

The dual climate impact of news media The carbon footprint-handprint challenges in Nordic commercial news media organizations

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Abstract

This article examines the challenges that arise as news media organizations address the climate crisis as commercial journalistic organizations. Following a communicative constitution of organization (CCO) approach, we analyze how Nordic commercial news media organizations navigate the climate crisis through the dynamics between words (“talking”) and actions (“walking”). Using a combination of document data and interview data, we examine such talk–walk dynamics in organizational communication about carbon footprint and carbon handprint. Our findings demonstrate how these talk-walk dynamics shift when “talk” – sensegiving about climate change – is positioned as the core product of commercial operations. We identify three key challenges in media organizations’ climate change communication: demonstrating credibility through leading by example, relevance through reflecting environmental concerns and values, and leadership through renewing practices when necessary. Finally, the findings suggest that while organizations grapple with measuring the carbon handprint, the concept serves as a tool to enable sensemaking on the dual climate impact of media organizations.

Keywords

Communicative constitution of organization (CCO); News media organizations; Environmental impact; Climate crisis; Carbon footprint; Carbon handprint; Talk and action

Introduction

Journalistic media companies play a vital role in the climate crisis as agenda-builders, meaning-makers, and gatekeepers in the public debate, and as business entities making climate-related decisions. As for-profit companies, commercial news media organizations have the power to shape agendas, potentially accelerate climate action, and call out inaction (Guenther et al., 2023; Happer & Philo, 2016; von Zabern & Tulloch, 2021). For instance, *The Guardian*, a renowned legacy newspaper owned by the Guardian Media Group, has gone beyond traditional journalism to advocate for the environment (Salvesen, 2018). In 2019, they made headlines by adopting the term “climate emergency” instead of the neutral “climate change”, and subsequently announced that they would no longer accept advertising from fossil fuel extractive companies (Bateson & Nicklin, 2020; Carrington, 2019). These kinds of actions can set normative expectations for other firms in the media industry and have also led to a broader deliberation over the social responsibility of media organizations and the role of media organizations in society vis-à-vis environmental crises such as climate change.

Our study analyses commercial or private-sector news media organizations’ (see Cornia et al., 2016) strategic responses to climate change in the Nordic countries. Drawing on a combination of public document data and interview data, we examine the media industry as a business industry with high societal impact and a dual role or separation into journalistic/editorial and business/marketing functions (Artemas et al., 2016; Deuze & Witschge, 2018; Olkkonen, 2018). Our point of departure is that the news media organizations have a twofold climate impact: direct impact through reducing their greenhouse gas emissions and indirect impact through disseminating information in the democratic public sphere about the climate to enable collective sensemaking and mobilization in society (Christensen & Cornelissen, 2011; Christensen et al., 2022). While editorial decisions belong to the newsrooms, which traditionally have relative autonomy in the main organization (see, e.g., McQuail, 2013), the leadership of media organizations can strive to influence the position and image of their media brand, thereby engaging specific audiences and stakeholders. While the separation of these two functions is increasingly questioned in today’s media landscape (see, e.g., Coddington, 2015; Cornia et al., 2020), they need to be systematically and consequently aligned with the strategic actions of the organizations.

We examine commercial news media organizations from an integrative organizational perspective, which has been a less-studied perspective in relation to newsrooms and news organizations. Namely, we intend to conceptualize news media organizations from an integrative standpoint that encompasses both the editorial or journalistic processes and the commercial or business perspectives. In many cases, journalistic organizations are studied either as producers of journalistic content or as commercial entities. In contrast, our approach seeks to contribute by demonstrating the interconnectedness of these dimensions, highlighting how journalistic and commercial logics coexist, interact, and

shape the organization as a whole. By doing so, we hope to provide a comprehensive understanding of the dynamic nature of modern news media organizations and their role in the broader media ecosystem in the context of environmental communication and media studies. In fact, we argue that an integrative approach is necessary to better understand the environmental impact of media organizations.

In our study, we apply the theoretical concepts *carbon footprint* and *carbon handprint* to capture the dual impact of news media organizations and observe their interplay in these organizations' alleged climate actions and climate-change communication. As evidenced by our findings, media organizations claim to minimize their negative impact on the environment (footprint) and maximize their positive impact on society through their journalism and communications (using the concepts of carbon handprint, or alternatively, brainprint). The findings show how the stated strategies to minimize the harmful ecological footprint and maximize the positive societal carbon handprint – or brainprint, which is a more nuanced application of the handprint idea to the specific context of the media industry – pose tensions. Specifically, the findings reveal three types of challenges as the concept of a carbon handprint gains prominence: those related to credibility, relevance, and leadership. While media companies need to demonstrate credibility, relevance, and leadership to have a positive carbon handprint, such efforts inevitably involve sensemaking: authoring, creation, discovery, and conflict (Ford et al., 2008; Weick, 1995; Weick et al., 2005).

This article contributes to a comprehensive understanding of the relationship between media companies and climate change (e.g., Painter, 2019; Salvesen, 2018; Schäfer & Painter, 2021; von Zabern & Tulloch, 2021) and broader business understandings of climate change (Nyberg et al., 2022; Wittneben et al., 2012). Our findings also contribute to research on the dynamics between talk and action (Christensen et al., 2021; Schoeneborn et al., 2020, 2022; Weick, 1995) by interrogating their relationships in the climate change communication of organizations that claim to operate in a low-carbon industry with a high societal impact. Namely, we show how talk–walk dynamics – the relationship between words and actions – change when “words” (1) are the core product of organizations, (2) have a high societal impact, and (3) are scattered, with actors such as journalists and managers representing the organization.

The article is structured as follows. We first discuss the relationship between news media organizations and the natural environment by identifying the dual impact of news media organizations in the context of climate change. Thereafter, we deepen this idea by conceptualizing the dual impact as a question of carbon footprint and carbon handprint, through which we intend to inspect the climate change actions of Nordic media organizations. Before proceeding to the empirical analysis of commercial news media organizations' climate actions, we present the research questions, data, and the design of the study. The analysis focuses on the challenges that media organizations face as they

navigate their relationship with climate change, in which a central tension lies in the relationship between “words” (talking) and “actions” (walking).

News media organizations’ dual climate impact

The climate impact of news media organizations is part of their interaction with the broader natural environment, which refers to all living and nonliving elements that occur naturally on Earth, outside of human-made or artificial creations, encompassing the physical, chemical, and biological systems that support life, as well as the processes and interactions within these systems. News media organizations relate to this planetary ecosystem in two fundamental and interrelated ways. On the one hand, news media organizations engage in discursive means of journalistic production and organizational communication that deal with the natural environment, and on the other, their organizational existence forms, above all, a relationship with the environment via resource consumption. The first mentioned dimension is maintained through the continuous activity of coverage, in which the environment and nature constitute the object of reporting, criticism, and deliberation. The second dimension refers to the relationship between the organization as an entity in the physical world and the environment, of which media organizations are a part, and is defined through the media organizations’ operational impacts and resource consumption. The symbolic dimension tends to place the focus on the sellable output of media organizations, which is typically discussed in journalism, media, and cultural studies. Studies of journalism have started dedicating increasing attention to the sociomaterial practices of newsrooms (Maares et al., 2023) and the environmental impact of journalistic practices (Maxwell & Miller, 2017), considering challenges related to the natural environment as integrated (Berglez et al., 2017), and journalism as part of the Anthropocene (Morton, 2015).

