve Designation Guidelines to replace the 2003 handbook. Importantly, the EPA straight away started a closer and more restrictive screening of counties’ activities in protected area designation and management, which caused a fair amount of irritation on the part of many counties who felt that their competence was being questioned and that the direction that area protection officials at the EPA wanted them to take was not in line with current ecological knowledge. It was certainly not in line with proposed restoration within the Action Plan for the White-Backed Woodpecker (WBW), which by late 2008 was coming to an end and a revised version for continued work was submitted to the EPA. Given that the total funds available for Action Plan work were diminishing by then, this draft needed revision to reduce the

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32 Interview 27, EPA official, 2016
33 Interview 3, EPA official, 2012; Interview 27, EPA official, 2016; Interview 30, EPA official, 2016
34 Interview 5, EPA official, 2013.
35 Interview 9, EPA official, 2013. It should be noted that ‘ideological’ (ideologisk) as used within the Swedish conservation profession does not refer to broader political or party-line ideologies, nor does it seem to be used pejoratively, but rather denotes different schools of thinking within ecology and conservation; when asked about the value of ‘untouched’ nature, this interviewee answered (half jokingly) that he should not pronounce himself on ‘ideological issues’ since he was not a biologist.
40 Interview 9, EPA official, 2013.
41 Interview 3, EPA official, 2012; e-mail from same official 4 April 2012; Interview 32, County official, 2016.
42 Interview 3, EPA official, 2012; Interview 5, EPA official, 2013.

33
amount of resources proposed and to update and revise the work plan accordingly. However, even after that revision (which took more than a year for the WBW Action Plan authors to complete), a harder crux remained. This was the restoration and active management that the Action Plan suggested in some protected areas; the discussions that this raised put the Action Plan on hold awaiting the development of the two guidelines just mentioned — again causing frustration at involved counties, the SFA and ENGOs.44 These processes combined became rather drawn-out, going on for half a decade and more.

The Forest Management Guidelines was still in deadlock by early 2010, but although no one within the EPA was very happy with the version that had been produced by then, it was nevertheless felt that they just had to send something out for comments after so long time.45 Thus, a draft (SEPA 2010) was distributed to various interested parties including counties, other government agencies such as the SFA, ENGOs and others. Although the unresolved disputes within the EPA gave the draft a somewhat ambivalent impression, it generally had a strong focus on pristine nature and non-intervention, and parts of the text seemed to indicate a lack of trust in the capacity and good will of the counties to manage protected areas well (paper I). It also significantly downplayed the work with action plans for threatened species, stating that such work should primarily take place outside protected areas and that any ‘claims’ that action plans may have on management in protected areas can only be met if they are in line with existing management plans and the proposed Forest Management Guidelines (paper II). The draft was met by rather scolding and almost universal criticism,46 questioning whether the EPA was up to date with the current ecological knowledge and legislative framework. The critics saw non-intervention as just one possible, and increasingly insufficient, method to achieve the overarching goal of biodiversity (a term not used prominently in the 2010 draft) and argued for a more interventionist approach to this end, including restoring or creating habitat for threatened species by manual means. The EPA went back to the drawing-board, eventually distributing a second draft for comments in March of 2012 which was largely accepted in the review round, and the finalized document was published in April of 2013 (paper I, SEPA 2013b).

The Reserve Designation Guidelines were similarly subject to intense debates, both within the EPA and in the review rounds. Focused on the formal procedures and legal framework for Designation Guidelines in two main ways. First, the Reserve Designation Guidelines insist on a detailed listing of proposed management when designating a reserve; and secondly, this becomes more difficult to change due to a new legal interpretation according to which any revision in fact means annulling the previous decision and replacing it with a new – which, according to the Environmental Code (ch.7, s.7), requires ‘exceptional circumstances’.47 Critics have seen this as a back-door way of preventing active and adaptive management48; this is a charge denied by the EPA officials leading the work.49 and the Reserve Designation Guidelines themselves do not explicitly comment the desirability of specific forms of management (paper II). Despite the internal debate and critique in the written opinions on two drafts sent out for review, which was outspoken although not as massive as in the Forest

45 Interview 3, EPA official, 2012
46 This was fuelled also by pent-up frustration with the intensified screening of reserve decisions, held-up Action Plans, the denied LIFE co-funding etc. (Interview 3, EPA official, 2012).
47 The previous handbook from 2003 had explicitly said that revising a decision did not mean annulling it.
49 Interview 30, EPA official, 2016
Management Guidelines case, the strict interpretations — which had early on been given the support of the responsible executive and the chief legal counsel50 — prevailed (paper II, SEPA).

The Action plan for the white-backed woodpecker (paper II) was closely linked to both the above guidelines due to the necessity of active restoration and management to re-create and maintain habitat, including by mechanical methods in existing protected areas to achieve results in the near term. For five years, Action Plan drafts were not approved by the EPA, partly because costs needed to be reduced, partly awaiting the outcome of the above guidelines which needed consideration. There was also discussion around specific areas such as Färnebofjärden National Park, where the Action Plan coordinator at the EPA did not see hindrance in the Park’s management plan against the proposed spruce removal, but certain area protection officials at the EPA did.51 When the EPA eventually approved a draft to be sent out for comments (SEPA 2013a), it received criticism both from the initial authors (primarily the SFA and SSNC project managers) and in the written opinions that came in from other interested parties. The draft Action Plan was criticized for discouraging restoration and management in protected areas and instead placing the main responsibility for restoration on forestry actors. There was also criticism against the absence of funding a national coordinator and the change of the name of the Action Plan from ‘the white-backed woodpecker and its habitat’ to ‘older deciduous forest, with the white-backed woodpecker as an umbrella species.’ A County official produced a new version at the EPA’s request in 2015, but although it had already been given a green light by involved counties,52 the EPA was not prepared to send it out for formal review.53 By the fall of 2016, after joint public criticism from the SSNC and a major forest company, the EPA commissioned another County official to rewrite the draft, primarily to narrow the geographical focus.54 The new draft was submitted to the EPA in early November 2016 (by mid-December, it had not yet been sent out for formal review).

