

Master thesis in Sociology, 30 higher education credits

Close(d) to Nature
Modifying Work in Swedish Forestry

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Abstract

This thesis explores the discursive formation and modification of close-to-nature forestry (CNF) as an issue in the Swedish forestry debate. While forests are important for recreation, culture, and economy in Sweden, they are also a source of controversy and polarised debates – predominately so in the environmental debate. Clear-cutting is used in 90 per cent of Sweden’s productive forests and is considered the most beneficial management for the forestry industry. The EU Commission’s New Forest Strategy (EUFS) released in 2021 however criticised clear-cutting due to the release of CO₂ and negative consequences for biodiversity. What instead was endorsed and has gained attention in recent years is CNF, a practice that preserves the biodiversity and continuity of forests. With clear-cutting dominating Swedish forestry, such a shift would alter the industry at the core. By asking how CNF is shaped as an issue by the state and forestry industry in Sweden; what strategies to modify CNF take place; and how the dominant forestry framing is affected and protected in relation to the CNF issue, this thesis covers how CNF has been shaped and modified in Swedish documents between 2004–2023. Combining the theoretical tools of ‘issue formation’, ‘modifying work’, and ‘framings and overflowings/leaks’, the thesis broadens the understanding of how dominating framings of forests and forestry are sustained. The modifying strategies of diversion, displacement, detachment, and this study’s additions of delay, delegitimization, and duplication, are found to be used by state and industry to protect their forestry practices. Their strive to transform CNF into a non-issue makes visible increasingly occurring leaks in their framing. This knowledge of how modifying work can be used to protect dominating framings is useful to understand by which means power is maintained through certain small, discursive tools.

Keywords

Close-to-nature forestry; Forest debate; Issue formation; Modifying work; Framings and overflowings

1. Introduction

Covering almost 70 per cent¹ of the land, Sweden is one of the most forest-dense countries in Europe (World Bank, 2023). This has made forestry a prominent industry, including a large paper- and pulp industry, that has come to shape the dominating framing of Swedish forests. Meanwhile, forests hold significant cultural and social value, are considered important for recreation, and their ecosystems accommodate the majority of Sweden's plant and wildlife species (WWF, 2023). This makes forestry surrounded by ambivalence and polarised debates between a large variety of actors, with conflicting ideas on what sustainable forestry entails. The controversies show how the demands on forests' ecosystem services are only increasing: in addition to growing demands on products in the form of timber, paper, and pulp, which call for intensified logging, forests are increasingly valued for their vital role in the climate crisis, providing biodiversity conservation and carbon sequestration, which conversely call for more widespread protection of forests.² In this thesis, I dig into the environmental aspects of the forestry debate with a focus on an alternative to the dominating forestry practice: the issue of close-to-nature forestry (CNF), a collective term for selective, ecosystem-based forestry management where the diversity and continuity of the forest are preserved. By studying how CNF is shaped and modified as an issue in official Swedish documents, it will be possible to investigate its impact on the dominating forestry framing.

Influenced by the 1992 Earth Summit³ in Rio de Janeiro, and in an attempt to settle the contemporary controversy between environment and economic growth (Andersson & Westholm, 2019), the Swedish Forestry Act was in 1993 reformed to give additional weight to environmental considerations (Prop. 1992/93:226). The act concluded that the future of forestry would have both a production- and an environmental goal, which were to be equal. Within the environmental goal, they decided that new forestry methods should be applied more extensively, referring to the need for long-term safeguarding of the natural productive capacity of forest ecosystems (ibid.: 46). The 2001 evaluation of the Forestry Act (SUS 2001) however concluded that more diverse forestry methods had not been implemented, and fewer clear-cuts to preserve ecosystems and biodiversity were not achieved.

Beyond new environmental goals, the Forestry Act of 1993 came to shape what is commonly referred to as 'the Swedish model' guided by the rule of freedom with responsibility. The act significantly deregulated forestry and gave landowners greater freedom to decide how

¹ This includes both old growth forests, continuity forests (forests that have never been clear-cut, also called 'natural forests'), and forest plantations. People who oppose the forestry industry however dispute whether all of this is to be seen as forests, as a large proportion consists of industrial monoculture plantations. In this thesis, a wide understanding of 'forests' is used that includes both industrialised, continuity and old growth forests, as that is the given understanding in the majority of the empirical material.

² An increasing set of conflicting demands that are hard, if not impossible, for the slow-growing boreal forests of Sweden to be able to sustain.

³ The United Nations Conference on Environment and Development (UNCED), which emphasised the interdependence between social, economical and ecological factors in sustainable development.

to manage their forest, but it also came with responsibilities concerning the protection of forests and biodiversity, relying heavily on the voluntariness of landowners. Beland Lindahl et al. (2017: 46) have analysed the Forestry Act and subsequent bills to investigate the Swedish forestry model “and the particular pathway to sustainability that it promotes”. Despite the equal goals between production and environment, they found that in practice, production goals are prioritised over environmental goals. By-products from clear-cutting further play a major role in the large paper- and pulp industry and consequently, for Sweden’s goal of leading the substitution from fossil products (Fossil Free Sweden, 2020). Clear-cutting practices are deeply embedded in the imagination of what Swedish forestry entails and is used in 90 per cent of Sweden’s productive forests today (Björklund et al., 2021).

When the EU Commission in the summer of 2021 released their new Forest Strategy for 2030 (EUFS) (European Commission, 2021), forests were described as important carbon sinks, and clear-cutting practices were denounced due to the consequential release of carbon dioxide (CO₂) and negative consequences for biodiversity. The criticism the EU Commission posed towards monoculture plantations and clear-cuttings thus became an indirect critique of Swedish forestry, as even-aged forest management through clear-cutting is the most common management in Sweden. What instead was endorsed to protect biodiversity, improve resilience, and store more CO₂ was *close(r)-to-nature* forestry (CNF). The EU thereby endorses a shift along the line with environmentalists: forestry needs to adapt to the forest, the forest can no longer be adapted to the needs of the industry. Yet the Swedish Forest Industry Federation maintains that clear-cutting is the method of choice for landowners because it is the most suitable method for the structure of Sweden’s boreal forests, asserting that selective logging and natural regeneration have not worked for Sweden (Swedish Forest Industry Federation, 2022a).⁴

The forestry industry, backed up by the state, steers the dominating framing of forestry in Sweden. The industry and state have a long history of cooperation, where forestry since the beginning of the 20th century has been an important capital for the Swedish state to invest in, administer, and make a profit from (Andersson & Westholm, 2019: 115). Moreover, there are institutionalised connections between forestry education, research, and industry in Sweden: forest companies themselves invest in research; the Swedish Forestry Research Institute Skogforsk is financed by the industry and state; and the forestry faculty at SLU (the Swedish University of Agricultural Sciences) has its roots in the mission to help the industry develop. At SLU, the industry is considered a client important both as recipient and financier of research (ibid.: 120–131). A sociological approach to this field and subject thereby contributes with a

⁴ Referring to careless selective logging before the 1950s that resulted in forest degradation in the northern parts of Sweden (Swedish Forest Industry Federation, 2021; 2022a). The degradation was due to how logging was guided by short-sighted and exploitative interests, where harvesting far exceeded forest growth (Lundmark et al., 2013; Andersson & Westholm, 2019; Hertog et al., 2022). This gave selective forestry methods a bad reputation in Sweden still noticeable today, which is discussed later in this thesis.

critical voice, producing alternatives to the dominant view, while much forestry research in Sweden co-operates with industrial interests. This further makes the Swedish perspective particularly interesting in the study of CNF, as such forestry management contradicts the status quo in Sweden.

The work toward the final version of the EUFS has been described as chaotic and filled with disputes from member states (Röstlund, 2021). Eight states⁵ joined together in a letter against the first draft (Köstinger, 2021), while Sweden's national parliament has been openly critical of EUFS for its "supranational elements", disagreeing with the Commission's "endeavour[...] to steer various forest production methods" (Sveriges Riksdag, 2021, *my translation*). By contrast, EUFS got support from over 80 NGOs around Europe⁶ in a joint statement (Mowat, 2021). The EUFS and the issue of CNF have thus been controversial, strongly disapproved by some and highly welcomed by others. The more detailed regulation of member states the Commission has been criticised for approaching has the potential of making the EU a closer actor within Swedish forestry. Together with the tension around CNF, this has the possibility of destabilising the dominating forestry frame.⁷ Some form of action is thereby to be expected from the state and industry in an attempt to protect their position. This raises questions of whether CNF can provoke a change in the in-so-far stable forestry framing where the industrial focus, despite the equal goals, is what frames Swedish forestry, agreed upon between industry, state and Swedish forest research.

This thesis aims to deepen the understanding of how CNF is developing in Sweden and what implications this has on the dominating actors and forestry framing, by studying how the issue is being defined and modified in documents over almost two decades. The forestry debate in Sweden is lively, and various academic studies focus on forests and forestry, yet the growing amount of research into forestry methods and stakeholder perceptions does not solve the debate. The controversy around forestry and alternate ways of managing forests is social, whereby sociology has something valuable to contribute with in understanding the social dynamics present in the debate, and more specifically, in the issue formation of CNF. The sociological perspective can also dissect the agendas, values and actions present in this issue formation, understanding that forestry is not self-evident, but steered by actors and interests.

We can understand what kind of issue CNF is made into based on how it is framed discursively. In this, documents are a powerful tool that allows for a deeper understanding of the performative effect of written language: that texts and documents are not descriptions of a

⁵ Austria, Czech Republic, Estonia, Finland, France, Germany, Hungary, Latvia, Poland, Romania and Slovakia.

⁶ Including several Sweden-based NGOs, such as The Swedish Society for Nature Conservation, Protect the Forest, Fältbiologerna, and Klimatriksdagen, emphasising the economic, social and ecological losses that come with clear-cut forestry.

⁷ Callon (1998) suggests that framings when they are disputed, have an inherent potential to overflow, and when this occurs it calls for either denial or openness to reframing. This will be developed further in the theoretical framework.

reality outside of the text, rather, they take part in forming the reality (Asdal, 2015; Asdal & Reinertsen, 2022). Using that understanding of issues in documents, I will investigate the trajectory of the CNF issue by asking the following research questions: How is CNF shaped as an issue by the state and forestry industry in Sweden? What strategies to modify CNF take place? And how is the dominant forestry framing affected and protected in relation to CNF?

This thesis starts with a section that builds onto the introductory information and contextualises close-to-nature forestry in Sweden. This is followed by an introduction of the theoretical concepts of issue formation, framings and overflows/leaks, and modifying work that together compose the theoretical framework of this study. The succeeding section explains the method of ‘practice-oriented’ document analysis, along with a presentation of this study’s empirical material. In the section thereafter, the results are presented in six different subsections, boiling down to a concluding discussion on the findings of this thesis.

2. Contextualising close-to-nature forestry: the Swedish case, the debate, and previous research

The attention towards CNF has grown alongside the growing attention to the climate crisis and the consequential need for carbon sequestration, visible in the space dedicated to this in the new EU Forest Strategy (EUFS). To understand the controversy of CNF from a Swedish perspective, there is a need to understand Swedish forestry and the controversies surrounding it. In the following sections, the terminology around CNF is explained in more detail, followed by an introduction of Sweden as a case of interest for forestry studies, the Swedish model, the forestry industry’s importance, and the debate on alternative forestry methods. This provides a context for the study that is central for an understanding of the mechanisms behind the dominant industry-framing of forestry and how the introduction of CNF thus becomes controversial in this context.

