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Public Advocacy for the Swedish Forest-Based Bioeconomy

– A Social Constructionist Analysis of the *Swedish Forest Initiative*

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Abstract

During the last decade bioeconomy has been presented as a possible solution to the decoupling of the economy's dependence on fossil fuels. In a Swedish context, the forest sector has emerged as a significant arena of interest and the industry has been defined as a driving agent in the transition. In the light of this, efforts have been made to market the Swedish forest as an attractive resource in order to gain the attention of the public. The purpose of this study is to examine how the dominant forest actors strategically communicate the bioeconomy through the *Swedish Forest* initiative. Using a social constructionist perspective and a diverse set of concepts streaming from discourse analysis, semiotics and rhetoric the campaigns of the initiative could be explored. The results show that the dominant forest actors formulate a story that portrays the forest as a climate solution and further enforces production interest while neglecting environmental aspects. Additionally, the industry positions itself as essential in a transition towards a forest-based bioeconomy, while marginalizing actors with competing interests such as ENGOs and indigenous Sámi people.

Keywords: story, semiotic, environmental ethos, strategic communication, bioeconomy, forestry

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Abbreviations

ENGO	Environmental non-governmental organisations
NFP	National Forest Program

1. Introduction

In 2017, Sweden adopted a climate policy framework containing the goal of achieving zero net emissions of greenhouse gases into the atmosphere by the year 2045 (Regeringskansliet 2017). This means that Sweden is facing the challenge of becoming climate neutral in less than 30 years, with the phasing out of fossil fuels calling for major transitions in the society. Clearly this is an ambitious vision and leads to the question of how this can be achieved.

In relation to this urgent transition, the concept of *bioeconomy* has been presented as a possible solution for moving away from the fossil fuel addiction (Godeau 2016). Bioeconomy has been described as: “(...) a transition from an economy that to a large extent has been based on fossil fuels to a more resource-efficient economy based on renewable raw materials that are produced through the sustainable use of ecosystem services from land and water” (Formas 2012 p. 16). Sweden is a country rich in forest, as it covers two-thirds of the land area (SkogsSverige 2017). The Swedish forests have thus been suggested as essential in the shift, seeing how they can work both as a carbon sink and replace fossil fuels-based products (Näringsdepartementet 2018). The Swedish forest sector, however, contains many different interests and actors, ranging from the forest industry and forest owner associations to non-governmental environmental organisations (ENGO). There is also a lack of clear definition of what a bioeconomy entails (Pfau *et al.* 2014), which aggravates a common understanding of the situation. It has been documented that while different stakeholders within the sector perceive bioeconomy to be a promising concept, ENGOs expressed concerns about an increased production, whereas industry and state representatives see increased production as a solution and a win-win for climate change and the economy (Hodge *et al.* 2017).

2. Background

2.1. The Swedish Forestry

In order to understand the Swedish debate about a forest-based bioeconomy there is a need to look into the history of the Swedish forestry sector. For centuries, forest has been utilized in Sweden for private purposes such as fuel, timber, and as hunting grounds. In the mid-19th century the demand for wood for the manufacturing of products such as log, pulp and paper increased, which stimulated intensified forestry (The Royal Swedish Academy of Agriculture and Forestry 2009). This development became one of the backbones in the Swedish modernization (Beland Lindahl 2008), however the increased industrial use of forests in the absence of reforestation consequently led to an overexploitation and depletion of forest areas (The Royal Swedish Academy of Agriculture and Forestry 2009). Thus in 1903 the Parliament announced the first Swedish Forestry Act with a focus on the regeneration of forest (The Royal Swedish Academy of Agriculture and Forestry 2009). The main objective was to secure the future supply of wood, making sure that Sweden would be able to continue its production (Skogshistoriska Sällskapet 2020). The Swedish Forestry Act has been revised a number of times over the years, most recently in 1993. This latest revision led to significant changes in Swedish forestry, as it altered the previous strong objective of maximizing the yield. It was replaced by two objectives, one of environmental concerns and one of production, formulated as equally important. This raised the question of how much forest should be preserved, in order to reach the goal of maintaining the biodiversity, an issue that has not yet been resolved and thus remains a subject of debate (Beland Lindahl 2008). Additionally, the 1993 revision also entailed a deregulation, which in everyday speech is referred to as “freedom with responsibility” (Appelstrand 2012 p. 191). This principle is supposed to grant forest owners the freedom to manage their forest in a way they perceive to be appropriate, while at the same time ensuring that the objectives of the Swedish Forestry Act are fulfilled (Skogsstyrelsen 2017).

Another important aspect of the forest sector is the organization of its actors. For a long time, the forest was considered a common resource. This was an understanding that would not shift until the 19th century, as the state began a selloff of forest land to companies whilst also distributing forest among individuals (Holmgren 2015). Today, half of the Swedish forest is owned by private forest owners, whereas private companies own a quarter and the state-owned company Sveaskog possesses 14 %. The rest is distributed between foundations, other private owners such as the Swedish church, and public actors such as municipalities and county administrative boards (SkogsSverige 2019). An important milestone in this division occurred when interest grew among the forest enterprises to obtain more land, a development which was quickly stopped by the Swedish government by declaring a law which prohibited the companies from acquiring bigger land areas. The law was enforced in 1906 and later expanded in 1925 and as a result, the Swedish forest owner-division has been more or less stabilized ever since (Enander 2007).

2.1.1. Competing Interests

During the 1970s, the attention to forestry increased among the Swedish environmental and protection movements, as they criticized the existing approaches. The movements especially disapproved of the use of herbicides and the methods of clear-cutting, initiating a debate that would continue for the years to come (Enander 2007). The latest revision of the Swedish Forestry Act mirrors this struggle between interests of further production and the environmental movement's protests. The forest owners have gained more independence, as seen in the "freedom with responsibility" approach. However, as environmental concerns have become equally important legally, new constellations of actors have left the corporatist structures less powerful, as additional interests such as biodiversity need to be taken into account in forest operations (Holmgren 2015).

In the northern parts of Sweden there is another dimension to the conflicting interest in the forest, since forests are also used as grazing land for reindeer held by the indigenous Sámi people (Beland Lindahl 2008; Sandström *et al.* 2012). Recent research shows that despite ongoing negotiations and dialogue meetings, the Sámi remain less satisfied with the outcomes than the forest companies (Sandström *et al.* 2012).

Additionally, Sweden carries a tradition of making the forest accessible to its citizens. In the 1940s, the concept of *Allemansrätten* (*Right of Public Access*) was introduced in public administration as a result of modern urbanization and the resulting lack of access to nature for many urban dwellers (Ahlström 2008). The Right of Public Access is considered part of Swedish culture and entails that everybody has the right to roam freely in nature. This includes areas owned by

someone else, and follows that the premise of “do not disturb, do not destroy” is obeyed (SkogsSverige 2018).

2.2. The Bioeconomy

Although there seems to be a consensus for the need to move away from the fossil fuel-based economy (European Commission 2016), there are different ideas concerning more precisely what the bioeconomy should be or how to get there (Pfau *et al.* 2014).

Some studies have identified two dominant narratives about the bioeconomy: one that is focused on (bio)technology and one that is natural resource-oriented (Bugge *et al.* 2016; Hausknost *et al.* 2017). The biotechnology-centered narrative concentrates on technological innovations and bio-based products as the solution, and although it claims to inhabit positive climate and environmental effects, the primary goal is to drive economic growth through the production of biotechnology. The bioresource-centered narrative emphasizes the role of new renewable resources (such as forests) in the bioeconomy. Environmental protection is not emphasized in any of these two narratives (Bugge *et al.* 2016). According to Hausknost *et al.* (2017), the bioeconomy “has largely been associated with visions of “green growth” and the advancement of agricultural and industrial biotechnologies and has been framed from within an industrial perspective” (2017 p. 1). Both dominant narratives fit well into this description. In general, they have both been criticized for their lack of strong sustainability commitments, as they advocate a future founded within our current economic system (Vivien *et al.* 2019). Fischer *et al.* (2020) mention that a third narrative connected to degrowth has been put forward by some actors, but is much less dominant. Unlike the two more dominant narratives the degrowth narrative acknowledges ecological limits and suggests ecological planning, instead of seeing the concept of bioeconomy as a solution to limitless growth (Vivien *et al.* 2019).

The function of trees as a carbon sink has been a driving force in the European bioeconomy discourse, in line with the bioresource-centered narrative. Pülzl *et al.* (2014) point out that forests are framed as contributing to a win-win situation: “Forests are seen as industrial production site of forest residuals and woody biomass, while CO₂ neutrality is maintained, thus contributing to climate mitigation” (2014 p. 391). Concerns are raised about this narrative potentially enabling greenwashing, since products containing biomass do not necessarily respond to global issues (Vivien *et al.* 2019 p. 195). Some studies have also shown that the climate benefits seem to outrival the environmental concerns. In Finland, bioeconomy has been used as a means to enforce extended production at the

expense of the environmental goals. This despite the fact that production and environmental concerns, much like in Sweden, are formulated as equal in national legislation (Kröger & Raitio 2017). Fischer et al (2020) furthermore conclude, after studying the Swedish National Forest Program (NFP), that the Swedish forest-based bioeconomy appears to be influenced by European, bio-resource centered bioeconomy discourses.