Summary of appended papers
Both papers analyze the events delineated in the preceding section, which has thus partly summarized and partly expanded on the accounts in the two papers. Empirically, the first paper centers on the Forest Management Guidelines, while the second includes all three but focuses particularly on the white-backed woodpecker Action Plan. The theoretical focus of the papers also differs, paper I analyzing competing discursive articulations and paper II discourse institutionalization. In the following, each paper is briefly summarized.

Paper I
Paper I focuses empirically on the debate around the Forest Management Guidelines (especially the 2010 draft of these and the written opinions on this draft). Theoretically, it analyzes how key signifiers are discursively articulated in competing ways.

The analysis centers particularly on the notion of untouched(ness) and its corresponding non-intervention management principle (free development); on biodiversity and its corresponding adaptive management approach; and on naturalness which is perhaps most strongly associated with management through restoring natural disturbances. It shows how critics articulated untouched nature as an outdated term reminiscent of a past century and as a subjective, aesthetic concern as opposed to the objective, ecological value of biodiversity which is also an overarching goal in the present legal-political framework. In this articulation, non-intervention is just another method in the toolbox to be applied and evaluated in light of the latest ecological knowledge through adaptive management. The reactions also indicated that the 2010 draft was seen as a counter-challenge to an already well-established common sense. Attempts to problematize

50 Interview 30, EPA official, 2016.
51 Interview 2, EPA official, 2012.
52 E-mail from Östergötland County Administrative Board to the EPA, 2015.
53 Interview 26, SFA official, 2016; statement by EPA official at SSNC seminar 9 March 2016.
54 Interview 33, SSNC official, 2016.
biodiversity appeared only in the 2010 draft or by the few defenders of it, and in no instance was it questioned outright.

Naturalness occupied a form of middle ground: a few critics dismissed it as outdated or unscientific along with ‘untouchedness’, but mostly it remained an important bridging notion that can be articulated with both discourses — more as a property of nature in the interventionist discourse, and more as an emphasis on natural (undirected) processes in the preservationist discourse. An outspoken defense of naturalness as autonomy of nature was not found, however; the analysis suggests that this might be partly because such an argument is hard to make within the shared ‘discursive formats’ of this field — emphasizing science, legislation and tested experience — and also hard to square with biodiversity which is not defined with reference to human influence.

The paper concludes by pointing to a need to critically examine not only the older preservationist discourse and ‘naturalness’, but also the ascending interventionist discourse and ‘biodiversity’.

**Paper II**

Paper II discusses all three of the debated documents described above, with a particular focus on the debates around the Action Plan for the white-backed woodpecker. Outlining the same competing policy discourses as in paper I, the main theoretical focus is on how elements of these policy discourses are institutionalized and how this then shapes and is shaped by the struggles studied here.

The paper first makes a theoretical contribution through elaborating the notion of ‘discourse institutionalization’ found in the two discourse-analytical approaches that were outlined in chapter 3. Both the effects of discourse institutionalization and the processes of negotiation, re-interpretation and modification of institutions are found to be inadequately conceptualized in accounts of discourse institutionalization. Arguing that discourse institutionalization as a useful analytical concept in analyzing policy struggles should be separable from the deeper entrenchment of discursive patterns, the term ‘institution’ is used for various forms of authoritative and observable features such as rules, measuring instruments or official policy documents. Taken-for-granted notions or deeply rooted norms are rather seen here as more sedimented forms of discourse structuration. I suggest that the structuring effect of institutions thus understood comes from their *durability*, but also what I call their *legibility* (something observable to refer to) and the way they *leverage* the legitimacy of pre-existing institutions. The point is that such institutionalization must not necessarily be preceded by, but can also contribute to, discourse structuration, and that the processes of discourse institutionalization thus can be more open-ended than the image evoked by thinking in terms of slow and diffuse ‘sedimentation.’

The analysis points to how elements from both policy discourses which have been institutionalized at various levels over the years constitute resources or hindrances in the struggles studied. It also shows how the actors involved try to shape the understanding of these institutional legacies to fit their worldviews and claims, and try to institutionalize these understandings through inscribing them in the policy documents under debate. The analysis further highlights how the discursive dominance of an interventionist discourse focused on adaptive management for biodiversity (described in paper I) does not necessarily translate into discourse institutionalization; instead, preservationist logics seem to have become more institutionalized as a result of the struggles over the last years.
6. Concluding Discussion

This thesis set out to explore how issues regarding active intervention in nature are represented, debated and institutionalized within Swedish nature conservation, and to what effect. This aim has been explored by analyzing policy struggles around guidelines for the designation and management of protected forests and the action plan for the white-backed woodpecker. This concluding chapter will discuss and analyze the findings from the appended papers in order to address the overall aim and the research questions.

To recall, the first research question was to identify competing representations of the ends and means of conservation and the contestations around them; the second question focused on how these relate to scholarly debates around intervention in nature; the third question concerned the role of discourse institutionalization; and the fourth asked about the implications of the outcome so far of these debates. In the following, the first section will discuss questions 1 and 2, while the next will focus on the discursive-institutional struggle and its outcomes, thus addressing other parts of question 1 along with questions 3 and 4. The end of that section will discuss possible future developments, before ending with a few concluding remarks and avenues for further research.

Outlining competing discourses and connecting to scholarly debates around intervention in nature (Questions 1 and 2)

Both papers schematically described a ‘preservationist’ vs. an ‘interventionist’ policy discourse, summarized in table 5 on the following page. The table follows the same format as table 1 in chapter 2, in order to reconnect to the aspects laid out there; the commentary does not go row by row, but uses the letter numbering within brackets to connect to the table. It should be noted that these are stylized, reconstructed from documents and interviews, in light of the literature, and that it is not necessarily the case that any one person would subscribe to all elements on any side — certainly not in any particular setting or circumstance.55

Starting with the preservationist policy discourse, the major concern is old, continuity forests which are being threatened on two fronts. Those not yet protected are in danger of clear-cutting (a), and so available funds and manpower should be devoted to protecting more areas with existing high values, and if possible reinstate natural disturbances (f), rather than revising old management plans and doing short-term restoration and management — which may be unnecessary in the long run as nature eventually acquires new values (b, k). In already protected areas, continuity values may be threatened by overly meddlesome management using methods which lack adequate scientific support (b, c). Non-intervention or ‘free development’ (Sw. fri utveckling) is the privileged approach.

