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Reflexive investigations of a neglected feature

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Reflexive investigations of a neglected feature

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strategic sustainability communication

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Johan Florén



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Abstract: Sustainability communication confronts some of society's most pressing and complex challenges. This thesis advances the field by highlighting complexity as a defining characteristic of strategic sustainability communication, a perspective that has been largely neglected. It challenges the dominant organization-centric approach that frames communication as an instrument for achieving corporate goals, and instead emphasizes a formative understanding that recognizes communication as constitutive of sustainability strategies and practices. Drawing on complexity theory and paradox theory, the thesis explores how organizations engaged in a global investor initiative to combat climate change perceive and respond to the external and internal complexities of sustainability issues. Through a reflexive methodological approach, it analyzes interviews and six years of initiative reports to understand how communicative processes are shaped by "wicked problems" and organizational tensions between sustainability and financial goals. The results show that conceptual ambiguity, stakeholder diversity, non-linear development and organizational paradoxes challenge dominant strategic communication models. Instead, the study argues for a shift towards more interactive, adaptive and sensemaking communication approaches. By identifying and empirically applying key complexity concepts, the thesis contributes to theory development in sustainability communication and provides rare insights into investor organizations as central but understudied sustainability communicators. It advocates a reorientation of stakeholder logic, from organizational control to societal engagement and issue focus, to address the grand challenges of our time.

Key words: Strategic communication, Sustainability communication, Formative communication, Grand Challenges, Complexity, Paradox, Institutional investors, Climate Action 100+

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Formative conversations as foundation for strategic sustainability communication

Reflexive investigations of a neglected feature

Johan Florén



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To Lotti and Viggo with love and gratitude

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List of Papers

Paper I

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Paper II

Florén, J. (2025). Sustainability Communication Beyond the Business Case Frame: A Study of Investors Making Sense of Paradoxical Tensions. In *Strategic Sustainability Communication: Principles, Perspectives, and Potential* (pp. 143-160). Cham: Springer Nature Switzerland.

Introduction

A ‘superwicked problem.’ That’s the way many scientists have come to characterize climate change – and it’s not because they have a fondness for New England slang. A wicked problem is one that is so complex, with so many different causes and stakeholders, that it is all but impossible to solve completely. Poverty is a wicked problem; so is terrorism. But those pale in comparison with what’s happening to our planet.

TIME Magazine (Walsh, 2015, p. 7)

I became involved in sustainability issues in business and investment in the early 2000s, and for as long as I can remember, there has been an ambition to shape the field with accounting as a model. The idea is that sustainability should be something clearly defined and widely recognized; something regulated, predictable and easy to measure. Over time, that ambition has increasingly appeared as a problem.

When the UN Sustainable Development Goals (SDGs) were launched in 2015, 191 member states had agreed on 17 goals with 169 targets to be achieved by 2030. At the time, I was responsible for sustainability issues at a pension fund with ownership in 3,000 companies, and together with many colleagues in the industry, I saw this as a major step towards a long-awaited consensus and clarity. That is, until it was time to translate the SDGs into concrete actions and it became clear that the problems are interconnected in long chains of dependencies. Sometimes the goals even conflict with each other. Where to even begin?

For me, this was a direct experience that left a lasting impression of how difficult these problems are to solve, with all the conflicting goals, dependencies, and the large number of actors involved. Complexity defines the entire ever-changing field with different issues and initiatives succeeding each other as the center of actors' attention. Simply staying up to date on the changes becomes a central part of the job.

Since then, I have been puzzled by how limited an impact this fundamental condition has had on both practice and research, and how traditional management approaches remain unchallenged despite their obvious shortcomings in dealing with complexity. After all, every organization that has

chosen to engage with the issues has been forced to deal with them, whether they want to or not. This sense of wonder has been a strong motivation for conducting the study: a desire to understand how organizations are affected by the complexity of sustainability issues, how they deal with it, why the impact on strategies is limited, and what they can do about it.

Instrumental economic framing dominates

Many of the most intractable societal problems of our time are related to sustainability and are often referred to as “grand challenges”. They are complex and involve many interactions, new understandings and nonlinear dynamics with effects that extend beyond the boundaries of a single organization or community (Ferraro et al., 2015). In this context, the importance of communication has not received the attention it deserves.

Sustainability communication has been researched in many different fields for decades (Coombs & Holladay, 2021; Kemper & Ballantine, 2019; McDonagh, 1998). Among the most common research areas are green marketing communication, sustainability reporting, and greenwashing (Golob et al., 2023). The concept of *strategic* sustainability communication, on the other hand, is still in its infancy but clearly evolving (Weder, 2025). As it addresses urgent but intractable problems that are far from solved (Ferraro et al., 2015; George, et al., 2016; Smith et al., 2017), the development can be expected to continue.

A problem with sustainability communication at the meso level has so far been that an organization-centric perspective has had a hegemonic position, where communication is seen only as a tool for achieving strategic goals (Hahn et al., 2018; Lock, 2025; Schoeneborn et al., 2024; Weder, 2023). Instrumental economic framing of sustainability has dominated (Verk et al., 2021), even to the extent that some researchers consider the potential for further research to be depleted (Dzhengiz & Hockerts, 2022). levin

The instrumental approach rests on the underlying assumption that communication can be controlled, something that does not follow from the definition of strategic communication. Strategic communication takes the environment into account through dialogue and emergent strategies that relies on the participation of many people to bring richness to the process (Holtzhausen & Zeffass, 2014). However, with a functionalist approach, it is still fundamentally managed, purposive and organization centered (Murphy, 2014).