3. Research problem

In this thesis I examine the means and messages used by the forest industry to persuade consumers about their vision of a Swedish bioeconomy, by situating it into the context of the Swedish forest debate. The Swedish forest industry has expressed the new focus on bioeconomy as a potential opportunity for them “to tell our story and show how good our products are” (Hodge *et al.* 2017 p. 585). This can also be seen as a chance for them to demonstrate their engagement in a green future (Hodge *et al.* 2017). Furthermore, the necessity of consumer awareness has been acknowledged as central in a transition towards a bioeconomy, seeing how it is not only necessary to provide alternatives but also to make sure that consumers choose them (Formas 2012 p. 19). Indeed, a recent study points out that Swedish consumers are being given an important role when the forest sector talks about how to change into a Swedish forest-based bioeconomy (Fischer *et al.* 2020). When studying the Swedish NFP process, Fischer *et al.* (2020) additionally concludes that “there is also a clear hope communicated by the reports that if everyone has enough or the correct form of knowledge about Swedish forestry, consensus about the role of the forests in the bioeconomy will be achieved” (2020 p. 14). This indicates an expressed need for establishing a normalized knowledge in relation to the Swedish forest-based bioeconomy. Consequently, the industry has made significant efforts in recent years to market forest-based products as an alternative to more conventional materials – such as plastic, as presented in the case below.

3.1. *Swedish Forest* - a forest industry initiative

In 2017, a number of different actors within the forest industry joined together in an initiative named *Swedish Forest* (Swedish: *Svenska Skogen*). The actors connected to the initiative range from some of Sweden’s big forest interest organizations and companies such as the forest owner association LRF Skogsägarna, the forest industry association Skogsindustrierna, the private forestry company Bergvik Skog to the governmentally owned forestry company Sveaskog (Svenska Skogen 2020a). The objective of the project has been to market the future potential that exist within the Swedish forest (SKOGEN 2017). The actors, however, also argue in the press release that there is nowadays a lack of common

knowledge about the forest among the Swedish population. *Swedish Forest* therefore states the following: “*We wish more people will be able to experience, understand and appreciate the forest’s never-ending possibilities. This initiative is in many ways an initiative for popular adult education*” (Svenska Skogen 2017a; my translation). They have, since the start four years ago, aimed to educate the public about the potential of Swedish forests and forestry in a transition to a bioeconomy through strategic communication presented on their own website, as well as through campaigns produced three times annually. These campaigns have faced critique from ENGOs who are accusing the initiators of misleading information. For example, Greenpeace created a contra-campaign as a response, changing the slogan of the campaign to focus on the felling rather than growing of forest and thereby criticizing the current forest management system (Greenpeace 2017). Based on this, I argue that there is a need to investigate what possibilities the industry possesses to strategically communicate their view of a future Swedish bioeconomy.

3.2. Aim and research questions

The aim of this study is to identify how dominant actors in the Swedish forestry sector strategically communicate the *bioeconomy*. In the investigation of this, the thesis will focus on the following research questions:

- ◇ How is the Swedish forest portrayed in relation to bioeconomy, climate adaptation and mitigation?
- ◇ What stories are told about the future?
- ◇ What values are fostered?
- ◇ How does the forest industry portray itself in relation to environmental responsibility?
- ◇ Which forest identities and activities are included and excluded in this vision?

4. Theoretical framework

This study draws on social constructionism, a perspective that renounces the idea of objective truths. The theoretical starting point for social constructionism is that people constantly interpret and define phenomena based on their own (individual as well as collective) experiences and understandings. As a result, meanings attached to things or situations become subjective, since meaning is constructed through social interaction between people (Creswell 2018). Social constructionism also makes the point that humans are fundamentally historical and cultural beings and that our understanding and knowledge of the world are a product of this. What is seen as natural or unacceptable actions will be based on these worldviews, leading to socially constructed understandings additionally impacting the society on a crucial level (Jørgensen & Phillips 2002). Social constructionist inquiry therefore seeks to shed light on the varying meanings attached to a phenomenon by actors, through inductively studying the meaning constructed in the collected data (Creswell 2018 p. 46).

Ferdinand de Saussure made an important contribution to the understanding of language as a system arbitrary in relation to the reality it is referring to (Jørgensen & Phillips 2002 p. 9). Saussure saw the sign as the basic unit of language, and in his search for understanding how language works, he developed important concepts that laid the foundation for a structuralist approach. According to Saussure there are two sides to a sign; the *signifier* (sound-image) and the *signified* (the concept that the sound-image refers to). The relationship between them is arbitrary as there is a lack of natural connection between the word itself and the meaning of it. The relationship is stabilized through a society's collective interpretation of it and as this meaning of the sign might vary over time and across cultures, Saussure concludes that the sign is socially constructed (Rose 2016 p. 113).

In this thesis the subject of inquiry centres around different perceptions of a bioeconomy. Seen from a social constructivist perspective the issue is hidden in what the problem is described to be, and which social realities define that problem. Hajer (1995 p. 46) argues that "Environmental politics brings together a great variety of actors who not only all have their own legitimate orientations and concerns, but have their own modes of talking too.", I would argue that the

governance of the Swedish bioeconomy and the involved actors are situated in a similar condition with actors expressing conflicting interests. This furthermore means that different actors will hold varying perspectives of what the solution to said problem might be. Additionally, the legitimacy of the actors' perspectives and their power to affect the ongoing debate tend to vary, resulting in a marginalization of the less dominant perspectives (Hajer 1995). As an influential actor the forest industry has its own vision of what its role should be and makes an effort to promote said vision through strategic communication. Since this vision is also imbued with values, it is essential for me to explore what values they are reproducing, and through which means this is done.

4.1. Discourse analysis and semiology

In order to distinguish the patterns that formulate the meaning in the strategic communication of *Swedish Forest*, I apply discourse analysis combined with concepts from the semiotic tradition. Both discourse analysis and semiotic interpretation originate from the understanding of Saussure, as the two traditions are based on a constructivist and (post)structuralist approach. Together they enable a study of both the language and visual elements in the material.

Jørgensen and Phillips (2002) has described discourse analysis as concerning the construction of the world through the use of language and other modes of communication, based on which we collectively create an understanding of reality. This means that we found our understanding on a social and historical context that manifests through our communicative interaction with each other, thus creating an intersubjective understanding of reality. I understand discourse the way it has been presented by Hajer (2009 p. 60) as “an ensemble of notions, ideas, concepts, and categorizations through which meaning is ascribed to social and physical phenomena, and that is produced in and reproduces in turn an identifiable set of practices”. According to this perspective, the ensemble of these things is what structures our communication and patterns in discussions. Hence, Hajer emphasizes the performative function of discourse as our collective manner of ascribing meaning to things, through speech and other means of communication. This led to a continuous reinforcement of certain perspectives, making them form our sense of reality. Discourse analysis is therefore said to be “the method of finding and illuminating that pattern, its mechanisms and its political effects” (Hajer 2009 p. 60). Discourses can also be more or less influential, which Hajer (2009) argues can be assessed through analyzing their effects. If a discourse is used by a given social unit to conceptualize the world and thus becomes a dominant perspective, this is what he calls a *discourse structuration*. If it solidifies into institutions or the practice of an organization, it becomes a *discourse institutionalization* (Hajer 2009 p. 64).

This will be important in the analysis below regarding which perspectives are seen as more legitimate in the debate and how this affects the view on the governing of the Swedish forest.

Semiotic theory concerns the study of signs and their role in society and is therefore a useful theory when analyzing visual campaigns. The study of semiology and the meaning of signs plays a significant role in the analyzing of images and their relation to broader systems of meaning-making. This means that our comprehension of how different types of elements such as words, images, videos, sounds, angles and expressions interact and are given meaning can be traced. Importantly, due to this search for meaning, semiology tries to shed light on social effects and the reflection of power in signs. The exploration of cultural meaning also results in semiology having a connection to ideological perspectives and is often used as a form of critique (Rose 2016 pp. 106–110). As some of the material of strategic communication I will look into is based on commercials and posters, there is a need to apply theory that enables an analysis of the visual argumentation and the cultural meaning reproduced. Semiology will therefore act as a complement to textual discourse analysis.

The Saussureian presentation of signs is central for the basic understanding of their structure; it does not, however, provide much understanding for how meanings change (Rose 2016 p. 113). In order to provide answers, I have therefore chosen to turn to the work of Roland Barthes. According to Barthes, signs are formed by the signifier, the content of the object, and the signified, the meaning expressed by the signifier. This leads to two significant concepts: denotation, which is the actual message, and connotation, which is the message perceived by people based on their cultural understanding of reality (Barthes 1977 p. 17). Barthes then identifies three types of messages that can exist inside an image: the linguistic message, the literal message (alternatively the denoted image) and the symbolic message (alternatively the connoted image). Barthes argues that images are polysemic and therefore contain multiple interpretations. The linguistic messages therefore work as a way to limit the intended interpretation of the image. The text or spoken context can fill two possible functions: it can guide the focus into one specific meaning, what Barthes refers to as anchorage, or it can add meaning and work together with the image to convey a meaning, which Barthes refers to as relay (Barthes 1977 pp. 32–42).