2.1. Terminology: close-to-nature forestry and related concepts

Close-to-nature forestry (CNF) is not a specific logging method, but a collective term for selective, ecosystem-based forestry management where the diversity and continuity of the forest is preserved, and can be described as a forestry-philosophy. The EUFS describes CNF practices as seeking “multifunctional forests by combining biodiversity [...], carbon stock preservation and timber-related revenues” (EU Commission, 2021: 14), while noting that there is no globally agreed-upon definition. What is highlighted is “biodiversity-friendly” (ibid.: 15), “ecosystem-based management approaches that strengthen the resilience of EU forests” (ibid.: 10), “taking into account the differences in natural conditions, biogeographic regions and forest typology” (ibid.: 12).

Continuity forestry (CF)⁸ is a system that could be placed within that philosophy – and a term that in Sweden is more widely used than CNF – which may in turn include different logging methods depending on the conditions of the forest.⁹ In short, CF refers to forestry where the ground is always tree-covered, as opposed to clear-cutting where the ground is left bare. Some actors refer to CF as a specific method, while some however use it more interchangeably with CNF. Both CNF and CF are terms used in this thesis due to how the concepts overlap and as different actors tend to favour one term over the other.¹⁰ That is why this study of CNF must include a broader terminology, justified through the lack of one agreed-upon definition and how they represent the same forestry philosophy at their core.

The term CNF has in later years appeared in the Swedish context as a philosophy of forest practices that are ecosystem-based, mindful of biodiversity, soil and naturally occurring tree types. NGOs and the Swedish Green and Left Parties have used the term since the early 2000s,¹¹ while it is much newer for the Swedish state and forestry industry. With the increased attention towards this concept in recent years, this study will be able to explore its development and the impact it may have on the dominating forestry framing in Sweden.

2.2. Sweden as a case and the ambivalence around forestry

Its large forested areas, the cultural significance and profitability in forest use make Sweden of special interest in the debate around CNF. Selective logging methods (as opposed to clear-cutting) have long had a bad reputation in Sweden, still evident among certain groups. The reputation is a result of exploitative forestry practices during the early to mid-1900s responding to Europe’s increasing demand for wood, where selective logging was used to intensively harvest only the most “valuable trees without any corresponding regeneration” (Lundmark et al., 2013: 113). Led by a short-term perspective, this caused degradation of the forests and has since been referred to as ‘the green lie’ (ibid.; Hertog et al., 2022). In the 1950s, sustainable

⁸ Also called continuous cover forestry.

⁹ One type of CNF/CF logging method does not fit everywhere, rather, the method needs to be adapted to the conditions of the specific forest and the naturally occurring tree species. Shelterwood systems, patch-cuts, and the Lübeck-method are all versions of non-clear felling methods that can be considered CNF practices.

¹⁰ In Sweden, the terminology around CF shifted during the early 2000s. CF (*kontinuitetsskogsbruk*) was the term predominately used up until 2008, when a term best translated as ‘non-clear felling forestry’ (*(kal)hyggesfritt*) instead became standard, more precisely referring to all methods without clear-cuts (Skogsstyrelsen, 2008; Espmark, 2017). Though non-clear felling is the more established term in Sweden, CF is most commonly used in the English language. As they refer to very similar practices and tend to be used interchangeably, this thesis will henceforth refer to both practices as CF.

¹¹ Fältbiologerna described and discussed CNF in their member magazine in 2006, presenting the earliest NGO document in the empirical material of this study (Fältbiologerna, 2006). In 2001, the Swedish Green Party argued for the first time (at least available digitally) that more CNF methods should be developed (in Interpellation 2001/02:495), and in 2009, the Left Party started using the concept in their arguments on changed forestry (Interpellation 2009/10:26). The Green and the Left are the two only political parties arguing for implementation of CNF, where a range of political motions for CF/CNF can be found between 2001–2023, all having been rejected. For comparison, the state (through the Swedish Forest Agency) mentions CNF explicitly for the first time in 2020. Before that, CF/related terms are the ones used.

ideas around forestry began developing and regeneration became compulsory, coinciding with the full transition to clear-cutting to streamline forestry (Lundmark et al., 2013). This heritage creates on the one hand a pride in current practices as they include more long-term planning, and on the other hand, an associated inertia in departing from current traditions and opening up to alternatives, where CF/CNF for some are associated with the selective logging of the past.

Most of Sweden's forests are thereto owned by private individuals – a right of ownership the previous government strengthened, deciding that protection of forests is to be based on voluntariness and the initiative of the landowner (Prop. 2021/22:58). This situation makes the question of more centralised governance of forest management from the EU sensitive. New regulations and demands are considered infringements to citizens' rights of ownership. All of this makes Sweden of special interest, showcasing the complexity forestry can withhold and the destabilisation CNF may induce.

The Swedish case is also exceptional due to the close connection between the forestry industry, the state, and Swedish forest education and research. Andersson and Westholm (2019) have studied the connection and cooperation between forestry research, state and industry through the case of the Mistra and industry-financed¹² research programme Future Forests. The goal for the industry actors in the programme was to increase acceptance for intensified forest production, implementing the idea that growing forests sequester carbon (i.e., as opposed to 'fully-grown' trees) through the legitimacy of the universities. Andersson and Westholm describe the research programme as a 'sorting process' where financiers could decide what is relevant and around this create a consensus, ostensibly disarming the classic conflict between environment and economic growth while strengthening the forestry industry's traditional perspective (ibid.: 112). Just like the Forestry Act of 1993 was an attempt to stabilise the controversy between production and environment (see Introduction and section 2.3 in this thesis), Future Forests was intended to solve a societal conflict whilst giving the forestry industry greater influence over forest politics.¹³ This type of co-produced research risks silencing divergent voices and alternatives to the prevailing views. Worst-case, such research programmes may function as outlets for preconceived ideas shaped by certain interests (ibid.: 68).

¹² That Mistra financed it meant that the research needed to have direct relevance for the forestry industry, and the results were thus assessed not only according to the knowledge contribution but based on the relevance to business and politics (Andersson & Westholm, 2019: 66–67, 113). The forestry industry co-financed the research programme through the companies SCA, Holmen, Bergsvik (liquidated in 2019), state-owned Sveaskog, Skogssällskapet, private forest-owner associations, and dioceses within the Swedish Church (ibid.: 111). The programme developed from Mistra's initial idea of openness and interdisciplinarity, to becoming an industry-driven lobby project where scientists in the end were urged by the industry financiers to not refer to Mistra (ibid.: 121, 126).

¹³ The programme served as a mechanism to cement a certain future, rather than as the name suggests, explore different futures. In this, the forestry industry did initially not want social scientists in the programme, as they might critically analyse actors and processes in a way that would risk the financiers' control of the research agenda (Andersson & Westholm, 2019: 122). Mistra however demanded including social scientists (ibid.: 126).

With research in such close collaboration with industrial interests, certain knowledge and expertise inevitably takes precedence in research results. In this respect, sociology's role is critical, and it is imperative that sociology also gets involved in the study of forest-technical issues, as is this thesis' objective.

2.3. 'The Swedish model'

The time around 1990 was marked by protests against the logging of old-growth and mountainous forests in Sweden, along with international threats of boycotting products from Swedish forests because of clear-cutting forestry (Andersson & Westholm, 2019). In 1993, the Swedish Forestry Act was revised in an attempt to settle the divide between environment and economic growth. It resulted in a policy shift where the production goal and environmental goal were given equal weight, updating the previous sole goal of maintaining high wood production (Beland Lindahl et al., 2017). Here, 'the Swedish model' was born, emphasising landowners' right to manage forests under the policy of freedom with responsibility where they were "expected to improve environmental conditions while maintaining high wood production" (ibid.: 45). It has been advertised as a model of success for sustainable forestry, while it indirectly also was a recognition of such opposition between environment and economy existing (Andersson & Westholm, 2019).

Beland Lindahl et al. (2017) have analysed documents and bills around the Swedish forestry model and found that despite the equal goals between production and environment, production is in practice prioritised. The Forestry Act's pathway to sustainability was a 'more of everything' approach, "influenced by ideas of ecological modernization and the optimistic view that existing resources can be increased" (ibid.: 44). The emphasis on ecological sustainability increased in later bills through "the adoption of concepts such as ecosystem services, [...] landscapes and ecological connectivity" often used by environmentalists (ibid.), but parallel with these efforts, the dominant framing is maintained, with increased wood production depicted a win-win strategy for a range of economic and ecological problems without reflection on the uncertainties raised in academic literature regarding this.

A fundamental aspect of freedom with responsibility is that landowners are expected to manage their forests "according to ambitions that exceed the threshold stipulated by the law" (ibid.: 52), especially regarding environmental considerations. The means for achieving the environmental goals are thereby found as "soft" and "non-coercive", resulting "in a relatively closed politics maintaining the status quo" (ibid.: 53–54). These findings form a context for later sections of this thesis, where landowners' freedom with responsibility is repeatedly brought up by the state and industry in arguments around CNF.

2.4. Sweden's forestry industry – economic importance and substitution from fossil products

The prominent forestry industry, including the large paper- and pulp industry, plays a significant role in the national economy. Sweden is the world's fourth largest exporter of paper, pulp and sawn timber with an export value of 164 billion SEK in 2021 (Skogsindustrierna, 2023). Using forest products to substitute fossil products – replacing cement with wood, plastic packaging with paper, fossil fuel with biofuel, etc. – is paramount for the industry and embedded in Sweden's goal of being the world's first fossil-free welfare state by 2045 (Fossil Free Sweden, 2020). Sweden's self-image and strive to be considered a model country in the climate transition rests heavily on this industrial goal connected to clear-cutting. Apart from this goal, the demand for wood and other forest products is global, making Swedish forestry part of a global supply chain. Thus, pressure to increase production comes both from within and outside the country. Yet these interests are in stark conflict with the framing of forests as vital homes to biodiversity, as carbon sinks that must remain standing (or end up in mainly long-lived products), and with the interests of Sámi reindeer herders, environmentalists, and other groups who value the forests for their social, recreational, and intrinsic values. The critique that came along with the EUFS by extension contests Sweden's self-image, adding to the sensitivity around CNF.

2.5. The debate on alternative forestry methods

Those debating the climate crisis in relation to Swedish forests are often divided into two camps, with temporality as an important factor. Firstly, those who argue that the forest should be preserved to protect biodiversity and sequester enough carbon in time to reach climate goals, supported by climate movements, a wide range of scientists (e.g. Lenas, 2023; Skytt et al., 2021), and the EUFS. Secondly, those who argue that forest products are the most sustainable alternative in the transition from fossil products in the long run, making continued extraction necessary, supported by a range of other scientists (e.g. Irslinger, 2022), the forestry industry, and the Swedish state. While the former highlights forests' biodiversity, resilience and importance in reducing the amount of CO₂ in the atmosphere, the latter see forests as a renewable resource that contributes to sustainable products and energy vital in the path towards independence from fossil fuels. These overarching forest framings are important for how CNF is implemented in the Swedish debate.