The multiple environmental crises, ranging from global warming to biodiversity loss and from increased environmental disasters to inefficient environmental politics and diplomacy, have emphasized the first-hand impact in important epistemic terms, seeing journalism as an actor that shapes public knowledge about sustainability and its deficits. The climate change coverage of news can be specialized (subsumed as climate or environmental journalism, produced by specialists in respective areas) or general (as part of overall news coverage, produced by generalists), and it has a significant influence on the cultural setting where organizations and individuals make decisions that impact the natural environment (Neff, 2022; Wittneben et al., 2012). News media organizations are primary sources of information about the climate (Guenther et al., 2023; Schäfer & Painter, 2020; Thier & Lin, 2022), and traditionally, they are expected to influence public concern for environmental issues (Boykoff, 2011; Haring et al., 2011) and sensemaking of climate change (Boykoff, 2011; Brüggemann, 2017b; Nerlich et al., 2010). They are also expected to set the agenda and influence what becomes socially constructed as a social

problem (Boykoff, 2011; Brüggemann, 2017b; Harring et al., 2011). Media attention is often considered a proxy for public attention (Boykoff, 2011) and can consequently impact the political agenda (Bakaki et al., 2020). Journalistic media can also bring the effects of climate change on marginalized communities and ecosystems close to the reader (Berglez & Lidskog, 2019; Frig & Penttilä, 2025; Nyberg et al., 2022), making events from distant places “appear in ‘real’ time on the screen on our desktop, seemingly erasing physical distance” (Bansal & Knox-Hayes, 2013, p. 65). In short, by keeping climate change in the news, news media organizations can construct it as an issue of public concern (Harring et al., 2011).

Commercial media organizations have also been criticized for unsustainable actions, for example, driving consumerism (Diprose et al., 2018), dramatizing events like climate change to gain readership (Brüggemann, 2017a; Kenny, 2021; Painter, 2013), and refraining from criticizing firms for fear of losing important commercial partners (Etter et al., 2019). Accordingly, there is debate about whether journalists in these organizations should present solutions to the climate crisis (Painter, 2019) and build bridges between different social actors (Brüggemann, 2017b), or whether solution-based journalism risks the watchdog role of journalists (Painter, 2019).

The second impact dimension has been discussed as part of organizations’ strategies and actions in relation to the climate and environment, and the role of journalistic organizations has remained ambivalent. While the digitalization of media has initially raised hopes for a reduction in the carbon footprint of newspapers, these expectations have been overshadowed by the growing emissions associated with the Internet (cf. Kuntsman & Rattle, 2019). The consequences of editorial practices and decisions, such as journalists’ travels, have also been scrutinized, and newsrooms have been pushed towards increased transparency in terms of their own climate consciousness. The news industry’s relationship with climate issues has proven to be complex. The governance of its dual climate impact has positioned news media organizations as active participants in the climate crisis, rather than observers and reporters of change, reconfiguring the functions of news journalism. This shift also compels news media organizations to take proactive measures and address and reflect upon their own contributions to the problem, rather than maintaining a passive stance. This is why news media organizations’ sensemaking of climate impact deserves attention.

The carbon foot- and handprint of news media organizations

In general, tackling the dual climate impact is a question of dealing with both concrete climate activities (what organizations do) and discursive efforts to add meaning to intentions and descriptions of conducted activities (what the organizations say that they do). Communication, however, loses its power if it is not aligned with demonstrated actions. The dyad of actions and words is often characterized in organizations as a balancing act of “walk” and “talk” (e.g., Schoeneborn et al., 2020). However, organizations such as media

organizations that seek to educate, inform, entertain, and explain the world, communicate about their own climate activities similar to other organizations, but also, more broadly, engage in sensegiving about climate change by shaping others' interpretations and meaning construction (Gioia & Chittipeddi, 1991).

Following the research tradition that regards communication as performative, it can be argued that by enabling collective sensemaking about climate change, news media can potentially accelerate organizational and social change (Schoeneborn et al., 2020), stimulate reflections and debate about ambitions, heighten expectations for better practices, and trigger concrete plans to reach them (Christensen et al., 2022). Communication is sometimes understood as "a type of action often necessary to mobilize further activities" (Christensen et al., 2021, p. 412). Scholars in this tradition hence postulate that talk is action (Christensen et al., 2021; Ihlen, 2015; Schoeneborn et al., 2020), as "talk 'does' things" (Trittin-Ulbrich, 2023, p. 928): It transforms the situation and practices of organizing (Christensen et al., 2021; Schoeneborn et al., 2022).

The concept of carbon handprint leans on this idea of the performative nature of communication. The carbon handprint refers to the greenhouse gas reductions a company can help its customers achieve (Grönman et al., 2019). Contrary to the carbon footprint, which refers to the total amount of greenhouse gases emitted directly or indirectly by an organization, handprint thinking has come to refer to the positive environmental impact an organization or activity has in reducing or offsetting carbon emissions. Therefore, when organizations seek to align "walking" and "talking", actions and words, the handprint concept is used to refer to talk that has performative potential to shape and change organizational reality (Koep, 2017).

As such, the handprint measures more than the company's own environmental impact of production – which can be reduced but never abolished completely – and rather aims to demonstrate the overall balance between the negative and (broader) positive impacts (Dijkstra-Silva et al., 2022; Grönman et al., 2019). The concept of handprint has been suggested to be especially beneficial for sustainability communication, as it can present the impacts of sustainability actions in a tangible form (Grönman et al., 2019). Despite its communicative potential, the existing research on carbon handprint has been focused on the technical measurement frameworks and their presentation (e.g., Dijkstra-Silva et al., 2022; Grönman et al., 2019; Lakanen et al., 2021), rather than on organizational communication and deliberation over the carbon handprint. However, as shown in this article, the increased attention to the carbon handprint concept causes actors to debate and reflect on the climate impact of companies, creating tensions such as uncertainties and disagreements over (at times) conflicting courses of action when organizations reflect over their social responsibility (Koep, 2017; Poroli & Cooren, 2024). Thus, the concept of handprint can enable public and inclusive deliberation over the moving corporate responsibility ideals, standards, and goals during the environmental crisis (Christensen et al., 2013; Scherer & Palazzo, 2007).