4.2. The Argumentative Approach

In order to investigate the discourses reproduced by the actors, I employ Hajer's argumentative approach as a lens. Hajer (2009) states that "people tell facts in a

story” (pp. 61), which means that as a way to make a convincing argument people use narratives. This enables an argumentative function as it has the potential to change the meaning of a phenomenon or situation as well as positioning actors, and subsequently, storylines help to create and reproduce a way of perceiving reality. Stories provide a closure to issues as they become pinned down in a certain way that make them possible to act on. The argumentative interaction is further expressed by Hajer (1995) to be a key moment in the formation of discourses, which is necessary to explore as it offers an understanding to the prevalence of certain discursive constructions. The argumentative approach suggests storylines and metaphors to be the two central concepts of the linguistic analytic framework, functioning as tools to allocate the arguments forming the stories.

A storyline is described as “a condensed statement summarizing complex narratives, used by people as ‘shorthand’ in discussions” (Hajer 2009 p. 61). Through storylines, people can draw on different discursive categories and thus establish a meaning to certain phenomena, positioning themselves in relation to them and creating coalitions. Since stories are not fixed, but rather based on stimulated cognitive processes, storylines can open up a re-ordering of the common problem understanding. As a result, storylines function as a way to suggest unity in bewildered discursive components, providing problem closure (Hajer 1995). Hajer (1995) also states that “Story-lines are devices through which actors are positioned, and through which specific ideas of 'blame' and 'responsibility', and of 'urgency' and 'responsible behaviour' are attributed” (1995 pp. 64–65).

As for metaphors a concise description is given by Lakoff and Johnson in the classic book *Metaphors We Live By*: “The essence of metaphor is understanding and experiencing one kind of thing in terms of another” (2003 p. 5). In other words, metaphors give clarity to understanding through comparison. “War on drugs” for example, is a classic metaphor. It is of course not an actual war, but the understanding of war indicates that strong measures will be implemented, and the matter is taken seriously (Hajer 2009 p. 61). A related concept is similes, which function in a similar way as metaphors in that they are both based on understanding through comparison. The difference lays in that a metaphor creates an implicit comparison where a simile instead points out the similarity between thing by saying something is *like* something else (Murfin & Ray 2003 p. 447). Hajer (2009) also states that the effectiveness of the strategic action, that is the employment of a storyline or metaphor, is contextualized. A useful method is therefore to formulate this context by connecting a situation to something that is familiar to others. A statement can gain power if there is a link to previous texts, often referred to as *intertextuality* (2009 p. 63). In a similar way historical events can be used to explain new ones, linking them together in a ‘chain’ of meaning in a mechanism called *citation* (2009 p. 63).

The argumentative approach mainly focusses on policy process, as Hajer (2009 p. 62) argues: “Storylines and metaphors fulfill a particularly significant role in political processes where policies have to be determined in a group of actors that do not share the same frame of reference. In such settings metaphors and storylines are the vehicles for trust and consensus”, pointing out that people assess the legitimacy of an argument based on whether it ‘sounds right’. I argue that they fill a similar function in the case of strategic communication aiming to form a public opinion about a phenomenon, and this understanding therefore becomes a point of departure for my analysis. Since there generally exists competing discourses in any given situation, it becomes important to distinguish different alliances. According to Hajer (2009), governance is practiced through these *discourse coalitions*. They are created based on people sharing a practice and interest, resulting in them (re)producing certain discourses or *stories* as a way to exert their power in a context. For this analysis, I argue that the actors behind *Swedish Forest* are an example of a discourse coalition, seeing as how the initiative is constructed by an ensemble of actors who employ the same storylines within a specific practice.

4.3. An environmental ethos

I add the concept of *environmental ethos*, formulated by Ihlen (Heath *et al.* 2009), as it helps me add detail to the discourse analysis with particular focus on how the forest industry frames itself and in ways they convey seriousness, trustworthiness and competence to its audience. Ihlen bases his environmental ethos on the classical definition of ethos by Aristotle as one of the three appeals of proofs: logical arguments (logos), emotive arguments (pathos) and the ethical appeal of the rhetor as a trustworthy person (ethos). The ethos can be separated into the pre-existing view the audience has of the rhetor and as the appeal created in the speech situation, which is sometimes referred to as *invented ethos* (Heath *et al.* 2009 p. 362). The invented ethos can be strengthened in three ways, according to Aristotle: through demonstration of practical wisdom (phronesis), virtue (arête) and goodwill (eunoia) (Heath *et al.* 2009 p. 362). Although Ihlen (2009) sees this traditional understanding of ethos as applicable he also brings up more modern conceptions of the ethos which are more connected to reputation and perceptions of corporate social responsibility communication which he then breaks down into the importance of accuracy, transparency and credibility.

In his formulation of the environmental ethos, Ihlen (2009) combines the ancient understanding of how ethos can be strengthened with the more modern one in order to formulate four different claims, which he sees as common for corporations aiming to convince consumers about their environmental awareness. The first one

is called “*We Improve the World*” and is related to claims made by the company about their own, often technical, initiatives which they state help the environment and is well connected to the appeal of *phronesis* as well as *arête*. The next one is named “*We Clean Up Our Own Act*” and aims at presenting the responsibility taken by the company when doing environmental harm and is also based mainly on *phronesis* and *arête*. The third claim is “*Others Approve of Us*” and focuses on the use of a third party that can strengthen the belief in the company’s environmental work and testify to their virtue. This can be done through different strategies, such as referencing to other trustworthy organizations who approve of them, famous people who people might see as trustworthy or by showing of awards. Lastly, the fourth claim is called “*We Care About You*” and is closely connected to *eunoia* as the corporations use methods to create a connection to the consumers by empathizing with their needs and worries and thus show an understanding (Heath *et al.* 2009 pp. 366–370).

5. Method and material

Since discourses are formed based on the social and historical experiences (Jørgensen & Phillips, 2002), a contextual understanding of the Swedish forest sector and forest-based bioeconomy is needed in order to analyse the primary data. The background given in the first section of the study will therefore act as a frame of reference and secondary data, making it possible to understand the material in a wider context. In the following section, in order to give insight into the procedure, I describe the process of analysing the material based on the theoretical framework.

5.1. Method for analysing

The method for approaching the written material of this study is based on discourse analysis, as the formulated research questions motivate this search for storylines in the collected material. Additionally, the concepts will help guiding the analysis and make it possible to investigate how the storylines fit into a wider story of the Swedish approach to forestry in a bioeconomy context. Jørgensen & Phillips (2002 p. 3) state: “In discourse analysis, theory and method are intertwined and researchers must accept the basic philosophical premises in order to use discourse analysis as their method of empirical study”, and thus the theoretical assumptions are intertwined with the methodology .

The first step of the analysis was to collect and transcribe all the text material produced by *Swedish Forest*. In the cases where it existed an English version this was used, in a few cases a translation of the original Swedish version was needed. Next I read all material and colour coded them based on recurring themes that could be found (Robson & McCartan 2016), which was then formulated into specific storylines based on the concepts by Hajer (2009), presented in the theory section. The major prevailing themes included forest-based material and climate-positive messages. During the coding, I paid special attention to fact-like statements where actors presented a vision for a future forest-based bioeconomy, the role they envision the Swedish forest to play and how they position the forest sector in this transition. Following this thematic coding, I could formulate five different storylines incorporating the dominant themes communicated by the initiative. These storylines then worked as an overarching guidance to the whole analysis. In the results section, I use examples of quotes from the material as a means to provide transparency for the results.

In order to explore how a storyline was enforced through different means and to give a more holistic study of the strategic communication, I studied the visual aspects in relation to the storylines. The visual analysis therefore followed the discourse analysis. This part was done through the concepts presented by Barthes (1977). First, an analysis was conducted of the literal message (denoted image) found in the visual material by writing down a description. This was followed by a study of possible symbolic messages (connoted image), going back to the frame of reference, then connecting it to the linguistic message and thereby making it possible to explore how the visual aspects are meant to be interpreted and additionally are enforcing the storylines. The variation of the visual aspects could differ, in some cases a whole commercial referred to one coherent storyline, whereas other commercials might contain elements from different storylines. As to make a coherent study, the visual elements were therefore organized according to the presented storylines. In the results section, I give descriptions of the visual elements together with appurtenant quotes to exemplify the interpretations.

The environmental ethos was analysed in a similar manner, in which the material was studied in connection to the claims presented by Ihlen (2009) and the storylines. The procedure therefore consisted of searching for the means in which *Swedish Forest* strengthens their credibility by displaying environmental awareness in each storyline.

5.2. Material

The Swedish forest industry is a grand actor that consists of numerous forest organizations, companies and private forest owners. To explore all of them in relation to a forest-based bioeconomy would consequently not be manageable for a master thesis study. As a way of making my study comprehensible, therefore, I have chosen to limit my material to the collaborative initiative *Swedish forest*. I suggest that this initiative represent an important share of the industry. The empirical data sampling of this study is based on the material and publications presented on the initiative's website. This may be perceived to be the strategic communication represented by the actors who are involved in the campaigns; it will thereby serve as a means to gain understanding of the perspectives of the Swedish forest industry.

