Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

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Which knowledge counts?

– A critical discourse analysis of a conflict between a wind power development company and Sami communities

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Abstract

Sweden has ambitious climate and energy policies, for example 100 percent fossil free electricity production by 2040. A central part of the policies are wind power developments. However, wind power is not unproblematic either in an environmental or a social perspective as it negatively affects the indigenous practice of reindeer herding in Northern Sweden. With a focus on traditional knowledge, I have studied power and knowledge relations in a conflict between a wind power company and indigenous Sami reindeer herding communities in Gabrielsberget, Nordmaling's municipality. I have utilised the theoretical, as well as methodological, framework of critical discourse analysis, drawing on the work of Fairclough. Furthermore, Foucault's work on power and knowledge is used to analyze the dominant discourses regarding knowledge claims and its implications for the environmental permit process. The analysis of legal documents and recordings of court hearings shows that traditional knowledge is seen as a secondary source of knowledge and that reindeer herding is commonly constructed as a business, hiding its cultural values and connection to traditional knowledge. To be viewed as legitimate actor and have their claims and stakes taken into account, the Sami communities had to align with discourses constructing reindeer herding as a business and build their arguments on science instead of traditional knowledge. As discourses are socially constitutive, this will have implications both for how environmental permit processes plays out in the future but also for the status of traditional knowledge and reindeer herding.

Keywords: traditional knowledge, wind power, Sami communities, Critical Discourse Analysis, power and knowledge, science

Table of contents

Abbreviations

CAB	County Administration Board
CBP	Convention for Biological Diversity
CDA	Critical Discourse Analysis
EAD	Environmental Assessment Delegation
IASG	United Nations' Inter-Agency Support Group
Immemorial prescription	Legal right based on continual use of land during a long time
Sápmi	Area consisting of parts of Norway, Sweden, Finland and Russia that comprises the historical settlements of the Sami

1 Introduction

1.1 Wind energy, Sami reindeer herding and Traditional knowledge

Sweden's ambitious plan of 100 percent fossil free electricity production until 2040 and zero net emissions of greenhouse gases until 2045 (Government Offices of Sweden 2017) will have consequences both for the environment and the climate but also for other aspects of society such as competing values and land uses. The climate and energy politics cannot be seen as exclusively positive, or a benefit to all. When something is prioritised in society something else must stand back. This is the question of environmental justice, who (or what) pays the price of the climate- and energy policies?

An important part of the implementation of the Swedish climate- and environment policies is participation, mostly carried out through consultation meetings (Miljösamverkan Sverige 2013). The importance of participation and civil influence is also formulated in the aim for the democracy politics (Swedish Government's budget proposition 2017) as well as in public health policies (Swedish Government proposition 2007). Questions regarding democracy and environmental justice are central to the field of Environmental Communication through the perspective of language and the practice of communicating (International Environmental Communication Association 2015). Environmental communication as a field of research and practice is interested in how values, opinions and truths are constructed through language and whom who gets to participate in the communication. Whose voices are heard and why? One way to study this is by studying discourses; *"(…) particular ways of representing certain parts or aspects of the (physical, social, psychological) world (…)"* (Fairclough 2010:358). Discourse analysis reveals the discursive structure of a situation and can illuminate the democratic aspects and qualities of a social activity (Hajer and Versteeg 2005).

A central part of the fossil free plan is wind power developments. Wind power accounts for approximately ten percent of Sweden's electricity production (Swedish Energy Agency 2016) The government states that Sweden has good preconditions for continual developments and will keep supporting municipalities to enable new establishments (Government Offices of Sweden 2017). Overall, the Swedish population is positive to wind power, 61 percent thinks that Sweden should build more wind power than today the coming five to ten years (Hedberg 2017). However, wind power is not unproblematic. Developments cause a direct policy conflict between the Environmental Objectives *Reduced Climate Impact* and *A Magnificent Mountain Landscape* due to the effects wind power turbines have on reindeer herding (Sweden's Environmental Objectives 2017). The number of reindeers in the mountains is used as an indicator for the success of the objective *A Magificent Mountain Landscape* but areas important for grazing is threatened by exploitation of for example wind power, a part of the strategy to reach the objective *Reduced Climate Impact.*

The user right to reindeer herding is based on immemorial prescription and belongs to the indigenous Sami communities of Northern Sweden. It applies on approximately half of Sweden's surface, divided in 51 Sami communities (The Sami Parliament 2009; 2017a). The reindeer herder has right to use both private and public land and water for him/her and the reindeers (The Reindeer Husbandry Act, SFS1971:437). The right to reindeer herding is protected by the constitution and as long as the land is used by herders it cannot be taken without compensation (ibid). Reindeer herding is an integral aspect of Sami culture and all Swedish authorities are obliged to protect the interest of reindeer herding (Kløcker Larsen et al 2016). Reindeer herding requires large areas and as the cumulative pressure on the land increases through forestry, mining and wind power developments, the reindeer herding is strained (Kløcker Larsen et al 2016; The Sami Parliament 2009). The government of Sweden considers sparsely populated areas (common in Northern Sweden) suitable for wind power developments due to the possible contribution to the local economy

(Government Offices of Sweden 2008). The number of wind power turbines in Northern Sweden has increased rapidly from 48 in 2003 to 704 in 2014 (Kløcker Larsen et al 2016). The development of wind power turbines also brings construction of new infrastructure; roads and power lines and entails, in addition to the physical encroachment in the landscape, noise and risk for ice throwing (Skarin et al 2016). Skarin et al's research shows that wind power farms negatively affect both winter grazing areas and calving areas as the reindeers tend to avoid places where they can see or hear the turbines. The consequences are that the available grazing land reduces, and additional feed may be needed. The work load of the reindeer herders increase when they must watch the reindeers more closely and continually herd them towards good grazing areas.

The Sami people is considered a national minority in Sweden which entails special rights to culture and language (Government Offices of Sweden 2015). The Swedish Instrument of Government (SFS 2011:109, 1 chapter, 2§) states: *"The Sami people's and ethnic, linguistic and religious minorities' possibilities to keep and develop an own culture and community shall be enhanced."* (author's translation). In addition, the Sami are according to both Swedish and international law an indigenous people. Therefore, the Sami have rights to special cultural consideration both by international and Swedish law that goes beyond the scope of minorites' rights (Human Rights 2017). A living Sami culture based on sustainable reindeer herding and other businesses shall be promoted (Swedish Government's budget proposition 2017).

An intrinsic aspect of both culture and language is knowledge. The Sami Parliament (2010:8) describes *Árbediehtu*, the traditional Sami knowledge, as founded on the relation between nature, animals and humans. *"Árbediehtu, which among other includes heritage, traditions, customs and way of living, is the foundation for our Sami culture and our identity."* (author's translation). Indigenous traditional knowledge, which Árbediehtu is an example of, are holistic, adaptive and often passed on through oral traditions (ibid:13-14). The traditional knowledge systems can sometimes be in conflict with scientific knowledge since they are based on different value-systems (ibid:9). Despite the possibly conflictual nature, the possibility for complementary perspectives is brought forward both by indigenous communities and science. The Sami Parliament (2010:9) states: *"Traditional knowledge should not be seen as contrary to scientific modern knowledge, it is two knowledge traditions that exists side by side and complement each other."* (author's translation). Gaski (2013:118) describes the need to *"indigenize the academy",* meaning not only allowing indigenous people to participate in research but also to create space and mentalities where traditional knowledge systems can be seen and applied equal to western, scientific knowledge.

Several actors in the environmental field have brought forward the importance of including traditional knowledge in science, policy and legal contexts. In Sweden, the topic of traditional knowledge is very timely. The Swedish Environmental Protection Agency and the Sami Parliament (2018) have just presented their suggestions for preservation of traditional knowledge regarding Sweden's biological diversity in response to a Government remit. Furthermore, the value of and need for traditional knowledge is promoted by, amongst other, The Intergovernmental Science-Policy platform for Biodiversity and Ecosystem Services (IPBES 2017), The Arctic Council through the Ottawa principles (Arctic Council 2015), the Nagoya protocol (Swedish Environmental Protection Agency 2017) and The Convention on Biological Diversity (CBD) which Sweden ratified in 1993 (Swedish Environmental Protection Agency 2007). The CBD have produced the Akwé:Kon-guidelines which stem from article 8j in the Convention and are guidelines for impact assessments for projects that affects religious and/or indigenous sites (Convention on Biological Diversity 2004) .