The term carbon handprint can hence be understood as an analogy or a language game: It directly shifts attention to an alternative or additional way of understanding the carbon impact, which has long been measured through calculating the carbon footprint, that is, greenhouse gases generated by actions. Replacing the “foot” with the “hand”, the carbon handprint concept implies that organizations have a more immaterial climate impact beyond the measurable emissions. Specifically, the handprint suggests that organizations are able to influence others’ actions through their practices and communication. Moreover, the footprint and handprint metaphors draw attention to “actions” and “words” (or “walk” and “talk”), which are actively compared (Christensen et al., 2022). The concepts of carbon footprint and carbon handprint therefore immediately bring forth tensions between and within them. That is, using these concepts in organizational communication can bring about deliberation and questions, beyond those questioning whether the organization’s words and actions are in line. Additionally, stakeholders can question whether the concepts are used to effectively understand and improve practices in the environmental crisis, or to shift attention from their own harmful impact and practices elsewhere (e.g., van Laer & Smith, 2025).

Indeed, organizational communication scholars have long been interested in how organizations engage in sensemaking, such as the discovery, structuring, and articulation of the unknown, when confronted with new situations (Ancona, 2012; Ford et al., 2008; Weick, 1995; Weick et al., 2005), such as those required by a sustainability transition. Specifically, when engaging in sensemaking, organizations act in order to understand the new reality (Ancona, 2012; Weick et al., 2005). In doing so, they do not merely report about, for example, their environmental impact, but actively enact their environments. Through organizational sensemaking, situations such as climate change are hence “talked into existence” (Weick et al., 2005, p. 413). We argue that the concept of carbon handprint functions as a tool to enable such sensemaking in organizations. Moreover, we argue that it is important to understand how organizations with a significant societal impact, such as the news media industry, deal with this concept to communicate and make sense of the dual climate impact of their operations.

Research question

This article seeks to answer the following question: What kinds of challenges arise when commercial news media organizations address their dual climate impact – their carbon footprint and handprint? The study is situated in the Nordic countries, which have been referred to as “media welfare states” due to their welfare-state ideology, state intervention, high newspaper circulation and readership, and strong journalistic professionalism (Jakobsson et al., 2023; Syvertsen et al., 2014). The Nordic countries aspire to become the most sustainable and integrated region in the world by 2030, driven by the green transition, as envisioned by the Nordic Council of Ministers (2019, 2021). The media sector is

identified as a driving force for sustainable development, which puts special pressure on media organizations to align to the overarching aims of sustainability and green values, including the production of sustainable journalism (Berglez et al., 2017). Despite the prominent role of public service media in the Nordic welfare states (see, e.g., Carlsson, 2013), the majority of news media outlets in the Nordic region are commercial organizations.

Data and methodology

Our dataset consists of publicly available documents dating between 2018–2023 and nine interviews (eight individual and one pair) with ten top-level media executives, conducted between 4 April 2022–16 April 2024. The interviewees represent seven major commercial news media organizations with headquarters in the Nordics (Nordicom, 2024, Table 1). The organizations publish ad-funded digital and printed newspapers and magazines. The interviewees are top managers in the companies and were invited to participate in the study based on their position and core expertise in how the media organizations address sustainability. We cite the interviews using the titles of the participants at the time of the interview: Chief Operating Officer ($N = 2$), Editorial Director ($N = 1$), Group Finance Manager ($N = 1$), Director (Media) ($N = 1$), Senior Vice President (Communications and Brand)

Table 1. Nordic commercial news media organizations

Media organization	Media genres	Examples of news brands	Other core business operations
Bonnier News (SE)	News media and lifestyle media	Dagens Nyheter (SE) Expressen (SE) Dagens industri (SE)	Real estate, investments, book publishing
Schibsted News Media (NO)	News media	Aftenposten (NO) VG (NO) Aftonbladet (SE) Svenska Dagbladet (SE)	Marketplaces
Sanoma Media (FI)	News media and lifestyle media TV and radio channels Magazines	Helsingin Sanomat (FI) Ilta-Sanomat (FI) Nelonen (FI)	Sanoma Learning
JP/Politikens Hus (DK)	News media	Politiken (DK) Jyllands-Posten (DK) Ekstra Bladet (DK)	Book publishing
Alma Media (FI)	News media and lifestyle media	Ilta-Sanomat (FI) Kauppalehti (FI) Talouselämä (FI)	Marketplaces
A-Lehdet (FI)	Magazines	Apu (FI) Image (FI)	Marketplaces and e-commerce
Otavamedia (FI)	Magazines	Suomen Kuvalehti (FI)	Book publishing

($N = 1$), Head of Sustainability/Sustainability Manager ($N = 3$), and VP Portfolio Development and Marketing ($N = 1$).

We combined the interview data with public document data to triangulate the findings (Table 2). After delimiting the document data to materials that explicitly mention climate change, this dataset includes 618 pages of printed research material (Appendix 1). The materials are in English or Nordic languages; the excerpts are translated by the first author. References to the document data are indicated using the codes found in the appendix.

The interviews were conducted as online video calls in the respondent's preferred language (Finnish, Swedish, or English). The respondents were asked about their role and work and to elaborate on information on the company websites, reports, and news articles that report about the climate contributions of the media company. They also shared new information about what actions they have taken to address the environmental crisis. The interviews lasted for approximately an hour and were transcribed verbatim.

The interview transcripts and the collected textual material were approached with a qualitative thematic analysis (Guest et al., 2012). The texts were coded manually by identifying, noting, and finally categorizing how the media companies address the climate crisis. Here, we also paid attention to "the communicative dimension of action and the actionability dimension of communication" (Schoeneborn et al., 2022, p. 77). In other words, the idea that talk "is action in a number of important respects" (Christensen et al., 2021, p. 408, emphasis original) guided our analysis. Against this backdrop, we set out to identify Nordic commercial media organizations' responses to the advancement of climate change, bearing in mind the immanent duality of talk and action (Christensen et al., 2021; Schoeneborn et al., 2020, 2022). In practice, we noted in a coding frame the ways in which the media companies address the climate crisis. For example, the following statement was coded as "training": "Currently we are developing training for all employees to raise climate and environmental awareness". And this statement was coded as "appeal-

Table 2. Data summary

Type	Pages	Minutes
Reports ($N = 15$)	375	
Websites ($N = 13$)	62	
Company presentations ($N = 2$)	11	20
Press releases ($N = 4$)	12	
News articles ($N = 18$)	95	
Other media texts ($N = 6$)	42	
Advertisements and advertising campaign materials ($N = 8$)	21	
Personal interviews ($N = 9$, including one pair interview)	80	480
Total	698	500

ing to decision-makers”: “We hope that this gift will not only remind policymakers of their responsibilities but also encourage them to take action”. We then grouped the identified codes into broader categories and examined the relationships between them with an aim to identify what the actions were aiming to “do”. As shown and discussed in the following section, we identified three inductive thematic categories: the credibility, relevance, and leadership challenges. Our analysis focuses particularly on the interviews, which revealed challenges that media organizations face as they address their dual climate impact.