5.2.1. Website

In the centre of the strategic communication is the initiative's website (Svenska Skogen 2020a; b), as it works as a public gateway for their message. The majority of the website is text based, consisting of different informational sections about the

forest's potential and benefits. Furthermore, the website collects all the different aspects of the campaigns and therefore provides an overview of the initiative's work. In addition to this, the website contains a pedagogical game, where the website visitor is supposed to click as many times as possible for 10 seconds. The average number of clicks per second is said to symbolize the number of trees planted per second, with the function of displaying that each second 12 trees are planted in Sweden. There is also a section devoted to retransmit website visitors wanting to learn more to about the Swedish forest to other credible actors such as researchers, interest organizations and governmental agencies. For the analysis, the English version of the website was used, with some exceptions that only existed on the Swedish version as they redirected the reader to other Swedish websites. I analyze this material with the help of textual analysis.

5.2.2. Information campaigns

Much of the strategic communication, however, goes beyond the *Swedish Forest's* own website and has been transmitted through other types of media. This material is also included in the analysis. The initiative publishes three campaigns annually making the total number of campaigns 10 to date. A part of the campaign material are posters with informational slogans that capture the message of the season's campaign. The posters commonly focus on statements connected to the climate benefits provided by the forest as well as what we are able to produce from forest materials and how much forest Sweden possesses. Another noteworthy aspect of the campaigns are the commercials that accompany the posters (Svenska Skogen 2020c). The commercials are short and snappy but nevertheless make it possible to transmit a combination of different messages in just a few seconds since they combine spoken and visual communication. The setting is always in close relation to forest or trees of some sort, connecting the visual to the forest. The tone of the commercials is often pedagogical, where one person acts as the more knowledgeable actor who teaches someone less informed about the Swedish forest. The initiative has moreover also published five ads in Swedish (*Svenska Skogen 2019a; b; c; d; e*) on the website of *Dagens Nyheter*, Sweden's biggest daily newspapers. The format of these is similar to that of a debate article, seeing how they are based on an argumentative and informative structure. All of the commercials except for two contain English subtitles, the quotes from the ads and posters had to be translated by me from Swedish to English. The material from the information campaigns was analysed using both discourse analysis and visual analysis.

6. Results and Analysis

In this section, the results of the analysis are presented in order to identify how *Swedish Forest* strategically communicates the *bioeconomy*. I present the findings in sections based on themes that reveal the identified storylines. In total there are five different storylines, focusing on different aspects of the forestry discourse and together creating a broader story about the Swedish forest-based bioeconomy.

6.1. Storyline 1: Innovations from the forest create the material of the future

A prevailing theme encompasses a lot of the technical aspects of the bioeconomy discourse and works to promote the innovations that come out of an advancing market for bio-based products. This theme can be found in a majority of the material, not least in the metaphorical tagline *where the future grows*, indicating that this is a priority of the marketing strategy.

One aspect of this storyline concerns instilling the idea of trees as old while also being a modern resource that can be used for brand new products. A clear example of this is seen in the first commercial “*Where the future grows*” in which the spokesperson states: “*Although trees are old, they are used to make modern products*” (Svenska Skogen 2017c), followed by “*You can make clothes from the forest*” (Svenska Skogen 2017c) and “*You can even make cosmetic out of the forest*” (Svenska Skogen 2017c). *Swedish Forest* thus argues for the modernity of wood-based products, while simultaneously displaying the diversity of the material. Additionally, this idea of the forest as a modern resource is amplified through the visual aspects of the campaigns, as seen in the example “*Fashion*” (Svenska Skogen 2017d) where a fashion show takes place in the forest - using a felled tree as a catwalk. Fashion is generally connoted with being the most up to date, becoming a synecdoche where the fashion show represents the whole idea of something modern, further emphasizing that the forest is the material of the future. The phrase “*The future is more beautiful than you think!*” steers the interpretation and the message received is that forest-based products are a modern alternative.

Another aspect connects to the idea of the forest as natural and beneficial to the climate. *Swedish Forest* emphasise that the forest is a renewable resource and can substitute materials such as oil and plastic. This is illustrated in the reoccurring tagline “*innovations from the forest, an alternative to oil and plastic*” which appears in both commercials, posters and on the website. In addition, this is further elaborated on in the ad “*The forest, a part of the solution to the climate-question*” (Svenska Skogen 2019d; my translation):

“The real environmental gain happens when forest-based raw material replaces fossil fuels, plastic and energy intense materials such as metal and concrete. By doing that we minimize the inflow of new carbon dioxide into the atmosphere, carbon dioxide that might have been stored for millions of years.

By that we do not alter the balance in the atmosphere. The carbon which is bound in our trees does not alter the amount of carbon in the biosphere at all. But that happens when we pump up carbon or dig up coal which has been buried in the ground for 60 million years. When we use fossil fuels, we continue to add more carbon, says Rolf Björheden, professor at Skogsforsk.”

In this example *Swedish Forest* also draw specifically on the claim “*Others Approve of Us*”, to construct an environmental ethos. They do this by citing a professor, indicating that experts perceive them as virtuous (arête), which thereby gives legitimacy to *Swedish Forest’s* own position in the matter. From a visual perspective, the message of the forest as an alternative is communicated in posters where familiar plastic goods, such as a food packages, bottles and toys appear to be growing out of trees. The contrast between the man-made object and the tree is striking, but it also implies that products made out of forest material are more natural than the conventional alternatives, based on growing being connoted with natural matters. The message on the poster works as an anchorage as it conveys the repeated message “*innovations from the forest, an alternative to oil and plastic*”, thereby indicating that it is a more environmentally conscious alternative and thus it is given a market advantage. These technological innovations can also be seen as a sign of *Swedish Forest* strengthening their environmental ethos by using the claim “*We Improve the World*”, seeing how they provide renewable alternatives in order to tackle the environmental challenges and thus shows that they are knowledgeable (phronesis).

Lastly, *Swedish Forest* makes an effort to indicate the variety of possible areas of use that lays within the forest. It is a reoccurring argument used in a majority of the storyline’s examples; however, it is especially highlighted in the commercials “*All of this can be made from the forest*” and “*Innovations from the forest, an alternative to oil and plastic*”. In both of them, the focus is to display the possibilities of creating familiar objects out of forest. In the case of “*All of this can be made out of forest*” the viewer first sees a small spruce plant that is turned into different objects

that can be made out of it, indicating that this tree can become something other than what the viewer expected. In *“Innovations from the forest, an alternative to oil and plastic”* the visualization of these possibilities goes a step further by making these products more forest-like. The viewer is introduced to different situations where people do ordinary chores, but with products that are clearly made out of forest. For example, a man wraps sandwiches in birch bark, a woman grabs a bottle that looks like it has been carved out of wood and someone fuels a car made out of wood with sawdust. All of this contributes to the storyline of how wood is a more natural alternative, while at the same time strengthening the actor’s environmental ethos through the claim *“We Care About You”*. In these commercials, goodwill (eunoia) is shown by indicating that they understand the consumers’ worries for the possible changes that the future might entail. The actors behind the initiative therefore provide climate-friendly alternatives to recognizable habits and products, suggesting that we do not have to make big sacrifices in order to live climate-smart.

Taken together I found that this storyline functions as a way to steer consumers into choosing forest-based products by arguing for their climate benefits. Additionally, it also frames the production values as being in harmony with the climate goals, acting as an opinion-forming for their production interests.

6.2. Storyline 2: The forest is working for the climate

One of the most commonly used themes in the strategic communication concerns the climate benefits of the Swedish forest. To give an example, variations of the phrase *“the forest is good for the climate”* are mentioned 17 times throughout the strategic communication. The emphasis is on the forest as a service for the climate, said to function as a carbon sink and thereby lowering the amount of carbon dioxide in the atmosphere. For example: *“As the Swedish forest grows, it absorbs carbon dioxide in the atmosphere, which improves the climate”* (Svenska Skogen 2020b) and *“As it grows it purifies the air”* (Svenska Skogen 2019f). In many cases this is combined with references to how much carbon dioxide the Swedish forest binds annually: *“The Swedish forest binds and stores at least 50 million tone carbon dioxide per year”* (Svenska Skogen 2019f). This is an example of how the actors use logos arguments to improve their environmental ethos, pointing out their knowledge (phronesis) in the matter.

The forest is furthermore said to provide climate benefits, expressed in a rather anthropocentric manner where the recurring metaphor of the forest *“working for the climate”* is used on both the initiative’s website and in the descriptive text of the commercial *“Silence – work in progress”*: *“Every minute, around the clock, seven days a week and 365 days a year, the forest works for the climate. The forest*

cannot save our climate on its own, but if used in the right way it will be part of the solution” (Svenska Skogen 2019f). The message is also further enforced through visual and spoken aspects in the following commercial (Svenska Skogen 2019f): A man and a woman are seen walking through a forest only to stop by a sign, similar to one found in connection to construction sites, with the text “Silence - work in progress”. The woman seems confused as the man shushes her and tells her: “*That’s the forest working for the climate. As it grows it purifies the air. The Swedish forest binds and stores at least 50 million tonnes of carbon dioxide per year*” [sic]. The woman appears to be shocked to learn about this as she exclaims: “*What! 50 MILLION?! That much?!*” and the man proceeds to tell her: “*Sure, it’s great for the climate. Once a tree is fully grown it can be used to make climate-friendly products and materials. And new trees are planted all the time, so the forest just grows and grows*” to which the woman answers “*Unbelievable*”. The conversation steers the interpretation and works as a relay-function to the strange scene in which the forest has become a metaphorical construction site for the climate. This metaphor gives the idea of the forest working constantly and unremittingly to minimize the overflow of carbon dioxide.

