

Narrating Climate Change Conventionalized Narratives in Concordance and Conflict

Daniel Andersson et Coppélie Cocq

Volume 6, numéro 2, 2016

URI : https://id.erudit.org/iderudit/nw6_2art01

[Aller au sommaire du numéro](#)

Éditeur(s)

The University of New Brunswick

ISSN

1925-0622 (numérique)

[Découvrir la revue](#)

Citer cet article

Andersson, D. & Cocq, C. (2016). **Narrating Climate Change: Conventionalized Narratives in Concordance and Conflict.** *Narrative Works*, 6(2), 1–27.

Résumé de l'article

In this article, we take a narrative approach to Swedish media texts regarding farming, forestry, and Sami livelihoods. The main purpose is to illuminate how a master narrative on climate change is shaped, activated, and put into practice in different ways in different settings and contexts. The study discusses the complex interplay between different levels of narratives and the narrative dynamics that influence and shape collective representations of climate change. We discern a narrative level that does not explicitly challenge the master narrative, but operationalizes it in close relation to cultural contexts and specific goals, resulting in what we call *conventionalized narratives*.

Narrating Climate Change: Conventionalized Narratives in Concordance and Conflict¹

Daniel Andersson
Copp  lie Cocq
Ume  University

In this article, we take a narrative approach to Swedish media texts regarding farming, forestry, and Sami livelihoods. The main purpose is to illuminate how a master narrative on climate change is shaped, activated, and put into practice in different ways in different settings and contexts. The study discusses the complex interplay between different levels of narratives and the narrative dynamics that influence and shape collective representations of climate change. We discern a narrative level that does not explicitly challenge the master narrative, but operationalizes it in close relation to cultural contexts and specific goals, resulting in what we call *conventionalized narratives*.

In order to develop an ecologically sustainable society, we need to understand and critically discuss our own conceptions of nature (see Evernden, 1992). One way to approach the study of such conceptions is by looking at the culturally entrenched narratives—narratives shared by people within a cultural context—that we use when communicating about nature. Such narratives are used to make sense of the world (Jackson, 2002), especially when things happen that make us question the status quo, as is the case with global climate change.

In this article, we take a narrative approach to Swedish media texts regarding farming, forestry, and Sami² livelihoods—for example, reindeer herding and fishing. This approach highlights climate change through the lens of groups that depend upon nature in an explicit way for their livelihood. The main purpose of this work is to illuminate how a master narrative on climate change is shaped, activated, and put into practice in different ways in these different settings and contexts that each

¹The research for this paper was supported by The Swedish Foundation for Humanities and Social Sciences, Riksbankens Jubileumsfond. Grant number: P10–0647:1. We would like to thank Fredrik Skott, Alf Arvidsson, and two anonymous reviewers for commenting on earlier versions of the article.

² The indigenous people of Scandinavia.

have their own specific goals. We call these adaptations of the master narrative *conventionalized narratives*, and these can be understood as versions or operationalizations of the master narrative that serve specific functions and goals. The complex interplay between different levels of narratives is exemplified and discussed, and some of the narrative dynamics that influence and shape collective representations of climate change are highlighted.

Previous Research

The research on media coverage of climate change has grown considerably during the last ten years and has developed into a separate field of research. The most common type of studies is case studies of media discourse in individual countries (see Schäfer & Schlichting, 2014, p. 155). Swedish national media discourses concerning climate change have been studied, for instance, by Stoeckel (2010), who finds and discusses such prominent themes as the relationship between developed and developing countries, consequences and measures of climate change, agricultural matters, climate change and nature, climate change skeptics, politics and law, and public opinion (p. 169).

Another example in a Swedish context is a study by Uggla (2008) about a climate campaign conducted by the Swedish Environmental Protection Agency in 2002–2003 that involved newspaper advertisements, promotional films, advertising pillars, and leaflets. Uggla found that the campaign told a narrative on climate change that reduced the complexity of the problem and downplayed the issue of climate politics and climate change adaptation (pp. 730–731). Instead, the narrative focused on domestic climate mitigation activities on a personal level. However, this seemingly clear-cut narrative does in fact contain inconsistencies and ambivalence, and Uggla concludes that “climate change cannot easily be transformed into a single, coherent story” (p. 732).

Three prominent discourses on climate change in the Swedish agriculture press have been examined by Asplund, Hjerpe, and Wibeck (2013), including the contribution of agriculture to climate change, the impact of climate change on agriculture, and the impacts of climate policy on agriculture. The use of different metaphors has also been studied, and it has been found that war metaphors emphasize negative effects of climate change, such as damaged harvests and higher taxes, while gaming

metaphors instead emphasize positive effects, such as higher yields and higher incomes (Asplund, 2011).

The idea of nature has changed over time, and modern western understandings tend to posit humans as apart from nature, which in turn is viewed as a machine ruled by natural laws and without its own agency (Evernden, 1992; Oelschlaeger, 1991). Current research, for example, within the field of environmental humanities, exposes the obsolescence of this nature/culture dichotomy and emphasizes the need to investigate environmental issues in relation to human practices, representations, and behaviors (Nye, Rugg, Fleming, & Emmet, 2013). In line with this approach, the focus of this article is on nature as a discursive construct and on the way that nature is articulated in narratives.

Relationships to the land have been observed in a Sami context by Rydberg (2011), whose work shows how the landscape is linked to the identity of the Sami in Handölsdalen *sameby*, that is, the administrative unit for reindeer herding in Handölsdalen. Elsewhere, the implications of resource exploitation on the traditional land of local people have been studied, and it has been shown, for instance, how globalization can foster conflicts between indigenous groups and international commercial interests (e.g., Tsing, 2005).

The field of environmental humanities strives to bring “questions of meaning, value, ethics, justice, and the politics of knowledge production” into environmental domains (Rose et al., 2012, p. 2). The field composes a “space of simultaneous critique and action,” that is, an “unsettling of dominant narratives” (Rose et al., 2012, p. 3) along with the application of knowledge for shaping better possibilities in these challenging times (see also Hutchings, 2014, p. 213). The present article, by seeking to expose narratives as modes of shaping, maintaining, and questioning representations about climate change and, therefore, about the environment, is a contribution to this critical perspective and, hopefully, a contribution to applicable knowledge about the effects of representations on action.

Context: Setting the Scene

This study is part of a project that investigates how reindeer herders and farmers and foresters in northern Sweden construct their understanding of their relationship with nature in narratives. The broader project focuses on groups with divergent relationships to nature, and on the implications of the narratives for these communities.

The agriculture industry in Sweden employs more than 170,000 people (Jordbruksverket), and milk, beef, pork, and poultry are the main products. The forest industry provides direct employment to almost 60,000 people in Sweden, and forestry products are heavily export oriented (Swedish Forest Industries, 2013).