> "Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge,

> innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices". (Convention on Biological Diversity 2017 Article 8j)

Inclusion and respect for traditional knowledge are therefore both a right and trend words in science and development. There are several understandings of traditional knowledge as well as for the terms *local knowledge* and *indigenous knowledge* that sometimes are used in the same context. In my thesis the understanding of traditional knowledge follows The United Nations Inter-Agency Support Group (IASG) on Indigenous Issues which connects to the description of Àrbediehtu above.

> "Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds." (IASG 2014:3).

Àrbediehtu and traditional knowledge will here be used interchangeably. Following from the inclusion of practices, customs, and way of living in the defintions is the practice of reindeer herding included in the concept of traditional knowledge.

1.2 Problem formulation and research questions

Despite the the importance of civil influence and participation in the implementation of environmental policies and the special rights of the Sami, from being an indigenous people, several authors testify that Sami perspectives are unheard in legal decisions. Darpö (2016) found in his review of two controversial Swedish legal cases that Sami issues are forced to stand back in favour of environmental interests. Wik Karlsson (2017) from the Swedish Sami Association (SSR) describes how Sami statements are treated as biased and therefore not true. Lawrence (2014) argues that the discourse of renewable energy stands in conflict with reindeer herding as well as the Sami culture. These accounts shows that the Sami are treated injust in environmental conflicts. The Sami culture are on the losing side of the climate and environment policies and the rights of the indigenous Sami, both by international and Swedish law, are not respected. When the Sami perspectives and rights are overlooked, Sweden fails to meet its commitments to its indigenous population and the democratic quality of the climate and environment policies diminishes.
With a critical perspective following the accounts of SSR, Darpö and Lawrence, my thesis will study the inclusion and representation of *Árbediehtu*, the traditional knowledge of the indigenous Sami, in the conflict of Gabrielsberget's wind farm. I hope to provide useful insights in which role the relation between knowledge and power plays in the implementation of environmental policies and more specifically in the discouragement of Sami perspectives and issues. I will study how power shape which knowledge is considered legitimate by utilising Fairclough's framework of critical discourse analysis and Foucault's work on power and knowledge. The research questions derive from the general question *Which knowledge counts?* and are formulated below.

Research questions:

1. Which dominant discourses regarding knowledge claims can be found?
2. How does the knowledge discourses relate to discourses on reindeer herding?
3. What are the effects of the dominant discourses and the discursive practices on the inclusion of the Sami knowledge?

I have described the entry point to my inquiry, traditional knowledge. The problem formulation and research questions are followed by a review on the existing research on traditional knowledge and a short account of my personal interest and background relevant to the study. In chapter 2, the background of the conflict and the involved actors are presented. Chapter 3 concerns theory, first I outline the theoretical assumptions and implications of Critical Discourse Analysis, and second I present my theoretical framework that draws from Foucault's theories on power and knowledge. In Chapter 4, the method of Critical Discourse Analysis is described followed by a section on the material that is analysed. In chapter 5 the analysis is presented followed by discussion in chapter 6 before the final conclusions in Chapter 7.

1.3 Existing research on indigenous traditional knowledge

In this section I will shortly examine some of the research surrounding traditional or indigenous knowledge. The aim is to outline how traditional/indigenous knowledge have been researched previously and to show what my study can contribute with. The research concerning traditional/indigenous knowledge can be divided into two overarching themes dominating the field; 1) *Traditional/indigenous knowledge and science* and 2) *Traditional/indigenous knowledge in management.*

The researchers interested in the relation between traditional/indigenous knowledge and science come from different backgrounds, ranging from ecology, sustainability studies, earth science to indigenous studies. In common they have the belief that there are benefits to be gained from combining traditional/indigenous knowledge with science. The benefits are to some extent democratic values, participation and inclusion of indigenous perspectives (see Moller et al 2004) but in general the focus is on improving science and adaptation to for example climate change (Riedlinger & Berkes 2001; Riseth et al 2011; Leonard et al 2013) or to improve assesments (Sutherland et al 2013). Traditional knowledge is in this kind of research often seen as baseline data and a complementary perspective to science.

The line between the first identified theme, traditional/indigenous knowledge and science, and the second traditional/indigenous knowledge in management is somewhat fluid. For example, it can be argued that Moller et al's study from 2004 about combining science and traditional knowledge for co-management of wildlife in New Zealand also belongs to a management field. A difference between the themes, in addition to a more applied focus on management practices in the management field, is the more active role of indigenous communities and their knowledge in the management literature. While it can be argued that the first theme sees traditional knowledge as a resource, that can be tapped into to complement science, the focus of management literature is more on democracy and indigenous participation, although the ultimate goal is sustainable management. The following quote from Houde 2007 illustrates the more active role of the indigenous communities:

> "The First Nations of Canada have been active over the past three decades in negotiating natural resources co-management arrangements that would give them greater involvement in decision-making processes that are closer to their values and worldviews. These values and worldviews are part of the traditional ecological knowledge (TEK) that First Nations possess about the land; to reach agreements to the satisfaction of First Nations, appropriate ways to involve TEK in decision-making processes must be designed."

The literature in the management theme consists of case studies of co-management boards and practices (White 2006; Berkes, Kislalioglu Berkes & Fast 2007; MacGregor 2009; Roturier & Roué 2009) and reviews (Houde 2007; Berkes, Colding & Folke 2009).

My study relates to both the identified themes in the existing literature, but the entry point of the research and the context differs. The relation between traditional knowledge and science is an important part of my research but I do not start from the premise that

traditional knowledge can complement science. Rather, my focus lays on power differentials and competing discourses. Also, my research could be said to fit in the management theme. The study centres around energy management (wind power) but there seems to be little done with similar material (legal documents) and method (Critical Discourse Analysis) which I apply. I hope to contribute with an analysis and perspective on traditional Sami knowledge that appears to be not easily found in the existing research literature.

1.4 Personal story

I became interested in knowledge and the relation between science and other knowledge systems during my natural scientific bachelor in Environmental Science. I started to wonder about what happens to knowledge and knowledge claims in society and how different knowledges are viewed and valued. This interest developed during my internship at the Swedish Environmental Protection Agency. I encountered the term *traditional knowledge* in several contexts, ranging from the Intergovernmental Platform for Biodiversity and Ecosystem services to the Nagoya protocol. Inclusion of traditional knowledge seemed like a trend, but how does it play out in society, in a environmental conflict? That is the starting point of my research.

I would like to point out my academic and national affiliation as a Swedish person in First world institution to ensure transparency. Sweden has historically and to a large extent continuously colonised Sápmi and the Sami people. Universities and academic institutions has not been neutral or without blame in the colonisation and oppression of the Sami, see for example an account of racial biology studies at Uppsala University in Maja Hagerman's (2016) documentary *What measures to save a people?*. Banerjee (2000) argues that academic institutions are still shaped by colonial conditions and research tend to speak on the behalf of indigenous communities. My research is neither a study of the Sami culture or identity nor should it be read as an account of the Sami perspectives and voices. Although my research is situated in a critical tradition aiming to shed light on injustices and social wrongs, I do not intend to speak for anyone but myself in this study, all representations (and misrepresentations) are mine.

2 Background

There are several legal conflicts regarding wind power developments on traditional reindeer herding land. I will focus on the conflict of Gabrielsberget in Nordmaling's municipality in Northern Sweden, chosen due to the accessible material and its topicality. The latest verdicts that will be analysed is from November 2017. I will here describe the area, the actors involved and the background of the conflict.

2.1 Gabrielsberget

Gabrielsberget is an onshore forest area rich on lichen (Skarin et al 2016:37) in Nordmaling's municipality in Västerbotten County in the Northwest of Sweden. The area is mainly part of Vilhelmina Norra sameby's land but also Vapsten sameby is considered to have right to it. The area has been used for winter grazing for a long time (ibid) and the Sami communities therefore have special rights to the area, based on immemorial prescription (*urminnes hävd*). Gabrielsberget has during the last 25 years been used by a Sami community from Norway, Byrkije reinbetesdistrikt, first as a part of the Swedish-Norwegian reindeer grazing convention and since 2006 through an oral agreement between Vilhelmina Norra sameby and Byrkije reinbetesdistrikt (ibid). The winter grazing season starts in December – January and ends in April (Svevind 2014).