In other cases, growth of forest is instead said to help the climate rather than working for it: “*Do you know that this little spruce helps the climate as it grows? While it grows, it purifies the air and when it is fully grown it can be used to make climate-friendly products and materials, as an alternative to oil and plastic*” (Svenska Skogen 2018c; my translation). The description that the actors provide a resource (wood) that is part of a circular system (the continuously replanted forest) that constantly benefits the climate is aimed to be interpreted by the audience as a sign of the actors’ virtue (arête). An environmentally conscious audience may then appreciate this perceived idealism, thus increasing the consumers’ interest in the forest-materials. This can be said to be a sign of the actors making use of the claim “*We improve the world*” as a way to strengthen their environmental ethos; their source material is improving the climate even as it is being produced.

While climate is given much attention in the strategic communication, much less is given to other environmental concerns. The environmental claims made by *Swedish Forest* are also more vague; for example, they portray the forest as a natural choice, found in the descriptive text of several commercials: “*The forest is part of nature’s own eco system and is a remarkable renewable source*” (Svenska Skogen 2019g; h). In the ad “*Forest is an endless growing force*” (Svenska Skogen 2019e; my translation), the equality between production and environmental goals is mentioned: “*In the Swedish Forestry Act the economic production goals are seen as equal to the environmental goals and guidelines for how to manage in a sustained ecological way*”. However, this vague description does not explain any

requirements. *Swedish Forest* also make discrete indications of a flourishing biodiversity through sound images. In a few of the commercials the audience can hear birds singing and woodpeckers pecking wood (Svenska Skogen 2017c, 2018b; c, 2019f), which connotes a rich wildlife and a healthy forest. In one occasion an owl is shown sitting in a tree (Svenska Skogen 2017c). It seems like the forest industry does not want to acknowledge the conflicting interests built into the environmental debate.

6.3. Storyline 3: The forest is a place for recreation

In the process of analysing, a storyline about the recreational benefits of the Swedish forests appeared. It seems to be used less frequently by the initiative and is often presented as a supplement to other storylines. It is clearly connected to the Swedish tradition of Right to Public Access and the culture of spending time in the forest. While the other storylines are portrayed as presenting new possibilities, the recreational benefits are more familiar to the Swedes. The mentioning of recreational benefits furthermore seems to function as a way to stress the diversity of important services provided by the forest: *“As the Swedish forest grows, it absorbs carbon dioxide in the atmosphere, which improves the climate. While it grows we can spend time in the forest, making the most of its magical power and tranquillity”* (Svenska Skogen 2020b). The forest is portrayed as a place which brings relaxation to people, where we can spend time together and enjoy nature. An example of this is seen in the ad *“Kerstin Stenberg: ‘I am always in the forest – that is where I thrive’”* (Svenska Skogen 2019c; my translation), where she describes her own relation to the forest, as a private forest owner: *“The family often goes out in the forest, to have picnics, pick berries and mushrooms or maybe sleep in the open”* and since they live close to nature they do not have to *“make a project out of going to the forest”*. This presentation of a private forest owner is also a way for *Swedish Forest* to create an identification with their target group; she is just a common person and mother, not a big corporation - and she enjoys the forest in the same manner as a lot of Swedes do. Through this presentation they show the goodwill (eunoia) of the people who manage the forest, and their understanding for the forest as a place for relaxation, and thus strengthening their environmental ethos through the claim *“We care about you”*. Additionally, in order to show that they share the same perspective as the intended audience, *Swedish Forest* makes use of visual elements in their commercials. A common feature is people walking in the forest, often filmed from below and the people often gaze at the treetops. This gives a connotation of them feeling small in comparison to the forest, and thus signals respect. The forest is often portrayed as a place where people get together to associate. In the previously mentioned commercial *“Innovations from the forest, an alternative to oil and plastic”* (Svenska Skogen 2018a), five different individuals

in varying ages are shown doing everyday tasks individually. However, in the last scene they assemble as they walk in the forest with a picnic basket. This constellation of a male and female adult and children in different ages is commonly read as a family, but the only time they really interact with each other is in the forest. Another example can be found in a short scene from “*Where the future grows*” (Svenska Skogen 2017c) where a symbol of a heart and initials are carved into a tree. This is associated with lovers manifesting their love for one another and consequently the forest now connotes a place where people might spend time together, which additionally signals the importance of the forest to these unknown lovers.

6.4. Storyline 4: Forest has built Sweden and is thus part of our identity

Another recurring theme found is the importance of the forest as a component in the construction of the modern Swedish society. *Swedish Forest* here makes references to the historical role of the forest for the industrialization of the country, which can be noticed in the very first sentence from the commercial “*Where the future grows*”: “*In many ways, the forest has made Sweden*” (Svenska Skogen 2017c). This is a significant storyline as it lays a foundation necessary for understanding the valuable resources provided by the forest and the possibilities it has generated in Sweden. The forest is additionally described as playing a part throughout the history of Sweden, which is pointed out in the ad “*The invaluable forest – six important historical events*” (Svenska Skogen 2019a; my translation). In this ad, Gunnar Wetterberg, a well-known Swedish historian who has written a book about the Swedish forest history¹, presents six phases in the Swedish history in which the forest has played an important role for the population. The ad’s first two subtitles give a short summary of how the forest was used by early hunters and farmers as material for making fire and housing: “*For 8 000 years we lived as hunters in the forest and spent our time collecting nuts and roots. The forest’s material was used to make fire or build huts*” (Svenska Skogen 2019a; my translation) and “*Around 3 800 years ago the forest got a brand-new purpose as we began to farm the land. The animals were allowed to graze in the forest, we built fences out of sticks, the forest was used for fuel and occasionally trees were felled to build houses with*” (Svenska Skogen 2019a; my translation). After this, the focus quickly turns to describing the development of the forest as commodity and enabling the global position and the industrialization of the country, e.g.:

¹ Träd : en vandring i den svenska skogen

"The insight that metal could be extracted from ore resulted in forest for the first time having a significance beyond agricultural purposes. The forest was especially used as fuel in all of the stages of iron production.

- This is really important for Sweden. Ore was available in many places, but the forest was gone in other parts of Europe which prevented the possibilities for metal work. It was the forest that made it possible for Sweden to keep this business going and it was an important factor when the first export of iron and copper got going in Sweden, says Gunnar Wetterberg" (my translation)

Other important events mentioned is the development of the Swedish sawmill industry: "*The changes led to a big demand for timber and the Englishmen turned to Sweden where the modern timber export built up and triggered the sawmill industry*" (Svenska Skogen 2019a; my translation), and the development of papermills: "*The manufacturing of wood pulp led to new possibilities and new products, like different types of fuel and textiles*" (Svenska Skogen 2019a; my translation). What all of these examples have in common is the portrayal of forest as a crucial resource for the development of Sweden; from a country based on hunting and farming to today where materials from the forest represent an important share of Swedish exports. Having a historical expert with particular knowledge about the Swedish forest, such as Gunnar Wetterberg, present the importance of the forest for Sweden throughout time also strengthens the environmental ethos of *Swedish Forest* through the claim *Others Approve of Us*. His association with them indicates his perception of them as virtuous (arête), and thereby gives *Swedish Forest* legitimacy in the matter.

6.5. Storyline 5: The actors who take care of the forest are responsible

The analysis revealed that a lot of attention is paid to emphasise the role of the actors who take care of the Swedish forest. In this storyline there is a clear connection to the longstanding discussion about how the forest should be managed, and *Swedish Forest* use the historical background in their strategic communication in order to create legitimacy – what Hajer calls *citation* (2009 p. 63). An example can be distinguished in the historical reflection made in the commercial "*Where the future grows*" (Svenska Skogen 2017c) in which the spokesperson tells the story of how forest management has changed in Sweden: "*In the past, it was used so much in some places it was on the verge of disappearing. Here in Sweden we realized something had to be done...we now have twice as much forest as we did 100 years ago and forest owners' plant at least two new trees for every tree felled*". By contrasting the overuse which took place a century ago with the current situation,

the Swedish forest management is described as a story of success. Consequently, an image is formed of the forest's caretakers as knowledgeable. This is further amplified through the visual presentation: Simultaneous with the spokesperson telling the story of overuse, the viewer is shown a black and white scene where people are dressed in an early 20th century style in a landscape dominated by clear-cuts, connoting depletion of forest. Interestingly enough this is the only occasion where clear-cuts are shown and the rest of the commercial only portrays dense forests or plantations.