In the interventionist policy discourse, the overarching concern is to halt or reverse loss of biodiversity, which is caused not only by direct human-caused degradation through exploitative land use, but also by ‘natural processes’ of forest densification due to loss of natural or human disturbances (a, b). Addressing this requires active restoration, adaptive management and creation of target habitats, which we have the techniques to do — doing nothing means choosing to allow biodiversity loss (c, f). Although some species or other values will always be hurt by intervention, it is only needed or feasible in a small fraction of all protected areas, and effects will dissipate with time (b, k).

55 As noted in paper I, a number of opinions submitted in response to the 2010 draft Forest Management Guidelines could also be said to be centered around ‘balance’, recognizing downsides both with non-intervention and with an overly interventionist approach. Still, those ‘balance’ statements that articulate a conflict between two desirable goals do not display much of the existential hand-wringing and ambivalence that we saw examples of in chapter 2, but rather frame it basically as an issue of intervening when it is appropriate, i.e. ‘biologically motivated [and where] the conservation value is proportional to the cost’ (paper I p 47). They thus do not stray very far from the more interventionist proponents who seem to follow Botkin in presenting clear-eyed knowledge and freedom from old, emotional ideas as allowing us to ‘engineer nature in nature’s ways’ (Botkin 1990: 190).
<table>
<thead>
<tr>
<th>a) Causes of degradation</th>
<th>‘Preservationist’ ('free development')</th>
<th>‘Interventionist’ ('adaptive management for biodiversity')</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exploitation (Rash) conservation interventions (restoration, management) which may - damage nature directly - open door to exploitative interventions - build 'management debt' that drains resources from protecting new areas</td>
<td>Degradation (conversion to less desirable state and loss of disturbances) due to modern land use / exploitation ➔ Extinction debt; species will disappear if new habitat is not created Natural processes (esp. 'sprucification' and densification of open forest habitats) may 'destroy' existing habitat</td>
</tr>
<tr>
<td></td>
<td><strong>b) Nature’s ability to take care of itself</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>May need initial intervention to restore natural disturbances</td>
<td>Needs intervention to restore or replace / mimic natural disturbances Resilient to minor interventions (effects will dissipate with time)</td>
</tr>
<tr>
<td></td>
<td>Self-reliant with non-intervention (becomes more valuable given enough time)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>c) Our ability to help nature</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limited; no conclusive support for the effectiveness of mechanical interventions Precautionary principle: do no harm unless certain of benefits ➔ action more threat than inaction</td>
<td>Advanced; ample support for mechanical interventions (‘we can fix WBW habitats tomorrow, easily’) Non-intervention is equally active choice ➔ inaction more threat than action</td>
</tr>
<tr>
<td></td>
<td><strong>d) Moral obligations</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preserve valuable areas for coming generations</td>
<td>Maintain biodiversity, prevent species extinctions</td>
</tr>
<tr>
<td></td>
<td><strong>e) Value of intervention</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Positive if restoring natural disturbances; negative if ‘meddlesome’ Human tendency to fix and control to be avoided</td>
<td>Maintaining biodiversity, preventing species extinctions Active interventions engage people for conservation</td>
</tr>
<tr>
<td></td>
<td><strong>f) Intensity and type of intervention</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimal; primarily reinstating natural disturbances, possibly restore younger stands and let them develop freely</td>
<td>High; habitat creation, adaptive management</td>
</tr>
<tr>
<td></td>
<td><strong>g) Naturalness (Aplet &amp; Cole)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freedom from human control (and historical fidelity)</td>
<td>Lack of human impact (and historical fidelity)</td>
</tr>
<tr>
<td></td>
<td><strong>h) Biodiversity</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emphasize landscape level Created naturally over time Not the only value of protected areas</td>
<td>Restore or maintain original biodiversity Overarching goal to which protected areas should contribute</td>
</tr>
<tr>
<td></td>
<td><strong>i) Response to flux-centered paradigm</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prevent further exploitation, watch change occur</td>
<td>Adaptive management and ‘engineering’ necessary</td>
</tr>
<tr>
<td></td>
<td><strong>j) Basis for action</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Precautionary principle Original reason for protection and prescribed management</td>
<td>Ecological knowledge Original reason for protection (revise management as needed)</td>
</tr>
<tr>
<td></td>
<td><strong>k) Time perspective</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urgency: prevent new clear-cuts of valuable (old) forests Patience: no hurry to address sprucification and densification ‘to the next ice age’</td>
<td>Urgency: prevent species extinctions due to sprucification and densification (‘a lost species is gone forever’) Patience: ‘a pristine feel is possible to recreate in a few decades’</td>
</tr>
</tbody>
</table>

*Table 5. Overview of competing policy discourses pertaining to intervention in nature.*
**No replay of the preservation/restoration debates**

As could be seen in chapter 2, there are similarities between preservationist and some restorationist approaches in spite of the caustic preservation/restoration debates. And although I have used the term ‘preservationist’ for the non-interventionist side in my case (motivated not least because of the overriding concern in that camp on protecting new areas), we are clearly *not* seeing a replay of the preservation/restoration debates here. That is, there is no principled resistance to all kinds of restoration by any side. Instead, one could partially rephrase the debate in terms of the different responses *within* ecological restoration to the challenges brought by the new flux-centered ecological paradigm (i). In this perspective, the ‘preservationist’ side could rather be construed as favoring ‘holistic’ (Clewell and Aronson 2007) or ‘ecocentric’ (Jordan and Lubick 2011) restoration, or perhaps even ‘rewilding’. We see this in the focus (as shown in papers I-II) on restoring natural disturbances (f), the goal being a ‘self-sustaining system’ (SER 2004) of unmanaged (natural) processes requiring no further interventions, and not insisting on a certain outcome.

The other side then favors ‘intervention ecology’ (Hobbs et al. 2011), seeing a great and increasing need for intervention; but even this should be qualified. There is no explicit discussion in my material of ‘novel ecosystems’ — both sides seem to primarily strive to restore what has been lost or save what is disappearing (i. e. is rare), giving priority to that which is under most imminent threat. *Climate change* – an important impetus behind intervention ecology – is sometimes mentioned in the material as an argument both for and against intervention, but surprisingly little (it was explicitly excluded from consideration in the Forest Management Guidelines). Another relatively prominent concept in the intervention ecology literature (Hobbs et al. 2011) which is conspicuously absent from the debates studied here is the concept of *ecosystem services*: it is simply never brought up as an argument. This would seem to suggest that unlike biodiversity, ecosystem services is not (yet) seen as a relevant concept for the internal discussion within the conservation community, in spite of the increased emphasis on it in both international frameworks such as the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) and national policy (Swedish Gov. Bill 2013/14:141).