The debate on alternative forestry methods has been studied in the Swedish context before, in 2017 by Espmark who within the previously mentioned Future Forest-programme conducted a media study on the debate around CF, and recently by Hertog et al. (2022) studying existing barriers to implementing CF in Sweden. Espmark's research report (2017) on the media debate around CF covered the years 1994–2013, mapping out definitions and arguments used in the debate and concepts central to different stakeholders. She could find that many

concepts were used interchangeably and somewhat undefined in the debate, although all referred to forestry without clear-cuts, thus showing the centrality of including different concepts in this thesis. A problem Espmark notes is that actors tend to talk past each other as they do not discuss the same matters and that the very nature of the media debate means that actors never face each other, adding to the polarisation in the issue. Sharing a similar subject with Espmark's report, while investigating a different format of documents, this thesis will go beyond the mapping of the debate to study how the documents that discuss CNF also shape the reality around it, and in that, be able to study how actors' emphasis on different matters may be strategies towards a reshaping of the issue. While Espmark's study is a display of the conflicting interests present in forestry management, she does not problematize actors, their positions or stakes in this report – an analysis of the power structures present in forest technologies which this sociological study can contribute with.

Investigating the barriers that actors face in implementing CF in Sweden, Hertog et al. (2022) found the major ones to be connected to culture, industrial networks, education and markets. This involves the dominating status of current forestry methods (and the industry's restrictiveness in advising CF-methods), conservatism and strong group identity within the forestry sector, how forestry education “actively seeks to create a shared worldview, knowledge base and identity amongst forestry professionals” (ibid.: 6–8), and how today's market is not adjusted for larger, higher quality timber (which CF/CNF practices lead to). The common emphasis on ‘lack of knowledge’ and ‘ecological limitations’ as explanations for the lack of CF implementation are thus far too limited, while power and social dimensions within Swedish forestry deserve more attention (ibid.). The findings display the tight alliance between forestry actors, forest faculties at universities and the state previously outlined by Andersson and Westholm (2019), and the need to scrutinise the dominating practices and positions within Swedish forestry.

A deadlock in the divide between the forests' ecological and economic values has since long been present, where compromise is not an option for any side (Andersson et al., 2022; Sandström et al., 2016). NGOs, indigenous communities and local citizens strive to protect more of the forests from logging, while the industry wants to increase production. Sandström et al. (2016) compared four stakeholder groups' future visions of forests¹⁴, showing how the stakeholders were not close to meeting each other but rather posed very different values, views and goals for Swedish forests. Concerning conflicting goals, Andersson et al. (2022) studied the frames occurring in recent Swedish forest- and climate policies, and what implications this has for the conflicts. The study showed that even though alternative framings of sustainable development were present, frames of ‘weak ecological modernisation’ dominated, promoting the industrial economic perspective while marginalising NGOs' perspectives, as has been

¹⁴ The stakeholder groups were Biomass & Bioenergy; Environmental Conservation; Sámi Livelihood; and Recreation & Rural Development.

highlighted in previous forestry research (e.g. Beland Lindahl et al., 2019, earlier in this thesis). In this, “climate change is not seen as creating a need for fundamental change but rather as a motivation for continued, albeit modified, intensive forestry” (Andersson et al., 2022: 7), i.e. considering climate change an opportunity. With the growing acuteness of climate change and the widespread awareness of this within Swedish society, a greater understanding of how these framings can prevail in Sweden and in what concrete ways they are maintained is of utmost relevance.

Several studies show the powerful positions of the forestry industry and the apparent stability of the industrial framing of forests (e.g. Andersson et al., 2022; Hertog et al., 2022; Andersson & Westholm, 2019; Beland Lindahl et al., 2019). These findings also display how the controversy around forestry and alternate ways of managing forests is highly social, and how it is difficult for actors both within and outside the forestry sector to go against the current narrative. Knowledge of how this dominating framing of forestry gets protected and affected in relation to criticism is needed to better understand the stability of certain framings. This study helps fill this gap by investigating what a contemporary forestry controversy may do to the dominating forestry framing – in what ways this framing is affected and/or protected, bearing in mind the actor-driven agendas, values and power dynamics present in framing processes.

Understanding the historical formation and deep roots of the dominating forestry framing, how much the industry relies on clear-cutting methods, and the tensions between as well as within groups, enables a better understanding of the implications CNF may have on the dominating actors and forestry framings. This contextualisation of the varying terminology, Sweden as a case, Swedish forestry, and the debate on alternative forestry methods forms a knowledge base on which this thesis can build further.

3. Theoretical framework

In the following section, the collection of theories that form the theoretical framework of this thesis is presented. The section begins with a discussion on the wider understanding of the issue-approach along with the concepts of framing and overflowing, followed by a presentation of how the issue-approach can be applied in more detail using ‘modifying work’, and concluding with how these concepts together form a theoretical framework beneficial for the aim of this thesis.

3.1. Issue formation, framings and overflows

Drawing inspiration from Marres (2005; 2007) and Asdal (2015), the concept of ‘issue formation’ lays the foundation for the theoretical framework in this thesis, together with Callon’s (1998) notions of framings/overflowings. Issue formation is both a theory and method

within Science and Technology Studies (STS) to study how a phenomenon becomes controversial, politicised and recognised as an *issue* (Marres, 2005; Asdal, 2015). A controversial issue may further have the capacity to create new publics of interested actors around itself, Marres emphasises. She describes how “alternative issue articulations highlight different associations that come together in an issue: to foreground some associations enables the opening up of the issue for outside scrutiny, while an emphasis on others closes it down”, meaning that different ways of articulating issues make them differently open to publics (Marres, 2007: 772). Asdal points out how the issue-approach also can show the very opposite, how “turning something into an issue might also imply that it becomes, in certain important ways, a *non-issue*; a question to be handled exclusively by certain issue-experts, excluding persons or groups with an interest” (2015: 75, *emphasis in original*).

The issue-approach includes a certain form of framing, but Marres distinguishes it from framing theory through the claim that frames “are usually characterized as relatively stable entities – established ideas, values, symbols or institutional devices – that are relied upon to set limits for unstable things” (2007: 774), while issue formation by contrast show the changing nature of issues. Callon (1998) would possibly disagree with this through his understanding of framings and their inherent tendency for *overflowings*.

Framing is here understood as a boundary-making process, one which Soneryd and Sundqvist (2022: 102) describe as “a way of simplifying and creating order in a complex world; some aspects of a problem are seen as relevant, while the framing excludes other aspects”. This boundary around certain aspects remains steady if both the affected actors and the outside world agree upon it (which is often done implicitly by following the rules of it). Yet when issue framings are questioned or challenged, Callon (1998) suggests that *overflowings* to the framing occur, which can either be ignored or trigger change. Ignored overflows tend to grow, which means that the alternative for the dominating actors to contain it is some form of action. In this, Callon’s notions of framings and overflowings do not consider frames – at least not on all levels – as such stable entities as Marres presumes, but can rather be put in relation to and be combined with Marres’ issue-approach to capture a richer picture. The stability of framings shouldn’t be decided in principle but needs to be answered through empirical studies. Where issue formation captures the becoming of, and changing processes around the CNF issue in particular, framings/overflowings serve to put this into the larger framing of forestry, and how the dominant framing shapes, and is shaped by, the CNF issue. The latter may further explain how dominating frames can prevail through how overflows are managed by the dominant actors behind this framing.

Soneryd and Sundqvist (2022) have developed the concept pair further, showing that challenges to dominant framings do not always result in overflowings, but can rather occur in the form of *leaks* that the actors of the dominant frame can manage ongoingly. The options of action to an overflow may be summarised as “denial or acceptance” (ibid.: 107), but a leak is

manageable with smaller measures where the framing can be repaired and modified in a strive to maintain the existing order. As “governing bodies have an interest in maintaining the existing order and excluding actors that challenge it” (ibid.: 105), they will strive towards attending to leaks before they overflow (thereby consequently excluding any new actors).

In relation to nuclear waste management in Sweden, the nuclear industry saw that the problem of finding a place for final storage could be solved through voluntary measures where the public was involved in certain negotiations. Yet “the technical core remained non-negotiable to outsiders, despite public protests having been the catalysts for this change” (Soneryd & Sundqvist, 2022: 105–106). This way, the nuclear industry successfully repaired a leakage by involving the public but remained in control of its core activities. Similar to nuclear waste management, forestry in Sweden may be regarded as “historically characterised by a strong expert culture that is hard to destabilise even after overflows have occurred” (ibid.: 107), making this perspective useful to bring into this study. It raises questions of whether the issue articulations of CNF in Swedish documents imply overflows or leaks, and if so, open up for outside involvement or prevent that from happening. How are the dominating actors – industry and state – attending to a possible destabilisation? The importance of the forests’ instrumental values and the agreed-upon use of clear-cutting as the means to make the most of this value, frames today’s understanding of what forestry is and entails. When CNF becomes an issue of interest within the forestry debate, this may create a leak or overflow in the dominant forestry framing. To explain the dominance of the forestry industry and the strive to maintain this position as new issues emerge, Callon’s concepts are useful to study and assess the stability of the framing.

How an issue is shaped, potentially reshaped, and how this gets contested between actors can imply the presence of leaks/overflowings. To more deliberately explore this process and understand how leaks and overflows can be attended to, a third concept will complement the above. The concept of ‘modifying work’ coined by Asdal (2015) is an approach influenced by a combination of the Foucauldian tradition, Actor-Network Theory and the issue-approach. Beyond a framing of the issue, modifying work allows for an understanding of the concrete strategies through which issues can be modified.

3.2. Modifying work

In Asdal’s article *What is the issue? The transformative capacity of documents* (2015) the formation of a politics of pollution control is described. In 1949 in Norway, the production of aluminium was started in a smelter which along with aluminium also produced an extensive amount of the reactive gas fluorine which contaminated the local community. With departure in an expert report, Asdal studied how the issue of air pollution was redefined, normalised and closed down by “issue-experts” (Swedish/Norwegian: *sakkunniga*) from the industry. The story of pollution was changed from being something problematic and acute to be a display of the

bright future of the new industrialised Norwegian welfare society. In this, a phenomenon created by industry was made to belong to (and be managed only by) the industry itself. Asdal shows how the document in question thereby established control of an issue through modifying work. The issue of pollution was downplayed by framing and defining it “as a general and quite common problem” not unique to this country or industry, making it undramatic (Asdal, 2015: 78). The same industry responsible for the emergence of an issue were made the issue-experts, and through the suggestion of a ‘licensing system’ in the expert report, pollution was made into a new governable object. In investigating the modifying work around this issue, Asdal puts forward a range of strategies, three of which will be given special attention in this thesis:

- (1) *Normalising practices* – Where is the issue given space? What is described as being at stake, and what needs to be done? How problematic and acute is the issue, or, how common and ordinary is it?
- (2) *Re-timings and re-locations of the issue* – When is it to be handled? Is it relocated from one level to another, or from one site to another?
- (3) *Descriptions of actors and Detaching actors from issues* – Who are made into main characters and experts, and who are detached from the issue or put ‘outside’ of the text?¹⁵

These strategies will be complemented by some terms coined by Rayner (2012: 122) of what he calls “organizational strategies for excluding uncomfortable knowledge”. Rayner explains that making sense of the world is only possible through certain exclusion and simplification, where much needs to be left out (ibid.: 111). This is not necessarily a conscious exclusion, but rather a way to navigate through the world without facing overwhelming amounts of details. Rayner explains that “knowing and not knowing are interdependent” (ibid.), and that uncomfortable knowledge refers to the “unknown knowns [...] which societies or institutions actively exclude because they threaten to undermine key organizational arrangements or the ability of institutions to pursue their goals” (ibid.: 108). The negative aspects of clear-cutting and the positive possibilities in practices like CNF could be considered uncomfortable knowledge for the Swedish forestry industry. Rayner raises four strategies to exclude uncomfortable knowledge:

- (1) *Denial* is the “refusal to acknowledge or engage with information”;
- (2) *Dismissal* “acknowledges the existence of information” but denies it “as erroneous or irrelevant”;
- (3) *Diversion* “involves the creation of an activity that distracts attention away from an uncomfortable issue” (ibid.: 113); and
- (4) *Displacement*, a more subtle strategy than diversion, substitutes engagement with the issue with “a more manageable surrogate” (ibid.: 120).