The forest managers are portrayed as possessing knowledge gained from years of overseeing the forest, but also as caring due to them being presented to plant more than expected in order to secure the demand of wood. The replantation is furthermore linked to the actors' climate-responsibility: "*as the forest grows, it absorbs carbon dioxide and improves the climate*" (Svenska Skogen 2017c). This means that the forest owners are thus strengthening their environmental ethos in this storyline through the claim "*We Clean Up Our Own Act*", showing that they possess wisdom (phronesis) and virtue (arête) and therefore take responsibility for the loss of forest. It can also be perceived as taking on a leadership role, where they are presented to be doing more than what is asked of them, demonstrating their virtue as caring for the future of the forest and thus making use of the environmental ethos claim "*We Improve the World*". On their website the actors additionally express the need for forest management in order for the forest cycle to continue: "*The renewable power of the forest never ends, as long as the forest is cared for and maintained in the right way*" (Svenska Skogen 2020b). The actors state that there is a need to manage the forest in order for it to be vital: "*When the forest grows freely some trees succumb due to the concurrence. Those trees can easily become a center of pests and in dense forest with a high number of dry trees will have a higher risk of wildfire. In a managed forest those trees are harvested as soon as they have died of natural causes*" (Svenska Skogen 2019b; my translation). This indicates a need for the forest to be managed in order to continue growing and thus the work of the forest caretakers is essential.

The idea of the forest owners going the extra mile is reoccurring in all different medias used in the strategic communication, and is especially visible in the ad "*The forest does all of this for the climate as it grows*" (Svenska Skogen 2019b; my translation). This ad clearly makes a reference to the Swedish Forestry Act: "*The people who own the Swedish forests are good at maintaining and managing them. It is not allowed to fell forest without compensating with new trees. For every tree felled two to three new ones are planted and of the country's 41 million hectares of land 28 million hectares are covered by forest*". In this case Swedish Forest makes use of *intertextuality* of the situation (Hajer 2009 p. 63), by informing its audience

that they do more than the law requires so that their statement becomes even more powerful.

Additionally, *Swedish Forest* uses visual elements in their commercials to pedagogically convey their argument, which is especially clear in the examples of “*The apartment*” (Svenska Skogen 2019g) and “*The ice cream*” (Svenska Skogen 2019h). In both of these cases similes are used to explain how much forest is planted every year in Sweden. “*The apartment*” introduces the viewer to an apartment viewing in which a potential buyer enters an apartment full of trees. She looks surprised and points out: “*Oh, I see there’s plenty more forest in here than what it looks like in the photos*”, upon which the smiling real estate agent answers: “*Sure! 70 percent of the area actually! The same as in Sweden*”. As the answer surprises the potential buyer, the real estate agent then continues to state: “*Yes, the forest is growing at double speed now compared to a hundred years ago*” which makes her exclaim in chock. “*The ice cream*” is designed in a similar manner; the viewer is shown a kiosk located in a forest area where a man just finished a popsicle and throws away the left-over stick, when the cashier suddenly hands him two more. The man is confused and objects, telling her he only ordered one. As a response she informs him: “*Yes, but I do as we do with the forest in Sweden...for every tree felled, we plant two new ones*” and “*Sometimes three, that’s super for the climate*”. The man looks surprised but also impressed as he notes: “*Oh, that’s a lot of popsicle sticks. And plantlets*”. The cashier then leans forward and tells him that this means 380 million plants every year – resulting in a similar choked exclamation as in “*The apartment*”. Both of these examples use these similes as a way to make these enormous numbers more comprehensible to the audience – the percentage of forest covering the apartment is the *same as* covers Sweden and the cashier does *as they do* with the forest in Sweden. The spoken content is necessary in order to create an understanding for the message, it works together with the visual elements in order to convey the intended meaning and therefore has a relay-function. The connotations in these two commercials relate to this previously mentioned story of success. We are shown the abundance of forest in the apartment which is said to represent the percentage of forest covering Sweden, and the man is handed two additional popsicles for free which signals the prosperity of the Swedish forest sector. This is connected to our social understanding of the metaphor “more is better” (Lakoff & Johnson 2003 p. 22) – as we have more forest now than a century ago the forest owners must be doing a good job. Consequently, the people who take care of the forest come across as reliable seeing as they take responsibility and the forests are growing.

Notably, little is mentioned about what the forest management looks like today, other than the replantation. In the ad ”Kerstin Stenberg: ’I am always in the forest

– that is where I thrive” (Svenska Skogen 2019c; my translation) goes a bit more in depth, as a private forest owner is interviewed about her role. She is presented as having a genuine interest in her forest, and her lifestyle as an active forest manager is said to require a close connection to nature: “*The lifestyle requires a constant awareness of nature’s own cycles and the seasons, where each period has its own purpose*”. Although nothing is said about her environmental responsibility as a private forest owner, this description creates an idea of her being environmentally conscious - she simply seems to be in touch with the forest. The ad mentions nothing about what type of trees are planted, how much dead wood the forest contains or how big the biodiversity is.

7. Discussion

Through the analysis of *Swedish Forest*, it appears as though the forest industry further cements some of the perspectives found in previous studies (Pülzl *et al.* 2014; Johansson 2016; Kröger & Raitio 2017; Vivien *et al.* 2019; Fischer *et al.* 2020). The study reveals five different storylines which put together formulates a bigger story of the Swedish forest in relation to significant actors and interests. The findings are closely intertwined with the perceptions found in a recent study of the Swedish National Forest Program, in favour of a bio-resource narrative and an anthropocentric neo-industrial story of the forest (Fischer *et al.* 2020). Seeing how the private sector has previously been distinguished as the drivers behind this story, it indicates a reproduction of hegemonic discourses through the strategic communication of the initiative.

The forest is portrayed as being the resource of the future and a panacea for the emerging Swedish bioeconomy. Storyline 1 indicates that the forest is a modern product, renewable and therefore perceived as more natural than conventional materials such as oil or plastic. The process of manufacturing forest-based products is furthermore formulated as a circular system which creates a never-ending outtake and thus supports an increased production. Founded on a circular process the story gives the appearance of securing a balance between bioeconomy and the climate. This perspective is enforced further through storyline 2 which portrays the forest as a carbon sink and metaphorically working for the climate. The framing of the forest as a modern resource and climate benefit legitimizes an increase in production (Pülzl *et al.* 2014). As the production interests are proven to be in the centre of the story it comes as no surprise that non-productive interests are given less attention. Where climate serves an important role in the story, the actors do not acknowledge other environmental impacts of the forestry; instead, climate benefits appear to replace environmental goals. This finding complies with what Bugge *et al.* (2016) and Fischer *et al.* (2020) has concluded about the bioresource vision neglecting environmental measures. According to the latest revision of the Swedish Forestry Act, the environmental goal should be considered equal to the production goals, which in reality has been proven hard to implement. By focusing on the climate benefits rather than the environmental aspects, the industry shifts attention from the environmental debate, marginalizing actors who might represent this aspect such as

NGOs. Recreational benefits have been proven to exist within the story through storyline 3 but are given less priority. They are rather presented as a perk which can be used besides all the climate and production benefits. The objective of the strategic commercial therefore seems to concern the approval of the production and not so much the public accessibility and usage of the forest. This might also explain the lack of Sámi people and reindeer in the strategic communication, although they are arguably important actors using the Swedish forest. Due to conflicting interests with production forestry, including them in the strategic communication would be difficult while maintaining the overall positive picture of the forest industry.

Storyline 4 introduces the historical importance of the forest and function as a link to the vision of the Swedish forest's future role. The citation works together with the previous portrayal of the forest in storyline 1 and 2 to set up an understanding of the forest as central in the construction of a future society without fossil-based products. The initiative makes use of this neo-industrial story (Fischer *et al.* 2020) to position themselves within the Swedish bioeconomy discourse, as seen in storyline 5. They repeatedly make references to the replantation of forest and state that Sweden as a result have twice as much forest as we did during the last industrialization, which is meant to be interpreted as a sign of success. By framing the climate threat as the issue, the increased amount of forest becomes a sign of the actors' responsible management; more trees equal less carbon dioxide. Since not much is mentioned about how the forest is managed, it appears to be of less importance to the public and they should instead trust the knowledge which the actors behind the initiative have gained through years of experience and practice. The actors further make use of all four of the environmental ethos claims (Heath *et al.* 2009), indicating a need for them to be perceived as trustworthy in environmental matters. The actors who take care of the forest are presented as possessing a special type of knowledge necessary for maintaining the forest in the right way. By arguing for the benefits of the forest, the actors strengthen their own position and come across as responsible. Comparing this once more with the points made by Fischer *et al.* (2020) I argue that the *Swedish Forest* initiative functions as a way to reproduce what they perceive as the correct type of knowledge about the Swedish forestry, educating and influencing the public through aimed campaigns about a story which will make them agree with the industry's interests.

8. Conclusion

As I have previously mentioned, both the industry and the government have expressed a need for increased consumer awareness and a positive attitude to bio-based products. Based on my study, I draw two conclusions in relation to this. First of all, by alluding to perceptions of forest-based products as natural and part of a circular system improving the climate, the dominant forest actors portray the forest as an enabler of a greener future. Their vision of a Swedish bioeconomy is clearly established within the bioresource narrative, prioritizing production and climate benefits over non-profit benefits such as environmental aspects, thus further reproducing a hegemonic discourse that has already been institutionalised through the Swedish NFP. Secondly, the actors in the discourse coalition of *Swedish Forest* use this opportunity to position themselves as central in the matter. A common message in the strategic communication is the expert knowledge acquired through years of managing the forest, which is manifested through the redoubled amount of forest during the last century. This further legitimizes a forest management governed by the interests of the forest industry and consequently marginalizes actors advocating for non-production interests.