**Naturalness and Biodiversity**

In terms of the different meanings of *naturalness* (g) delineated in chapter 2 (Aplet and Cole 2010), the ‘preservationist’ response to the ‘dilemma of intervention’ inherent in the definition of Swedish National Parks (‘in its natural state or essentially unchanged’, Swedish Environmental Code ch. 7 s. 2) comes down on the side of ‘freedom from human control’ in Aplet and Cole’s term. If we can restore a natural flooding regime to Färnebofjärden National Park (a potential locale for the white-backed woodpecker, see paper II) and thereby keep both natural processes and the kind of deciduous habitat which motivated its protection, then by all means let us do that. If not, letting natural processes continue takes precedence; we should not manually and recurrently remove the naturally encroaching spruce.

In the interventionist discourse, encroaching spruce is actually a highly ‘unnatural’ condition caused by regulating rivers, preventing fire and generally favoring spruce in production forestry. While restoring natural disturbances is recognized as ideal in the sense of producing the most complex and long-lasting effects, there is no reason why we should not try to mimic these effects as best we can in order to preserve threatened habitat — because naturalness as lack of human effect trumps naturalness as freedom from human control. This signals ‘intervention ecology’ in insisting that ‘the decision *not* to intervene is also a deliberate and intentional management decision’ (Hobbs et al. 2010: 484), and involving a wider view on how forests can become ‘damaged, degraded or destroyed’ (SER 2004), with ‘sprucification’ as an important and urgent driver of degradation and a threat to biodiversity, addressed through ‘spruce sanitization’ (Sw: gransanering, SFA 2010).

If ‘naturalness’ is problematized in the interventionist discourse, ‘biodiversity’ (h) comes across as an unquestioned, self-evident goal (paper I), seemingly a shorthand for ‘concern for nature informed by ecological science’, and not related to either the older ‘naturalness’ or the more recent ‘ecosystem services’. In the preservationist discourse, biodiversity is a little more problematic, handled in different ways: articulating with lack of human intervention, relegating it to the
landscape outside protected areas, emphasizing landscape level diversity over a narrow species focus, or just presenting it as too vague to be of much practical guidance (paper I, II). However, it is not questioned outright.

The difference in focus between naturalness and the more abstract notion of biodiversity also involves competing articulations of the protected area itself. In the preservationist discourse, it is precisely that: an area, a container of values that sets it apart as a ‘gem’ in an otherwise degraded landscape. Protected areas cannot compensate for such degradation which instead has to be addressed at the landscape level by other actors. The individual area is to be handled with the utmost care, allowing only interventions outlined at the time of designation (j), and vigilantly guarded from outside threats. In the interventionist discourse, protected areas are important instruments in the service of maintaining biodiversity in Sweden, ‘engines’ (paper II) in the conservation effort that we have invested a lot of money in and which must therefore be managed conscientiously, adaptively and pragmatically choosing methods and revising goals in light of the latest ecological knowledge (j).

This then also implies different roles or identities for conservationists. In the preservationist discourse, the primary role is that of guardian: snatching valuable areas from the jaws of development and keeping them safe for posterity. Interventionists rather come across as members of a rescue team, using whatever means we have to prevent biodiversity loss. They also see intervention as helping to engage people for conservation work through providing concrete results from concrete action, while preservationists see a lack of patience in this ‘will to improve’, making it a problem rather than an asset (paper II). In this sense, the debate has certain echoes of the restoration–preservation debates where restoration as a benefit both for nature and the human–nature relationship (Jordan 2003, Light 2000) is pitted against a wariness of ‘managerialism’ (Bavington 2005).56

The absence of ethical arguments
The perhaps most important element of the debates referenced in chapter 2 that does not feature prominently in our case is the ethical arguments for non-intervention — whether conceived as ‘respect for nature’s autonomy’ (Heyd 2005, Katz 2014), or humility and ‘letting be’ as the appropriate role or ‘fit’ of humans in relation to our biotic and geophysical surroundings (Maier 2012), or ‘deference to nature’ (Jordan and Lubick 2011: 188). Some interview statements from one EPA official voice a preference for ‘not trying to fix or control everything’, or that ‘nature can take care of itself and there is a great value in that in itself’ (paper II), and certain statements in the 2010 draft of the Forest Management Guidelines emphasize e.g. the value of ‘unspoiled nature’ (paper I). But such statements are the exception, and provoked strong reactions in the opinions on the 2010 draft.

Instead, the defenders of non-intervention tend to use rather more practical arguments: resource efficiency, limited knowledge, legal limitations, political guidance, aesthetic or recreational concerns ... In fact, the only time the term ‘anthropocentric’ was used in the interviews, it was contra a biodiversity focus, referring to visitors’ impressions as a last argument for leaving an area untouched if there were no valid ecological, economical or legal objections.57 These practical arguments are in line with the shared ‘discursive formats’ (Hajer 1995) in which both sides can frame their own view as based on facts of the world but the other’s as based on principle or emotional or aesthetic concerns; themselves as pragmatic, science-based, realistic and in line with relevant legislation and policy and the others as dogmatic, short-sighted or negligent of relevant legislation (these discursive formats are then also reinforced by this positioning). The different

56 This ‘managerialism’ — or, more positively stated, this insight that restoration and management may be necessary to preserve biodiversity — arguably contributes to the unusual alliance between ENGOs and forestry actors in paper II. See also Mårald et al. (2016), who, examining changing concepts in Swedish and US forestry journals over the 20th century, conclude that the constant is the idea of management itself, as the raison d’être of professional foresters.