The Sami population, estimated to be about 80,000 to 95,000 individuals, is spread across Norway, Sweden, Finland, and Russia in urban areas as well as in the traditional Sápmi area. In Sweden, reindeer herding is regulated by the Reindeer Husbandry Act, and this law gives the right to herd reindeer exclusively to the Sami population. The exercise of that right requires that the herder is a member of a *sameby*, an economic form of cooperation within a specific geographical area. Of all the Sami in Sweden, only about 10% are members of a Sami village and are reindeer herders. Reindeer herding, along with fishing, handicrafts, and, more recently, tourism, are livelihoods that embed traditional Sami knowledge and modes of land use. As such, reindeer herding is a right, a way of life, and a traditional practice (Nordin, 2007) rather than an industry.

Research Design

The empirical data cover the period from January 1, 2011 to February 24, 2014 and include texts containing the search string *klimatförändring** [“climate change” and its inflected forms]. The data comprise two corpuses: the Farmers’ and Foresters’ Press (FFP) corpus with 77 texts, and the Sami News (SN) corpus with 52 texts. This time period was chosen based on convenience in relation to our research project, and coincides with the publication of a report from the IPCC (Intergovernmental Panel on Climate Change). Another factor of relevance was that the previous fall had been unusually mild, and consequently actualized narratives about climate change.

The FFP corpus contains texts from the magazines *Land Lantbruk* and *Skogsland*, which are leading Swedish trade publications covering farming and forestry, respectively, published weekly by LRF Media, a subsidiary of Lantbrukarnas Riksförbund (LRF). They contain chronicles, opinion articles, editorials, feature articles (on individual farmers, etc.), reports from meetings and conferences, and reports on new research, and

they aim to provide the latest news for active farmers and foresters (*Land Lantbruk & Skogsland*, 2014).³

The SN corpus contains texts from the website of Sameradion [The Sami Radio], which is a separate channel of the National Swedish Radio. It is the main source of news in Sweden that covers the geographical Sami area (Sápmi) and topics of relevance for the Sami population. The mission of Sameradion is, as can be read on their website under the heading *Sameradion och SVT Sápmi för Samefolket* [Sami Radio and SVT Sápmi for the Sami People] (*Sameradion*, 2014b), to offer news, culture, sports, entertainment, discussion, and so forth, related to Sápmi and its inhabitants. News reports and commentaries broadcast on Sameradion radio are published as texts or transcriptions on the website. The production consists, therefore, of text-based articles to a greater extent than audio files.

The primary aim of this study is not to compare the media sources, but to gain insights into the narrative constructions of climate change in a variety of contexts where there is a direct link between nature and livelihood. However, the Sami are a national minority in Sweden and have been exposed to historical colonial injustices and there are special legal rights and limitations that control traditional Sami livelihoods—for example, reindeer herding, hunting, and fishing. This creates a situation where the Sami material needs, in many ways, to be understood against a different backdrop than the rest of the data, and therefore this material is comprised in a separate corpus, the SN corpus.

Through a close reading of the texts in chronological order, we identified what actors appeared in each text. Each corpus was read through anew, and sorted according to the role given to these actors in relation to nature, the environment, and other actors. As a result, we could identify a number of narrative patterns. Through the whole process, we worked in parallel with each corpus. In this study, we take a broad approach to climate narratives in a selection of media sources, and the texts in the corpus were not classified into or analyzed with respect to different genres.

The remainder of this article is structured in the following way. After this presentation of the contexts, data, and methods, we will present our analytical framework, which focuses on master narratives and the concept of *conventionalized narratives*, a concept introduced in this article. We then illustrate possible conventionalized narratives in the two

³The material from the magazines was accessed from the magazines' joint website on February 24, 2014.

corpus, followed by a discussion of the interplay between narrative levels by closely examining the themes of *conflicting narratives* and *struggle and competition*. The article ends with a concluding section in which the main findings of the analysis are highlighted and further discussed.

Narratives and Layers of Meaning: Analytical Framework

In line with Bamberg (2005), we understand the concept of *master narratives* as collective cultural understandings or, as Hammack (2011a) defines the concept, “interpretations of historical events and collective experience” (p. 16; see also Mishler, 1995). Such master narratives are usually not realized linguistically as single narrative structures, but are more often found as preconceptions underlying and influencing written and oral texts. Master narratives are central to social categorization, and group members integrate them into their personal narratives (Hammack, 2011b, p. 313), appropriating some aspects while repudiating others.

We take as a point of departure a mainstream understanding of climate change widely promoted by mass media and we suggest that this constitutes a dominant master narrative of climate change in the Swedish context that we are studying. This master narrative involves a human cause of the changes—primarily through emissions of so-called greenhouse gases—and that the changes will have consequences—predominantly negative—for humans. One important source of this narrative, which is often referenced in mass media, is the IPCC (Intergovernmental Panel on Climate Change) and its reports. One example is the *Synthesis Report: Summary for Policymakers* (IPCC, 2014), which states that “Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems” (p. 2).

Although counter narratives (see Bamberg, 2004) are found within certain groups—for example, so-called climate skeptics who reject the whole idea of man-made causes of climate change—it is our assessment that the master narrative formulated above is a dominant master narrative in Sweden, against which other narrative levels need to be formulated and understood.

The analysis of the corpus reveals that this master narrative is implemented in different ways. It is these operationalizations of the master narrative, here termed *conventionalized narratives*, that are the

focus of our study. The approach is similar to Pruitt's (2012) study of the interplay between two dichotomous big narratives on human progress: one utopian and one dystopian. Pruitt shows, through analysis of blogs, that these big stories, in the narrative environment of peak oil, are further divided into little stories that fill in the gaps between these two binary positions. Pruitt's big story of human progress is highly polarized and the little stories discussed in the article, although they nuance the two binary positions, are placed in a continuum between them. What we call *conventionalized narratives* are instead, for the most part, compliant with a single master narrative. In conventionalized narratives, certain parts of the master narrative are muted or highlighted, and different actors are given different roles. This approach also has similarities with Loseke's (2007) study of narrative identity, and the interplay between the cultural, institutional, organizational, and personal levels. Loseke illustrates the importance of analyzing relationships between different narrative levels, and at the same time highlights the difficulties involved in separating them.

The culturally entrenched narratives we are studying are, in various degrees, dominant within certain domains and they articulate various approaches to the master narrative. While master narratives are global to a great extent, conventionalized narratives are closely connected to specific cultural and social contexts and express possible ways of understanding external events, such as climate change in this case.

Another important aspect of the variation of the master narrative in conventionalized narratives is the level of agency the different actors are given. The concept of agency provides a fruitful angle of approach for analyzing narratives (Labov, 2001), and the concept is understood here as the capacity and/or obligation to act. The object under study in this article, however, is the representation of participants and agency, that is, how agency is construed in narratives (Bamberg, 2005). Nature can, for instance, become an actor with human-like intentions or a victim or a non-place—that is, a place whose identity and history is disregarded (Augé, 2009; Cocq, 2014).