¹⁵ Asdal describes that “it is the main character’s motives and interests we identify with most easily”, and thereby it matters how the roles around the issue are distributed (2015: 80).

Certain connections can be found between Rayner's strategies towards uncomfortable knowledge and the notion of modifying work, whereby combining these strategies will complement Asdal's concept. These combined strategies of modifying work are used as analytical tools in this study to capture how the issue of CNF changes along its life trajectory when taken up by different documents.

I use modifying work both according to Asdal's original description (as an understanding of how issues can be reshaped) and in an elaborated understanding together with the notions of 'framings/overflowings' and 'leaks', understanding modifying strategies as concrete tools to prevent or repair leaks and overflows. This thesis thus develops both the categories of modifying work further with the combination of Rayner's strategies, and extends the use of Callon's theory in a new way where modifying work can be used to handle leaks and risks of overflows in dominant framings.

Combining the above theories and concepts forms a theoretical framework that allows for investigations on different levels. The concept of issue formation captures the controversies around CNF, the becoming and framing of the CNF issue along with what actors get connected to the issue, and is mainly aimed at the first research question of how CNF is shaped as an issue by the state and forestry industry in Sweden. The categories of modifying work will further make visible what strategies to modify CNF that take place (and how the forestry industry by this may be excluding the 'uncomfortable knowledge' around CNF), capturing the second research question. Lastly, combining the concepts of framings and overflowings to the issue-approach and modifying work capture the scope of the third research question through how the dominant forestry framing is affected and protected in relation to the emergence of the CNF issue, and how governing actors either adapt or strive to maintain the dominant framing. This puts the issue in relation to the dominating position of the forestry industry and the wider forestry debate.

4. Research Method

All documents address issues of some kind, more or less important ones. By doing so, they also contribute to (or even take the lead in) shaping the issue; arguing around the nature of the issue, establishing agendas, and "sometimes transforming issues to non-issues, killing them off" (Asdal & Reinertsen, 2022: 104). Documents are thus a useful source from which to investigate societal issues and debates. I use what Asdal and Reinertsen refer to as a practice-oriented document analysis (Asdal, 2015; Asdal & Reinertsen, 2022) to methodologically study the formation of CNF as an issue in Sweden and to understand the different agendas around it, which actors that get to play a role, and the possible implications the framing of this issue has for the dominating forestry frame. The following sections will describe further what this

method entails, what empirical material this thesis relies on and how it was gathered, finishing with a discussion on ethical considerations.

4.1. Practice-oriented document analysis

Asdal and Reinertsen (2022) highlight the importance documents have in society at large and our individual lives. What they call a practice-oriented document analysis refers to what the documents can do and enable, what actors do through documents, and documents as part of a larger field of practice (ibid.: 17). According to them, this method is broader than what is usually referred to in text or discourse analysis, treating the documents as an empirical field where different practices take place. Important in this is the understanding that societal issues found in texts are not reflections of a reality *outside* of the texts. Departing from some forms of discourse analysis that regard texts as a certain perspective of reality (e.g. Alvesson & Sköldbberg, 2000: 200), the practice-oriented document analysis views documents as contributors to the very formation of the issue. The approach thus relates to the concept of performativity, meaning that documents themselves are considered active, with the power to create reality: the issue addressed in the documents becomes what they describe it as (Asdal & Marres, 2014). Documents create understanding and set things in order, thus – some more successfully than others – creating a stabilised understanding of reality. What happens in documents and what consequences they cause is of great importance in understanding how an issue like CNF is created and managed in practice.

Beyond how the issue is described, this method helps study where power lies in the documents, “which documents [that] get to play a role” (Asdal & Reinertsen, 2022: 106) and how the issue of CNF differs between documents. Different documents have different authority and power to modify issues. This thesis focuses on mainly official documents that can be assumed to have a certain authoritative power, outlined further in the next section. With the dominating position of the forestry industry and their close connection to the state, it is likely that documents produced by actors of the industry and state have more power to shape forestry issues overall than NGOs – or social scientists – and thus also the issue of CNF, even if (or simply because?) it clashes with their dominating framing of forestry. Yet with a new central actor appearing in the form of the EU Commission, supporting agendas more in line with NGOs, changes in the issue articulation around CNF could be expected. As one side strives to shut the issue down, the other may work towards opening it up. However, Marres argues that “whether a given issue indeed counts as a public affair or not is often disputed” and this cannot be determined principally, but has to “be determined by empirical means” (2005: 50). Whether the issue of CNF can be regarded as unsettled and open for influence from other actors, or should be considered a settled issue belonging to industry, thus need to be determined empirically. The document analysis presented is appropriate in this task, and sociology contributes with a deeper understanding of how the issue articulations behind ‘settled issues’

are based on agendas, choices, values, and power structures – and the idea that what is settled can be made unsettled. The ambition of this thesis is to critically analyse the framing of CNF with such a perspective, calling attention to the agendas and positions of state and forestry actors present in the formation of CNF as an issue, and relating this to the dominating forestry framing.

An integral part of the issue-approach is finding what documents are influential or authoritative regarding the issue. This coincides with the very gathering of empirical material, which further forms a trajectory of the issue, analysing where the issue emerges in the first place (the becoming of an issue), how the issue plays out, is being transformed as it moves, or, how it eventually ends or is being closed (Asdal & Reinertsen, 2022: 115). Through this, the method involves more concrete tools as to how a document analysis can be conducted than for example Laclau and Mouffe’s discourse analysis (Jørgensen & Phillips, 2002).

The issue-approach is both theoretical and methodological, and the practice-oriented analytical approach goes hand-in-hand with the theoretical framework laid out above. Using it on CNF to trace the issue through documents allows for a rich and thorough investigation into how CNF has evolved as an issue in Sweden over the course of almost two decades.

4.2. Material, sampling, and analytical coding

Preparatory to the sampling process, key-stakeholders (in the form of private and state-owned forestry companies, forest-owner associations, lobbying groups, state authorities, the church, and NGOs) were identified through readings of a vast quantity of research on the forestry debate together with a dive into the active societal debate through news reportages and debate articles. This preparatory work was conducted to find which actors call for attention and investigation in studies of forest-related issues, to then search for documents and publications on CNF and related concepts¹⁶ on the actors’ own websites.¹⁷ Not all predefined actors could be found to mention CNF or related concepts, whereas these actors were excluded from the study¹⁸ (see Table 1 for a list of actors). When sampling documents, a snowballing-method was useful to backtrack the issue and find earlier publications that had been missed or were no

¹⁶ Due to variations in the terminology used (see section 2.1 for a discussion on this), the criteria in the sampling of empirical material have been for it to include ‘close-to-nature forestry’, ‘continuity forestry’, ‘continuous cover forestry’, ‘ecosystem-based forestry’, or in Swedish, ‘kontinuitetsskogsbruk’, ‘hyggesfri/-tt’, ‘ekosystembaserat skogsbruk’, or ‘naturnära skogsbruk’.

¹⁷ While some of the preparatory work led directly to documents used, like the letter from Sweden and Finland’s prime ministers to Ursula von der Leyen (2021), retrieved from Dagens Nyheter.

¹⁸ Most NGOs and Sámi associations seem to disapprove of clear-cutting management and the current industrial focus on Swedish forests, yet without mentioning alternatives. As the sample is based on the formation of CNF as an issue (not the sole problematization of clear-cutting), documents/actors not mentioning such concepts are not relevant to the aim of this study and were thus excluded from the sample. Large forestry companies such as e.g. Stora Enso, and forest-owners associations like Norra and Mellersta, could be found to mention neither CNF nor CF, and were likewise excluded, and so was the Swedish Environmental Protection Agency (*Naturvårdsverket*) that was not found to particularly discuss CF/CNF in any reports (they are however included in the Governmental mission to define CNF, which is part of the empirical material).

longer easily accessible through the stakeholders' websites (especially helpful for finding the earliest documents). Lastly, specified searches on online search engines allowed for openness to other documents and actors. Following the issue between documents offered an understanding of what documents are recurring and thus can be deemed influential in the issue formation.

The sampling process resulted in 35 documents from the years 2004–2023, published by the forestry industry, state, church, and NGOs (see Table 1), with the vast majority of documents published in the last few years. Actors beyond the state and forestry industry are present in the material to investigate alternative framings and understandings, and to study whether new actor-constellations appear around the issue. The amount of documents was deemed reasonable for the scope of this thesis, covering the earliest and latest documents found on CNF and CF as well as a width of actors, without composing a material too large for a thorough analysis. The documents chosen are official documents such as policies, reports, and other forms of texts that represent the organisations' official standpoints, recommendations and conceptualisation of CNF, excluding debate articles, news publications, or other information on actors' websites that are missing date or can be revised regularly, focusing on more formal texts.

Above all, apart from these exclusions, these are the documents existing on the subject. After thoroughly tracing documents, this is the selection reached, thus covering a substantial part of what is in fact available on CNF.¹⁹ The empirical data was considered saturated when a sufficient number of prominent actors were represented and new themes or properties stopped occurring. The state and forestry industry make out the majority of the material while fewer documents are from NGOs.²⁰ The material was systematically coded in the program NVivo, allowing a neat overview of the large amounts of data.

By following both actors and the issue through documents, this method allowed for an understanding of the social dynamics present in the formation and reshaping of CNF, and further, the agendas and power structures steering those mechanisms. The use of a document analysis on the type of public documents that compose the material of this thesis enables an investigation of how the issue of CNF is both currently acted upon in the Swedish forestry

¹⁹ The total amount of documents on CF/CNF would land on about 65–70 documents that all have been skimmed through to decide whether they add to the sample or not. This includes all sub-reports by SFA released in close proximity to the ones included, a few more issues of SCA's forest magazine, a range of political inquiries and motions on CF/CNF between 2001–2023 that all have been rejected, and other documents fleetingly mentioning CF/CNF or related concepts. Documents were excluded if they presented very similar information and/or were released in proximity to another document by the same actor already present in the data (which especially applied to additional documents from the Swedish Forest Agency, already composing the majority of documents).

²⁰ This can be due to NGOs' stronger focus on the complete protection of forests, e.g. the decreasing amount of old-growth forests in Sweden, along with an emphasis on different forms of communication where debate articles, social media, and news publications on the organisation's webpage are common for NGOs. It is also possible that NGOs work more cooperatively internationally with forest issues due to the strong position that the forestry industry has in Sweden.

context, and how these documents may have the performative power to shape the reality around the larger forestry debate.