57 Interview 8, EPA official, 2013.
logics (legal, economic, precautionary ...) invoked by the non-intervention proponents converge on
the same policy prescription: instead of intervening in existing reserves, create new ones (paper II).
But while an ethically informed defense of nature’s autonomy is consistent with this policy
prescription, it is not consistent with the discursive formats, or with present ‘discourse
structuration’ in which notions of unspoiled or autonomous nature are dismissed as ‘emotional’
and hence unfitting in the science-based work for biodiversity.

A disregard of emotional arguments is consistent with findings elsewhere (e.g. Buijs and
Lawrence 2013, Satterfield 2004). It may seem ironic that ethics and emotions are in a sense taboo,
since arguably, these are important motivating forces behind conservation, both at the level of
individual conservation workers and at the level of public support for conservation policies. Indeed,
it has been increasingly recognized that the decision-making processes of conservation
professionals are influenced by emotions even if professionals tend not to use them in strategic
argumentation (Buijs and Elands 2013, Kennedy and Vining 2007, Hobbs 2013). In the words of an
official who was later to become the head of the Swedish EPA:

despite our honourable efforts to explain, define, classify, computerize and problematize with the aid of
“objective” methods, [it is still] “the silhouette of the eagle” [which] is the incentive behind all
conservation activities. (Liljelund 1993: 11)

What is noteworthy in our case is how also potentially ethical arguments are equated with
aesthetics and emotions, to the effect of weakening the preservationist argument. It is not that
ethical arguments are seen as irrelevant to nature conservation, but they do seem to be reserved for
the ‘outside’, e.g. to be forwarded for the preservation of species and habitats. When the Project
Plan for the Forest Management Guidelines mentioned possible ‘goal conflicts ... between species
protection and ethical aspects’ (SEPA 2008: 12) — which might be construed as ‘interventions to
favor certain species vs. the autonomy of nature’ — it later disappeared without a trace (paper I).
Apart from the emphasis on science and rationality within the conservation field, and an
expectation of overarching normative concerns being shared, the very dominance of biodiversity,
with its scientific aura and lack of reference to human action (cf. Sarkar 1999) is likely an important
factor for invalidating notions of unspoiled or autonomous nature.

All this notwithstanding, one may still see some affinities between Katz’ (1992, 2000) line of
argument against restoration and that of the ‘preservationists’ studied here. Restoration — however
benevolent and beneficial — can pose a threat to something perceived as eminently valuable
(Nature’s Autonomy and status as Original for Katz; here instead the valuable areas that we have —
or have not yet — protected), primarily via a logic of ‘slippery slope’ or unintended consequences.
The better we get at restoring, says Katz, the greater the risk that it is used as argument for
exploitation; the more we intervene in protected areas, say the preservationists at the EPA, the
greater the risk that exploitation is seen as compatible with the protected status, and that we fail to
protect new areas (paper II). In both cases, there is a natural (but dangerous) drive towards action
that needs to be checked; for Katz, it is the dream of mastery and domination, in our case it is well-
meaning — but from the time perspective of ‘to the next ice age’ necessarily short-sighted —
conservation officials or volunteers who would favor this or that species or management method
according to the fashion of the day.

Understanding the policy struggle and its outcomes (Question 1, 3 and 4)
This section will discuss the policy struggles themselves, in terms of competing articulations of key
signifiers (question 1), the institutionalization of different articulations (question 3), and the
outcome so far in terms of what articulations seem to prevail, why that might be, and what it might
imply for the future (question 4).

Dislocation, articulatory struggles and discourse structuration
Although analyzing the longer lines of development in detail is beyond the scope of this thesis, the
account presented in chapter 5 suggests that even as the old preservationist program was being
implemented through escalating protection of ‘primeval’ or ‘natural’ forests, an interventionist
Policy discourse was growing stronger from the 1990's onward, being firmly established by the time the debates studied here erupted. During the immediately preceding decade or so before the period in focus in this thesis, then, I would argue that two policy discourses were leading partly parallell, 

These came into more open conflict and created dislocation around 2007, when the ‘maintenance workers’ (Marcussen 2009, Torfing 2009) of the preservationist policy discourse ‘woke up’ to the shifts that had occurred and tried to pull the breaks or reverse gear. This spurred both a more explicit formulation of a preservationist discourse (in the 2010 draft Forest Management Guidelines) than had been visible in official documents in later years, and a more explicit refutation of that policy discourse than had previously been needed (in the written opinions from counties, ENGOs etc.). The ‘dislocation’ here then primarily concerns the common (order of) discourse, in that the organizing ‘nodal points’ within each of these competing policy discourses became contested ‘floating signifiers’ in the debates studied here (cf Jørgensen and Phillips 2002).

In the responses to the 2010 draft Forest Management Guidelines (paper I), it became clear that holding up ‘untouched’ forest as a primary value and ‘free development’ as a privileged management approach (or a goal in itself) just would not fly. These old nodal points could no longer organize the common discourse, but became floating signifiers to be re-articulated. The ‘untouched’ notion was made irrelevant through articulation with a non-existing state of affairs or with a mere aesthetic experience, and ‘free development’ was degraded to just another management approach. ‘Biodiversity’ has instead stepped in as the new nodal point, with ‘adaptive management’ as its privileged management approach. This change shows in both measures of discourse structuration, i.e. the degree to which drawing on certain discursive elements is necessary for (or antithetical to) making legitimate sense within a field (Hajer 1995), and how widely used such discursive elements are (Hajer 2009) — in paper I, indicated by the outrage displayed in the written opinions as well as the near-universal critique. Even with ‘naturalness’ remaining a bridging notion (paper I), the results thus suggest that the Swedish conservation bureaucracy has come a long way from the preservationist focus on original, pristine nature that has previously been seen to characterize it (Emmelin 2009, Mels 2002).

Still, as displayed in paper II, the attempt to halt the interventionist discourse’s further entrenchment seems to have been partly successful, with non-intervention policy in certain respects having become more institutionalized as an outcome of the policy struggles studied here. How can we understand this?