2.2 Actors

Vilhelmina Norra sameby, Vapstens sameby, Byrkije reinbetesdistrikt (The Sami communities)
As previously stated, Gabrielsberget belongs to the winter grazing areas of Vilhelmina Norra Sameby and Vapstens sameby, but is mostly used by Byrkije reinbetesdistrikt from Norway. The Sami communities have handed in statements both separately and together. In the analysis I will treat the Sami communities as an entity, as the courts does. In addition to statements, the Sami communities have invoked evidence in forms of scientific reports and articles as well as witness interrogation with a reindeer herder from Byrkije reinbetesdistrikt, party interrogations with members of Vilhelmina Norra sameby and Vapstens sameby and expert interrogations with researchers.

Svevind, Gabrielsberget Nord Vind, Gabrielsberget Syd Vind (The companies)
The companies are responsible for applying for the permit and conducting the Environmental Impact Assessment and the control program that will map the effects on the reindeer herding during the trial period. The companies are sister companies belonging to the same business group and for simplicity reasons, no difference will be made between the companies, they will further on be referred to as *the company*. The company has invoked evidence as the control program, expert opinions and scientific research as well as expert interrogations with a researcher and representatives from the consulting company that wrote the control program.

Sámediggi (The Sami Parliament)
The Sami Parliament has a two folded function, it is both a national authority and a parliament with elected members. The Sami Parliament is an advisory organ as well as the expert authority for Sami issues and works for a living Sami culture (The Sami Parliament 2017c). The Sami Parliament has several tasks (The Sami Parliament 2016). Central for this context is the administrative agency and responsibility for reindeer herding as a public interest in societal planning and decision-making. The Sami Parliament functions in the conflict as a consultation body to the courts.

The County Administration Board of Västerbotten County
The Swedish County Administration Boards (CAB) are responsible for the inspection of large wind power establishments in the counties. The permit that is required is tried by the Environment Assessment Delegation (EAD) at the CAB. In Gabrielsberget the EAD first gave permission to 40 plants (2006) and then to six more (2015). When the decision was appealed to the Land and Environment Court, The CAB was siding with the company but after the second appeal, in the Land and Environment Court of Appeal they agreed with the Sámi communities. The CAB have submitted rather short statements and play a minor role in both the court's reasoning and in my analysis.

The Land and Environment Court
The Land and Environment Courts are responsible for issues regarding environment and water, registration of properties and planning and building. In the case of Gabrielsberget, the Land and Environment Court is the first instance of appeal for the decision from the EAD. There are five Land and Environment Courts in Sweden, as a part of five of the District Courts. The Land and Environment Court active in the case of Gabrielsberget is a part of Umeå District Court.

The Land and Environment Court of Appeal
The second instance of appeal for environmental issues is the Land and Environment Court of Appeal, a part of Svea Court of Appeal located in Stockholm. The decisions from the Land and Environment Court were in the case of Gabrielsberget appealed by the company to the Land and Environment Court of Appeal. The decisions from the Land and Environment Court of Appeal is the last decisions included in this analysis but for some cases is it possible to appeal to the Supreme Court.

2.3 The conflict

My analysis will focus on the later part of the conflict, during the years 2015-2017 but I will first outline the background. For a summary, see a timeline of the conflict in figure 1. The conflict started in 2006 when a company called Svevind got permission to build 40 wind power turbines on Gabrielsberget (Svevind 2018). Both local residents and Vilhelmina Norra sameby was negative to the project (Umeå District Court 2006). The decision was appealed to Land and Environment Court of Appeal by concerned parties and organisations. The Court of Appeal rejected the appeal (Svea Court of Appeal 2007) and the concerned parties appealed again, now to the Supreme Court who did not try the case (The Supreme Court 2008). All 40 turbines were up and running by 2012 (Svevind 2018). In 2015 a company called Gabrielsvind AB applied and received a permit to build a maximum of six new wind power turbines on Gabrielsberget from the EAD at the CAB of Västerbotten (County Administration Board of Västerbotten 2015). Vapstens sameby and Vilhelmina Norra sameby opposed the permit and appealed to the Land and Environment Court (Umeå District Court 2016a). The Land and Environment Court agreed with the Sami communities and the CAB's decision was rescinded. The company then appealed to the Land and Environment Court of Appeal (Svea Court of Appeal 2017a). The verdict came in November 2017 and the company's appeal was outruled, i.e. the six new wind power turbines will not be permitted.

Another aspect of the conflict of Gabrielsberget regarded terms and conditions for the existing wind farm. When the wind farm first got permission in 2006, the question regarding measures to limit the operation's effects on the reindeer herding was postponed during a trial period. The trial period was ended by the Land and Environment Court, and terms and conditions for the windfarm was established in 2016 (Umeå District Court 2016b). The company appealed the decision to the Land and Environment Court of Appeal

(Svea Court of Appeal 2017b). The Court of Appeal changed only a few of the conditions from the Land and Environment Court's decision.

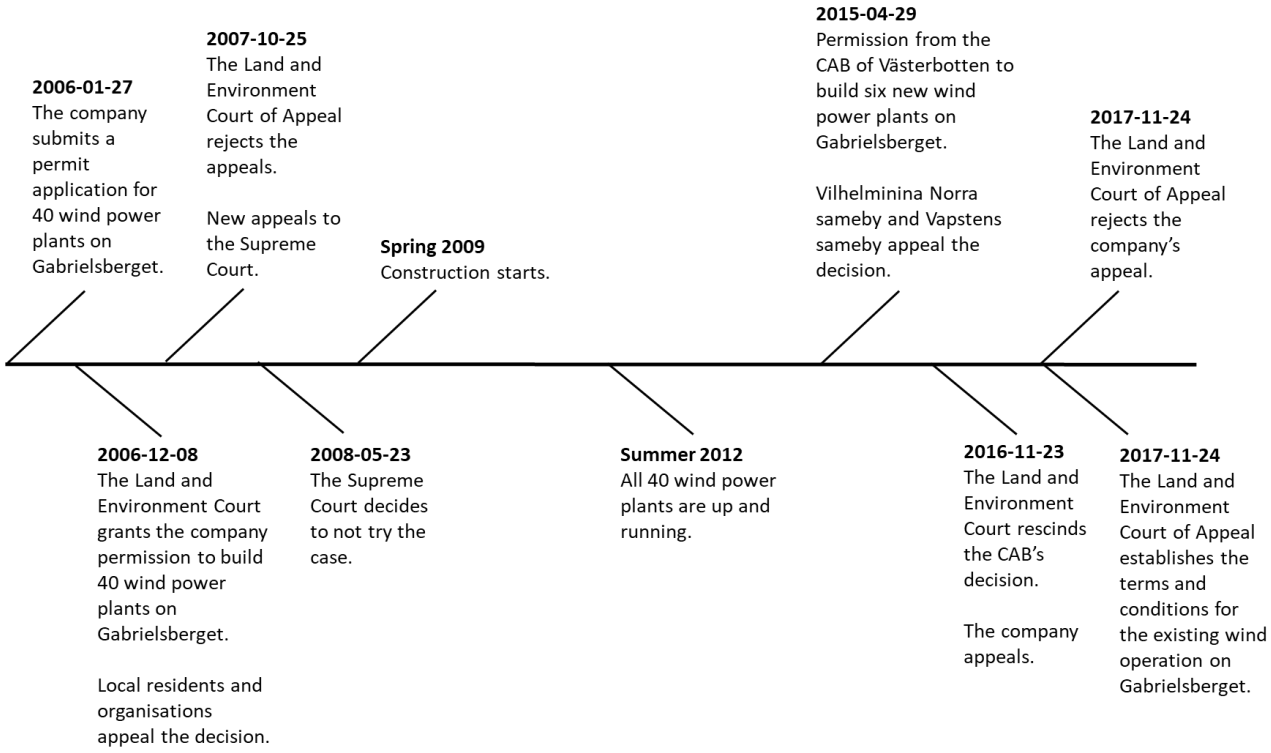

Figure 1. Timeline over the conflict regarding wind power developments on Gabrielsberget.

3 Theory

In this section will I describe the theoretical framework of Critical Ciscourse Analysis that this thesis is situated within. I will also outline the theory of Power and Knowledge that will guide my analysis.