References

- Ahlström, I. (2008). *Allt om allemansrätten: ett svenskt kulturarv*. Stockholm: Hilma.
- Appelstrand, M. (2012). Developments in Swedish forest policy and administration – from a “policy of restriction” toward a “policy of cooperation”. *Scandinavian Journal of Forest Research*, vol. 27 (2), pp. 186–199
- Barthes, R. (1977). *Image, music, text*. London: Fontana.
- Beland Lindahl, K. (2008). *Frame Analysis, Place Perceptions and the Politics of Natural Resource Management*. Swedish University of Agricultural Sciences. [2020-02-07]
- Bugge, M., Hansen, T. & Klitkou, A. (2016). What Is the Bioeconomy? A Review of the Literature. *Sustainability*, vol. 8 (7), p. 691
- Creswell, J.W. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th edition. London: Sage.
- Enander, K.-G. (2007). *Skogsbruk på samhällets villkor: skogsskötsel och skogspolitik under 150 år*. Umeå: Institutionen för skogens ekologi och skötsel, Sveriges lantbruksuniversitet. Available at: https://pub.epsilon.slu.se/8483/1/Enander_K-G_111130.pdf
- European Commission (2016). Paris Agreement. Available at: https://ec.europa.eu/clima/policies/international/negotiations/paris_en [2020-04-21]
- Fischer, K., Stenius, T. & Holmgren, S. (2020). Swedish Forests in the Bioeconomy: Stories from the National Forest Program. *Society & Natural Resources*, vol. 0 (0), pp. 1–18 Routledge.
- Formas (2012). *Swedish Research and Innovation Strategy for a Bio-based Economy*. Stockholm: Forskningsrådet för miljö, areella näringar och samhällsbyggande, Formas. Available at: https://www.formas.se/download/18.462d60ec167c69393b91e60f/1549956092919/Strategy_Biobased_Economy_hela.pdf
- Godeau, C. (2016-09-14). “Bioekonomi är nästa ekonomiska våg” - *Global Utmaning*. Available at: <https://www.globalutmaning.se/bioekonomi-ar-nasta-ekonomiska-vag-norden-har-vad-som-kravs-att-leda-omställningen/> [2020-02-06]
- Greenpeace (2017). *Svenska ‘Skogen’*. Available at:

<http://www.greenpeace.org/sweden/se/skog/svenskaskogen/> [2020-02-06]

Hajer, M.A. (1995). *The Politics of Environmental Discourse*. Oxford: Oxford University Press. DOI: <https://doi.org/10.1093/019829333X.001.0001>

Hajer, M.A. (2009). *Authoritative governance: policy-making in the age of mediatization*. Oxford: Oxford University Press.

Hausknost, D., Schriefl, E., Lauk, C. & Kalt, G. (2017). A Transition to Which Bioeconomy? An Exploration of Diverging Techno-Political Choices. *Sustainability*, vol. 9 (4), p. 669

Heath, R.L., Toth, E.L. & Waymer, D. (2009). *Rhetorical and Critical Approaches to Public Relations II*. New York, UNITED STATES: Routledge. Available at: <http://ebookcentral.proquest.com/lib/uu/detail.action?docID=412919> [2020-02-06]

Hodge, D., Brukas, V. & Giurca, A. (2017). Forests in a bioeconomy: bridge, boundary or divide? *Scandinavian Journal of Forest Research*, vol. 32 (7), pp. 582–587

Holmgren, S. (2015). *Governing Forests in a Changing Climate*. Swedish University of Agricultural Sciences.

Johansson, J. (2016). Participation and deliberation in Swedish forest governance: The process of initiating a National Forest Program. *Forest Policy and Economics*, vol. 70, pp. 137–146

Jørgensen, M. & Phillips, L. (2002). *Discourse analysis as theory and method*. London: Sage.

Kröger, M. & Raitio, K. (2017). Finnish forest policy in the era of bioeconomy: A pathway to sustainability? *Forest Policy and Economics*, vol. 77, pp. 6–15

Lakoff, G. & Johnson, M. (2003). *Metaphors we live by*. Chicago: The University of Chicago Press.

Murfin, R.C. & Ray, S.M. (2003). *The Bedford glossary of critical and literary terms*. Basingstoke: Palgrave Macmillan.

Näringsdepartementet (2018). *Strategi för Sveriges nationella skogsprogram*. Stockholm: Regeringskansliet.

Pfau, S.F., Hagens, J.E., Dankbaar, B. & Smits, A.J.M. (2014). Visions of Sustainability in Bioeconomy Research. *Sustainability*, vol. 6 (3), pp. 1222–1249

Pülzl, H., Kleinschmit, D. & Arts, B. (2014). Bioeconomy – an emerging meta-discourse affecting forest discourses? *Scandinavian Journal of Forest Research*, vol. 29 (4), pp. 386–393

Regeringskansliet (2017-06-15). *The climate policy framework*. Regeringskansliet. [Text]. Available at: <https://www.government.se/articles/2017/06/the-climate-policy-framework/> [2020-02-06]

Robson, C. & McCartan, K. (2016). *Real world research: a resource for users of social research methods in applied settings*. Hoboken: Wiley.

Rose, G. (2016). *Visual methodologies: an introduction to researching with visual materials*. London: Sage.

Sandström, P., Sandström, C., Svensson, J., Jougda, L. & Baer, K. (2012). Participatory GIS to mitigate conflicts between reindeer husbandry and forestry in Vilhelmina Model Forest, Sweden. *The Forestry Chronicle*, vol. 88 (03), pp. 254–260

SKOGEN (2017). Landsomfattande kampanj för svensk skog. *SKOGEN*, Available at: <https://www.skogen.se/nyheter/landsomfattande-kampanj-for-svensk-skog> [2020-02-06]

Skogshistoriska Sällskapet (2020). 1900-talet. *Skogshistoriska Sällskapet*. Available at: <https://skogshistoria.se/skogshistoria/skogsbruk-genom-arhundradena/1900-talet/> [2020-02-07]

Skogsstyrelsen (2017-05-31). *Frihet under ansvar*. Available at: </aga-skog/du-och-din-skog/frihet-under-ansvar/> [2020-02-06]

SkogsSverige (2017-09-25). *Fakta om skog*. *SkogsSverige*. Available at: <https://www.skogssverige.se/skog/fakta-om-skog> [2020-02-07]

SkogsSverige (2018-06-14). *Allemansrätten*. *SkogsSverige*. Available at: <https://www.skogssverige.se/friluftsliv-jakt/allemansratten> [2020-02-09]

SkogsSverige (2019-12-19). *Vem äger Sveriges skogar?* *SkogsSverige*. Available at: <https://www.skogssverige.se/skog/fakta-om-skog/vem-ager-sveriges-skogar> [2020-02-08]

Svenska Skogen (2017a). *Den svenska skogens storhet lyfts i nytt kunskapsinitiativ*. Available at: http://www.svenskaskogen.nu/files/Svenska_Skogen_Pressmeddelande_20170327.pdf [2020-01-31]

Svenska Skogen (2020c). *Svenska Skogen - YouTube*. Available at: <https://www.youtube.com/channel/UC5A09LVfUvxFrYAIEdLZBjA/videos> [2020-05-19]

The Royal Swedish Academy of Agriculture and Forestry (2009). *The Swedish forestry model*. Stockholm: The Royal Swedish Academy of Agriculture and Forestry. Available at: <http://www.ksla.se/wp-content/uploads/2010/10/The-Swedish-Forestry-Model.pdf> [2020-04-29]

Vivien, F.-D., Nieddu, M., Befort, N., Debref, R. & Giampietro, M. (2019). The Hijacking of the Bioeconomy. *Ecological Economics*, vol. 159, pp. 189–197

References of the analyzed material

- Svenska Skogen (2017b). *Svenska Skogen. Svenska Skogen*. Available at: <http://svenskaskogen.nu/> [2020-02-06]
- Svenska Skogen (2017c). *SVENSKASKOGEN 60 Where the future grows*. Available at: <https://www.youtube.com/watch?v=werYj9OydF8> [2020-03-14]
- Svenska Skogen (2017d). *SVENSKASKOGEN – Fashion*. Available at: <https://www.youtube.com/watch?v=ok0fB4T2CrU> [2020-03-14]
- Svenska Skogen (2018a). *Innovations from the forest, an alternative to oil and plastic*. Available at: <https://www.youtube.com/watch?v=bJcrYLUVsOY> [2020-04-01]
- Svenska Skogen (2018b). *Svenska Skogen – Allt det här kan göras av skog – 15 s*. Available at: <https://www.youtube.com/watch?v=4R42qR6tDLs> [2020-03-31]
- Svenska Skogen (2018c). *Svenska Skogen – Granplantan som hjälper klimatet – 25 s*. Available at: https://www.youtube.com/watch?v=rt_c8qOrkW8 [2020-03-30]
- Svenska Skogen (2019a-10-16). *ANNONS: Den ovärderliga skogen – sex viktiga historiska händelser. DN.SE*. Available at: <https://www.dn.se/brandstudio/svenska-skogen/den-ovarderliga-skogen-sex-viktiga-historiska-handelser/> [2020-03-29]
- Svenska Skogen (2019b-10-23). *ANNONS: Det här gör skogen för klimatet när den växer - DN.se. Dagens Nyheter*. Available at: <https://www.dn.se/brandstudio/svenska-skogen/det-har-gor-skogen-for-klimatet-nar-den-vaxer/> [2020-03-31]
- Svenska Skogen (2019c-10-30). *ANNONS: Kerstin Stenberg: ”Jag är jämt i skogen – det är där jag trivs” - DN.se. Dagens Nyheter*. Available at: <https://www.dn.se/brandstudio/svenska-skogen/kerstin-stenberg-jag-ar-jamt-i-skogen-det-ar-dar-jag-trivs/> [2020-03-21]
- Svenska Skogen (2019d-10-14). *ANNONS: Skogen – en del av lösningen på klimatfrågan - DN.se. Dagens Nyheter*. Available at: <https://www.dn.se/brandstudio/svenska-skogen/skogen-en-del-av-losningen-pa-klimatfragan/> [2020-03-16]
- Svenska Skogen (2019e-10-29). *ANNONS: Skogen är en växande kraft som inte tar slut. Dagens Nyheter*. Available at: <https://www.dn.se/brandstudio/svenska-skogen/skogen-ar-en-vaxande-kraft-som-inte-tar-slut/> [2020-05-19]
- Svenska Skogen (2019f). *Silence - work in progress (english subtitles)*. Available at: <https://www.youtube.com/watch?v=s9T4ALM37d0> [2020-03-30]