**Discourse institutionalization**

In discussing discourse institutionalization in paper II (and chapter 3 above), I defined my usage of the concept partly according to Hajer (2005; 2009) as the translation into concrete policies or institutional arrangements. But I also parted ways with Hajer by arguing against seeing it as just the second stage in a ‘two-step procedure for measuring the influence of a discourse’. I have rather studied this as two separate (although related) processes, where discourse institutionalization is not just slow, actor-free ‘sedimentation’ of discourse, but also an arena of conscious struggle where it is not necessarily only the already dominant discourse that becomes institutionalized. Indeed, I would argue that what the different sides are trying to achieve in the debates studied here (and, I expect,

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58 This should not be taken to mean that there was a situation with closed-off silos of thought: asking any EPA or County official, they would likely have told you that area protection and species-oriented conservation are two main pillars of the conservation authorities’ mission, and all would likely be able to point to potential conflicts between (or within) the two in particular cases. As an example, in a 2006 EPA report (based on a 2004 conference) about goal conflicts in conservation, nine out of the 32 practical examples discussed were classified as ‘conservation against conservation’ (SEPA 2005a). But the processes studied here meant an open struggle to challenge, defend or transform norms, institutions and practices (Glynos and Howarth 2007: 105) of a different order of magnitude.

59 The fact that almost all counties were critical to the 2010 draft was forwarded by the project manager as an important factor for resolving some of the deadlock in the internal debates within the EPA; before the written opinions came in, area protection officials often argued that only a few people (especially those working with Action Plans for threatened species) wanted more intervention (Interview 3, EPA official, 2012).
in many other policy struggles) is precisely to institutionalize certain discursive articulations or logics of action in various kinds of formal documents, mindful that this will then condition action or provide discursive resources for different claims in the future.

This is of course not to say that discourse institutionalization is only an outcome of such conscious struggles. Many of the stumbling blocks encountered by those advocating more intervention for the white-backed woodpecker (paper II) may be seen as unplanned legacies from a time when the preservationist discourse was dominant; one example is purposes and management plans of certain older nature reserves that prescribe non-intervention even in cases where it is obviously at odds with the type of nature supposed to be preserved, indicating that it used to be a default management prescription. The legacies from inventories of old-growth forests may similarly be seen as outgrowths of a dominant paradigm rather than conscious attempts to strengthen one policy over another. Likewise, the institutionalization of the biodiversity discourse over time (from the CBD and EU directives to national legislation and policy instruments such as action plans for threatened species) does not seem to primarily have taken place as a strategic opposition to a competing paradigm. Rather, the clashes between older non-intervention management plans and Natura 2000 requirements to restore or maintain designated species and habitats for those same areas could be seen as indications of the partly ‘parallell lives’ that the two paradigms have led.

Much of the debate studied here is then about which of these institutionalized features that should take precedence over others. A form of ‘institution shopping’ (cf. ‘venue shopping’, Baumgartner and Jones 1993), perhaps — or rather ‘institution shaping’, since this ‘structure positioning’ (Hajer 1995) is a process of articulation, i.e. establishing a relation between different institutions that mutually modify their meaning (Torfing 2005). And to entrench a particular articulation of them, ideally that should itself be institutionalized — as partially achieved by both sides. Some of the interventionist ideas were institutionalized in the *Forest Management Guidelines*, such as a strong biodiversity focus, promoting adaptive management and emphasizing that action plans for threatened species should guide management of protected forests (paper I). But this was also moderated by a continued focus on naturalness in the guidelines, and, importantly, strongly circumscribed in practice through the *Reserve Designation Guidelines*. In direct opposition to the interpretation favored by the interventionists, the Reserve Designation Guidelines give national legislation precedence over EU Directives, interpreting the former as setting an extremely high bar for any revisions and the latter’s requirement as applicable only at the biogeographical level and not for the individual area (paper II). The Reserve Designation Guidelines also affect the power of ‘gatekeepers’ (Wilder and Howlett 2014), changing purposes and management plans for nature reserves from an ‘institutional lock’ operable by County-level officials into more of a ‘structural lock’ (or at least an institutional lock that is under tighter control of the gatekeepers at the EPA) by introducing a new and stricter interpretation of the higher-level ‘structural lock’ that is the Environmental Code.

**Understanding the (re-)institutionalization of the preservationist discourse**

Interviewees point to a small group of people within the EPA driving this shift back toward non-intervention; basically describing a situation where it is ‘three or four people at the EPA against the rest of the world’, everyone else having taken on board the new ecological knowledge and the need for action to preserve biodiversity. So one might be tempted to answer the question why the interventionist discourse has been hindered in its further institutionalization simply by pointing to this small group of ‘maintenance workers’ (Marcussen 2009, Torfing 2009) or ‘gatekeepers’ (Wilder and Howlett 2014) of the preservationist policy discourse. And there is no doubt that particular people having certain professional roles within the EPA or having the support of relevant EPA executives have made a crucial difference here. However, as Hajer points out, to explain ‘the influence of a stubbornly resisting actor’, one must also examine the rules and discursive practices that ‘constitute the legitimacy of his position’ (Hajer 1995: 51) — why have the ‘hard-liners’ succeeded to the extent that they have? There are, I think, several levels of explanation.

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60 Interview 32, County official, 2016.
One first, perhaps obvious, element of an answer is the coordinating and therefore gatekeeping role that the EPA has in these matters, being supposed to provide general guidelines for the counties’ work and having the ability to pronounce themselves on the counties’ designation of reserves or changes in them. That is, when area protection officials at the EPA wanted to pull the breaks, they had some they could pull immediately, by starting screening proposed nature reserve cases closely, reversing the more laissez-faire attitude that seems to have flourished in the early 2000’s. And when it comes to existing reserves, the long tradition of non-intervention provided a broad base of status quo to defend.

Still, this more restrictive practice was then institutionalized in the Reserve Designation Guidelines, which, after all, are not just the words of a few officials but have been formally decided by the EPA — certainly under the objection of many counties as well as many within the EPA, but not the all-out rebellion that could be seen in the opinions on the Forest Management Guidelines. Why were the ‘maintenance workers’ more successful in this case?

One important difference is that the 2010 draft of the Forest Management Guidelines directly challenged the dominant interventionist discourse, along with the competence and judgment of county officials. By contrast, the Reserve Designation Guidelines operate on much more technical, legal turf. To be sure, counties still objected to an overemphasis on non-intervention in provided examples etc., and also argued against the new legal interpretations as such, but this terrain is not the one where their professional identity lies. Once a decision has been made, respect for the overarching institutional framework may also dampen critique, especially among those working within the EPA, but also the counties which are also representatives of the State. The ENGOs and forest companies, and to some extent the SFA, have a freer role here, which may part of the reason why it is these actors that most forcefully have been questioning the State’s lack of action for the WBW (see paper II).