Conventionalized Climate Narratives

In the following sections, different conventionalized climate narratives in the data will be suggested, starting with the FFP corpus and

followed by the SN corpus.⁴ The description focuses on the most prominent narratives in the respective corpus. After this description, the interplay between different conventionalized narratives and between different narrative levels is illustrated through the analysis of conflicting narratives in the FFP corpus and the theme of struggle and competition in the SN corpus.

FFP Corpus

The majority of the texts in the FFP corpus are reports of climate and agricultural/forestry research, reports from meetings with political and stakeholder organizations, or opinion texts written by editorialists, politicians, representatives from stakeholder organizations, and researchers. Here we suggest that prominent conventionalized narratives of climate change in the FFP corpus, which sometimes are part of the main driving point of the argument, often function as underlying understandings that are not part of the immediate focus of the text.

The public/consumer is affected.

One of the most common operationalizations of the master narrative of climate change in the FFP corpus is where the public or consumers are positioned as the ones affected negatively. In these instances, the first part of the master narrative is muted—that is, the causes of climate change and the negative effects on humans on a broad scale are emphasized. These negative effects vary and include poor water quality, collapse of or changes in ecosystems, and the most common: reduced access to food. The latter negative consequence is mainly described as the result of a decreasing amount of arable areas (*Land Lantbruk & Skogsland*, 2011b). The negative effects of climate change are often mentioned as one of the coming challenges, together with, for example, peak oil and population increase. It is argued in several of the texts that Swedish agriculture should be strengthened or protected in order to ensure future food supply (*Land Lantbruk & Skogsland*, 2013a), a line of argumentation that should be understood against a widespread conception, found throughout the corpus, of a continuously shrinking Swedish agricultural industry and increasing food imports.

⁴ References for the FFP and SN corpora are listed separately below in **References 2: Media Texts**.

We suggest the existence of a conventionalized narrative in the FFP corpus, where the cause of climate change is muted, the negative effects consists of reduced access to food, which affects the public/consumers and that the solution to this is a strengthening of Swedish agriculture.

Farmers/foresters are affected.

Common victims of climate change in the FFP corpus are the farmers and foresters themselves. Among the negative effects of climate change for farmers are weather disasters, drought, increased rainfall, plant diseases, and shortage of clean water. For foresters, these effects include insect infestations, storm damage, fungal infections, and poor forest roads as a consequence of a lack of ground frost, along with a general conception of changing conditions for the industry.

We suggest the following two conventional narratives that both silence the first part of the master narrative—that is, what or who is causing climate change—and that focus on adaptation in response to the negative effects. In the first one, farmers are victims, and agency is given to politicians on the national level (e.g., *Land Lantbruk & Skogsland*, 2015) or higher, as, for example, the EU (e.g., *Land Lantbruk & Skogsland*, 2011a), and not on the farmers themselves. In the second one, the foresters are victims, but also the ones supposed to act, most often by adjusting which tree species are planted (e.g., *Land Lantbruk & Skogsland*, 2013c). This difference in agency could mirror a higher degree of regulation of the agricultural industry than the forestry industry in Sweden.

The master narrative suggested earlier in this article construes climate change as having predominantly negative effects, and this is also the case in a majority of the texts in the FFP corpus. There are, however, examples where climate change is understood as having, at least in part, positive effects for farming and forestry, and we suggest conventionalized narratives where farmers and foresters are positively affected by climate change.

The positive effects for farmers are the opportunity to grow new crops and the possibility of increased yield, and the positive effect on foresters is increased tree growth. One explicit example of this conventionalized narrative is found in an article that reports future climate scenarios for Sweden as predicted by the Swedish Meteorological and Hydrological Institute (SMHI) that was published on the same day as the

UN's climate panel report (Intergovernmental Panel on Climate Change, IPCC) in 2013 (*Land Lantbruk & Skogsland*, 2013f). In a column next to the main text, under the heading "Fact: Plusses and Minuses with the 'New' Climate,"⁵ it is concluded that "a warmer climate does not mean only negative effects but can lead to new crops and an increased competitive advantage for Swedish farming." After this introduction follows a list containing five positive and five negative effects of climate change for Swedish farming. Regarding forestry, the narrative is rather homogenous: warmer climate will lead to increased growth, which is positive for the forester and the forest industry (*Land Lantbruk & Skogsland*, 2013e).

The narratives where farmers and foresters benefit from climate change do not challenge the master narrative directly. However, since it is widely accepted that the global impacts of the ongoing climate change are negative as a whole, there is little room for this type of narrative.

Farmers/foresters are affecting the climate.

Farmers and foresters are not just affected by climate change. In some texts they are given agency and seen as affecting the climate, both negatively and positively. The examples that describe a negative climate impact is almost exclusively tied to farming and focuses on emissions of CO₂ and other greenhouse gases (*Land Lantbruk & Skogsland*, 2013d).

We suggest a conventional narrative in the FFP corpus where farming contributes to climate change through the emission of CO₂. This is a problematic narrative in the context we study: that is, a context that actively promotes the agricultural industry. When looking closer at the examples where this narrative is present, it becomes clear that this narrative is often included as a common understanding, as a point of departure when discussing ways to reduce this climate impact.

The majority of the examples with positive climate impacts deals with the forestry industry as a provider of biofuel and thus as part of the solution to climate change (*Land Lantbruk & Skogsland*, 2013b). We suggest the presence of a conventionalized narrative in the FFP corpus, where climate change is caused by emission of CO₂ and where the forest industry plays an important and active part in the solution, that is, through providing biofuel.

⁵ Quotations from the articles have been translated from Swedish to English by the authors.

There is also evidence for a conventionalized narrative where farming is seen as having a positive effect on the climate, by “binding coal,” the production of biogas, and by producing foods in a more ecologically friendly way than what is being done in other countries. One article even went so far as to name the Swedish farmer as an “environmental fighter” (e.g., *Land Lantbruk & Skogsland*, 2011a) against climate change (*Land Lantbruk & Skogsland*, 2011c). This conventionalized narrative of the Swedish farmer as affecting the climate in a positive way will be discussed in more detail in the “Conflicting Narratives” section below.

SN Corpus

The SN corpus is composed of texts authored by journalists and concerned with the situation in Sápmi in relation to reindeer herding, fishing, and other issues associated with climate and weather as well as reports of recent research concerned with the environment at global and local levels.

Prominent conventionalized narratives on climate change in the SN corpus articulate the role, position and agency of various actors, with focus on livelihoods in relation to the environments and principally from the perspective of changes, threats, and adaptation.

Reindeer herders and other Sami livelihoods are affected by climate change.

The most common operationalization of the master narrative of climate change in the SN corpus is where reindeer herders and Sami livelihoods are affected negatively. Higher temperatures have major consequences for the weather and the ecosystem. The most common negative results for people in Sápmi are poor reindeer grazing conditions; starvation, disease, and increased costs are other recurrent problems for reindeer herding. The responsibility to act is laid on politicians and on humanity at a global level, whereas people at a local level (in Sápmi) are described as witnesses to the results of climate change and as those who are already suffering from its consequences (e.g., *Sameradion*, 2011e).