Findings

Broadly, the results show that media organizations claim to “operate in a low-carbon industry” (SANOMA.01, p. 40) and consider emission reduction to be a resource-intensive yet attainable task. At the same time, media companies can claim their “strategy is designed to maximise our positive ‘brainprint’ on society and to minimise our environmental footprint”, and that they “have a highly positive net impact on society” (SANOMA.03, n.d.). Although the concept of a carbon “brainprint” or, alternatively, handprint, has caused a lot of discussion in the media industry, it remains a fuzzy concept:

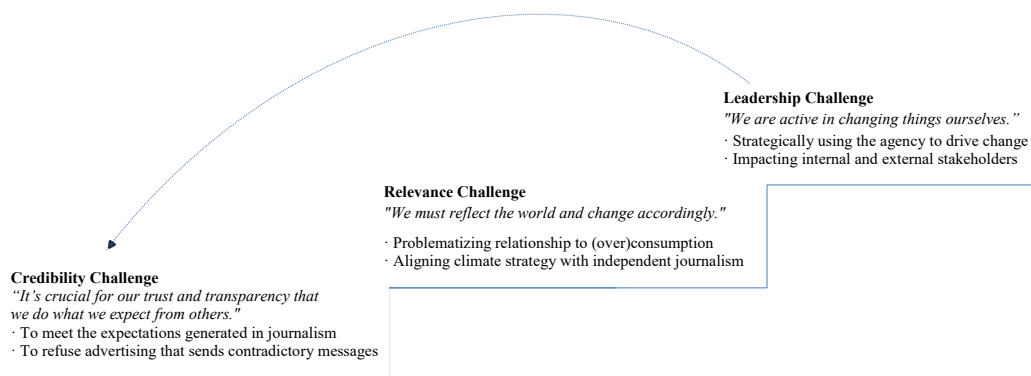
[...] if you think about the footprint, it’s a very measurable impact. When it comes to the handprint, the challenge is how you measure that handprint. As long as there is no such thing as a robust way to measure it, to show it, then it remains as talk and discussion. (Sustainability Manager, 16 April 2024)

Nevertheless, the carbon handprint concept is more commonly used in media organizations and the industry, and there are efforts to find ways to measure it in more detail (Sustainability Manager, 16 April 2024). As follows, the concept rather becomes a movement and an umbrella concept under which media actors debate the role and impact of media companies and its dual role in the climate crisis. The discussions around the dual climate impacts of both footprint and handprint center around three challenges (Figure 1), to which we turn next.

The credibility challenge

Because the media examine firms in their journalistic work, to be credible, they need to match this effort with efforts to build more sustainable news media organizations. The identified credibility challenge highlights tackling inconsistencies between what representatives of companies say (“talk”) they expect from others and what they do (“walk”). Accusations of corporate hypocrisy can stem from inconsistencies between corporate communication and action and, more broadly, from inconsistencies between the expectations organizations and their representatives set for others, and how the organizations perform themselves. For example, when sharing advice for best practices with other news publishers, a representative of Schibsted comments:

Figure 1. Talk-walk dynamics: Media and the environment



Given the business we're in, it's crucial for our trust and transparency that we do what we expect from others [...] Publishers should focus on maximizing their impact and actually doing things, in contrast to talking about sustainability and feeling good about it". (SCHIBSTED.07)

The quote illustrates a relationship between carbon footprint and carbon handprint: It is argued to be necessary that media companies do themselves what they expect from others. This kind of credibility challenge is specific to organizations, such as media companies, that adopt an institutional watchdog role in the society. As an example of matching talk with walk, news brands have paid attention to the carbon footprint of producing journalism, such as flights needed to report from distant locations (JP.06; SCHIBSTED.10). The credibility challenge hence creates tensions as stakeholders assess and sometimes criticize whether the organizations themselves follow the expectations they set in their journalism. This brings about normative pressures to "contribute to a greener business model" (JP.06).

Furthermore, the credibility challenge highlights tensions between media visibility for advertisers and the climate responsibility of those advertisers. Media companies' connection to other actors, such as advertisers, brings about tensions. Therefore, the "greener business model" entails reducing emissions in their own operations as well as in the value chain. Moreover, as the media business is closely linked to advertising, the visibility that commercial media organizations offer to advertised products becomes a topic of debate. In particular, advertising carbon-intensive practices and actors near climate journalism has faced significant criticism, prompting media planners to consider these contexts: "it is in nobody's interest that those ads are in the context of this content" (Sustainability Manager, 16 April 2024).

The document data shows one prominent example of such criticism, as a TV channel received a notification for greenwashing when an energy company sponsored a climate change-themed TV series. The collaboration sparked public criticism and complaints to the Council for Mass Media, which stated that "the sponsor has in practice influenced the

idea of the program and the choices of the authors”, and the collaboration “undermined public confidence in the independence of journalism, especially as representatives of the energy company were strongly represented in the program” (SANOMA.01, p. 25). In general, investing in climate journalism and simultaneously offering advertising space to, for example, travel ads, is seen as a dilemma that news brands have needed to explain to their readers.

The ad policy of Bonnier’s *Dagens Nyheter* (DN) has been regarded as one of the more straightforward ways a journalistic organization has sought to drive organizational and social change (i.e., have a positive carbon handprint) and has caused societal debate and deliberation within news organizations (M.02). Namely, the newspaper stated in 2021 that it will henceforth not publish commercials in premium locations from companies that make the majority of their income from the fossil fuel industry (BONNIER.08). The news article that announced the newspaper’s decision also states that the policy ensures a credible and nuanced context for their customers who want to communicate their climate commitments, as the “largest advertisers have stated goals to be fossil-free within a decade” (BONNIER, 08).

The strategies for discontinuing advertising from fossil fuel companies have prompted debate and varied responses in the media industry. According to one view, instead of preferring some advertisers over others, “the other option is to cooperate or invest in the company you want to change” (Sustainability Manager, 16 April 2024). A sustainability manager in another media company has reportedly promoted following the examples of DN and other news brands, but has faced resistance among the newspapers (referring to the representatives of the newspapers here as “they”):

This is also a very difficult discussion. Of course, they don’t want to lose their income. And it’s like, but we need the income to have the independent journalism. And as long as it’s not, as long as it’s allowed to sell fossil fuels, why should we take a political stand and say no to that kind of advertising? So that is the kind of discussions that you have on that part and what we are trying to say, yes, we understand that, but if you had kind of taken a stand, maybe you had gotten even more income from other sources that really appreciate that you take a stand. So, but again, it’s a difficult discussion because they really want to be independent. They don’t want to take part. And I fully understand those views as well. (Sustainability Manager, 29 September 2022)

How media companies should engage with climate change creates tensions in media companies, as they are scrutinized like other businesses, but also as journalistic institutions. The tensions here emerge from inconsistencies between different messages that are examined as a challenge to credibility. Broadly, tensions stem from the expectation to “walk the talk” – although here, the focus shifts from the intra-organizational pressures to meet commitments, to a broader view that weighs the talk and actions of many actors, including media companies and their media, journalism, and advertising. Such weigh-

ing involves conversations and deliberation over change (Ford et al., 2008), specifically in the role and impact of media in the climate crisis. It also involves active efforts to give an account of what is being done to address and mitigate climate change. Such “discursive justifications” are employed to gain credibility but are not in themselves sufficient to produce action (Ford et al., 2008, p. 367). As shown next, relevance and leadership are other necessary dimensions.