Table 1: Actor representation in material

Type of actor	Name	Qty	Document
Industry:	Balanskommissionen	1	Report
	Billerud	2	Annual report; Brochure
	Holmen	1	Information folder
	SCA	2	Forests owner magazine; Annual report
	Sveaskog	2	Press release; Annual- and sustainability report
	Swedish Forest Industry Federation (<i>Skogsindustrierna</i>)	2	Position paper; Report
	Södra Forest-Owners	3	Brochures; Response to motions
State:	Committee of Environment and Agriculture (<i>Miljö- och jordbruksutskottet</i>)	1	Statement on EU Commission's New Forest Strategy (EUFS)
	Government	2	Strategy document; press release
	Stefan Löfven (former Prime Minister)	1	Letter to President of the EU Commission
	Swedish Church	3	Motion; Church meeting; Response to motion
	Swedish Forest Agency (SFA) (<i>Skogsstyrelsen</i>)	7	Reports; Policy document; Brochure
NGO:	Greenpeace	1	Report
	Fältbiologerna	2	Member magazine; Forest Policy Programme
	Protect the Forest (<i>Skydda Skogen</i>)	1	Brochure
	Swedish Society for Nature Conservation (SSNC) (<i>Naturskyddsföreningen</i>)	2	Reports
	WWF	2	Referral response to SFA; Vision paper

4.3. Ethical considerations

Conducting a document analysis removes some of the ethical considerations through the very method compared to other qualitative research methods where the integrity, confidentiality and

privacy of participants need consideration. This document analysis is based on public records from predominantly organisations, institutions and corporations, where opinions, claims and definitions are raised in people's professional roles. The bias of different authors and organisations, a potential problem to take into consideration in document analyses (Morgan, 2022), is neither an obstacle in this study as the very objective is to investigate how CNF is formed through documents depending on the actors behind it.

In an internet culture where algorithms can influence individuals' digital experiences differently, certain new aspects to take into consideration when collecting digital material arise. Marres (2015: 665) raises the problem of digital bias in search engines, where results tend to be biased towards e.g. commercial sources. She proposes two ways to deal with this: (1) a precautionary approach that understands digital media as "a source of noise that must be neutralized", and (2) an affirmative approach that treats it "as an empirical resource for controversy analysis". Although Marres' discussion applies mainly to social media and not the official format of documents used in this study, the latter approach should be the rational approach for researchers in a digitalised world, positioning internet sources as useful for studies of issues and controversies. Bias would compose a bigger problem in a media study or social media-netnography, as algorithms play a larger role in these contexts. Nevertheless, risks for digital bias necessitate that data collection is undertaken with a variation of strategies, as done in this study, using different specified searches and alternative terminology to avoid one-sided results.

5. Results

The vast number of actors, concepts and complex material involved in this study calls for a structured disposition of the results. The first two subsections therefore aim to provide a technical base and chronological structure of the issue formation for the latter subsections to build onto. It begins with a portrayal of how the issue first appears and the subsequent issue trajectory characterised by repeated redefinitions (5.1), followed by the struggles in the framing of CNF as an issue and how different framings tend to converse (5.2). The continuing subsections build onto this base through additional modifying strategies that are found to permeate the material: re-timing practices around CNF (5.3); practices of detaching actors from the issue and the global/local perspectives present in this (5.4); and practices of normalising CNF's place in the margins (5.5). The strategies are related and to some extent overlap but can be distinguished into separate key-themes with the help of the combined concepts of Asdal (2015) and Rayner (2012). These are considered key-themes in the study as they recur between different actors and documents and respond to shifts and currents in the climate debate (through e.g. the EUFS). The results section ends with a summary of the key-findings and how these

function as indications of leaks in the dominant forestry framing, along with a development of the strategies of modifying work (5.6).

5.1. The becoming and evolving of the CNF issue

Continuity forestry (CF) as an alternative to traditional clear-cutting forestry that mimics the natural forest was first raised in a government-ordered study by the Swedish Forest Agency (SFA) in 2004 (Skogsstyrelsen, 2004). Such methods were investigated as a way to log continuity forests (forests that have never been clear-cut) that were not subject to full protection. The study, and its following report-series between 2008–2013, were (at least in the initial phase) conducted to put these types of forests into production. This was argued to be the rational way to relate to these forests:

Some of the continuity forests are, however, forests that are not subject to area protection and where rational forestry *can* and *should* be conducted in a well-thought-out way with alternative and environmentally adapted forestry methods.

(Skogsstyrelsen, 2004: preface, *my translation, emphasis added*)

This forms the context for the first definition of CF, in a document aimed at defining continuity forests to be able to know which ones are subject to be put into production.

In 2008, SFA's first report in their report-series focused more specifically on CF and defined it as "management without clear-cutting the forest. That is, the forest has continuous trees on the ground and a certain minimum degree of closure" (Skogsstyrelsen, 2008: 2, *my translation*). They evaluated this definition to be too wide, and in 2010 it was adapted to incorporate more legal regulations of specified timber stocks. CF was described as a complement to clear-cutting that should increase in certain areas where clear-cutting is unsuitable, but not as an excuse to log conservation areas (Skogsstyrelsen, 2010). In 2011, the SFA states that clear-cutting disfavours most species in the forest, while CF preserves environmental values (Skogsstyrelsen, 2011), and in 2020, SFA recognises and refers to "close-to-nature methods" for the first time, describing it as a type of CF management that "keeps the resemblance to an unaffected forest" (Skogsstyrelsen, 2020: 25, *my translation*).

It is apparent that there has been a certain reluctance to use the term 'close-to-nature forestry' by the state and industry, possibly due to how current methods are already regarded as sustainable (e.g. Skogsstyrelsen, 2020; Swedish Forest Industry Federation, 2021; 2022b; Södra, 2022b, Balanskommissionen, 2022). A claim that other practices are more nature-like indirectly cements an understanding of current management as *unnatural*, which not adheres to the industry's interests. By contrast, Fältbiologerna, an independent youth organisation to the Swedish Society for Nature Conservation (SSNC), introduced CNF already in 2006 in a feature article about German forestry, describing how "there is a forestry system that creates better ecology and economy at the same time. It is called CNF and is based on nature's conditions instead of human's" (2006: 16, *my translation*). In 2010, SSNC called attention to the same case, stating that Germany's CNF methods "shows a trend towards ecological land

use, not only in Germany but throughout the EU” (Naturskyddsföreningen, 2010, *my translation*). NGOs’ use of the CNF concept, their confidence in it and attempts to promote its use in Sweden, thus differ from that of the state and industry, but have not made as much impact on the issue trajectory. SSNC describes that CF has been used almost as a term of insult due to the exploitative forestry practices carried out under this name in the first half of the 20th century (*ibid.*: 5). The bad reputation of ‘selective logging methods’ in Sweden, described earlier in this thesis, is present in the description of CF/CNF throughout the years by state and industry. In their brochure on CF methods, Sweden’s largest forest-owners association and forestry industry group Södra introduces CF by referring to the ‘green lie’:

The end of the 19th century and the beginning of the 20th century were characterised by a battle between organised clear-cutting and [CF] in Norrland. [...] Clear-cutting won that debate. By overharvesting [...] and by getting unhealthy spruce or poor birch on pine land, what is known as ‘Norrland’s green lie’ was created.

(2022b: 2, *my translation*)

Another example is found in SCA’s magazine for forest-owners in Sweden’s northernmost counties. CF is featured as a topic on the front page, indicated as one of the key-themes of the magazine. Despite this, the negative image of CF from the early to mid-1900s is what permeates the editorial page:

Some people advocate CF as an excellent alternative to today’s clear-cut forestry – and a universal solution that provides optimal climate benefits and can fulfil the EU’s ambition for the forest to serve as a carbon sink. But it’s not quite that simple. [...] In Sweden, CF was practised on a large scale between the 1920s and 1950s. But the biology of the boreal forests in Norrland meant that the forest did not grow back naturally. Instead, we got residual forests with small trees and very low growth that eventually had to be felled, resulting in enormous clear-cuts.

(SCA, 2023a: 3, *my translation*)

SCA, a producer of paper, pulp and wood products with the largest private forest ownership in Europe, claim that we did not know enough about the methods then, but that today, we know better: how research shows that CF would lead to significantly lower forest growth, which in turn would lead to less sequestration of CO₂ and consequently, increased dependence on fossil products. “Continuing to use traditional forestry is therefore positive for the climate!”, the editorial concludes (2023a: 3, *my translation*), which is the understanding of CF the reader is left with as they continue to read about different CF methods later in the magazine (and as SCA express they are glad to help landowners who want to manage their forest according to CF). In other words, business as usual is considered best – even in this magazine where CF is highlighted. Rather than embracing more forestry methods, SCA’s approach towards CF suggests that they address the issue not because they want to, but because they have to. SFA moreover repeats CF’s bad reputation in policy documents (2010), information sheets (2020), and reports on CF (2004; 2021), asserting how it is associated with failed management and

heavily degraded forests. Still, CF/CNF is in many documents also recognized as a gentler form of forestry for species and ecosystems, where actions for nature consideration are more efficient than in clear-cut forestry (Skogsstyrelsen, 2008; 2011; 2020; 2021; 2022; Södra: 2022a).²¹ This both reflects and creates ambivalence around the issue.

Again in 2021, SFA clarified their definition of CF as they had noticed that different actors attached different meanings to the concept, leading to misunderstandings (Skogsstyrelsen, 2021). SFA states that they adopted an “almost sociological approach” in their work with this definition where they tried to bring together stakeholders and actors to understand their respective perspectives, which they later reconciled with experts (*sakkunniga*) within forest management (ibid.: 33), resulting in this latest definition of CF (translated by them as ‘non-clearcut forestry’):

Non-clearcut forestry on forest land intended for wood production implies that the forest is managed in such a way that the land always has a tree cover, without any larger clear-cut areas.

(Skogsstyrelsen, 2021: 10)

In this definition, it is more clearly specified than previously that “without any larger clear-cut areas” refers to 0.25 hectares of clear-cuts allowed within CF, and the necessary long-term intention to manage the forest with CF for it to be counted as CF-managed.

SFA is the actor with the most authority in defining the concept, with both industry and NGOs referring to SFA’s definitions. Regardless, there is an ongoing struggle between the industrial and the environmental side on where to draw the boundary of what constitutes a CF/CNF practice, and which movement gets ownership of the issue.²² WWF has written a referral response to SFA’s latest definition of CF. They criticise the broad descriptions which they express make CF include everything from selective, low-intensity thinning to a logging intensity close to clear-cutting (2021: 1), and question how trade-offs were made and what expertise was prioritised between stakeholders in the development of the definition (ibid.: 4). It is clear that the type of expertise prioritised by the state – and what is considered an “almost sociological approach” in understanding a width of actors – is coloured by how closed the state and industry is for outside influence, leading to how this work was interpreted and communicated by SFA as noticeably ‘open’.

²¹ CF is described as the forestry practice with the least impact on biodiversity, positive for lichen (a species that function as a bioindicator as they are sensitive to pollution, and an important source of food for reindeers and other animals), mycorrhizal fungi, and for water quality as it contributes to less water pollution. Even where enhanced consideration of nature is taken during clear-cut practices, CF is stated as more beneficial for biodiversity.