Extensive references to research and political reports in the texts underscore the breadth of the problem of climate change as a global phenomenon (e.g., *Sameradion*, 2012d). Political decisions are described as the major means by which the negative consequences of climate

change can be slowed down, for instance, by reducing emissions of CO₂. Strategies for reindeer herders to meet climate challenges are discussed, often in relation to a need for increased participation in political decisions or in relation to other environmental issues of immediate interest in Sápmi, such as resource exploitation.

We suggest here the existence of a conventionalized narrative where reindeer herders are witnesses of a climate change that causes complications for this form of livelihood. Responsibility lies at a political level; it is also at this level that measures to limit climate change have to be taken. In this conventionalized narrative, the herders have a low degree of agency regarding the possibilities of adapting to climate change. They are also placed in the position of being the ones suffering from climate change caused by unmentioned others.

Traditional livelihoods can adapt to changes caused by climate change.

As shown above, conventionalized narratives in the FFP corpus express nuances regarding the destructive impact of climate change. In a similar manner, there are examples in the SN corpus where climate change does not have only negative effects for reindeer herders and other Sami livelihoods. In this narrative, fewer negative aspects of climate change are mentioned (e.g., Sameradion, 2013c). A variation of this narrative underscores how climate change is something that reindeer herders can manage and cope with because they are used to extreme weather variations. Solutions that are suggested to meet the challenges of climate change include increased knowledge and awareness of what is happening. Another possible solution is pastoralism (nomadism; e.g., *Sameradion*, 2011b), which is identified as strength for indigenous people because it implies a higher degree of adaptation to the climate (for instance, drought), thanks to the use of various grazing areas that provide access to different resources. The reindeer are mentioned in two texts as a solution to climate change, and this illustrates that, although peripheral in the data, reindeer herders can be understood as having agency with regard to climate change (e.g., *Sameradion*, 2012b, 2014a). New strategies are discussed, such as the use of GPS in assisting herders when herds are dispersed due to poor grazing conditions. In one article, indigenous people are described as having a responsibility in relation to each other and it is suggested that the Sami have to act in solidarity with other indigenous groups around the world.

We suggest here the existence of a conventionalized narrative that promotes the adaptability of traditional Sami livelihoods, and thereby gives agency to the Sami actors.

The fauna and the flora are affected by climate change.

The effects of climate change are a matter of concern for many elements in the ecosystem. Several texts position animals and plants as victims, with no or only indirect mention of the role of humans as a possible cause. The Arctic char risks disappearing, the polar fox is threatened, and the migration patterns of birds are changing. As for the flora, the “new” climate is favorable for the pine, but increased fungal infections kill plants (e.g., *Sameradion*, 2011a). As we will discuss more extensively later in this article, various species are set in competition to each other: for example, the Arctic char and the pike. Some species are presented as not being a natural part of the ecosystem, while others are part of Sami traditions.

We suggest a conventionalized narrative where no specific reasons or responsibilities for the changing climate are mentioned: that is, where the causes are, once again, muted, and where nature in Sápmi is affected by climate change. Climate change transforms and reshapes the ecosystem, with consequences for people who practice traditional livelihoods.

Climate change is only one factor among many that affect reindeer herding.

Climate change is set in relation to other challenges that affect reindeer grazing areas. Narratives in the corpus recount how reindeer herding is affected negatively by a series of man-made causes, including wind power, the mining industry, climate change, and global warming. The “mining boom,” a topic of immediate interest in Sápmi today (Cocq 2014; Müller 2013), is mentioned on many occasions, along with global warming. In these texts, climate change is not an isolated process, but one of many that affects present and future conditions for reindeer herding. The exploitation of natural resources and the negative effects of climate change are thus articulated as an issue that falls upon indigenous people harder than upon other people because of a conjunction of factors: for example, exploitation, unpredictable weather, and threatened land rights.

We suggest a conventionalized narrative where climate change is juxtaposed with other threats to reindeer herding, and that stresses the lack of agency of reindeer herders and issues related to indigenous rights and colonization.

Conflicting Narratives

Some of the conventionalized narratives in the FFP corpus seem to be in conflict with each other: for example, where the foresters or farmers are victims of climate change and where they are positively affected by climate change. Here we will investigate another apparent conflict, namely between the one where farmers are victims and the one where they are seen as part of the cause of climate change, hereafter referred to as the *farmers-as-victims/perpetrators* narrative.

This conflict is centered around farmers being passive and active, patients and agents. The farmers-as-victims narrative (legion in the FFP corpus) positions the farmers in a passive position vis-à-vis climate change and its effects. In those cases where the narrative is supplemented with suggested courses of action, the farmers in some cases regain initiative and agency—although in many of the examples, agency is handed over to politicians and administrative bodies. The position as one of the causes of climate change is, on the contrary, active, and in some ways expresses agency. This conflict is also a matter of responsibility and morality. As victims, farmers cannot be subjected to criticism and demands that they should change what they are doing; being an actor with agency, on the other hand, demands responsibility.

How then is the farmers-as-perpetrators narrative invoked and articulated in the texts? As pointed out earlier, this narrative is less common than the farmers-as-victims narrative, perhaps because trade publications like *Land Lantbruk* might avoid criticizing their primary audiences—that is, farmers. In addition, in several of the cases where the farmers-as-perpetrators narrative is found it is articulated as a more or less implicit accusation, and the focus is either on the response to such an accusation or on measures said to reduce the effects of agriculture on the climate.

One example that illustrates this is a text in which a food company with an ecological profile introduces a system where suppliers—that is, farmers—receive extra payment for their grain if they perform certain environmental actions that are focused “primarily on addressing climate change” (*Land Lantbruk & Skogsland*, 2012c). Here the farmers-as-

perpetrators narrative, where grain growers have a negative impact on the climate, motivates the reward system implemented by the food company. An underlying narrative where farmers contribute to climate change legitimizes the implementation of a system that rewards those who reduce their climate impact.

A similar example is an article that describes a discussion of the EU's agriculture policy, a discussion that is said to center around “environmental programs that decelerate (lit. ‘break’) climate change” and that aims at so-called “climate measures” (*Land Lantbruk & Skogsland*, 2012a). Of course, the need to implement climate measures implies a negative impact on the climate to begin with. In the text, the measures themselves are said to potentially “decelerate” climate change—that is, not stop or reverse it, but cause it to slow down—which adds a notion of inevitability to the process of climate change.

Here we also want to mention the expression “climate compensation,”⁶ that is used, for example, to describe a dairy company’s planting of trees in Mozambique (*Land Lantbruk & Skogsland*, 2012e). The wording itself refers to the farmers-as-perpetrators narrative because compensation is something that is done or needed in relation to previous negative actions—in this case, contributing to climate change.