The relevance challenge

Media organizations seek to demonstrate relevance in the climate crisis, indicating that they can respond to the increasing environmental concerns and values of the readers. For example, one media company published a statement, in which they suggest that “we must recreate our relationship to commodities in the media” due to the ecological crisis and announced intentions to present a more sustainable lifestyle also in their journalism (A-LEHDET.04). With this statement, the news brands in the company seek to emphasize their relevance to media consumers with ecological values as they try to distinguish their content from traditional consumerism-oriented lifestyle journalism, which can have a negative carbon handprint if it connects aspirational lifestyles with increased consumption (see also Frig & Jaakkola, 2023). Such discussions have been particularly prominent in lifestyle media, which have had to redefine their relationship with commodities:

[...] if we talk about lifestyle media, it has for years been quite consumer-oriented and it has had to, in recent years – not just now, but over the past few years – deal with its relationship to consumption and analyze it, to reflect on the relationship of journalism to consumption quite a lot. (Media Business Director, 22 November 2022)

Investments in climate journalism are among the most relevant ways media organizations can demonstrate a positive carbon handprint. The relevance challenge reveals inconsistencies between various publications in the organization, particularly when certain publications identify as climate-conscious media and exert normative pressures on others. Specific news brands within the media organizations have made important and notable investments in climate journalism, which are also mentioned in sustainability reports. For example, Swedish *Aftonbladet* started reporting about climate change daily on its Klimat Live site in 2021, aspiring to “grow into a knowledge bank where readers can access the latest research, studies and news updates on climate change” (SCHIBSTED.08). Reportedly, specific newspapers have made major contributions in climate monitoring: for example, business magazines have shown interest in monitoring the climate performance of firms on stock market pages (ALMA.05; BONNIER.12) to, for example, “send a signal to investors, asset managers, companies, customers and other stakeholders that sustainability must enter the mainstream as one of the most important factors in the economy” (BONNIER.12). In 2019, the general-interest magazine *Apu* made its editorial policy clear by announcing that it will use the term “climate crisis” instead of climate change, since

“language shapes attitudes” (ALEHDET.05). Overall, the editorial lines and profiles of the publications owned by each corporation also vary. For example, the sustainability report of Danish JP/Politikens Hus states that “the editorial line of our news media can vary greatly, and that is the intention” (JP.01, p. 3).

Media organizations also try to balance between investing in specialized reporting on the environmental crisis and including a climate angle in all kinds of journalistic texts (M.02). Newspapers and general interest magazines that have profiled the brands as relevant sources of information about environmental issues have recruited specialized theme correspondents who focus on climate change and the environment (ALEHDET.06; SANOMA.15; SANOMA.16). By investing in climate journalism and the specialization of theme correspondents, the media brands can provide expert content on climate change and seek to position themselves as reliable and relevant sources of information. This position can also be regarded as a way to gain a competitive advantage in the market and to reach younger media consumers, which are difficult to reach (Development and Marketing Manager, 4 April 2022). Having specialized theme correspondents in-house is argued to benefit the availability of information for all journalists. For example, theme correspondents have educated other journalists about environmental issues and journalism.

Specifically, when asked about the carbon handprint of news media, interviews reveal that media organizations have also struggled with the “balancing act as to how much the company’s business climate strategy can guide the content” considering the requirement for independent journalism (Sustainability Manager, 16 April 2024). As one response, some media companies have encouraged, for example, designers and journalists to participate in training about environmental issues. However, the response to invitations for participation in environmental training has varied:

But it kind of stranded a bit. [Another company], I think they went forward to a certain degree. For us, it was, it’s a bit like the newspapers want to decide alone. They kind of don’t necessarily want someone from the outside to come and tell them what they should focus on, as I said. – But it’s difficult to push it from a sustainability angle. You need to kind of... But what we’re working on now is trying to... how can we actually have people kind of inside this editorial environment that pushes this agenda themselves. So, I think that it’s difficult to sit on the corporate level and kind of push that agenda related to content. (Sustainability Manager, 29 September 2022)

The strategic corporate aspirations to portray the media organization as one with a positive societal impact in the environmental crisis can hence create tensions, since attempts to guide journalistic content in any way is seen to contradict journalistic guidelines. In addition, mismatches between the growing environmental concern and the realities the media content present can create tensions, prompting the industry to reflect on their choices and perspectives. Tensions therefore arise from divergent ideas about how the media should address the environment and from the deliberations about necessary

changes. Such tensions are also necessary for organizational communication to be performative and bring about change (Christensen et al., 2022; Ford et al., 2008; Schoeneborn et al., 2019). For example, some of the changes that the deliberation has brought about include specific media brands actively positioning as “change agents” (Ford et al., 2008), engaging in advocacy and activism for the planet.

The leadership challenge

Media organizations typically aim to maintain their independence by separating journalistic ideals from commercial and political goals and therefore traditionally explicitly distance themselves from advocacy. At the same time, it is common to emphasize that environmental protection, similar to democracy and human rights, must be promoted by the media. Further, some actors have engaged in external advocacy work and internal activism for the environment.

For example, Sanoma’s biggest newspaper *Helsingin Sanomat* has highlighted calls for climate action in marketing campaigns, such as by distributing pens with carbon dioxide ink to G20 leaders as a call to climate action (SANOMA.06) and by developing a Climate Crisis Font that melts in front of the viewers’ eyes, illustrating the impact of climate change on the Arctic Sea ice. The font “is intended to be used by anyone who wishes to visualize the urgency of climate change” (SANOMA.07). By publishing the font, the newspaper reportedly aspired to convey the message that “change is possible with rapid and radical actions” (SANOMA.07). Here, the marketing campaign was combined with climate journalism: The font has been used, for example, in a collection of climate-change articles that presents news articles published in the newspaper between 1979-2020 (SANOMA.09). Sanoma’s climate advocacy hence went beyond a marketing campaign, as it combined a marketing campaign with calls for climate action in the journalistic content. The newspaper’s campaigns that take a stand for climate action have been labelled as “value-based marketing” (SANOMA.05), which, similar to corporate or brand activism, can be expected to be greeted with divisive responses of both support and dissent. Taking a stand *was* therefore preceded by internal reflection:

In 2018, we had a discussion about whether we were prepared to do things that could lose indignant subscribers. It was decided to take the risk because defending values is so important. (SANOMA.05)

Dagens Nyheter engaged in a form of brand activism in 2020, inviting the climate activist Greta Thunberg to function as Editor-in-Chief for one day (BONNIER.07). By collaborating with the iconic climate activist, the newspaper reportedly aspired to “treat the climate crisis like the game changer it is” (BONNIER.07). According to the news article that announced this decision, the idea was born as a reaction to the criticism of how *DN* and the media cover climate change:

Greta Thunberg, the world's best known climate activist, visited *Dagens Nyheter* in September, to talk about the media and climate change. During her visit she was sharply critical of how *Dagens Nyheter* and the media at large cover climate change, saying that newsrooms do not treat it as an important and extremely serious crisis. (BONNIER.07)

Interviewed media managers often emphasized that “it’s not just that we are subject to certain demands – we are active in changing things ourselves” (Media Business Director, 22 November 2022). Accordingly, some organizational members, such as sustainability managers, can seek to drive change from the inside, acting as “internal activists”, as indicated in the following interview excerpt: “But I would say that we haven’t gotten much push from the stakeholders. – I wouldn’t say that. So, the pressure in [the company], it’s from me, pushing for this agenda” (Sustainability Manager, 29 September 2022).