3.1 Critical Discourse Analysis

I will utilize the theoretical as well as methodological framework of Critical Discourse Analysis, drawing on the work of Norman Fairclough (2003 & 2010, Jorgensen and Philips 2002). Discourse analysis has its foundations in the work of the Swiss linguist Ferdinand de Saussure (Jorgensen and Philips 2002:9-10). Saussure believed that the structure of language, which he called *langue*, was stable. Signs' meanings are given to them by their difference from other signs. The relative fixed nature of signs and the exclusion of power relations in Saussure's langue was criticized by post-structuralists who brought forward the contextual nature of meaning. A sign can have different meanings in different contexts and therefore change over time and space. Also, people do not have the same access to language, since the structure of language is constructed by power relations. For post-structuralists, which critical discourse analysis draws from, social structures are constructed, reproduced and changed through the use of language (op.cit:11). This idea gives the possibility to study social structures in texts and can result in useful insights in the constructed nature of culture, knowledge and hegemony. Critical discourse analysists see discourse as both constituting the society and as constituted by other social practices. Language (discourse) is a social practice, a form of action, socially and historically situated and in relation with other aspects of the social world (Jorgensen and Philips 2002:61, Fairclough 2010:92).

Discourse is a somewhat vague concept with several definitions. My thesis will follow the definition of Fairclough (2010:358); *"A discourse is a particular way of representing certain parts or aspects of the (physical, social, psychological) world (...)".* There are multiple discourses an individual can draw upon in a situation, which ones depend on the context and the individual. In a given situation, one actor might be freer to choose a discourse than another actor. This relates to power, in Fairclough's words *power behind discourse* and connects to the term *order of discourse*, inspired by Foucault. An order of discourse is the linguistic aspect of a network of social practices and consists of a combination of genres, discourses and styles. In a given practice, the choice between order of discourses is socially constituted and the order of discourse functions as linguistic structure, limiting what can be said and how (Fairclough 2003). The dominating group in society has the power over the appropriate code of conduct and hence the available discourses for individuals to draw upon (ibid 2015).

In addition to post-structuralism, critical discourse analysis also has its ontological foundation in social constructivism as seen in the argument that social structures are produced and reproduced through language use. Fairclough (2010:4) defines critical discourse analysis as

> "(…) not analysis of discourse 'in itself' as one might take it to be, but analysis of dialectical relations between discourse and other objects, elements or moments, as well as the analysis of the 'internal relations' of discourse."

A central part of these dialectical relations is power and knowledge.

Critical discourse analysis stems from critical theory and aims at uncovering and address inequalities reproduced through discourse. In Fairclough's (2010:7) words; *"It focuses on what is wrong with a society (an institution, an organization, etc.), and how 'wrongs' might be 'righted' or mitigated, from a particular normative standpoint"*. This thesis will

investigate if and how the climate and environment politics respects the rights and knowledge of the indigenous Sámi through the case study of wind power on Gabrielsberget.

3.2 Power and Knowledge

Discourse analysis is to a large extent founded on the work of Michel Foucault who defines discourse as:

> ”We shall call discourse a group of statements in so far as they belong to the same discursive formation. […Discourse] is made up of a limited number of statements for which a group of conditions of existence can be defined. Discourse in this sense is not an ideal, timeless form […] it is, from beginning to end, historical – a fragment of history […] posing its own limits, its divisions, its transformations, the specific modes of its temporality.” (Foucault 1972:117).

Although I acknowledge the influence of Foucault on discourse analysis and hence on my analysis I do not adopt a Foucauldian lens to define and analyse the discourses as such. Instead I will use Foucault's work on power and knowledge to further my analysis on how power and knowledge governs discourses. Foucault is famous for his view on power. Power, to Foucault is both constraining and constructive. It is not exclusively exercised from above, as a political or economic force but is widely distributed and traverses all aspects and formations of society (Foucault 1977; 1980). To understand power, Foucault (1977:194) argues that the focus must shift from the view of power as a restraint and instead study how power produces reality. Foucault is critical to the liberal idea of separating power and knowledge as well as the Marxist tradition of separating science and ideology because it implies that knowledge can be untouched by power relations (Shiner 1982:390). Foucault sees power and knowledge as intrinsically linked, in a reciprocal relation.

> “We should admit rather that power produces knowledge (and not simply by encouraging it because it serves power or by applying it because it is useful); that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations.” (Foucault 1977:27).

To study power-knowledge one needs to study not the knowledge itself but instead focus on the *“the subject who knows, the objects to be known, and the modalities of knowledge”* (ibid). To study the field of law, for example, one should not focus on the field of thoughts in itself but rather on the role of the lawyers, what they are considered knowledgeable about and their degree of commitment to truth based on their knowledge.

Foucault connects power-knowledge to discourses by arguing that *“each society has its regime of truth”* which steers which discourses are true, how discourses are evaluated, and the status of them speaking the truth (Foucault 1980:131). Western societies tend to see ‘truth’ in scientific discourses (Foucault & Deleuze 1980; Gruenewald 2004; Bäckstrand & Lövbrand 2006). Scientific discourses are central to politics and economy and are produced and reproduced by societal institutions, media and universities. As the regime of truth decides what discourses are true it also disqualifies some discourses and knowledges as illegitimate (Foucault & Deleuze 1980). The regime of truth relates to my overarching research question that the others derive from; Which knowledge counts?

4 Method and material

In this chapter I will describe how critical discourse analysis is used as a method for analysis in this thesis and the material chosen for the analysis.

4.1 Critical Discourse Analysis

Critical Discourse Analysis (CDA) is not just a theoretical framework, it is also a methodological approach. It proposes a way to analyse the dialectical relations between discourse and other social practices (Chiapello & Fairclough 2002:185). Discourse analysis is chosen for this thesis since it is a well-founded and widely accepted method for analysing the underlying power relations and different knowledge claims in texts and language use (Bäckstrand & Lövbrand 2006:50). CDA is founded in symbolic constructivism and language is conceptualised as an irreducible part of social life (Fairclough 2003:2). The analysis oscillates between a close inspection of text and an engagement with the social context it is situated in (Fairclough 2001:229).

I have adopted the thoroughly outlined methodology of Fairclough (2003; 2010) in this thesis. Fairclough (2010:132-133) has a three-dimensional conception of discourse, and a three-dimensional method of analysis. Discourse consists of (I) *text*, (II) *discourse practice* and (III) *sociocultural practice.* Fairclough's analysis method includes a linguistic description of the text, text in this sense meaning spoken or written language. Furthermore, the text is to be analysed *indiscursively*, meaning which different *genres*, *styles* and *discourses* do the text draw upon and articulate (Fairclough 2003:3). Genres are intrinsically linked to discourses as they are forms of actions that constitutes social events (including discourses). In a discourse analysis, genres are seen through the light of semiosis and could for example be everyday conversations, interviews, management guides, or as relevant for this thesis laws and court decisions (Chipello & Fairclough 2002:193). Discourses are also infixed in ways of being, in the constitution of identities, or styles (ibid:194). For example, the identity of a scientific expert is a partly a semiotically constructed way of being. Fairclough presents these dialectics in a helpful schematic way:

> "Dialectics of discourse
>
> Discourses (representational meanings) enacted in genres (actional meanings)
> Discourses (representational meanings) inculcated in styles (identificational meanings)
> Actions and identities (including genres and styles) represented in discourses (representational meanings)" (Fairclough 2003:29)

Discourse practice is how the text is produced and consumed (Jorgensen & Philips 2002:69) and should be analysed in terms of relation to the text (Fairclough 2010:132). Lastly the relationship between discourse practice and sociocultural practice is explained. Jorgensen and Philips (2002:69) propose a useful summary of the method:

"The analysis of a communicative event thus includes:

(I) analysis of the discourses and genres which are articulated in the production and the consumption of the text (the level of discursive practice);
(II) analysis of the linguistic structure (the level of the text); and
(III) considerations about whether the discursive practice reproduces or, instead, restructures the existing order of discourse and about what consequences this has for the broader social practice (the level of social practice)."

My analysis follows these three dimensions, but the dimensions inform each other and the analysis is to some extent fluid between them (Jorgensen & Philips 2002:68-69).
The first research question about which dominant discourses regarding knowledge claims that can be found relates to both the linguistic structure of the text and the discourse

practice. I have here focused on *modality*, the actors' commitments to truth and obligation in their statements (Fairclough 2003:17). Modality relates to identities, what actors commit themselves to is a part of who they are (ibid:166). I am particularly interested in commitments to truth following Foucault's concept of regime of truth. Modality is seen both in the structuring of sentences and choice of words, for example *the reindeers are negatively affected by wind power* is a stronger commitment to truth than *the wind power may negatively affect the reindeers* but also through the use of modality markers (ibid:170) such as certainly (high commitment), probably (median) and possibly (low). The analysis is based on the following questions:

- How do the actors commit themselves to truth?
- What are the truth claims founded upon?
- What issues are discussed?
- How is the representation of the knowledge discourses constructed?