But there may also be a deeper dynamic at work, for which we can look to Discourse Theory for clues. As Torfing has argued, a policy path is often held together ‘by the policies that it excludes and constructs as an antagonizing threat to its own basic principles.’ (Torfing 2009: 77). The major ‘antagonizing threat’ for conservation is arguably exploitation and degradation of nature, by urban development, production forestry, mining etc. And the preservationist policy discourse could be seen to provide a coherent response to that threat, by insisting on first saving areas that may otherwise be exploited, and then making sure that the status of that protection is not undermined by conservationists intervening in them without a solid case and following a strict legal procedure.61

In contrast, whatever the threat of ‘sprucification,’ it is not an antagonizing external threat. Indeed, if it were not ultimately seen as stemming from anthropogenic changes (i.e. being ‘unnatural’), it would likely not be a legitimate problem. In other words, although I found in paper I that ‘biodiversity’ is generally not anchored in ‘naturalness’ in these debates, it still is, at a deeper level. The SSNC argued in a letter to the EPA that

the goal of biodiversity, where species conservation is of course central, should guide the formulation of purpose and management plans for protected areas. A concept such as “naturalness” has no value in itself in this context.62

This is a clear statement that ‘naturalness’ is not relevant to protected area management. But still, the SSNC surely would not work to introduce the white-backed woodpecker to Sweden had it not once been prevalent. Since it is not at all threatened by extinction globally, and there is no genetically distinct Swedish variety to be lost, the rationale for saving it is that it used to be here, i.e. Sweden is part of its natural range, and here it is rare. Historical continuity, naturalness, rarity; arguably, all parts of the romantic half of the marriage between the enlightenment and romantic

61 Inversely, some of the strong reactions against the 2010 draft of the Forest Management Guidelines could be seen as stemming from being associated with the outside, as a potential threat to nature rather than its steward and helper.

tradition that is nature conservation (Lundgren 2009b: 235), regardless of the dismissal of the ‘romantic’ notion of nature taking care of itself (paper II).

This suggests, then, a deeper-level attachment to notions of naturalness, even among those prone to declaring the term ‘naturalness’ outdated. One way of thinking about this is in terms of the shared codes that unite conflicting discourses within an order of discourse, Waever’s (2005) ‘Foucauldian boxes’ mentioned in chapter 3; part of the older discourse are deeper levels which condition the thought even of the opponents at its present surface level. This could be conceptualized as discourse structuration at different levels: while biodiversity is a nodal point at the manifest level of internal policy debate can ostensibly be articulated in opposition to naturalness, notions such as rarity and historical conditions remain shared concerns (especially in argumentation against external actors).

Perhaps this shared concern could be captured with another word, related to the antagonizing outside. We discussed above how, although ethical and emotional arguments do not seem to fit in the internal conservation debate, they are likely important drivers. One common denominator, with both ethical and emotional charge, is loss. Probably most people active in the conservation field might describe their work as preventing loss, and feeling passionately about this. Making sure we do not lose another valuable forest — a goal institutionalized through forest surveys and ‘value-based’ protection strategy. Making sure we lose no more species — a goal institutionalized through the Red List of threatened species and action plans.

Preventing loss of the abstract notion of biodiversity could, theoretically, be different. It could for instance involve focusing protection on younger forest stands as a more cost-effective approach than protecting mature and thus expensive forests (Gustafsson and Perhans 2010); but while this should be in line both with future-oriented intervention ecology and the long time perspective of the non-intervention discourse (nature acquiring value given enough time), such ideas do not seem to gain much traction. Or it could involve ignoring the white-backed woodpecker’s short-term presence in Sweden and focusing only on long-term creation of deciduous habitat — as the non-interventionists at the EPA has argued for, but which is a non-starter for the SSNC and others. Perhaps long-term, net avoidance of biodiversity loss is simply too abstract and remote compared to present-day loss of particular species or areas.

**Implications for the future**

To sum up the above, I have suggested a dominant interventionist discourse in which protected areas are engines in the biodiversity rescue operation and the idea that ‘nature knows best’ is dismissed as outdated and romantic; but also that at least parts of the romantic legacy remain at a deeper level and non-intervention institutional legacies have actually been strengthened in some ways. What might this imply for the future? Considering possible scenarios invites a discussion of the relative importance of discourse structuration and discourse institutionalization.

One scenario could be that, given the dominance of ‘adaptive management for biodiversity’ in terms of discourse structuration, it is just a matter of time before the few die-hards at the EPA will have to give in or become irrelevant (or retire, à la Kuhnian paradigm shifts). In this scenario, once the normative rationale behind non-interventionist practices is discredited, the other logics presently keeping them in place will be vulnerable to relatively small shifts. Such changes could include increased scientific evidence for management methods, changes in law or legal precedent, changes in funding, or changes in EPA leadership.

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63 When Lundström et al. (2014) modeled forest protection to maximize biodiversity under budget constraint, young stands dominated; but the county-level conservation officials in the study prioritized protecting remnants of old-growth forest.

64 Such evidence was recently summarized by the Mistra Council for Evidence-based Environmental Management (Bernes et al. 2015)

65 e.g. so that evidence-based changes in management do not require ‘exceptional circumstances’ or so that Natura 2000 requirements must apply at the area level.

66 e.g. the government assigning extra funds for management.
However, we should be wary of end-of-history arguments, as if changes in policy are ‘simply the outcome of the gradual triumph of science’ (Midgley 2007: 3330); even if the broader flux-centered emphasis of current ecological theory remains for the foreseeable future, it can be articulated in different ways, e.g. supporting both intervention ecology and rewilding as we saw in chapter 2. As historically contingent constructions, policy discourses can shift through the introduction of new elements or the reconfiguration of existing ones. One relatively recent development that supports a preference for hands-off management is precisely the rewilding movement and, more broadly, a renewed interest in wilderness in Europe and the Natura 2000 system (see e.g. European Commission 2013). So another scenario could be that this trend grows rapidly in Sweden, too. In that scenario, the institutionalization of non-interventionist practices might turn up to have been not just a shallow if irritating impediment on the march to rational biodiversity conservation, but instead something that kept these practices in place until a renewed emphasis on non-intervention and wildness seeps in from the rewilding discourse to lend them new and broadened support. Inversely, if the last eight years (instead of the debates studied here) had seen a concerted effort to update protected area purposes and management plans to harmonize with Natura 2000 restoration and management requirements, the ‘adaptive management for biodiversity’ discourse would have been broadly institutionalized, and more resistant to changes on the ground if and when rewilding, a relaxation of Natura 2000 goals or a questioning of biodiversity would come to the fore.