It is particularly difficult for meat-producing farmers to come across as environmentally friendly because besides the conventionalized narrative that posits farmers as causing climate change the meat industry has often been singled out as especially responsible for CO₂ emissions. There are few examples in the FFP corpus where the meat industry is in focus, but we want to highlight one of them in more detail, where it is argued that meat production has the potential to “become Earth’s salvation.” This is a challenging position, indeed, given the just-mentioned conceptions of the relationship between meat production and CO₂ emissions. The text argues against—and in that process also illustrates—these conceptions.

The author of the text in question, who is referred to as an “editorial writer/opinion editor” on the journal’s website, begins the article by commenting on a new report from the UN’s IPCC: “And as usual, when the climate issue is debated, voices are raised for decreasing meat-eating.” This is followed by a quotation from Professor Filip Johnsson of Chalmers University who says we have to get used to eating less meat in the future than we do today. “It’s really strange,” the author continues, “that the engineers have been allowed to set the agenda for the

⁶ Swedish verb *klimatkompensera*.

Swedish climate debate. But there are dissenting voices, at least outside the borders of our country.” The author then refers to the biologist Allan Savory, who developed the method of “holistic care and planned grazing” that is said to be able to stop desertification and to bind carbon and methane into the ground—all through animal husbandry. A Swedish attempt to apply this method is given attention in the article, and this is followed by a final comment tied to a forthcoming Swedish visit by Allan Savory: “Perhaps the visit can attract attention and move the Swedish climate debate in a new direction. At least one can hope so” (*Land Lantbruk & Skogsland*, 2013g).

The farmers-as-perpetrators narrative is referred to both at the opening and closing of the article, and with a high degree of distrust in the writer’s tone, the agenda of this debate is attributed to “the engineers”—perhaps including researchers and other representatives of academia. The article can be seen as an attempt to chip away at this narrative by suggesting a completely opposite one, in which animal husbandry can be viewed as having positive climate effects.

There seems to exist a need to resolve the tension between these two somewhat conflicting narratives: that is, the one where farmers are victims and where they are perpetrators. Looking at a single text where both narratives are found gives some insights into this process. The article entitled “Farmers Are Hit First” gives voice to the LRF’s climate expert, who participates in the UN’s International Climate Conference of the Parties as part of the World Farmers’ Organization. When asked what their line of argument is, she replies:

Agriculture continues to be part of the solution and the problem. Farmers are often the first affected by the effects of climate change. Initiatives in investment, education, consulting, research, and new technology must be made for agriculture to meet the climate challenge at the same time as more mouths need to be fed. Agriculture’s full potential must be utilized, and when it comes to steps to take, resource efficiency measures are the single most important ones. At the same time, the level of knowledge needs to be raised regarding the fact that agriculture will always emit greenhouse gases because there are biological processes that are essential for us having something to eat. (*Land Lantbruk & Skogsland*, 2012f)

In the first sentence of the quotation, a narrative about agriculture as a perpetrator and climate saviour is evoked. These two conflicting narratives come together, thanks to the highlighting of agriculture's importance for food production together with the promise that the development of agriculture—for example, through the use of new technologies—means that the industry is up to the “the climate challenge.” By referring to “biological processes,” the climate-changing activities of agriculture are framed as something natural. The dominant discourse of the farmers-as-victims narrative is also brought into the reasoning by mentioning that farmers are often the first to be affected by climate change—but this narrative does not play any real role in the arguments.

On several occasions, the farmers-as-perpetrators narrative is tied to the idea that Swedish agriculture is more environmentally friendly than agriculture in other countries. As a result, production in Sweden can be described as environmentally friendly—at least in a global comparison. This line of arguing is here exemplified in one text from the FFP corpus where a representative of the LRF describes a new report on Swedish agricultural developments (*Land Lantbruk & Skogsland*, 2012d). Swedish agriculture is said to be among the best in the world⁷ in terms of a variety of factors affecting the environment (although several further improvements—for example, methane reduction—are suggested), and imports of food to Sweden from other parts of the world are said to result in “the export of environmental impact.” Impacts, especially negative impacts, on the climate are brought together with other environmental impacts, such as the leaching of nutrients from the soil from agricultural practices, and the conclusion is that investments should be made in Swedish agriculture.

In another article, a representative of an organization that, among other things, stands for labeling meat as “climate-certified,” concludes: “We are good at producing climate effectively here in Sweden, and this is an added value that we should be better at communicating, both in Sweden and abroad” (*Land Lantbruk & Skogsland*, 2012b). By raising the issue to a global level, Swedish agriculture can be characterized as an activity with positive effects on the climate.

This form of narrative strategy—that is, to raise a local issue to a global level—is also used in the narratives identified in the SN corpus. This occurs in texts that draw parallels between the Sami and other indigenous peoples in the world, and it creates a discourse of solidarity

⁷ Swedish: *i världstoppen*.

and responsibility towards each other, as well as towards global problems such as drought and famine. Thus, the Sami as an indigenous people are defined as being in an essential position when it comes to dealing and coping with climate change, or even as a solution to climate change as seen in an article about the benefits of pastoralism. The effects of climate change in Sápmi and the Sami livelihoods gain authority and significance when set in relation to a global level—for instance, when reindeer herders are given the role of problem solvers in the struggle against global warming.

Struggle and Competition

As suggested in the above section about the conventionalized narratives in the SN corpus, a narrative about resource exploitation and its consequences for people living in the area is interwoven with narratives about climate change. This concretizes themes of struggle and competition. In this section, we focus more specifically on texts that illustrate how narratives about struggle and competition are actualized by, and entwined with, narratives about climate change.

In a text entitled “Environmental Harms Are a Bigger Threat,” (*Sameradion*, 2011d), research results are discussed and commented on by Ol-Johan Sikku, project leader of “Slow Food Sápmi,” which is part of an international non-profit member-supported organization (*Slow Food*, 2015). According to the article, scholars who have studied fish species in a lake in Abisko (a mountain village in northern Sweden, 95 km from the main town of Kiruna) have noticed that the “pikes have driven the Arctic char out of the lake.” Research results referred to in the text indicate that pikes are becoming more and more common in the mountain lakes due to the warmer climate. “This is a change that is not good, since the Arctic char is almost a Sami national fish. If a so-called junk fish takes over the mountain lakes, it is serious, of course,” Sikku said in an interview.

Climate change is not the biggest threat to the Sami food traditions, as indicated in the title of the article and as the journalist stresses in the text, referring to Sikku:

Climate change is something that people living close to nature,⁸ that is, the Sami, have learned to adapt to if it is only about changes in the weather. But the biggest threat is all the resource exploitations that are happening faster and

⁸ Swedish noun *naturfolk* [people of nature].

faster; they are a greater danger and poison the land.
(*Sameradion*, 2011d)

Climate change is here set in comparison to other threats; changes in the weather are not a new challenge. The real threat comes from resource exploitation, Sikku explains, because mines and wind power take over Sami land, “the ground for our traditional food culture,” and thus the Sami lose their ability to “produce and live in accordance to our culture.”