The second research question of how the knowledge discourses relates to discourses on reindeer herding relates to the analysis of the discourse practice. The focus will lie on the *interdiscursivity* and *recontextualization*. Interdiscursivity is when different genres and discourses are borrowed from other fields and combined and articulated together (Fairclough 2003:35). Recontextualization connects to interdiscursivity, it is the movement of discourses between different social field and scales as some discourses becomes dominant and transcends structural barriers (Fairclough 2003:35). The following analysing questions will be posed to the material:

- How is reindeer herding constructed?
- What genres and discourses are articulated?
- What subjects are produced?

Lastly, the final research question regarding the effects of the discourses on the inclusion of Sami knowledge is directly connected to the sociocultural dimension and the analysis will be guided by the questions below:

- How is traditional knowledge included in the permit decisions?
- How does this affect the possibilities of the Sami to influence the permit process?

CDA can be carried out in different ways. One common approach is to first identify relevant discourses from theory and then search for them in the material (for example; Bäckstrand & Lövbrand 2006; Söderlund 2016). I have adopted another approach, based in abductive analysis (see Haig 2008; Timmermans & Tavory 2012). I will continually establish which discourses are present in the material through my analysis and in a dialogue with theory. There are several characteristic and named discourses prevalent in the environmental field, such as Ecological Modernization, Green Governmentality, Civic Environmentalism and Environmental Security (Bäckstrand & Lövbrand 2006; MacGregor 2010). I do not intend to identify and characterize representations in my material as belonging to any of these discourses (although the argument that they do can certainly be made), simply because it is not needed for the purpose of this thesis. I let my analysis be informed by what representations of traditional Sami knowledge are dominant, describe them and connect with both the social, historical and political context as well as relevant theory and literature on Sami issues. Actors are not always aware of the implications of the discourses they utilise (Hajer & Versteeg 2005:175-176). Through describing and analysing the discourses that steers the view on Árbediethu I can unravel the democratic implications of the discursive practice.

4.2 Material

In this section I list the material used for analysis. Three cases from the later part of conflict of Gabrielsberget has been analysed. The decision to focus on the later part of the conflict and exclude the first phase, regarding the 40 turbines that were built, was partly based on lack of time and partly on a will to study the newest verdicts which reflects the courts' latest views on traditional knowledge. The material chosen for analysis includes all the public documents and recordings related to the cases where opinions and standpoints are articulated. Material regarding administrative aspects of the trials, such as emails regarding times and dates have not been analysed. In total 173 pages have been analysed. The material consists of public documents and access is granted through contacting the relevant court and stating what case number and file appendix (below in brackets) one is interested in.

(I) Six new turbines (Case M 1421-15)

- Verdict from the Land and Environment Court
- Appeal of decision by Vapstens sameby (file appendix 3)
- Statement from the company's attorney (file appendix 9)
- Statement from the County Administration Board of Västerbotten County (file appendix 10)
- Statement from Vapstens- and Vilhelmina Norra Sameby (file appendix 12)
- Minutes from meeting (file appendix 64)
- Presentationmaterial from the company (file appendix 66)
- Recorded interrogations with experts, witnesses and parties to the case

(II) Six new turbines, appealed decision (Case M 10878-16)

- Verdict from the Land and Environment Court of Appeal
- Statement from the Vapstens-, Vilhelmina Norra sameby and Byrkije renbetesdistrikt (file appendix 16)
- Statement from the Sami Parliament (file appendix 18)
- Commentary from the company's expert (file appendix 43)
- Closing arguments from the company (file appendix 58)

(III) Conditions for the existing park (Case M 10882-16)

- Verdict from the Land and Environment Court of Appeal
- Statement from the Vapstens-, Vilhelmina Norra sameby and Byrkije renbetesdistrikt (file appendix 14)
- Statement from the company's attorney (file appendix 27)
- Statement from the Sami Parliament (file appendix 55)
- Statement from the Vapstens-, Vilhelmina Norra sameby and Byrkije renbetesdistrikt (file appendix 57)
- Presentation material from the company at the main hearing (file appendix 64)
- Presentation material from the CAB at the main hearing (file appendix 66)
- Presentation material from the Sami communities' expert at the main hearing (file appendix 71)
- Recorded interrogations with experts and a witness.

5 Analysis

In this chapter the analysis is presented. First I will describe the discourses regarding knowledge claims; traditional knowledge and science. Science functions in the case as a regime of truth, it steers and evaluates the legitimacy of other discourses. Second, to provide a fuller understanding of the view on traditional knowledge in the conflict of Gabrielsberget, I will describe the two dominant discourses regarding reindeer herding as a practice; an indigenous rights discourse and an economic discourse. Finally, the consequences for the inclusion of traditional knowledge in the permit process will be discussed. The quotes from the analysis material are all translated from Swedish to English by the researcher. For the original Swedish formulations see the footnotes.

5.1 Traditional knowledge versus science

Two dominant discourses regarding knowledge claims were found; traditional knowledge and science. The analysis shows that science constitutes stronger power relations than traditional knowledge. This is for example seen in subject positions; the ones who know science have higher status and are viewed as experts while traditional knowledge holders are seen as biased. As power is constructive of reality, science is viewed as more true than traditional knowledge that on its own is seen as illegitimate source of knowledge.

5.1.1 Traditional knowledge as equal to science

The discourse of traditional knowledge relates to the Sami identifying as indigenous people. Their statements and claims in the cases are based on traditional knowledge about reindeers, herding and the area. The discourse of traditional knowledge refers to reindeer herding as a traditional practice dating back several hundred years and constructs wind power as a threat to its continual survival. The discourse views traditional knowledge and science as equal sources of knowledge. The different knowledge systems are not seen as conflicting or opposing, but as parallel and co-existant. Claims based on traditional knowledge can stand on its own but can also be complemented by scientific arguments on equal grounds. Traditional knowledge holders are considered to be the most knowledgeable, experts of the reindeer practice and the area and the discourse therefore concludes that traditional knowledge should be given a lot of weight in the court's reasoning. This argumentation is in line with the Convention for Biodiversity, article 8 j, regarding the nations' obligations to respect and maintain the knowledge of indigenous communities. The Sami Parliament (2017b:4)[1] states

> "Consideration of article 8 j regarding traditional knowledge entails that the statements given by the reindeer herders should be given a lot of weight. The reindeer herders are the most knowledgable about reindeer herding and variations, changes in the reindeers' behaviour and other development in reindeer herding. […] In light of this, The Sami Parliament deems that the statements given by reindeer herders and other knowledgeable of reindeer herding should be considered true and given a lot of weight in the trial."

Furthermore, the discourse of traditional knowledge views traditional knowledge as adaptive and dynamic, as the environmental processes gives rise to new technology and ideas, the reindeer herders will gain new experiences that will be included in the knowledge sphere.

[1] *"Beaktande av artikel 8 j traditionell kunskap innebär att de uppgifter som har lämnats av renskötselns utövare ska ges stor vikt. Renskötselns utövare är de som sitter på den mest omfattande kunskapen om renskötseln och förändringar, renarnas förändrade beetende och annan utveckling inom renskötselverksamhet. […] Mot bakgrund av ovanstående anser Sametinget att de uppgifter som lämnats av renskötare och andra sakkunniga/verksamma inom renskötse bör tas för riktiga och tillmätas stor betydelse i målet."* (The Sami Parliament 2017b:4)

5.1.2 Science as a regime of truth

The scientific discourse represents the conflict as a question of numbers and capacity and uses statistics, calculations and models. The scientific discourse's influence in Gabrielsberget goes beyond the scope of a discourse amongst others. Science functions as a regime of truth and traditional knowledge is viewed as a secondary source of knowledge. The truth of statements and discourses are evaluated by scientific standards. Knowledge claims based on science are considered truer than claims based on traditional knowledge. All the actors in the case (with the exception of the court who through its powerful and decisive role has more freedom to be uncertain as it is not their representation of reality that is to be judged) make non-modalised claims and commit themselves to the truth. They position themselves as speaking the truth while claiming that the others are not. Strong commitments to truth is a feature of the judicial genre as the actors in a legal conflict presents their version of the truth and hence needs to position themselves as certain and right. It is therefore more interesting to study how the actors through linguistic and discursive strategies try to undermine the credibility of the other's truth claims. Claims based on science are argued to be truer than claims based on traditional knowledge as seen in this statement:

> "In this case, the Sami communities have on one hand, without support of any scientifically based investigations, claimed that the six new turbines on Gabrielsberget Väst would make it completely impossible to continue with reindeer herding in the area. […] The company have on the other hand, with support from comprehensive investigations […] instead been able to show that the effects from the wind power will not be of the magnitude that reindeer herding will not be able to be conducted in the Lögdeå winter grazing area." (Advokatfirman Åberg & Co 2017a:4)[2].