²² The industry strives to push the boundary in their benefit, e.g. in claiming that many CF practices actually fall within clear-cutting forestry (Billerud, 2023b) and how twice as large clear-cut areas (0.5 hectares) are communicated as permitted in CF (Södra, 2022b). NGOs are pushing it in the other direction, emphasising the alignment with nature’s own boundaries (Naturskyddsöreningen, 2010; 2022; WWF, 2019; Greenpeace, 2022).

The EU Commission's New Forest Strategy (EUFs) forms a certain breaking point in Sweden, after which documents on CF and CNF appear more frequently, 'close-to-nature' begins being mentioned by more actors, and tension around the issue builds up further. Because of the EU Commission's attention to CNF, the Swedish Forest Agency (SFA) and the Swedish Environmental Protection Agency (EPA) were 2022 given a Governmental mission to investigate possibilities for CF and to define CNF, to be presented in December 2023 (Regeringskansliet, 2022). Although deemed unfavourable for the state and forestry industry (and actively opposed by state actors, as the later sections will show), this shows how actors nonetheless need to touch upon the issue of CNF when it has been raised by the EU. The trajectory of the CNF issue ends with a comment from the state-owned (and Sweden's largest) forestry company Sveaskog's CEO in their annual report, where he raises their ongoing and future work with CF methods (Sveaskog, 2023). Thus beyond addressing the issue, the industry needs to present itself as open to change.

The Governmental mission given to SFA and EPA can be seen as a way to provisionally stabilise struggles over the issue articulations to make the issue manageable (Lahn 2021: 7), where the Government acknowledges the need for action, puts order around the issue, and delegates it to the correct agencies. This connects to the strategy of *diversion* from Rayner (2012): focus and attention is put on the mission and the work with the new definition and distracted away from any actual plan of implementing CNF. The very action of giving the mission can function as a stronger stabiliser than the finished definition, as it symbolises that action and control is taken of the situation. The fact that work is *ongoing* is an argument that can be referred back to for as long as it is ongoing²³ (and not completed), removing the need for further action until then and thereby making the mission more important than the results. As the results are not yet presented at the time of writing this thesis, there is still no telling what the final document and new definition will do with CNF; if it through the new definitions is made governable by the state and industry, if it will indicate any form of change and/or openness to new actors, or new normalising practices regarding what the very issue is about. As for now, the controversy around CNF is partly handled, and in a sense made into a governable object, through the mission itself and the modifying work of diversion.

Since 2008, both the forestry industry and NGOs have deemed that CF/CNF should increase. Yet little seems to have happened in practice. The following sections aim at focusing deeper on different categories of modifying work raised by Asdal (2015) to investigate how the issue in different ways has been modified through the documents of this study.

²³ Used for example by the Swedish Church (Svenska Kyrkan, 2022a; 2022c) when rejecting motions on transitioning towards CNF in Church-owned forests, with e.g. the argument that the concept needs further definition which the SFA and the Swedish Environmental Protection Agency are in the midst of developing.

5.2. What is the issue? Framing and duplication

For the EU Commission and NGOs, CNF is an issue of biodiversity and carbon sequestration: a climate issue. For the industry and state, it boils down to a production and economic issue in the sense that CNF is deemed to equal less productive gains. The former wants a transition of current clear-cuts into CNF-managed forests, and the latter sees CNF as a complementary practice in forests less suitable for clear-cutting management. Hence, there is some struggle regarding what the issue is about, how comprehensively it should be dealt with, and what is at stake. This section will start with a look into NGOs' perspective on CNF and how the issue is framed, which goes along the lines of the EU Commission, followed by the counterarguments by the industry – and how some arguments are used by both sides.

In the empirical material, NGOs' position on CNF is clear and shared between the five NGOs represented. "To be able to cope with climate change and save biodiversity, we need to change the way we manage our forests", Greenpeace write in a positive response to EUFS (2022: 6, *my translation*), referring to the acuteness of the crisis using a common 'we' and society's and humans' shared need to change current forest practices. That "nature is allowed to set the limits for resource utilisation" is by SSNC considered a fundamental condition to be able to cope with the future challenges that society and forest ecosystems face (Naturskyddsföreningen, 2022: 6, *my translation*), emphasising the nation's and politician's responsibility in this. Forests are furthermore framed as carbon sinks along the line of the EU Commission (Naturskyddsföreningen, 2010; 2022; Greenpeace, 2022), and CF/CNF is by NGOs considered a win-win situation for biodiversity and carbon sequestration.

Intact forests are many times better carbon sinks than young plantations, as forest products from the latter (pulp, paper, biofuel, etc.) have a short life cycle, with CO₂ being released into the atmosphere within a few years. Many plantations are even net sources of greenhouse gases in their early years, as CO₂ is released after clear-cutting when the soil is exposed and solar radiation increases.

(Naturskyddsföreningen, 2010: 44, *my translation*)

By converting to sustainable and close-to-nature forestry, we can in the long term ensure species-rich and viable forests that can bind lots of CO₂ – which benefits both the forestry industry and other parts of society in the long run.

(Greenpeace, 2022: 6, *my translation*)

After EUFS's release in 2021, documents from SFA began appropriating the carbon sink framing – but with the counterclaim that clear-cutting is the best forestry method for the aim of sequestering carbon. Given that CF often leads to slightly lower growth, SFA writes, the opportunities to increase the carbon sink will also be slightly lower (Skogsstyrelsen, 2022: 36). This makes visible how the two opposing frames communicate with each other. On the one hand, they possibly strive to take each other's perspective, yet on the other hand use it to modify the arguments to fit into their own framings, a form of normalising practice that delegitimizes the opponent and their credibility. Holmen, one of Sweden's largest private forestry industry

companies, further makes use of the NGO discourse of caring and working with nature when describing that forests are the only truly functional carbon-“vacuum cleaner” we have, and therefore, it is vital that we actively nurture and manage it and consider what we do with what ends up in the vacuum bag (Holmen, 2021: 27). This refers to the substitution-framing where as much of forest as possible should be made use of to exchange fossil products. Not logging is considered a waste of this natural resource.

While the reason for raising the issue of CNF within the forestry industry in the first place in 2004 was the biodiversity problem associated with clear-cutting (Skogsstyrelsen 2004), CNF comes to be defined as a production and economics issue for the forestry industry (again associated with the substitution-frame), in the sense that CNF is deemed to be unfavourable for business. Documents by state and industry stress how CF/CNF equals less productive forests and thereby poorer economic outcomes (e.g. Holmen, 2021). Södra interprets this as meaning that more forest thereby needs to be logged when transitioning to CNF, turning the argument around towards opponents of clear-cutting: “to achieve the same economic result as one hectare of clear-felling, three to four times the area must be cut through” (2022b: 6, *my translation*).

Still, many of the documents state how timber becomes more high-quality through CNF management (Skogsstyrelsen, 2020; Skogsstyrelsen, 2021; Södra, 2022b; Greenpeace, 2022; Naturskyddsföreningen, 2022). This could lead to better quality for the consumer, quality-wise competitiveness on the global market for the industry, and more money for the landowner. Fältbiologerna claim that the dichotomy between ecology and economy is false, that a viable forest is a productive forest (2006: 16) and further that CNF is more economically justified than clear-cutting because “a forest management that involves ‘minimal human input’ is economically superior to a forest management that has ‘maximum results’ as its economic principle” (*ibid.*: 19, *my translation*). Thus in several NGO-documents, the economic perspective and argument often posed by the industry gets appropriated by NGOs (Fältbiologerna, 2006; 2010; Naturskyddsföreningen, 2022; Greenpeace, 2022;), showing a form of modifying work around CNF where the two framings communicate and duplicate each other’s perspective to their benefit. Here, arguments from the industry *against* CNF are bent to reflect NGOs’ arguments *in favour* of CNF.

Balanskommisionen, a lobbying group financed by different forestry and energy companies, goes beyond landowner or industry losses when raising the question of possible loss of consumer surplus in reduced production of forest products (2022: 9), posing the change towards CNF management as a threat to the good of the general public (using NGOs’ appeal to the common good). The question of economic gains through CNF creates a leak in the dominating framing of forestry, where clear-cutting is considered the most beneficial practice economically and product-wise for industry. Drawing in the ‘general good’ and consumer economics could be an attempt to fix that leak.

The industry balances the struggle regarding what the issue is about, and what is at stake, by counterclaiming the carbon sink framing; appropriating language from NGOs; and highlighting other environmental problems that can be solved by current forestry apart from the biodiversity framing told by the EU Commission and NGOs. Two opposing over-arching framings of the forest are crystallised: the intrinsic values framing (under which the biodiversity framing lies), and the production framing (under which the substitution framing lies), while both of these struggle to include the carbon sink framing.²⁴ Increasingly, however, the two framings converse with each other: the NGO framing of CNF increasingly includes economic and instrumental aspects, while the industry's dominant forestry framing has begun to incorporate 'nurturing' language and involve environmental goals. A form of modifying work of duplicating and bending arguments of the opponent is used here, possibly in a strive to cover different aspects of the societal debate – and consequently reach a potentially wider public, while stabilising the issue in accordance with their own interests.

5.3. Re-timing or just delaying the CNF issue?

Even if CNF is brought up in a range of documents from the industry, little is focused on the concrete implementation of such new forestry practices, and much is about “improving the conditions for CF” (Regeringskansliet, 2022: 1), “propose objectives to guide the direction and level of ambition of the national work” (ibid.), “welcome new thinking” (Sveaskog, 2023: 6), and similar phrasing. In this way, the documents address the issue at the same time as it is postponed, which recurs in different forms through the documents. Former Swedish prime minister Stefan Löfven wrote together with Finnish prime minister Sanna Marin a letter to President of the European Commission Ursula von der Leyen in April 2021 asking her to remove the concept of CNF in the then newly released EU taxonomy of environmental investments:

In relation to forestry, we want the concept close-to-nature forestry to be deleted. A possible solution to the issue of close-to-nature forestry, and other concepts related to the strategy on biodiversity, would be to remove them from this version of the delegated act and include them in a future revision of the DA when the current ongoing work on definitions and criteria related to the implementation of the strategy on biodiversity has been completed and agreed on.

(Löfven & Marin, 2021: 2)

²⁴ In the struggle for ownership of the carbon sink framing, there is a parallel discussion on the carbon neutrality of biofuel that is important for the industry in their claim. The forestry industry claims that burning biofuel is carbon neutral due to the planting of new trees that sequester carbon. Due to this argument, biofuel emissions are not counted among Sweden's greenhouse-gas emissions, making it seem like the emissions have decreased over the last decades, when in fact, this decline reflects the substitution to biofuels that also release greenhouse gases, yet are not counted. The latter is emphasised by NGOs, along with how more greenhouse gases apart from CO₂ are released. This relates to CNF through the connected struggle for the carbon sink framing. This is an issue that won't be discussed further here, although one that deserves its own study.

This demonstrates a *re-timing* of the issue (Asdal, 2015) to an undefined future where it cannot be dealt with until the preconditions of complete agreement on definitions and criteria are met. Action is stalled through how investments are to be moved from implementations of CNF to the work on defining the issue of CNF further. More important than optimising practices is the bureaucratisation of the issue – and as long as the issue is kept in the bureaucratic stage, current forestry practices can proceed. Throughout the issue trajectory, the terminology of CNF, CF and similar concepts is described as difficult (by predominantly the state and industry), claimed to be ascribed too varied meanings by different people, and that clarifications and accepted definitions are needed before the issue may be taken forward – a practice of delaying any further action on the issue. Consequently, the more time the industry is given to proceed with, or increase, clear-cutting, the fewer areas will possibly be redeemed suitable for future CNF methods, as it is deemed easier to implement CNF practices on forests that have never been clear-cut than on previously clear-cut forests.