The co-occurrence of these narratives underscores how climate change is only one aspect of a wider threat scenario with serious consequences. The land is threatened, which implies that Sami culture is threatened. The Sami lack agency—they are described as victims who cannot influence decisions made about them. However, their power of adaptation to the changing weather gives them another role in the narrative with a greater degree of agency. The competition between the “Sami national fish” and the “junk fish” illustrates a struggle that is taking place in the environment as a result of the changing climate—a topic that is addressed in several texts and that illustrates changes in the ecosystem. The interview with Sikku is a comment on another article, published the previous day (*Sameradion*, 2011c), based on researchers’ observations about the species of fish in the mountain lakes. That article describes how the Arctic char risks “disappearing” because “the pike have taken over”—a “gluttonous” fish in warm water. In this narrative, global warming is a fact that is not set in relation to human activity; no origin in climate change is mentioned.

The seriousness of this wider threat scenario is stressed through references to experts and in wording, as seen, for example, in another article about the vulnerability of the Arctic char (*Sameradion*, 2013a). This article is based on an account from an expert, a biologist who is referred to as an “Arctic char researcher.” He describes how the warmer climate (which equals warmer lakes) affects the ecosystem of the char and how the changes are in favour of other species. Some of these species (grayling, salmon, trout, perch, and lavaret) are referred to as “competitors”—a word that enhances discourses of struggle and competition. Here too, the narrative about resource exploitation is actualized; the biologist states that the char has had to deal with the three “big threats” of water regulation, overfishing, and competition from other species. These “threats” are obviously caused by humans, although this is not explicitly brought up in the text. The next “big challenge” the Arctic char has to meet, he says, is climate change.

The description of an ecosystem dominated by competition between species is in line with the narrative that we have identified (that is, “the fauna and the flora are affected by climate change”) in the texts discussed above. Here too, man-made environmental changes are mentioned, although the role of mankind is not explicitly stressed in the text. Once again, no agency is attributed to the different actors: the waters simply “get warmer,” and the conditions simply “get worse.” Through the use of the passive voice, no responsibility is attributed. The passive voice is also used when the expert suggests actions that can be taken to restrain the changes that are taking place. We are told that measures “are needed” in order to save the Arctic char, that net fishing should “be limited,” and that the situation must “be followed up.”

Other experts are invoked in the description of the struggle. For instance, fish species are the topic of yet another text (*Sameradion*, 2013b), but this time it is not the voices of researchers or leaders that is brought to the fore, but that of a fisherman. He gives a somewhat contrary narrative about the competition between different species. According to the fisherman from the area of Kilpisjärvi in northern Finland, all of the species are victims of climate change when the water in the mountain lakes gets warmer. “Even the pikes are affected,” he says. “The pike and the lavaret die before the Arctic char because of the climate change ... the warmer water is the villain.” Here, the water has agency and the fish are victims. The role of mankind is not discussed either. An expert whose authority is established through his local and experience-based knowledge strengthens this narrative. Per-Anders Wasara belongs to a family whose several generations have fished in the area of Kilpisjärvi, we are told. According to him, the Arctic char is more likely to adapt to the warmer climate than the pike and the lavaret.

These narratives summarize a process taking place in the ecosystem, but the role of humanity in this process is seldom explicitly mentioned in the SN corpus. The role that different natural species play is, however, discussed in many texts. In addition to the texts about fish species described above, there are texts discussing how the Arctic fox is threatened by the warmer climate (*Land Lantbruk & Skogsland*, 2013h), and how an increased amount of snow can eradicate mountain plants (*Sameradion*, 2011a). In this last article, the struggle is enhanced by the use of terms such as “dominating,” “killing,” and “taking over.”⁹ In

⁹ Reference to research about how the thickness of the snow affects the ecosystem in the mountains. While the snow was in favour of the plants at the beginning, the researchers found after six years that the ecological conditions had changed totally. A fungus “took

another text, we are told about the mountain birch as an environmental villain (*Sameradion*, 2012c). This is an exception to the most common conventionalized narrative that identifies plants and animals as victims and humans as the cause or contributor to climate change. Interestingly, competition is articulated between different species, and no reference to agency or to the role of mankind in the changes of the ecosystem is established in this narrative. The only humans mentioned are the researchers who have the role of observers.

Conclusions

This study contributes to a deeper understanding of a set of narrative strategies striving to make sense of the global, intangible and threatening phenomenon of climate change. As Olausson and Berglez (2014, p. 251) point out, issues of climate change exist in different media spheres—science, politics, economics, popular culture, law, and lifestyle—and these different spheres are related to one another in complex ways. This study shows that despite a master narrative about climate change that goes almost unchallenged, several conventionalized narratives work as operationalizations of the master narrative. These conventionalized narratives are closely tied to the cultural contexts, histories, and goals of different groups. Certain parts of the master narrative are highlighted and emphasized while others are hidden, and generic roles within the narrative are filled with different actors. Different conventionalized narratives create different understandings of what is really happening and why, and perhaps, most importantly, they support different courses of action. One example of this is the way in which the first part of the master narrative—which needs an actor whose actions cause climate change—is silenced; instead, focus is put on the second part of the narrative, in which a particular group is affected by climate change. By not recognizing who causes climate change—a category that most likely includes all humans—the conventionalized narrative can focus on affected groups and industries and argue for adaptation in order to increase—or at least not decrease—production, or to argue for economic subsidies.

The complex interplay between the master narrative and conventionalized narratives is shown, for example, through an analysis of the seemingly conflicting narratives of where farmers are perpetrators or victims. In this context, the local/global scale turns out to be of

over” and “killed” the majority of “kråkrisskotten,” “which is the dominant species in the ecosystem.”

importance. By lifting the issue to a global level, Swedish farming can be understood as a positive force when it comes to climate change, because it positions food producers outside of Sweden as being less climate efficient.

The different narratives can be understood as layers of meaning that are in concordance and in conflict with each other (Shuman, 2012). The analysis of the SN corpus illustrates how narratives operate at several levels. At a local level, they are closely related to history and a specific cultural context, and globally, they are set in relation to other indigenous peoples. It is also clear in the corpus that narratives about climate change are not isolated from other narratives. A dominant narrative about how people in Sápmi are victims of a series of man-made causes—not the least the exploitation of resources—frames climate change as one of many factors that affect the population.

In both corpuses, the role of knowledge is enhanced for the understanding and awareness of climate change and how it must be adapted to. This valuation of knowledge is established through intertextual references and through the identification of “experts,” researchers as well as community members. Knowledge is described as something that gives agency, and thereby transforms, the one affected by climate change into the one who takes action.

The task of separating narrative levels from each other is indeed a challenging one, and the discussion will certainly continue on exactly what should be included in the different levels. We hope to have illustrated a narrative level—the level of *conventionalized narrative*—that on the whole is compliant with a master narrative, but that varies greatly in regard to different contexts and to different conditions and goals for different groups. And by doing this, we hope to have provided a tool to further explore the complexity of shared cultural narratives.