Linguistically, the company portrays a higher commitment to truth when talking about their own approach through the use of the objective word *show* compared to the Sami communities' *claimed.*

The reindeer herders are in the scientific discourse seen as biased and the credibility of their knowledge is questioned. Traditional knowledge can from the viewpoint of a scientific discourse be complemented with science, but they are not considered equal as claims solely based on traditional knowledge is considered insufficient to draw conclusions from. Also, the scope of traditional knowledge is questioned. Unlike the dynamic view on knowledge found in the discourse of traditional knowledge, the scientific discourse has a rather museal view on traditional knowledge. It is argued that experiences and knowledge concerning newer phenomena such as wind power cannot be considered traditional knowledge as it is not passed down from generation to generation. The dominance of the scientific discourse's view on traditional knowledge as a secondary source of knowledge and reindeer herders as biased is seen in the different forms of interrogations that is employed in the trials. Foucault (1977:27) suggests a way to study how power shapes knowledge by focusing on *"the subject who knows"*. The subject who knows science is in the conflict of Gabrielsberget constructed and heard in the trials as an expert, a high profiled and powerful role in the Swedish legislative practice. The people whose knowledge are based in Árbediethu functions in the trials as witnesses or party witnesses. This means that the people who are the most knowledgeable about both the area and the practice are not viewed as experts but as someone who is a party to the case and therefore possibly biased.

[2] *"I detta mål har samebyarna, å sin sida, utan stöd av någon vetenskapligt baserad utredning, påstått att de tillkommande sex verken på Gabrielsberget Väst skulle helt omöjliggöra fortsatt rennäring i området. […]. Bolaget, å sin sida, har istället med stöd av omfattande utredningar […] kunnat visa att påverkan från vindkraften inte blir av den omfattningen att rennäring inte kommer kunna bedrivas inom Lögdeå vinterbetsland."* (Advokatfirman Åberg & Co 2017a:4)

5.2 Conflicting discourses on reindeer herding

Traditional knowledge comprises indigenous practices and ways of living, such as reindeer herding. To fully understand the view on traditional Sami knowledge and its implications for permit processes and environmental justice is it therefore important to understand the broader discourses regarding reindeer herding as a practice. Knowledge claims based in a traditional knowledge discourse relates to the view on reindeer herding as an indigenous right and a cultural practice. Knowledge claims based on science relates to the view on reindeer herding as a business amongst others. The discourses produce different subject positions, reindeer herders are constructed as right holders or workers/business owners in the reindeer industry.

5.2.1 Indigenous rights

A reoccurring representation of reindeer herding in the material is as a right and an important cultural practice. The discourse of indigenous rights is connected to the Samis identification as an indigenous people, the same identification process that gives rise to the traditional knowledge discourse. Texts belonging to the discourse of indigenous rights recontextualises extracts from decisions and laws related to reindeer herding and indigenous rights and is based on argumentation of the Sami, as an indigenous minority in Sweden with special rights (user-, property-, and civil rights). The wind power conflict is in this discourse represented as a violation of those rights. In addition to drawing from laws and conventions related to reindeer herding, reindeer herding is represented as a cultural practice. This relates to the discursive struggle between the two discourses on reindeer herding as seen in this statement from the Sami Parliament.

> "The Sami Parliament will in the following use the word reindeer herding instead of reindeer industry. This is to clarify that it is not only an economical, commercial business (reindeer industry) that is at stake but a Sami culture bearer that is a prerequisite for the survival of the Sami culture." (The Sami Parliament 2017b:1)[3].

By constructing reindeer herding as a culture bearer and an indigenous right the practice's difference from businesses and interests such as wind power is underscored. Traditional knowledge and culture cannot be measured in economic terms and economic compensation is hence insufficient.

The extent of the discourse of indigenous rights varies in the material and differences are found between the three cases. The discourse is strongest in the first case regarding the issue of the six new turbines where the representation of reindeer herding as a right is also evident in the court's texts;

> "The Sami enjoys the status of an indigenous people and a national minority in Sweden. The Sami and the reindeer husbandry is hence comprised by the protection that follows from article 27 in the International Covenant on Civil and Political Rights, ICCPR." (Umeå District Court 2016a:24) [4].

In the second trial, at the Court of Appeal the discourse is still strong but the focus has shifted slightly, the discourse is more used to response to claims by the company and more focus is on the protection of the industry than on civil rights in Swedish and international law. In the case regarding conditions for the existing park the indigenous rights discourse is even less predominant. Reindeer herding is constructed as a right through references to the

[3] "*Sametinget använder i det följande begreppet renskötsel istället för rennäring. Detta för att förtydliga att det inte enbart är en ekonomisk, affärsmässig verksamhet (rennäring) som står på spel utan en samisk kulturbärare som är en grundförutsättning för den samiska kulturens fortlevnad."* (The Sami Parliament 2017b:1).

[4] "*Samerna åtnjuter status av ursprungsfolk och nationell minoritet i Sverige. Samerna och rennäringen omfattas således av det skydd som följer av artikel 27 i den internationella konventionen om medborgerliga och politiska rättigheter (International Covenant on Civil and Political Rights, ICCPR)."* (Umeå District Court 2016a:24).

reindeer husbandry law (Rennäringslagen) but there are no explicit references to indigeneity.

5.2.2 Economic discourse – Reindeer herding as a business

Another prevailing discourse found in the material is an economic discourse. Reindeer herding is constructed as a business and being a reindeer herder is a job. In the economic discourse the situation is represented as a conflict between two businesses where the matter for the court to judge on is the issue of compensation. Reindeer herding is represented as an industry that can co-exist with other industries as long as it is properly economically compensated. The discourse centres around costs, compensations and workloads, for example the Sami communities describe and discuss the economic effects of the proposed wind farm on the reindeer industry, regarding payments, increasing costs and workloads. The courts discuss the economic consequences for the reindeer herding and if the costs for compensations are reasonable. The courts interweave an economic discourse with a judicial discourse and states;

> "When choosing between conserving natural resources or claiming them, principally a socioeconomic judgement of which action that is preferable should be conducted. The socioeconomic assessment must be conducted with, among other, starting point in the aims for the economic politics (prop. 1985/86:3 s. 150 ff). The assessment shall include consideration of the practical and economical consequences of the protection the paragraph gives (prop. 1985/86:3 s. 155)." (Umeå District Court 2016a:22)[5].

Through representing reindeer herding as a business, the cultural values and the practice's special relationship to traditional knowledge are overlooked. This entails that reindeer herding can be evaluated and judged on the same premises as other businesses or interests, by science.

5.3 "Won the battle but lost the war" – Consequences for the inclusion of traditional knowledge

The case of Gabrielsberget is highly complex and can on the surface look like a success for the Sami communities due to the trials' positive outcomes. All three courts included in this analysis ruled in favour of the Sami communities. The Land and Environment Court deemed that the company had not proven that it was possible for the six new turbines and the reindeer herding to coexist. The court decided that it was more important to protect the interest of reindeer herding than to promote the interest of wind power in Gabrielsberget given the risk that traditional reindeer herding would completely seize to exist in the area if the turbines were built. The Land and Environment Court of Appeal agrees with the Land and Environment Court and did not believe Gabrielsberget was a suitable location for the six new turbines. The company's appeal was overruled. In the case regarding conditions for the existing wind park, the court acted from the starting point that reindeer herding should continue to be able to be conducted in the area and overruled the company's appeal, acting in favour of the Sami communities. The courts articulated some quite strong formulations in favour of the Sami communities and it can be argued that the decisions to some extent were based on the discourse of traditional knowledge. The court states;

> "Now in the current case it cannot be regarded that the grazing capacity in the technically usable area in Lögdeå winter grazing area is made clear. Despite this, the Court of Land and Environment deems that it, from the referred final report and the stories proposed by the reindeer herders, can be considered proven that it is the already established wind farm on

[5] *"Vid valet mellan att bevara naturresurser eller att ta dem i anspråk bör i princip en samhällsekonomisk bedömning göras av vilken åtgärd som är att föredra. Den samhällsekonomiska värderingen måste göras bl.a. med utgångspunkt i målen för den ekonomiska politiken (prop. 1985/86:3 s. 150 ff)."* (Umeå District Court 2016a:22).