A questioning of biodiversity may sound far-fetched, but we should not expect any policy idea to be immune from dislocation (Jeffares 2008, 2014); as we saw in chapter 2, all-out critiques of the concept — and, notably, its management implications — have started to appear. Of course, institutionalization matters here too. The early enshrinement of biodiversity into the CBD and EU and national legislation both helped accelerate its diffusion as a taken-for-granted concept and makes its dislocation more difficult. It strengthens it in discourse structuration terms, i.e. the mere fact that it is an official goal for conservation means that not referring to it in a policy argument may be questioned (as it was in the opinions in paper I), or that critique against the concept may be taken as critique against nature conservation as such. This may be an unthinking adaptation to the vocabulary of the day, but it may also become a conscious, strategic issue. Even if you (say, after reading Maier 2012), were convinced that ‘biodiversity’ is an insufficient or even directly harmful way of conceptualizing nature’s values and the proper human-nature relationship, would you really suggest re-negotiating the CBD, replacing ‘biodiversity’ with something else? Apart from identifying that ‘something else’, one obviously runs the risk of ending up with a convention that is watered-down from a conservation point of view, or with nothing. Especially now, with the establishment of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in 2012; if one is even more critical of the notion of ecosystem services (as limiting the values of nature to instrumental ones), then one perhaps prefers IPBES to a IPES, without the ‘B’ for ‘biodiversity’.

The main theoretical takeaway from the above scenarios is that both discourse structuration and discourse institutionalization matter and that both may strengthen each other. Discourse institutionalization may do two things that can effect change: favor repeated action of a particular kind (e.g. through survey manuals), and entrenching a particular kind of argument, both of which may eventually create ‘new normals’. Leipold and Winkel (2016), using the imagery of a river bank, suggest that it is the combination of soft materials (discourse structuration) and hard materials (discourse institutionalization) that creates stability. In our case, then, we might venture the expectation that neither an interventionist nor a preservationist extreme is likely in the near term. The discursive dominance and wide institutionalization of biodiversity and adaptive management seems to preclude a return to the old preservationist paradigm. But to the extent that naturalness remains a deeply sedimented thought structure, a bridging signifier in the present order of discourse (paper I), and institutionalized at various levels (paper II), we are equally unlikely to see

67 From 2017, the conservation division of the EPA will be led by a former executive at a county that has been critical to the non-interventionist emphasis in drafts of the Forest Management Guidelines and the Reserve Designation Guidelines.
a radical approach towards maximizing biodiversity becoming widespread. In between those extremes, there is ample room for continued debate.

Concluding remarks
This thesis has provided a window into how the ends and means of nature conservation are negotiated at a policy level normally outside public scrutiny and debate, and concerning an issue that is likewise often seen as a matter of mere implementation: how to manage those parts of nature that we set aside for conservation purposes. But the issue of intervention is central to nature conservation: what can and should we do ‘for nature’? How this issue is dealt with in nature conservation policy work is something that merits more research, and there are several avenues that could fruitfully be explored. Comparing the dominant discourse and policy struggles in Sweden with those in other countries is one example. Within the Swedish case, the frame of analysis in this thesis could be broadened in time or scope, e.g. including the political level as commonly understood (the role of ministries and political parties), or focusing more on the interactions of different parts of the ‘green triangle’. One particular connection found here which should be explored is the unexpected coalition between ENGOs and (ecologists at) forestry companies when it comes to conservation management (paper II).

That said, the narrow scope of actors studied in this thesis has had the advantage of playing down some of the usual suspects as drivers of policy struggles such as resource distribution or differing material interests. Ideationally driven policy struggles are of course not unique to nature conservation, and the analytical approach taken in the thesis adds to the increasing literature focusing on them. Scholars that take discourse as a starting point would do well to inquire further into the role of institutionalization in policy struggles, for instance through closer examination of how discourse institutionalization can contribute to discourse structuration.

Returning finally to the title question of the thesis, the goal has not been to try to settle it; nor do I think it can or even should be settled. A detached observer may conclude that whether supposedly clothed in naturalness or biodiversity, the emperor is in fact naked — or at least will be once you pick a thread of either garment and keep pulling. But this is really only saying that nature conservation is a social and political endeavor. Exposing the flaws of previous foundations, e.g. by claiming that nature has ended or that biodiversity is a meaningless concept, neither invalidates conservation efforts nor defines their direction. As in all common endeavors, we have to build and rebuild the foundations we need from the materials available. Such de-and re-construction is taking place both in the scholarly literature and (if less self-consciously) among the various policy actors involved in conservation, in day-to-day activities or open policy struggles such as those studied in this thesis. To venture a humble suggestion for both of these construction sites might be to emphasize indeterminacy.68 This notion, it would seem to me, resonates both with the discursive view of the social world, the present-day flux-centered ecological paradigm, and with the non-interventionist wariness of changing management fashions and hubristic beliefs in our ability to control. Indeterminacy is not just about our limited knowledge of how nature will develop and respond to our interventions (or lack thereof), but also the very basis for our knowledge and our valuation. Recognizing this would imply that rather than trying to escape dilemmas by defining one of the alternatives as unproblematic or hiding the necessity to choose, we should keep them alive, ever returning to the uncomfortable and unanswerable questions about our intervention in nature (cf. Jordan and Lubick 2011).

Nature, meanwhile, will continue to surprise us, whatever we choose to do or not do. Keeping the dilemma of intervention alive means allowing that to be an at once intimidating and comforting thought.

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68 I am indebted here to my fellow Ph.D. student in the RESTORE project, David Bell, who used to advocate ‘indeterministic restoration’; he in turn was inspired by (Millar et al. 2007, Harris et al. 2006).
References


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## Appendix

### Interviews

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