Svenska Skogen (2019g). *The Swedish Forest – The apartment (english subtitles)*. Available at: <https://www.youtube.com/watch?v=C069EsYmvfY> [2020-03-30]

Svenska Skogen (2019h). *The Swedish Forest – The ice cream (english subtitles)*. Available at: <https://www.youtube.com/watch?v=7EeYAOhCJVk> [2020-03-30]

Svenska Skogen (2020a). *Svenska Skogen. Svenska Skogen*. Available at: <http://svenskaskogen.nu/> [2020-03-23]

Svenska Skogen (2020b). *Svenska Skogen. Svenska Skogen*. Available at: <http://svenskaskogen.nu/> [2020-03-30]

Svenska Skogen (2020). *Svenska Skogen - YouTube*. Available at: <https://www.youtube.com/channel/UC5A09LVfUvxFrYAIEdLZBjA/videos> [2020-05-19]

Appendix 1

Swedish original and English translations of all the quotes translated and cited by me in the article.

Swedish Forest – a forest industry initiative:

”Vi önskar att fler får upptäcka, förstå och uppskatta skogens oändliga möjligheter. Det här initiativet är på många sätt ett folkbildningsinitiativ.”

“We wish more people will be able to experience, understand and appreciate the forest’s never-ending possibilities. This initiative is in many ways an initiative for popular adult education.” (Svenska Skogen 2017a)

Storyline 1:

“Skogen – en del av lösningen på klimatfrågan”

”The forest, a part of the solution to the climate-question” (Svenska Skogen 2019d)

*

“Men den riktigt stora miljövinsten får vi när skogsråvara ersätter fossila bränslen, plast och energiintensiva material som metall och betong. Då minskar vi tillförseln av ny koldioxid till atmosfären, koldioxid som kan ha varit lagrad i miljoner år. – Då ändras inte balansen i atmosfären. Kolet som finns bundet i våra träd ändrar inte mängden kol i biosfären över huvud taget. Men det gör vi däremot om vi pumpar upp kol eller gräver upp kol som legat begravt i 60 miljoner år i marken. När vi använder fossila bränslen fyller vi på med mer kol hela tiden, säger Rolf Björheden, professor på Skogsforsk.”

“The real environmental gain happens when forest-based raw material replaces fossil fuels, plastic and energy intense materials such as metal and concrete. By doing that we minimize the inflow of new carbon dioxide into the atmosphere, carbon dioxide that might have been stored for millions of years.

By that we do not alter the balance in the atmosphere. The carbon which is bound in our trees do not alter the amount of carbon in the biosphere at all. But that happens when we pump up carbon or dig up coal which has been buried in the ground for 60 million years. When we use fossil fuels, we continue to add more carbon, says Rolf Björheden, professor at Skogaforsk.” (Svenska Skogen 2019d)

*

Storyline 2:

“Skogen är en växande kraft som inte tar slut”

“Forest is an endless growing force” (Svenska Skogen 2019e)

*

“I den svenska skogsvårdslagstiftningen jämföras de ekonomiska produktionsmålen med miljömål och riktlinjer för hur skogen ska skötas ekologiskt hållbart.”

“In the Swedish Forestry Act the economic production goals are seen as equal to the environmental goals and guidelines for how to manage in a sustained ecological way.” (Svenska Skogen 2019e)

Storyline 3

“Kerstin Stenberg: ‘Jag är jämt i skogen – det är där jag trivs’”

“Kerstin Stenberg: ‘I am always in the forest – that is where I thrive’” (Svenska Skogen 2019c)

*

”Familjen beger sig ofta ut i skogen, för att ha picknick, plocka bär och svamp eller kanske sova i det fria”

“The family often goes out in the forest, to have picnics, pick berries and mushrooms or maybe sleep in the open” (Svenska Skogen 2019c)

*

“Göra det till ett projekt att fara ut i skogen”

“Make a project out of going to the forest” (Svenska Skogen 2019c)

Storyline 4:

“Den ovärderliga skogen – sex viktiga historiska händelser

“The invaluable forest – six important historical events” (Svenska Skogen 2019a)

*

”Under 8 000 år levde vi som jägare i skogen och ägnade oss åt att samla nötter och rötter. Skogens material användes för att göra upp eld och bygga kojor.”

“For 8 000 years we lived as hunters in the forest and spend our time collecting nuts and roots. The forest’s material was used to make fire or build huts” (Svenska Skogen 2019a)

*

“För cirka 3 800 år sedan fick skogen en helt ny innebörd och vi började bruka jorden. Djuren fick beta i skogen, vi byggde stängsel av pinnar, vi använde skogen som bränsle och då och då fällde vi ett träd och byggde hus”

“Around 3 800 years ago the forest got a brand-new purpose as we began to farm the land. The animals were allowed to graze in the forest, we built fences out of sticks, the forest was used for fuel and occasionally trees were felled to build houses with.” (Svenska Skogen 2019a)

*

”Kunskapen om att metall kunde utvinnas ur malm ledde till att skogen för första gången fick en betydelse utanför jordbruket. Skogen användes som bränsle i princip alla skeden av järnhanteringen.

– Det här är jätteviktigt för Sverige. Malm fanns på många ställen, men i andra delar av Europa var skogen slut och då kunde man inte längre bearbeta metallen. Det var

skogen som gjorde att Sverige kunde hålla igång den här metallindustrin och blev en viktig faktor när den första exporten av järn och koppar kommer igång i Sverige, säger Gunnar Wetterberg.”

"The insight that metal could be extracted from ore resulted in forest for the first time having a significance beyond agricultural purposes. The forest was especially used as fuel in all of the stages of iron production.

- This is really important for Sweden. Ore was available in many places, but the forest was gone in other parts of Europe which prevented the possibilities for metal work. It was the forest that made it possible for Sweden to keep this business going and it was an important factor when the first export of iron and copper got going in Sweden, says Gunnar Wetterberg.” (Svenska Skogen 2019a)

*

”Förändringen ledde till ett stort sug efter timmer och engelsmännen vände sig till Sverige där den moderna timmerexporten byggdes upp och drog igång sågverksnäringen.”

”The changes led to a big demand for timber and the Englishmen turned to Sweden where the modern timber export built up and triggered the sawmill industry.” (Svenska Skogen 2019a)

*

“Massatillverkningen ledde till nya möjligheter och nya produkter, som olika sorters bränsle och till att göra textilier.”

“The manufacturing of wood pulp led to new possibilities and new products, like different types of fuel and textiles.” (Svenska Skogen 2019a)

Storyline 5:

”När skogen växer fritt så dukar en del träd under på grund av konkurrens mellan träden. Sådana träd blir lätt härdat för insektsangrepp och i täta skogar med en hög andel torra träd ökar brandrisken. I en brukad skog skördas sådana träd innan de har självdött”

“When the forest grows freely some trees succumb due to the concurrence. Those trees can easily become a center of pests and in dense forest with a high number of

dry trees will have a higher risk of wildfire. In a managed forest those trees are harvested as soon as they have died of natural causes” (Svenska Skogen 2019b)

*

“Det här gör skogen för klimatet när den växer”

“The forest does all of this for the climate as it grows” (Svenska Skogen 2019b)

*

“I Sverige är de som äger skogarna duktiga på att vårda och sköta om dem. Man får inte hugga ner en skog utan att ersätta den med nya träd. För varje avverkat träd planteras två till tre nya och av landets 41 miljoner hektar är 28 miljoner hektar skogsmark.”

“The people who own the Swedish forests are good at maintain and manage them. It is not allowed to fell forest without compensating with new trees. For every tree felled two to three new ones are planted and of the countries 41 million hectares of land 28 million hectares are covered by forest” (Svenska Skogen 2019b)

*

”Livsstilen innebär en ständig medvetenhet av naturens kretslopp och årstiderna, där varje period har sina uppgifter.”

“The lifestyle requires a constant awareness of nature’s own cycles and the seasons, where each period has its own purpose.” (Svenska Skogen 2019c)