Gabriesberget that is the main cause to the shown effects and consequences for the reindeer husbandry." (Umeå District Court 2016a:29)[6].

In contrast to the scientific discourse (see 5.1.2) the court does not question the Sami statements. The final authority, the court of appeal states;

"Nothing that would give reason to question the description of the area's function given by the Sami communities or that the function likely would disappear if the wind park was allowed has emerged." (Svea Court of Appeal 2017a:12)[7].

The statements of reindeer herders and the Sami communities regarding the wind power park's consequences for the reindeer herding are by the courts constantly articulated in combination with scientific reports, often handed in by the company.

"The company's final report and the statements left by the reindeer herders are sufficient enough to draw the concusion that it is the wind power operation, - the turbines, new roads and human activity - that is the most important cause to the effects on the reindeer herding and the increased work load for the reindeer herders." (Svea court of Appeal 2017b:13)[8].

It is not possible from the analysis of these three cases to draw conclusions regarding if this is because traditional knowledge and science are equal and can be used complementary (discourse of traditional knowledge) or if traditional knowledge needs to be backed up by science (scientific discourse). However, what is clear is the discursive struggle of the nature and meaning of reindeer herding. The courts interchangeably use the term reindeer herding, often in combination with the word traditional, and reindeer industry. The situation is, in line with the economic discourse, viewed as a conflict between two conflicting interests and not as a violation of the Sami rights. In addition, even when traditional reindeer herding is the term discussed there are no references to indigenous rights, culture or traditional knowledge, that would be present in an indigenous rights discourse. The courts argue that the rights of the Sami communities are covered by the Environmental Code but there are no references to culture, traditions or knowledge in the Environmental Code. As the courts judge based on the Environmental Code is the impact of their use of the discourse of traditional knowledge limited and the exclusion of the indigenous rights discourse traverses through all three cases and courts. The courts (especially in the case regarding conditions for the existing wind park) tends to focus on the economic aspects of reindeer herding, costs, workloads and payments and not its cultural significance. It is hence reasonable to say that the court draws from an economic discourse, constructing reindeer herding as a business and obscures its connection to traditional knowledge.

As previously stated, the indigenous rights discourse was strongest in the first case regarding the six new turbines at the Land and Environment Court. In the second and third trial the Sami communities more discussed the sound research and enquiries the decisions were based on. Some rights were mentioned, but more in a Swedish context focusing on the right to an economically sustainable reindeer herding, not specifically indigenous rights. The statements from the Sami communities in the first case begins with recontextualization of indigenous rights laws and conventions.

"Sweden have not only according to national law commitments to reindeer herding and the

[6] *"Det kan i nu aktuellt mål inte anses klarlagt hur stor beteskapaciteten är i det område som tekniskt sett kan användas för bete i Lögdeå vinterbetesland. Trots detta anser mark- och miljödomstolen att det utifrån den åberopade slutrapporten och de berättelser som lagts fram av renskötarna, får anses visat att det är den redan etablerade vindkraftparken på Gabrielsberget som är huvudsaklig orsak till de effekter och konsekvenser som påvisats för rennäringen."* (Umeå District Court 2016a:29).

[7] *"Det har inte framkommit något som ger anledning att ifrågasätta den beskrivning av områdets funktion som har lämnats av samebyarna eller att funktionen sannolikt skulle försvinna om de ansökta verken tilläts uppföras."* (Svea Court of Appeal 2017a:12).

[8] *"Bolagets slutrapport och de uppgifter som lämnats av renskötarna talar i stället i tillräcklig grad för att det är vindkraftverksamheten – vindkraftverken, anlagda vägar och ökad mänsklig närvaro – som är den viktigaste orsaken till de störningar som uppkommit i renskötseln och den ökade arbetsbelastningen för renskötarna."* (Svea court of Appeal 2017b:13).

> Sami. There are several international organizations (amongst others ICCPR and ICERD) were the UN:s convention on the elimination of all forms of racial discrimination (ICERD) enacts a protection for the Sami right to land and water to at least not be deemed weaker than any other right to land and water (property rights and user rights etc.)". (Vapstens sameby 2015:2)[9].

The Sami statements in the second and third cases instead begins with:

> "The Sami communities deems that the case has been characterized by necessary investigations by several experts that have answered questions that has aroused after the "control program" referred to by the company was handed in in June 2014 in case 208-06." (Vapstens sameby, Vilhelmina Norra sameby, Byrkije reinbetesdistrikt 2017:1)[10]

It is possible to draw the conclusion from comparing the cases that the Sami communities chose to move away from the discourse based on indigenous rights and reindeer herding's cultural significance towards a more economic and scientific discourse since their argumentation based on indigenous rights in the first case fell on deaf ears. As discourses are constructive and in relation with other social practices this will have implications for how traditional knowledge is represented and included in future permit processes. Is reindeer herding an indigenous right, an integral and protected part of an indigenous culture or is it a private interest, a business, just like wind power, forestry or mining? By adopting discourses based on economics or natural science, the practice of reindeer herding's link to traditional knowledge is lost through exclusion of the cultural aspects and conformity with other value systems. Constructing reindeer herding as a business entails that it can be viewed, compared and judged using the same criteria as in an evaluation between two conflicting private interests. Therefore, it is important to look beyond the initial positive outcome and study on which grounds the Sami communities won the cases.

Foucault argues that power and knowledge are inseparable and co-dependant. Power constitutes a field of knowledge and knowledge simultaneously constitutes power relations. Power (and hence knowledge) constructs reality. In Gabrielsberget, mainly two representations of reality were present. The discourses of indigenous rights and economics represents the practice of reindeer herding in different ways. The Sami communities step by step abandon parts of their discourse throughout the trials and align more with the reality proposed by the other actors. This is one example indicating that traditional knowledge is less powerful. As previously discussed, another way to study power and knowledge is to focus on subject positions. The experts, who have a important role in the outcomes of trials are in the conflict of Gabrielsberget researchers and scientists. The traditional knowledge holders are heard as party to the case or witnesses, indicating that they and their knowledge are not objective. Science functions as a regime of truth which evaluates and dictates the legitimacy of other knowledges and ways of knowing. In the case of Gabrielsberget traditional knowledge is compared, contrasted and evaluated by science. Science steers what is true and constructs reality. This indicates that traditional knowledge is seen as less true, a secondary source of knowledge.

To be viewed as legitimate actor and have their claims and stakes taken seriously in the conflict of Gabrielsberget, the Sami communities had to align with discourses constructing reindeer herding as a business and build their arguments on science instead of traditional knowledge. Foucault (1977:27) argues *"[…] there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations."*.

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[9] *"Sverige har inte bara enligt nationell rätt ett åtagande gentemot rennäringen och samerna. Det finns ett flertal internationella konventioner (bl.a. ICCPR och ICERD) där FN:s konvention om eliminering av all rasdiskriminering (ICERD) stadgar ett skydd för den samiska rätten till mark och vatten genom att den samiska rätten i vart fall inte skall anses eller bedömas som svagare än annan rätt till land och vatten (äganderätt och nyttjanderätt m.m)."* (Vapstens sameby 2015:2)

[10] *"Samebyarna anser att målet präglaeds av erfoderliga utredningar av flertalet sakkunniga som bemöttte de frågor som tillkom efter att den av bolaget hänvisade "slutrapporten" lämnades in i mål 208-06."* (Vapstens sameby, Vilhelmina Norra sameby, Byrkije reinbetesdistrikt 2017:1)

Foucault's quote shows why it is so important on which knowledge grounds the Sami win. In the case of Garielsberget the Sami might have won the battle but lost the war since their access to the legal arena was discursively limited and traditional knowledge had to stand back in favour of the dominant discourses in Swedish society leading to the reinforcement of oppressing power relations.

6 Discussion

I will in this chapter discuss my results and place them in a broader context to finally answer the overarching question of *Which knowledge counts?* in the next chapter. I also aim to be transparent with the limitations of this study and suggest possibilities and directions for future research.