The forestry industry may have a lot to gain from re-timing the CNF issue. Governing actors maintain their control by implying that the dominating framing is opened up to new adaptations of sustainable forest management – yet power dynamics remain as before. In this way, new aspects and perspectives are let into the debate at the same time as the actual implementation of them is not. Re-timing – or rather delay – is in this way used as a tool to repair or even prevent leakages in their dominating framing.

The issue of CNF is further stalled by displacing focus, emphasising something else (more manageable) to turn the attention away from engagement with the issue (Rayner, 2012). Södra does so by proclaiming that the demand is too limited (as an answer to a petition to educate forestry inspectors on CF methods) and instead highlighting how they work with other projects such as increasing the amount of pine in forests and researching alien tree species with greater pest-resistance (2020: 2–3). The Swedish Forest Industry Federation does so by pointing out that there is no such thing as ‘good’ or ‘bad’ forest practices but that it depends on the context (2022b). The Swedish Church does so by claiming that the intentions behind CNF can be said to be addressed within their current work (Svenska Kyrkan, 2022b: 1), and Balanskommissionen does so by raising the problem of how reduced production in Sweden may result in increased production elsewhere (2022: 24). This modifying work of *displacement* and enhancement of other issues is yet another way to fix leakages, shift attention, stall the issue, and avoid attending to it further.

Repeatedly pointed out in documents by the state and industry is moreover the lack of practical experience and good research on CF/CNF compared to clear-cut forestry, whereupon not enough is known about the practice to implement it (Skogsstyrelsen, 2004; 2008; 2010; 2020; 2021; 2022; Balanskommissionen 2022; SCA, 2023a). What is interesting in this argument is the close connection between industry, state and forestry research in Sweden, which means that the former has influenced the focus of the research produced. Unconsciously

or not, this is another form of modifying work around CNF – perhaps Rayner’s strategy of *denial*, not recognizing the research and experience on CNF management from Nordic landowners that exists, or *dismissal*, considering this experience irrelevant²⁵. Further, it is a form of detaching actors from issues (Asdal, 2015), where the state and industry’s connection to research is overlooked.

Relating to this, Rayner suggests that “it seems odd that climate science has been held to a ‘platinum standard’ of precision and reliability that goes well beyond anything that is normally required to make significant decisions in either the public or private sectors” (2012: 117). These empirical findings suggest this applies to forestry and new forestry methods as well – and it is a useful standard for the state and industry to make use of in delaying action on CNF.

5.4. Detaching actors from issues

How actors gather around an issue, and who are depicted as main characters matter for how the issue is understood and acted upon (Marres, 2007; Asdal, 2015). This section centres around the most significant dimension of actor descriptions found in the material, where the single most frequently occurring actor is the private landowner, and how this relates to Asdal’s modifying strategy of detaching actors from issues. It follows with an exploration into the global/local perspectives present in the material, further found to be connected to this modifying strategy and how certain actors are depicted.

Private landowners are occurring in the material not through their own voice, but referred to by others. Many of the actors represented in the material are forest owners themselves (all forest companies, the state, church, etc), but as it is presented, it is the smaller, individual owners that are implied.²⁶ In the strategy for Sweden’s national forest programme, the individual landowner is described as having “a crucial role to play in creating a diverse forest landscape” (Regeringskansliet. 2018: 18, *my translation*). By the state and industry, landowners are continuously highlighted through the Swedish model of freedom with responsibility, but also NGOs place landowners as main characters. Greenpeace (2022) emphasise the economic gains CNF can provide to the landowner, and SSNC advocates for more economic incitements and varied options given to landowners, whom they have found want to use more varied forestry methods (Naturskyddsföreningen, 2022: 10). Yet responsibility is in NGOs’ case put on politicians, the state, and the forestry industry.

By continuously emphasising landowners’ own right to decide whether or not to use CNF, implicitly highlighting the smaller private owners, industry and state are using the

²⁵ Which in turn is a normalising practice regarding what expert knowledge is favoured and what actors are relevant (Asdal, 2015).

²⁶ In terms of forest ownership, the situation in Sweden is complex with a set of large owners and numerous small ones. The majority of forests are owned by these small, private owners.

modifying work of *detaching* themselves as responsible actors around the issue. Combined with increased national, European and global climate goals, it places a heavy load on private landowners. As the state and industry disclaim some of their responsibilities with the help of the local landowner, they are localising the issue of CNF. Asdal (2015) discussed in her study how taking the issue from the local to the national can make the issue grow and be taken more seriously. Thus by instead localising the issue, it is downplayed as an unusual practice that is only possible under certain conditions, while simultaneously shifting responsibility for the issue.²⁷

The discourse of global versus local is noteworthy here due to how it differs from what is usually encountered. In environmental debates, a common central aspect is how powerful actors emphasise the global good at the expense of local communities (Bäckstrand & Lövbrand, 2006). In the framing of CNF, it goes oppositely: NGOs tend to highlight forests' global importance for the climate crisis, comparing clear-cutting to the intensive logging in the Amazon forests and placing CNF as an important measure to sequester more CO₂ for EU and Sweden to reach their climate goals (while, however, emphasising that local landowners must be given *better* choices). The state and industry instead highlight the local conditions to change forestry methods, the landowners' freedom to decide, and that the EU must respect the principle of subsidiarity²⁸ (Miljö- och jordbruksutskottet 2021/22:MJU8). They thereby re-locate the issue from the global/EU level to the local, and simultaneously display a noble image of taking power from authorities such as the EU to the local stakeholders.²⁹

Although the industry has a responsibility and interest to maintain production in a global chain of forest commodities – which is enabled through continued clear-cutting – this is not the perspective accentuated. Again, the strategy of localising CNF detaches the state and industry from the issue in reducing their own and politicians' responsibilities – and burden – in the matter, and increasing that of the local landowner.

²⁷ Forest owners are also the audience for many of the documents in this study (e.g. different information sheets and SCA's magazine), which may seem to explain the central role they are given to some extent. But the fact remains that responsibility and agency are placed on certain individuals while others are shielded. That forest owners are the audience does not change this fact, nor does it justify it.

²⁸ A principle requiring that decisions shall be taken at the lowest appropriate level – i.e. Member States, or in this case even the local owner. This principle is fundamental within the European Union.

²⁹ Diverging from the rest of industry, Balanskommissionen (2022) embraces the global perspective when proposing that if logging decreases and clear-cutting is to be replaced by more CNF methods, this results in less rest-products to use as pulp and biomass, forcing Swedish industry to import foreign raw material to maintain production in the major pulp industry. Thus, they conclude, reduced logging here leads to intensified logging elsewhere, to meet demand. Although a vital question regarding shift of responsibility in the global perspective (one that has not been found in any other documents or previous research), this boils down to a question of decreasing demand (which NGOs emphasise). This is however not what the industry wants, as to why the substitution-framing instead is accentuated. Hence, Balanskommissionen's argument comes through rather as a way of diverting attention from what can or should be done here.

5.5. Normalising CNF as an abnormality

Where CNF is considered suitable is disputed. Protect the Forest has a clear statement of where CNF is to be used: “phase out clear-cutting and switch to CNF practices in the remaining forests without high nature values” (Skydda Skogen, 2020: 6, *my translation*), and SSNC stresses how “forestry within nature’s limits means that forest management methods must be diversified and adapted to the conditions of the natural forest ecosystem”, and that the methods therefore will differ depending on the area (Naturskyddsföreningen, 2022: 24, *my translation*). Industry instead considers CNF to be an alternative for a small portion of the land under special circumstances, such as peri-urban areas, areas where social values are of special importance, or near protected forest areas (e.g. Skogsstyrelsen, 2008; Holmen, 2021; Södra 2022a; 2022b; SCA, 2023a). Through the industry’s repeated description of CNF as a complementary practice, hard to implement and only suitable in very limited areas, CNF gets normalised as a forestry abnormality, probably not the right choice for most landowners, and/or is difficult to do right.

Simultaneously, CNF (and CF, the term more broadly used) is getting increased attention after the release of the EUFS. It is said to be a forestry practice companies are well acquainted with and use in their forests (e.g. Södra, 2020; Sveaskog, 2021; Sveaskog, 2023) – an inconsistency to the above framing of CNF as difficult and abnormal (indicating this framing as a conscious strategy to delegitimize the issue). In the finishing document of the issue trajectory, the CEO of Sveaskog brings up the company’s (increasing) work with CF, claiming that Sweden needs to stop slacking behind and move to the forefront:

We have long worked with CF methods and will use more CF methods in the future. CF is, just like clear-cutting, a tool for meeting various objectives such as efficient harvesting or increased biodiversity. The Swedish forest is key in the green transition and is of great value to the entire European effort on growth, competitiveness and the ongoing climate and energy transition. Here, Sweden still has an opportunity to change from being considered a “reluctant straggler” to being a driving force in a modern integrated forest policy in the EU.

(Sveaskog, 2023: 6, *my translation*)

When the largest forestry company in Sweden brings up how CF is to be used more, it at first glance indicates that an overflow to the dominating forestry frame has been caused by CNF and that this may have opened up for outside involvement – an honest aim for change, and openness for a shift towards CNF management. Yet when CF is brought up as a tool “just like clear-cutting”, the more system-changing meaning of the issue of CNF is absorbed and downplayed. Although emphasising that Sweden should be at the forefront of “modern integrated forest policy in the EU” – bearing in mind what type of forest policy the EUFS endorse – CF is mentioned on one page in the CEO comment of a 117-page annual report. Where the issue is given space in the document and whether it is prioritised or not has a meaning for how the nature of the issue is normalised (Asdal, 2015). The limited space given

to the issue in the document rather indicates a strive towards a non-issue, where it is mentioned for the sake of closing the discussion down rather than opening it up. Holmen did the same in their 128-page long information sheet about ‘future-smart forestry’ where CF is given two pages, and “lower timber production and poorer economic outcomes” as consequences of CF are the main points put forward (2021: 104), while however highlighting the aesthetic values and remained forest atmosphere with this type of forestry. Billerud (a producer of paper and packaging materials) mentions CNF once in their 166-page annual sustainability report (2023a), and SCA does the same in their 168-page annual report where CF is briefly mentioned twice even though they state that “developing and maintaining biodiversity in the company’s forests is the most important environmental objective in SCA’s forest management” (2023b: 161, *my translation*). This is a practice of pushing the issue aside that reoccurs in documents by forestry companies, pointing towards how they need to bring up the issue even if they might not want to, but also the modifying work of normalising it as unimportant through the limited space it is given. This anchors the idea of CNF as an abnormality in forestry.

5.6. Summarising: strategies towards a non-issue

The documents of this study show a range of modifying work that, deliberately or not by the actors, is taking place throughout CNF’s issue trajectory as stabilising practices to maintain the dominating forestry framing.