Corporate efforts to actively drive change and advocate for the environment can create tensions, as they encounter mixed reactions of support and dissent. Here, the focus broadens from complying with environmental norms and regulations to aspirations for leading the way and inspiring future actions through communicative action. According to our participants, sustainability managers, for example, go beyond overseeing that the company complies with regulations and norms – “that goes without saying, it’s house-cleaning” (Sustainability Manager, 29 September 2022). Rather, the role requires seeing “that our business models are future-fit”. Hence, as demonstrated by the arrow in Figure 1, the debates are likely to return to focus on credibility: Brand activism campaigns, for example, are likely to fail if the companies do not lead by example.

Discussion

This study examined challenges that arise when Nordic commercial news media organizations address their dual climate impact. Our research has shown how climate becomes debated and elaborated in organizations with an important dual impact: through direct impact on the environment and an indirect impact through journalism and communication. Hence, the findings of the study illustrate how talk-walk dynamics (Christensen et al., 2021; Schoeneborn et al., 2020; Winkler et al., 2017) manifest in organizations, in which the “talk” is the core product and is also argued to be the biggest contribution to society.

The concept of carbon handprint seems to further complicate the relation between talk and action, as organizations are increasingly expected to guide others to reduce their harmful environmental impact, and this is only possible by understanding talk as action. The findings show how the idea and concept of a handprint has become a prominent tool in the media industry to “make” actors debate about the performativity of their actions and suggest new directions for the future of media.

The findings suggest that there is no unanimous view on what carbon handprint means, what it should mean, or whether it is important. However, based on the interviews and document data, the concept directs attention to three kinds of challenges.

News media organizations can demonstrate credibility by calculating and showing the material environmental impact of journalism and journalistic business models, which are typically dependent on advertising income. They can prove relevance, for example, by investing in climate journalism, offering environmental education to journalists, following and measuring engagement, and listening to readers' environmental concerns. Finally, they can also demonstrate leadership by using their influence to take a stand and drive positive change (such as emissions reductions) in the media industry and in society. We have argued that while media companies first and foremost need to build credibility through reducing their carbon footprint, credibility in itself does not suffice to explain how media companies can have a positive carbon handprint. However, it is essential for media organizations to establish credibility in order to use their influence effectively to assist stakeholders and society in reducing emissions.

The findings further indicate that there exists numerous, and at times conflicting views on what a carbon handprint can entail. On the one hand, the strategic use by media companies of the term carbon handprint centers on broad and almost self-evident contributions, such as climate monitoring and increasing understanding and awareness about climate change. On the other hand, it includes attention to communicative actions such as problematizing the visibility and platform given to other actors, such as, notably, through advertising space. If we understand a carbon handprint as the greenhouse gas reductions a company can help its customers achieve (Grönman et al., 2019), the first, broader understanding of the handprint of media becomes difficult or even impossible to assess. The communicative actions demonstrated by the latter understanding can set pressures for other organizations and have performative effects, but they have been deemed as contentious practices that can, at worst, serve as a way to monetize and reinforce the increasing politicization of the climate debate (Ulver, 2021). We encourage future research to further investigate how carbon-handprint communication can be measured effectively, and to investigate its impact in a critical manner.

Finally, despite the deliberation over the carbon handprint and its prominence in organizational communication, it is not self-evident that media organizations always have a positive carbon handprint in reality – they might even have a harmful impact. Harmful impacts may occur either deliberately or inadvertently; for example, while actions such as refraining from a critical examination of green claims, or writing stories about carbon-intensive lifestyles can simply result from a lack of climate awareness, other actions, such as enabling greenwashing or publishing misinformation, can be more deliberate in nature. Both types of actions, deliberate or not, can contribute negatively to our common climate targets, and they deserve more in-depth investigation in future research. Climate inaction, such as hesitancy or resistance among media companies to address climate change, also influences the cultural context and warrants further examination.

Conclusion

Our study expands on research regarding the relationship between media organizations and climate change (e.g., Painter, 2019; Salvesen, 2018; Schäfer & Painter, 2021; von Zabern & Tulloch, 2021) by illuminating the challenges related to the dual role and impact of media companies in the climate crisis. The findings suggest that carbon-handprint communication for media organizations involves the tensioned areas of demonstrating credibility through leading by example, relevance through reflecting environmental concerns and values, and leadership through renewing practices when necessary.

Our study also contributed to the sustainability communication literature by explaining how a handprint is constituted and deliberated in practice – not as a tool for exact measurement but its essence as a concept that enables the deliberation and sensemaking of the broad societal impacts of business. Our findings show that news media organizations adapt the concept to better capture the nature of their impact and use it to align talk-walk dynamics. These results can be of use in sustainability communication studies that seek to understand both aspirations and actions, as companies increasingly engage with divisive issues such as climate change.

References

- Ancona, D. G. (2012). Sensemaking: Framing and acting in the unknown. In S. Snook, N. Nohria, & R. Khurana (Eds.), *The handbook for teaching leadership: Knowing, doing, and being* (pp. 3-20). Sage.
- Artemas, K., Vos, T. P., & Duffy, M. (2016). Journalism hits a wall: Rhetorical construction of newspapers' editorial and advertising relationship. *Journalism Studies*, 19(7), 1-17. <https://doi.org/10.1080/1461670X.2016.1249006>
- Bakaki, Z., Böhmelt, T., & Ward, H. (2020). The triangular relationship between public concern for environmental issues, policy output, and media attention. *Environmental Politics*, 29(7), 1157-1177. <https://doi.org/10.1080/09644016.2019.1655188>
- Bansal, P., & Knox-Hayes, J. (2013). The time and space of materiality in organizations and the natural environment. *Organization and Environment*, 26(1), 61-82. <https://doi.org/10.1177/1086026612475069>
- Bateson, A., & Nicklin, H. (2020, January 29). Why The Guardian will no longer accept fossil fuel advertising. *The Guardian*. <https://www.theguardian.com/help/insideguardian/2020/jan/29/why-the-guardian-will-no-longer-accept-fossil-fuel-advertising>
- Berglez, P., & Lidskog, R. (2019). Foreign, domestic, and cultural factors in climate change reporting: Swedish media's coverage of wildfires in three continents. *Environmental Communication*, 13(3), 381-394. <https://doi.org/10.1080/17524032.2017.1397040>
- Berglez, P., Olausson, U., & Ots, M. (Eds.). (2017). *What is sustainable journalism? Integrating the environmental, social, and economic challenges of journalism*. Peter Lang. <https://doi.org/10.3726/b11462>
- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511978586>
- Brüggemann, M. (2017a). Post-normal journalism: Climate journalism and its changing contribution to an unsustainable debate. In M. Ots, P. Berglez, & U. Olausson (Eds.), *What is sustainable journalism?*