References 1

- Asplund, T. (2011). Metaphors in climate discourse: An analysis of Swedish farm magazines. *Journal of Science Communication*, 10(4), 1–8.
- Asplund, T., Hjerpe, M., & Wibeck, V. (2013). Framings and coverage of climate change in Swedish specialized farming magazines. *Climatic Change*, 117, 197–209.
- Augé, M. (2009). *Pour une anthropologie de la mobilité*. Paris, France: Payot & Rivages. (Original work published 1992; English trans. [1995]: *Non-places: Introduction to an anthropology of supermodernity*)

- Bamberg, M. (2004). Considering counter narratives. In M. Bamberg & M. Andrews (Eds.), *Considering counter narratives: Narrating, resisting, making sense* (pp. 351–371). Amsterdam, The Netherlands: John Benjamins.
- Bamberg, M. (2005). Entries on Agency; Master Narratives, and Positioning. In D. Herman, M. Jahn, & M.-L. Ryan (Eds.), *The Routledge encyclopedia of narrative theory*. New York, NY: Routledge.
- Cocq, C. (2014). Kampen om Gállok. Platsskapande och synliggörande [The battle for Gállok: Locating and visiting]. *Kulturella Perspektiv: Svensk etnologisk tidskrift* 23(1), 5–12.
- Evernden, N. (1992). *The social creation of nature*. Baltimore, MD: Johns Hopkins University Press.
- Fairclough, N. (1992). *Discourse and social change*. Cambridge, England: Polity Press.
- Hammack, P. L. (2011a). *Narrative and the politics of identity: The cultural psychology of Israeli and Palestinian youth*. New York: Oxford University Press.
- Hammack, P. L. (2011b). Narrative and the politics of meaning. *Narrative Inquiry*, 21(2), 311–318.
- Hutchings, R. (2014). Understanding of and vision for the environmental humanities. *Environmental Humanities*, 4, 213–220.
- IPCC (Intergovernmental Panel on Climate Change). (2014). *Synthesis report: Summary for policymakers*. Retrieved from www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf
- Jackson, M. (2002). *The politics of storytelling: Violence, transgression, and intersubjectivity*. Copenhagen, Denmark: Museum Tusculanum Press (University of Copenhagen).
- Jordbruksverket [Department of Agriculture]. (2017). *Basfakta om svenskt jordbruk* [Basic facts about Swedish agriculture]. Retrieved from http://www.jordbruksverket.se/omjordbruksverket/statistik/jordbruksstatistiska_mmanstallning/basfaktaomsvensktjordbruk.4.116e9b9d159b31e6cb936b4a.html
- Labov, W. (2001). Uncovering the event structure of narrative. In *Georgetown University Round Table* (pp. 63–83). Washington, DC: Georgetown University Press.
- Loseke, D. R. (2007). The study of identity as cultural, institutional, organizational, and personal narratives: Theoretical and empirical integrations. *Sociological Quarterly*, 48, 661–688.
- Mishler, E. G. (1995). Models of narrative analysis: A typology. *Journal of Narrative and Life History*, 5, 87–123.
- Müller, A. (2013). *Smutsiga miljarder: Den svenska gruvboomens baksida* [Dirty billion: The Swedish mining boom back]. Skellefteå, Sweden: Ord & Visor.
- Nordin, Å. (2007). *Relationer i ett samiskt samhälle: En studie av skötesrensystemet i Gällivare socken under första hälften av 1900-talet* [Relationships in the Sami community: A study of the Skötesren system in Gällivare in the first half of the 20th century]. Umeå, Sweden: Sámi dutkan/Samiska studier.
- Nye, D. E., Rugg, L., Fleming, J., & Emmet, R. (2013). *The emergence of the environmental humanities*. (Background Paper). Stockholm, Sweden: Mistra (The Swedish Foundation for Strategic Environmental Research.) Retrieved from http://www.mistra.org/download/18.7331038f13e40191ba5a23/Mistra_Environmental_Humanities_May2013.pdf
- Oelschlaeger, M. (1991). *The idea of wilderness: From prehistory to the age of ecology*. New Haven, CT: Yale University Press.

- Olausson, U., & Berglez, P. (2014). Media and climate change: Four longstanding research challenges. *Environmental Communication*, 8(2), 249–265.
- Pruit, J. C. (2012). Peak oil and the everyday complexity of human progress narratives. *Narrative Works*, 2(2), 62–91.
- Rose, D., van Dooren, T., Chrulew, M., Cooke, S., Kearnes, M., and O’Gormand, E. (2012). Thinking through the environment, unsettling the humanities. *Environmental Humanities*, 1, 1–5.
- Rydberg, T. (2011). *Landskap, territorium och identitet i Sapmié: Exemplet Handölsdalens sameby* [Province, territory and identity in Sapmié: The example of the Handölsdalen Sami]. Uppsala, Sweden: Kulturgeografiska institutionen, Uppsala University.
- Schäfer, M. S., & Schlichting, I. (2014). Media representations of climate change: A meta-analysis of the research field. *Environmental Communication*, 8(2), 142–160.
- Shuman, A. (2012). Exploring narrative interaction in multiple contexts. In J. A. Holstein & J. F. Gubrium (Eds.), *Varieties of narrative analysis* (pp. 125–150). Los Angeles, CA: Sage.
- Slow Food*. (2015). Retrieved from <http://www.slowfood.com>
- Stoehrel, V. (2010). Narratives of climate change and environment: The facts and values portrayed in two Swedish newspapers’ online editions. *Observatorio Journal*, 4(2), 167–196.
- Swedish Forest Industries. (2013). *Facts and Figures 2013*. Stockholm, Sweden: Skogsindustrierna [Swedish Forest Industries Federation]. Retrieved from <http://www.forestindustries.se>
- Tsing, A. L. (2005). *Friction: An ethnography of global connection*. Princeton, NJ: Princeton University Press.
- Uggla, Y. (2008). Strategies to create risk awareness and legitimacy: The Swedish climate campaign. *Journal of Risk Research*, 11(6), 719–734.

References 2: Media Texts

A. FFP Corpus: Land Lantbruk & Skogsland [Farming and Forest Land]

- Land Lantbruk & Skogsland*. (2011a, January 29). Isolera inte Sverige i jordbrukspolitiken! [Do not isolate Sweden with an agricultural policy!]. Retrieved from <http://www.lantbruk.com/debatt/isolera-inte-sverige-i-jordbrukspolitiken>
- Land Lantbruk & Skogsland*. (2011b, May 25). En lång period av höga avräkningspriser [A long period of high crop prices]. Retrieved from <http://www.lantbruk.com/lantbruk/en-lang-period-av-hoga-avrakningspriser>
- Land Lantbruk & Skogsland*. (2011c, October 13). EU:s nya jordbrukspolitik i tio punkter. [The new EU agricultural policy in ten points]. Retrieved from <http://www.lantbruk.com/lantbruk/eus-nya-jordbrukspolitik-i-tio-punkter>
- Land Lantbruk & Skogsland*. (2012a, January 12). Tyskland tar strid för gårdsstöden [Germany will fight for farm subsidies]. Retrieved from <http://www.lantbruk.com/lantbruk/tyskland-tar-strid-gardsstoden>