The modifying work of diversion refers to the use of a “decoy activity” created to distract attention away from the issue (Rayner, 2012: 118). The repeated redefinitions of CF/CNF by the state actor SFA, and the new mission given by the government to SFA and EPA, represent diversions that make the issue of CNF seem handled by the state, and in a sense made into a governable object where the controversy around it is controlled for the moment, preventing leakages in the dominating framing. The more subtle version of diversion is the modifying work of displacement where engagement with CNF is substituted with something more manageable (Raynes, 2012: 120). The emphasised importance of substitution from fossil fuels (which implies continued or intensified logging by the industry) is one such displacement, and another is the emphasis on other environmental issues or climate-friendly practices made by industry actors.

The strategy of detachment of actors from issues (Asdal, 2015) is used when industry and state place landowners as the main characters around forest practices in a way that reduces their responsibility and burden around CNF. In the Swedish context, this strategy lies close at hand through the concept of freedom with responsibility. This further locates the issue of CNF as a context-based, local issue as opposed to a global/environmental issue, which downplays its importance while simultaneously shifting responsibility around it.

A few distinct strategies that did not fit the ones described by Asdal or Rayner could however also be found. While using the theoretical framework to find how the issue of CNF is

portrayed, indications of leaks and overflows, and which strategies modifying work are to be found in the material, the results of this study imply that there are certain aspects within modifying strategies that have not yet been named. Asdal's modifying work of re-timing the issue does not fully capture the strategies of stalling implementations of CNF. Re-timings relate to when an issue is said to be handled (Asdal, 2015). A discussion on implementing larger varieties of forestry practices has been going on for over two decades and was included in the goal of the revised Forestry Act of 1993. Nevertheless, forestry has not changed, only the argumentations and strategies against such changes. The issue of CNF is defined, redefined, and brought up only to be stalled – while the dominating framing of Swedish forestry remains. Implementation or any other action on CNF is not explicitly re-timed – it is continuously postponed to an unclear future that I suggest is referred to as a modifying strategy of *delay*. As long as the issue is kept in the bureaucratic stage, this strategy ensures that current forestry practices can proceed. To avoid appearing conservative or closed in a way that may cause outside questioning or criticism – and thereby risk overflowing the dominant framing – new issues and perspectives are let into the debate while actual implementation of them is not. Delay is in this way used as an instrument to repair or even prevent leakages, which may capture this common modifying work by the state and industry more fully than 're-timing'.

Another strategy relates to *dismissal*, i.e. "acknowledges the existence of [unfavourable] information" but denies it "as erroneous or irrelevant" (Rayner, 2012: 113), yet is not entirely captured by this term. The state and industry acknowledge the existence of CNF although it is unfavourable for their interests, but they are not simply waving it off as irrelevant – rather, it is described as an unfitting practice for Sweden's forests. I propose the term *delegitimization* to encompass the modifying work of undermining the legitimacy of CNF, e.g. by referring to the historically bad reputation of selective logging; claiming that current forestry is already what is best for the environment; that not enough is known about CNF; or referring to CNF as unsuitable for most Swedish forests and thereby normalising it as an abnormality to forestry. Further in this strategy, the normalising practice of 'pushing the issue aside' – mentioning it but giving it very little space and thus normalising it as unimportant, a recurring practice in the empirical material – also fits into the delegitimization strategy. CNF is here mentioned for the sake of closing the discussion down, rather than opening it up.

Neither Asdal's nor Rayner's concepts capture the strategy appearing around the issue of CNF where the different sides and framings are conversing. I propose this modifying work is referred to as *duplication*. By copying arguments from the other side and bending them to fit into their framings, the actors can incorporate and claim certain perspectives that adhere to the societal debate and thus to a potentially wider public than their current framing. NGOs do this by bringing up the economic perspective and adhering to landowners' profits, and the industry does this by applying a caring language for nature. This strategy occurs also in the struggle for

the carbon sink framing, where both sides argue for their cause claiming that their solution captures the most CO₂.

All of these strategies of modifying work – diversion, displacement, detachment, delay, delegitimization and duplication, and the normalising practices present within several of these strategies – illuminate the endeavours by the state and forestry industry to maintain the dominating forestry framing, as the ‘uncomfortable knowledge’ of CNF gets attention from the EU and threatens to challenge this. This material shows how Asdal’s and Rayner’s different theories can be used together to capture a broader range of strategies, and to what strategies they lack explanation. Delay, delegitimization and duplication expand both Asdal’s notion of modifying work (2015) and Rayner’s notion of organisational strategies for excluding uncomfortable knowledge (2012).

CNF has not created overflowings in the dominant forestry framing, yet active efforts to close down the issue imply the presence of leakages. As CNF becomes increasingly recognised as a beneficial alternative to clear-cutting (supported by NGOs and the EU Commission’s attention to such forestry practices), leaks are becoming increasingly noticeable in the dominant forestry framing, made visible through the strategies to prevent or mend these leaks present in the studied material. Each of the strategies of modifying work occurs as tools to mend leaks: when attention to CNF increases it forms a leak that ‘diversion’ aims to repair; when responsibility is placed on the state, the leak is mended through ‘displacement’; when the benefits of CNF may start to seem compelling to the wider public, ‘delegitimization’ or ‘duplication’ turns the positive attention back to today’s methods. In protecting their dominating position, the state and industry strategically strive to turn the issue of CNF into a non-issue.

6. Conclusion & Discussion

This thesis aimed to deepen the understanding of the development of close-to-nature forestry (CNF) in Sweden and the implications this has on the dominating forestry framing, by asking the questions: how is CNF shaped as an issue by the state and forestry industry in Sweden? What strategies to modify CNF take place? And how is the dominant forestry framing affected and protected in relation to the CNF issue? This aim was pursued by collecting reports, policy documents, statements, information sheets and other official documents related to CNF – directly or through related concepts – from the forestry industry, state/church, and NGOs, covering the period between 2004–2023. A document analysis was conducted using a theoretical framework that combines issue formation (Marres, 2005; 2007), framings and leaks/overflows (Callon, 1998; Soneryd & Sundqvist, 2022), and strategies of modifying work (Asdal, 2015; Raynes, 2012).

This study demonstrates the range of different values forestry is expected to represent, clearly reflected in the issue formation around CNF. Behind a relatively stable framing of forestry exists conflictual values. There are reasons for using the forests and reasons for letting them be, and concerning ecology, this creates a duality (increasingly apparent also in the economic perspective where NGOs show the lucrative reasons for transitioning to CNF). I demonstrate in this study how the state and industry are highly aware of this controversy, and manoeuvre it through a range of modifying strategies in the pursuit of keeping the dominating framing intact. Modifying work in the form of diversion, displacement, detachment, and my additions of delay, delegitimization and duplication, is found to be used by the state and industry to prevent and repair leaks in the dominating framing.

Concluding from the results, the state and industry's approach to forestry practices has not suffered from overflows leading to any reframing of the issue. This is also reflected in the fact that no new actors or new constellations of existing actors have emerged around CNF, which according to Marres (2007) indicates that no new framing or clear reframing of the issue has happened. Rather, the established actors are intact and so is the existing framing, and in this, the issue of CNF is deemed to belong to issue-experts (*sakkunniga*) within forest management. Nevertheless, I have in this study shown that there has been, and continues to be, intensive work to repair leaks in the dominating framing, together with small yet constant modifications of the issue. CNF has still posed a threat large enough for continuous modifying work to be practised in attempts to sustain business-as-usual. The dominating framing and current situation around CNF – and forestry at large – is not given, but is actively monitored and protected, which this thesis gives a detailed demonstration of. The absence of overflows and grand reframings shows how the state and industry have succeeded with their work to stabilise the issue of CNF – not through ignorance or passivity, but through highly active and successful defence strategies.

In the framing of CNF, it is for NGOs (along the lines of the EU) a climate issue regarding biodiversity protection. For the forestry industry and the state, the issue is one that affects production and economy and interferes with the goals of fossil substitution. After the release of the EU Forest Strategy (EUFS) in 2021, the framing of forests as carbon sinks permeating this document became appropriated by the forestry industry. Hence in relation to the long-since deadlock in the forest debate (Andersson et al., 2022; Sandström et al., 2016), an interesting finding of this study is how the opposing framings thereby converse with each other, a new modifying strategy present in the forest debate. The counterarguments to the dominant forestry framing are duplicated and turned to the industry's advantage, where continued clear-cutting is still considered a win-win for economic as well as ecological problems. CNF is not to replace or push aside clear-cutting but would be a way to log forests that cannot be clear-cut and thus, it is by some in the industry understood as a way to be able to log more areas than currently. Similarly to how Asdal's issue of pollution was acknowledged

by the industry responsible for the issue in a way that made it exist on the premises of the industry, CNF is here defined in a way, and given a certain amount of space, to make it governable by the state and industry. Just like Asdal's pollution-issue was raised at the end of a long report put together with other issues that normalised it as "part of the everyday machinery" (2015: 78), CF/CNF is pushed into the margins, which in itself is a framing of issue's irrelevance. The results of this study are thereby showcasing how something can be addressed at the same time as it is downplayed.

The barriers to implementing CF in Sweden found by Hertog et al. (2022) were evident also in the documents by the state and industry in this study. The industrial networks' restrictiveness to advise CF methods is shown in the negative definitions through which CNF is described. The forestry culture with clear-cutting-forestry's dominating status and the shared worldview within the sector are prominent in the indistinguishable arguments between different industry-actors in the material. This study thereby adds to Hertog et al. by showing how these barriers take form in official documents, along with the modifying work present in actively maintaining the barriers. The CNF issue demonstrates how environmental and climate issues can be addressed just enough for the industry to show that it exists on the agenda, is investigated, and worked with, but not enough for it to challenge the dominating order. This knowledge of how modifying work can be used to protect the dominating structure is useful to understand by which means power is maintained through certain small, discursive tools (where e.g. responsibility, blame and possibility for action lies).

The governmental mission to define CNF by December 2023 given to the Swedish Forest Agency (SFA) and the Swedish Environmental Protection Agency (EPA) is inviting more of the environmental side compared with the previous definitions of CF assigned by the government to SFA alone. The question is how much space EPA will take, and how much weight their voice has compared to SFA in the mission. This may be an ostensible opening up of the issue to more actors to stabilise the controversy, while at the same time technifying the issue and securing its belonging to the state and industry. Thus conceivably, another artificial opening just as the Forestry Act of 1993 and the Future Forest project were (Andersson & Westholm, 2019).

This thesis has shown the diverse strategies through which the issue of CNF is modified in documents as a way for the state and forestry industry to protect and maintain status quo. CNF has long been kept as a non-issue in Sweden, deemed to belong in the margins. When raised as an issue by the EU Commission, CNF became something the Swedish state and industry needed to address, and they have mostly done so in an attempt to sweep it back into a non-issue. A current hindrance to the CNF issue is that when more is written about CNF by the state and industry than by NGOs, due to the latter's focus on e.g. the complete protection of forests or international work, the consequence is that the issue of more ecosystem-based forestry gets to be shaped and, by extension risks being owned by, the same industry that is

fighting this issue and favours the very practices that CNF aims to replace. The risk of this is that the issue is toned down and becomes a just slightly different version of current forestry practices, letting business continue – almost – as usual. Yet though the industry strives to modify the issue, it is nonetheless a still active issue, one that has been neither settled nor turned into a non-issue yet. This study displays on the one hand how power and dominant positions and framings can be maintained, and on the other hand, the remaining openness and opportunity around the CNF issue where new constellations are still able to emerge, as the issue is not completely closed or stabilised.

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