- Integrating the environmental, social, and economic challenges of journalism* (pp. 57-74). Peter Lang. <https://doi.org/10.3726/b11462>
- Brüggemann, M. (2017b). Shifting roles of science journalists covering climate change. In M. C. Nisbet, S. S. Ho, E. Markowitz, S. J. O'Neill, M. S. Schäfer, & J. Thaker (Eds.), *Oxford research encyclopedia of climate communication*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228620.013.354>
- Carlsson, U. (Ed.). (2013). *Public service media from a Nordic horizon: Politics, markets, programming and users*. Nordicom, University of Gothenburg. <https://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-10089>
- Carrington, D. (2019, May 17). Why The Guardian is changing the language it uses about the environment. *The Guardian*. <https://www.theguardian.com/environment/2019/may/17/why-the-guardian-is-changing-the-language-it-uses-about-the-environment>
- Christensen, L. T., & Cornelissen, J. P. (2011). Bridging corporate and organizational communication: Review, development and a look to the future. *Management Communication Quarterly*, 25(3), 383-414. <https://doi.org/10.1177/0893318910390194>
- Christensen, L. T., Morsing, M., & Thyssen, O. (2013). CSR as aspirational talk: *Organization*, 20(3), 372-393. <https://doi.org/10.1177/1350508413478310>
- Christensen, L. T., Morsing, M., & Thyssen, O. (2021). Talk-action dynamics: Modalities of aspirational talk. *Organization Studies*, 42(3), 407-427. <https://doi.org/10.1177/0170840619896267>
- Christensen, L. T., Penttilä, V., & Stumberger, N. (2022). The communicative constitution of corporate social responsibility. In J. Basque, N. Bencherki, & T. Kuhn (Eds.), *The Routledge handbook of the communicative constitution of organization* (pp. 354-367). Routledge. <https://doi.org/10.4324/9781003224914-26>
- Coddington, M. (2015). The wall becomes a curtain. In M. Carlson, & S. C. Lewis (Eds.), *Boundaries of journalism: Professionalism, practices and participation* (pp. 67-82). Routledge. <https://doi.org/10.4324/9781315727684>
- Cornia, A., Sehl, A., & Nielsen, R. K. (2016). *Private sector media and digital news*. Reuters Institute for the Study of Journalism, University of Oxford. DOI: 10.60625/risj-x4yy-7265
- Cornia, A., Sehl, A., & Nielsen, R. K. (2020). 'We no longer live in a time of separation': A comparative analysis of how editorial and commercial integration became a norm. *Journalism*, 21(2), 172-190. <https://doi.org/10.1177/1464884918779919>
- Deuze, M., & Witschge, T. (2018). Beyond journalism: Theorizing the transformation of journalism. *Journalism*, 19(2), 165-181. <https://doi.org/10.1177/1464884916688550>
- Dijkstra-Silva, S., Schaltegger, S., & Beske-Janssen, P. (2022). Understanding positive contributions to sustainability: A systematic review. *Journal of Environmental Management*, 320, 115802. <https://doi.org/10.1016/j.jenvman.2022.115802>
- Diprose, K., Fern, R., Vanderbeck, R., Gill, L., Chen, L. V., & McQuaid, K. (2018). Corporations, consumerism and culpability: Sustainability in the British press. *Environmental Communication*, 12(5), 672-685. <https://doi.org/10.1080/17524032.2017.1400455>
- Etter, M., Ravasi, D., & Colleoni, E. (2019). Social media and the formation of organizational reputation. *Academy of Management Review*, 44(1), 28-52. <https://doi.org/10.5465/amr.2014.0280>
- Ford, J. D., Ford, L. W., & D'Amelio, A. (2008). Resistance to change: The rest of the story. *Academy of Management Review*, 33(2), 362-377. <https://doi.org/10.5465/amr.2008.31193235>
- Frig, M.-M., & Jaakkola, M. (2023). Between conspicuous and conscious consumption: The sustainability paradox in the intermediary promotional work of an online lifestyle site. *Journal of Consumer Culture*, 24(1), 3-23. <https://doi.org/10.1177/14695405231170684>

- Frig, M., & Penttilä, V. (2025). Environmental and social issues and the media game: Four ways to address mediated (in)visibility. *Media, Culture & Society*, 47(6), 1150-1167.
<https://doi.org/10.1177/01634437251331838>
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6), 433-448. <https://doi.org/10.1002/smj.4250120604>
- Grönman, K., Pajula, T., Sillman, J., Leino, M., Vatanen, S., Kasurinen H., Soininen, A., & Soukka, R. (2019). Carbon handprint – An approach to assess the positive climate impacts of products demonstrated via renewable diesel case. *Journal of Cleaner Production*, 206, 1059-1072.
<https://doi.org/10.1016/j.jclepro.2018.09.233>
- Guenther, L., Meyer, H., Kleinen-von KönigsLöw, K., & Brüggemann, M. (2023). A distant threat? The framing of climate futures across four countries. *Environmental Communication*, 17(7), 775-793.
<https://doi.org/10.1080/17524032.2023.2253500>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Sage.
<https://doi.org/10.4135/9781483384436>
- Happer, C., & Philo, G. (2016). New approaches to understanding the role of the news media in the formation of public attitudes and behaviours on climate change. *European Journal of Communication*, 31(2), 136-151. <https://doi.org/10.1177/0267323115612213>
- Harring N., Jagers S. C., & Martinsson J. (2011). Explaining ups and downs in the public's environmental concern in Sweden: The effects of ecological modernization, the economy, and the media. *Organization and Environment*, 24(4), 388-403. <https://doi.org/10.1177/1086026611420300>
- Ihlen, Ø. (2015). "It is five minutes to midnight and all is quiet": Corporate rhetoric and sustainability. *Management Communication Quarterly*, 29(1), 145-152. <https://doi.org/10.1177/0893318914563145>
- Jakobsson P., Lindell J., & Stiernstedt F. (2023). Normative foundations of media welfare: Perspectives from the Nordic countries. *Media, Culture & Society*, 45(2), 305-322.
<https://doi.org/10.1177/01634437221111914>
- Kenny, J. (2021). The evolution of environmental concern in Europe. In A. Franzen, & S. Mader (Eds.), *Research handbook on environmental sociology* (pp. 79-96). Edward Elgar.
<https://doi.org/10.4337/9781800370456.00013>
- Koep, L. (2017). Investigating industry expert discourses on aspirational CSR communication. *Corporate Communications: An International Journal*, 22(2), 220-238. <https://doi.org/10.1108/CCIJ-01-2016-0011>
- Kuntsman, A., & Rattle, I. (2019). Towards a paradigmatic shift in sustainability studies: A systematic review of peer reviewed literature and future agenda setting to consider environmental (un)sustainability of digital communication. *Environmental Communication*, 13(5), 567-581.
<https://doi.org/10.1080/17524032.2019.1596144>
- Lakanen, L., Grönman, K., Väisänen, S., Kasurinen, H., Soininen, A., & Soukka, R. (2021). Applying the handprint approach to assess the air pollutant reduction potential of paraffinic renewable diesel fuel in the car fleet of the city of Helsinki. *Journal of Cleaner Production*, 290, 125786.
<https://doi.org/10.1016/j.jclepro.2021.125786>
- Maares, P., Banjac, S., & Nölleke, D. (2023). Newsrooms as sites of community and identity: Exploring the importance of material place for journalistic work. *Journalism Studies*, 24(13), 1611-1628.
<https://doi.org/10.1080/1461670X.2023.2241074>
- Maxwell, R., & Miller, T. (2017). Making journalism sustainable/sustaining the environmental costs of journalism. In P. Berglez, U. Olausson, & M. Ots (Eds.), *What is sustainable journalism? Integrating the environmental, social, and economic challenges of journalism* (pp. 19-37). Peter Lang.
- McQuail, D. (2013). *Journalism and society*. Sage. <https://doi.org/10.4135/9781526435798>