- Land Lantbruk & Skogsland.* (2012b, May 10). De blir först med klimatmärkt kött [They become the first climate-labelled meat]. Retrieved from <http://www.lantbruk.com/lantbruk/de-blir-forst-med-klimatmarkt-kott>
- Land Lantbruk & Skogsland.* (2012c, June 14). Saltå Kvarn ger extra betalt [Saltå Mill gives extra pay]. Retrieved from <http://www.lantbruk.com/lantbruk/salta-kvarn-ger-extra-betalt>
- Land Lantbruk & Skogsland.* (2012d, October 12). Lantbruket kan bidra till ett mer hållbart samhälle [Agriculture can contribute to a more sustainable society]. Retrieved from <http://www.lantbruk.com/debatt/lantbruket-kan-bidra-till-ett-mer-hallbart-samhalle>
- Land Lantbruk & Skogsland.* (2012e, November 26). Arla startar egen trädgranskning [Arla will start its own investigation]. Retrieved from <http://www.lantbruk.com/lantbruk/arla-startar-egen-tradgranskning>
- Land Lantbruk & Skogsland.* (2012f, November 28). Bönder drabbas först [Farmers are hit first]. Retrieved from <http://www.lantbruk.com/lantbruk/bonder-drabbas-forst>
- Land Lantbruk & Skogsland.* (2013a, January 9). Det är väldigt dumt att bygga bort åkermark [It is very foolish to build off farmland]. Retrieved from <http://www.lantbruk.com/lantbruk/det-ar-valdigt-dumt-att-bygga-bort-akermark>
- Land Lantbruk & Skogsland.* (2013b, February 23). Han skapar kontakter mellan de nordiska skogsägarna. [He establishes contact between the Nordic forest owners]. Retrieved from <http://www.lantbruk.com/skog/han-skapar-kontakter-mellan-de-nordiska-skogsagarna>
- Land Lantbruk & Skogsland.* (2013c, June 16). Klimatzonerna flyttas en meter per timme. [Climate zones are moved one metre per hour]. Retrieved from <http://www.lantbruk.com/skog/klimatzonerna-flyttas-en-meter-timme>
- Land Lantbruk & Skogsland.* (2013d, June 30). Hans vete ska överleva flera säsonger. [His wheat to survive several seasons]. Retrieved from <http://www.lantbruk.com/lantbruk/hans-vete-ska-overleva-flera-sasonger>
- Land Lantbruk & Skogsland.* (2013e, August 17). Mer lövträd när klimatet förändras [More trees when the climate changes]. Retrieved from <http://www.lantbruk.com/skog/mer-lovtrad-nar-klimatet-forandras>
- Land Lantbruk & Skogsland.* (2013f, September 27). Så utvecklas det svenska klimatet fram till 2100. [To develop the Swedish climate by 2100]. Retrieved from <http://www.lantbruk.com/lantbruk/sa-utvecklas-det-svenska-klimatet-fram-till-2100>
- Land Lantbruk & Skogsland.* (2013g, October 4). Idisslarna kan bli klotets räddning [Ruminants can rescue the world]. Retrieved from <http://www.lantbruk.com/ledare/idisslarna-kan-bli-klotets-raddning>
- Land Lantbruk & Skogsland.* (2013h, October 7). Mörka moln för grothbranschen efter toppåret [Dark clouds over forest-residue industry after peak year]. Retrieved from <http://www.lantbruk.com/skog/morka-moln-grothbranschen-efter-topparet>
- Land Lantbruk & Skogsland.* (2014). *Om oss* [About us]. Retrieved from <http://www.lantbruk.com/om-oss>.
- Land Lantbruk & Skogsland.* (2015). Intressant omsättningsrekord på Eurex [Interesting record turnover on Eurex]. Retrieved from <http://www.lantbruk.com/kronikor/intressant-omsattningsrekord-pa-eurex>

B. SN Corpus: Sameradion

- Sameradion*. (2011a, June 26). Ökad snömängd kan slå ut fjällväxter. [Increased snow cover can knock out mountain plants]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4574771>
- Sameradion*. (2011b, September 7). Nomaderna har lösningen till svältkatastrofen på Afrikashorn [The nomads have the solution to the famine in the Horn of Africa]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4683666>
- Sameradion*. (2011c, October 24). Gäddan vanligare i fjällvärlden [Pike common in the mountains]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4761967>
- Sameradion*. (2011d, October 25). Miljöförstöringar är ett större hot [Environmental harms are a bigger threat]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4764418>
- Sameradion*. (2011e, November 30). Vinterregn skapar oro bland renägare. [Winter rain creates anxiety among reindeer owners]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4831246>
- Sameradion*. (2012a, January 25). Beteskris i stora delar av Sápmi [Bait crisis in large parts of Sápmi]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=4929388>
- Sameradion*. (2012b, April 4). Renar kan bli vapen mot klimatförändringarna [Reindeer can become weapons against climate change]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5051189>
- Sameradion*. (2012c, June 20). Fjällbjörken en miljöbov [Mountain birch an environmental villain]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5159771>
- Sameradion*. (2012d, November 19). Dramatiskt varmare klimat [Dramatically warmer climate]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5351478>
- Sameradion*. (2013a, September 25). Rödingen förlorare när klimatet bli varmare [The char loses when the climate becomes warmer]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5656525>
- Sameradion*. (2013b, September 27). Gäddan och siken dör före rödingen av klimatförändringar [Pike and whitefish die of climate change before char]. Retrieved from <http://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5658894>
- Sameradion*. (2013c, September 27). Renarna måste minska eller matas i framtiden [Reindeer must be reduced or fed in the future]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5658473>
- Sameradion*. (2014a, February 17). Renens betande kan motverka effekten av global uppvärmning [Reindeer grazing can counteract the effects of global warming]. Retrieved from <https://sverigesradio.se/sida/artikel.aspx?programid=2327&artikel=5786766>
- Sameradion*. (2014b). Sameradion och SVT Sápmi för Samefolket [Sami Radio and SVT Sápmi for the Sami People]. Retrieved from <http://sverigesradio.se/sida/gruppsida.aspx?programid=2327&grupp=21058&artikel=5850256>.

Daniel Andersson, PhD, is Associate Professor in Scandinavian Languages at Umeå University, Sweden. His research interests include linguistic anthropology, socio-onomastics, paremiology, narrative research, environmental humanities, language and identity, and language and gender. He is currently studying human understanding of nature and the meaning of place-names in a postcolonial Swedish Sápmi.

Coppélie Cocq, PhD, is Associate Professor in Sami Studies and Research Fellow at HUMlab, Umeå University, Sweden. She is a folklorist specializing in Sami storytelling. Her fields of research include narrative research, environment humanities, and digital humanities with specific interest in place-making, and linguistic and cultural revitalization. She is involved in research projects about transmission of indigenous knowledge, Sami cultural expressions in digital environments, and the narration of nature.