Two dominant discourses regarding knowledge claims were found, science and traditional knowledge. The discourse of traditional knowledge sees the two knowledge systems as equal. This view is supported by conventions and frameworks on traditional knowledge, such as the Convention for Biodiversity and also the recent report from the Swedish Environmental Protection Agency and the Sami Parliament (2018). This understanding is not shared by the scientific discourse. The function of the scientific discourse goes beyond the scope of a discourse comparable to the others found in the case of Gabrielsberget. Science functions as a regime of truth, it sets the standards of truth the other discourses are evaluated against (Foucault 1977:27). The discourse of traditional knowledge relates to the representation of reindeer herding as an indigenous right and an important part of the Sami culture which is in a discursive struggle with an economic discourse that constructs reindeer herding as a business. The economic discourse disregards the cultural aspects of reindeer herding and its special connection to traditional knowledge. Lawrence and Larsen (2017) argues that the courts ignorance of the discourse of indigenous rights is common in environmental conflicts in Sweden, not limited to wind power conflicts. To get their arguments across the Samis must base their claims on science and construct reindeer herding as a business. Traditional knowledge is not viewed as equal to science, but as biased, and the nature and meaning of the practice reindeer herding becomes colonised by the dominant discourses in Swedish society. An interesting aspect of the labelling of traditional knowledge as biased is that it entails that other knowledges, i.e. science, are objective and independent. Science is used by the actors in the conflict of Gabrielsberget as a wide concept comprising investigations and assessments made either by the company itself or on orders from the company. Although often written by consultants with a scientific background, these reports are conducted on behalf of the company, as a paying commission, not as independent research. Consequently, naming these reports as science is misleading as they should rather be seen as an own kind of knowledge claims than objective scientific accounts. Lawrence and Larsen (2017) came to similar conclusion in their study of the conflict between Semisjaur Njarg Sami community and Boliden mining company. The company's report were posited as based on objective facts while the Sami communities' report were subjective and invalid. This creates a paradox with implications for the outcome of trials and may result in further mariginaliation of traditional knowledge as one party's knowledge is seen as biased and the other party's knowledge, consisting of own analyses and calculations, are disguised as science.

The conflict of Gabrielsberget is an example of the policy conflict between the environmental objectives *Reduced Climate Impact* and *A Magnificent Mountain Landscape* and illustrates the complex nature of environmental issues. This thesis, from the perspective of traditional knowledge and discourse analysis, shows what happens when policies and values are incompatible; who/what is the winner and who/what is the loser? Environmental justice relates to social justice as social inequality and power imbalances are central to environmental issues (Bullard 1993). Sweden has received a lot of criticism from international organizations, ranging from human rights organizations to the UN and EU, for its Sami politics. It is stated that Sweden's national politics does not match their international agenda and standpoint regarding indigenous rights (Swedish radio 2016). The Sami communities in Sweden are treated injust, historically and still today, and the situation in environmental conflicts is no different. The Sami Parliament (2009:4) concludes that not only is indigenous communities severely affected by climate changes due to their traditional lifestyles' connection and dependency on nature but also the measures to limit climate changes (for example wind power developments) have proven to

often cause problems for indigenous livelihoods. Central to both the Sami politics, environmental policies and democracy aims are participation and civil influence. As the discourses of traditional knowledge and indigenous rights are not considered as legitimate as claims based on science, the Sami participation and civil influence are hindered when their access to the legal arena is discursively limited.

As discussed in the introduction of this thesis, traditional knowledge is somewhat of trend words in society and there is a will to include other knowledge systems including traditional knowledge in science, policies and management. The Sami Parliament and the Swedish Environmental Protection Agency presented in March 2018 suggestions on what needs to be done to preserve the traditional knowledge in Sweden. One conclusion from the report is that there is a need for traditional knowledge to be valued, respected and considered useful and necessary in regulations, management and policymaking. This thesis shows that there is a long way to go until this is the case in the Swedish legal process. As seen in the literature review, several articles propose inclusion of traditional knowledge as a complement to science. The view on traditional knowledge as subordinate to science found in the scientific discourse in this thesis entails that this might be very problematic. If traditional knowledge has to be supported by science to be considered true, problems will arise since the knowledge systems are not based on the same ontological assumptions. Valuing traditional knowledge firstly as a complement to science is a form of cherry-picking. Aspects of traditional knowledge that supports scientific hypotheses are chosen and when the knowledge systems differ, science is promoted because it is seen as the ultimate truth. Tengö et al. (2014) discusses the problem with validation, for traditional knowledge and other knowledge systems to be included in policies and management scientific validation is often a prerequisite. Constant scientific validation of traditional knowledge not only risks obscuring relevant and important knowledge but also strips communities of the legitimacy of their own knowledge. As Gaski (2013) argues there is a need for *indigenizing* the academy, but also as this analysis shows legal processes, new paradigms that allows traditional knowledge to function equal to science must be constructed. The ontological and epistemological differences between different knowledge systems must not only be understood and respected but seen as a benefit, enriching our understanding of the world we live in and hence what we can do to protect it.

6.1 Traditional knowledge – a problematic concept?

I have chosen to use the term traditional knowledge in this thesis since it is a widespread concept both academically and in other contexts. However, the term has some problematic aspects I want to shine light on. The use of the word traditional risks cementing a museal view on traditional knowledge as something old or even primitive, contrary to its adaptive and dynamic nature proposed by the discourse of traditional knowledge. The company's expert witness was critical if there could be traditional knowledge regarding the effects of wind power since it is a relatively new phenomena. On a side note to this, is it interesting that the expert (a Norwegian researcher) even intends to define traditional knowledge. Clearly, he is not the one most knowledgeable of traditional knowledge or in possession of interpretative prerogative. But since he has a high-status position as an expert what he says is automatically given some authority which means that the term traditional knowledge can be dangerous since it allows misunderstandings and misrepresentations. Some authors instead choose to use the term indigenous knowledge and it is possible that that term will become more dominant. Green (2010) argues that labelling indigenous knowledges as traditional is a colonial tendency that views indigenous communities as something historic and un-modern. Árbediethu is no less modern (or un-modern) than any other knowledge systems. No knowledge is stable, it is ever-changing and developing. For now, I feel comfortable with using traditional knowledge based on the fact that it is the term used by

the Sami Parliament and since both traditional knowledge in the United Nations definition and Árbediethu (see 1.2) are adaptive and dynamic.

6.2 Limitations and further studies

Critical Discourse Analysis is normative, it aims at remedying social wrongs (Fairclough 2010:7). This should not be seen as a weakness of the method, rather a strength, but it brings a need for transparency since the (inevitable) partiality and choices of the researcher has a significant influence on research process. I have clarified the position I take in this thesis in the introduction and tried to be transparent with methodological choices as well as the analysing process. I have employed different types of text, several from each actor, to create a rich picture, but a limitation of the study is the focus on texts and speech in the recordings. Body language, an intrinsic part of communication, is not included. This thesis aims to answer the question of which knowledge counts in the conflict of Gabrielsberget. My analysis shows that even with a positive legal outcome traditional knowledge is seen as a secondary source of knowledge. The cases I have studied are all connected and surrounds the same area and involves the same actors. For further research it would be interesting to study and compare more legal cases with other actors and courts involved to be able to draw more general conclusions regarding the status of traditional knowledge in Sweden. For a theoretical expansion of the scope of the research it would be suitable to draw more from colonisation- and political theory.

7 Conclusions

The cases studied in this thesis had positive outcomes for the Samis and the courts articulated some quite strong formulations in favour of the Sami communities. This is not always the case, Sami communities face potential intrusion and land use conflicts from several interests, not limited to wind power. My focus on traditional knowledge as one aspect of the conflicts has shown that despite positive outcomes of the trials, the Sami discourses are not considered as legitimate as claims based on science. This entails that the Samis access to the legal arena is discursively limited and they are further oppressed.

My question of *Which knowledge counts* followed from accounts of several authors studying Sami and environmental conflicts. Unlike Darpö (2016) I did not find that Sámi issues are forced to stand back in favour of environmental interests on Gabrielsberget but similar to Wik Karlsson's (2017) conclusion has my analysis shown that traditional knowledge holders are treated as biased. In the case of Gabrielsberget it is not a discourse of renewable energy (Lawrence 2014) that stands in conflict with reindeer herding and Sami culture but an economic discourse constructing reindeer herding as a business subject to scientific evaluation. To finally answer the overarching question, science is the knowledge that counts.

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