- Morton, T. (2015). The first draft of the future: Journalism in the 'Age of the Anthropocene'. In J. P. Marshall, & L. Connor (Eds.), *Environmental change and the world's futures: Ecologies, ontologies and mythologies*. Routledge. <https://doi.org/10.4324/9781315776552>
- Neff, T. (2022). Media and cultural systems: Connecting national news dynamics and the cultures of social problems through a case study of climate change in the U.S. and U.K. *Media, Culture & Society*, 44(7), 1272-1289. <https://doi.org/10.1177/01634437221099613>
- Nerlich, B., Koteyko, N., & Brown, B. (2010). Theory and language of climate change communication. *WIREs Climate Change*, 1, 97-110. <https://doi.org/10.1002/wcc.2>
- Nordic Council of Ministers. (2019, August 20). *Our vision 2030*. <https://www.norden.org/en/declaration/our-vision-2030>
- Nordic Council of Ministers. (2021, March 23). *Art and culture – driving force for sustainable development in the Nordic region: Co-operation programme on culture policy 2021-2024*. <https://www.norden.org/en/publication/art-and-culture-driving-force-sustainable-development-nordic-region>
- Nordicom. (2024). *The 25 largest media companies in the Nordics by turnover (2022)*. <https://www.nordicom.gu.se/en/facts-analysis/nordic/factsheets/25-largest-media-companies-nordics-turnover-2022>
- Nyberg, D., Ferns, G., Vachhani, S., & Wright, C. (2022). Climate change, business, and society: Building relevance in time and space. *Business and Society*, 61(5), 1322-1352. <https://doi.org/10.1177/00076503221077452>
- Olkkonen, L. (2018). Separation or integration of journalistic and business responsibilities? Corporate responsibility in Finnish media companies. *Journal of Media Business Studies*, 15(3), 169-187. <https://doi.org/10.1080/16522354.2018.1496554>
- Painter, J. (2013). *Climate change in the media: Reporting risk and uncertainty*. Tauris.
- Painter, J. (2019). Climate change journalism: Time to adapt. *Environmental Communication*, 13(3), 424-429. <https://doi.org/10.1080/17524032.2019.1573561>
- Poroli, A., & Cooren, F. (2024). Investigating the making of organizational social responsibility as a polyphony of voices: A ventriloquial analysis of practitioners' interactions. *Human Relations*, 77(6), 768-800. <https://doi.org/10.1177/00187267231158497>
- Salvesen, I. (2018). *Should journalists campaign on climate change?* Reuters Institute for the Study of Journalism, University of Oxford. <https://reutersinstitute.politics.ox.ac.uk/our-research/should-journalists-campaign-climate-change>
- Scherer, A., & Palazzo, G. (2007). Toward a political conception of corporate responsibility: Business and society seen from a Habermasian perspective. *Academy of Management Review*, 32(4), 1096-120. <https://www.jstor.org/stable/20159358>
- Schoeneborn, D., Glozer, S., & Trittin-Ulbrich, H. (2022). Constitutive views on CSR communication: The communicative constitution of responsible organization, organizing, and organizationality. In A. O'Connor (Ed.), *The Routledge handbook of corporate social responsibility communication* (pp. 73-84). Routledge. <https://doi.org/10.4324/9781003184911-8>
- Schoeneborn, D., Kuhn, T. R., & Kärreman, D. (2019). The communicative constitution of organization, organizing, and organizationality. *Organization Studies*, 40(4), 475-496. <https://doi.org/10.1177/0170840618782284>
- Schoeneborn, D., Morsing, M., & Crane, A. (2020). Formative perspectives on the relation between CSR communication and CSR practices: Pathways for walking, talking, and t(w)alking. *Business and Society*, 59(1), 5-33. <https://doi.org/10.1177/0007650319845091>

- Schäfer, M. S., & Painter, J. (2020). Climate journalism in a changing media ecosystem: Assessing the production of climate change-related news around the world. *Wiley Interdisciplinary Reviews: Climate Change*, 12(1), e675. <https://doi.org/10.1002/wcc.675>
- Syvertsen, T., Enli, G., Mjøs, O. J., & Moe, H. (2014). *The media welfare state: Nordic media in the digital era*. University of Michigan Press. <https://doi.org/10.3998/nmw.12367206.0001.001>
- Thier, K., & Lin, T. (2022). How solutions journalism shapes support for collective climate change adaptation. *Environmental Communication*, 16(8), 1027-1045. <https://doi.org/10.1080/17524032.2022.2143842>
- Trittin-Ulbrich, H. (2023). From the substantive to the ceremonial: Exploring interrelations between recognition and aspirational CSR talk. *Business & Society*, 62(5), 917-949. <https://doi.org/10.1177/00076503221114795>
- Ulver, S. (2021). The conflict market: Polarizing consumer culture(s) in counter-democracy. *Journal of Consumer Culture*, 22(4), 908-928. <https://doi.org/10.1177/14695405211026040>
- van Laer, T., & Smith, M. E. (2025). Responsibilizing the net-zero hero? Creation and implications of a tragic subject position. *Journal of Public Policy & Marketing*, 44(4), 542-558. <https://doi.org/10.1177/07439156241300997>
- von Zabern, L., & Tulloch, C. D. (2021). Rebel with a cause: The framing of climate change and intergenerational justice in the German press treatment of the Fridays for Future protests. *Media, Culture and Society*, 43(1), 23-47. <https://doi.org/10.1177/0163443720960923>
- Weick, K. E. (1995). *Sensemaking in organizations*. Sage.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409-421. <https://psycnet.apa.org/doi/10.1287/orsc.1050.0133>
- Winkler, P., Etter, M., & Wehmeier, S. (2017). Forms of talk-action-inconsistency: Introducing reverse coupling. *Management Communication Quarterly*, 31(3), 479-485. <https://doi.org/10.1177/0893318917699523>
- Wittneben, B., Okereke, C., Banerjee, S., & Levy, D. (2012). Climate change and the emergence of new organizational landscapes. *Organization Studies*, 33, 1431-1450. <https://doi.org/10.1177/0170840612464612>