Falkheimer and Heide (2015) explain the dominance of a functionalist applied approach in strategic communication and related fields, with

practitioners' need for simple, standardized models and positivist research ideals. Nevertheless, the dominant approach ignores one of the central premises of sustainability communication: the inherent complexity of the problems to be solved. These problems are “wicked” (Rittel & Webber, 1973).

Wicked problems often cannot be defined until the solution has been identified. They are societal problems that are complex, unpredictable, open-ended, and intractable (Head & Alford, 2015), characterized by system complexity, conflicting goals, and information uncertainty (Levin et al., 2012; Newig et al., 2013; Termeer et al., 2019). As the opening quote suggests, researchers have even identified climate change as a “super wicked” problem (Levin et al., 2012), given that time is running out, central institutions are weak, and those trying to solve the problem are also the ones causing it. The concept of wicked problems can be considered a precursor to grand challenges (Dorado et al., 2022), a concept that has received considerable attention in recent decades, with the UN's 17 Global Development Goals being the most widely accepted examples today (George et al., 2016).

Formative communication emerges

The thesis foregrounds complexity as one of the most important characteristics of sustainability communication, something that has been largely neglected to date. Diversity of actors with different agendas is part of the complexity of sustainability challenges. To define the problem and identify solutions, organizations therefore need to have continuous engagement with a broad diversity of stakeholders representing broad and varying views (Roper & Hurst, 2019). Thus, sustainability communication comes to the fore, or as Rittel and Webber succinctly put it: “The formulation of a wicked problem *is* the problem!” (1973, p. 161). As long as sustainability problems are not considered wicked but tame and complexity is neglected, it constitutes an obstacle that risks becoming insurmountable.

The communication theoretical premise of the thesis is an analytical division between functionalist and formative perspectives on communication (Schoeneborn et al., 2020). Both perspectives capture essential aspects of the practice and are therefore included in the study, although formative approaches are foregrounded due to the complexity of the subject, which is a latent trigger for sensemaking. As long as the purpose of sustainability communication is to transmit information and influence target groups, the complexity of the issues and organizational tensions are potential barriers to completion and

effectiveness. When sensemaking is the focus, the situation is reversed. Complexity entails recurring communication efforts to make sense of ever-changing conditions and thereby drives the development of practice. Functionalist research is based on the assumption that communication conveys information that represents an "external reality", in this case the sustainability practices of organizations, between different parties. The formative research approach instead considers practices as wholly or partly constructed by sustainability communication.

The instrumental economic framing of sustainability naturally places the organization at the center, but so does the stakeholder model, which will be touched upon later. Stakeholder theory, one of the most prominent lenses for studying sustainability communication, has so far mainly developed instrumental approaches where communication is driven by the importance of stakeholders in achieving the company's goals (Crane & Glozer, 2016). Therefore, some researchers want to turn the dominant organization-centered perspectives upside down to put society in focus (Lock, 2025; Schoeneborn et al., 2024; Wickert, 2021). This would mean a shift in the dominant stakeholder logic, with a better ability to anticipate problems and contribute solutions to grand challenges as a result for professionals (Lock, 2025). The thesis explores this path further.

Research aim, questions and contributions

Strategic communication in organizations engaged in sustainability issues encounters many forms of complexity. The overall aim of the thesis is to develop a deeper understanding of the complexity that characterizes strategic sustainability communication. To this end, the role of complexity in organizations' communication processes is examined primarily in two dimensions. First, as an external condition inherent in the intractable problems, which the organization is forced to consider to an increasing extent the more they engage. Second, as an internal phenomenon that arises when the organization adds sustainability goals to the financial goals and paradoxical tensions arise in the operations.

To explore these dimensions, an interview study is conducted with organizations participating in a global investor initiative to combat climate change, using complexity theory and paradox theory for analysis. In addition, a document analysis of six years of progress reports from the initiative is conducted, supplemented with contextual material. The methodological

approach is reflexive (Alvesson & Sköldbberg, 2018) with an abductive process that requires awareness of pre-understanding, values, and biases, given that all research is situated in time, place, and experience (Gani & Khan, 2024).

More specifically, the two articles in the thesis ask the research questions: how organizations (1) perceive that their communication processes are affected by the complexity of the problems they want to solve, and (2) make sense of the paradoxical tensions that accompany sustainability approaches. Both articles follow up on the communication consequences of the answers to the first question, and the second article also explores what an alternative to the business case frame could look like.

The selected case, Climate Action 100+ (CA100), offers rich opportunities to study multiple dimensions of complexity. Global equity investors have thousands of holdings across all industries and regions and therefore need to manage all types of sustainability-related risks and opportunities at multiple levels, including financial, human and nature-related as well as regulatory and political dimensions. They are thus exposed to the complexity of the entire global system, which has profound implications for their view of sustainability (Bril et al., 2020). This exposure, both multifaceted, broad and specific, is difficult to match. The initiative itself can be seen as a direct response to exposure to an overwhelming complexity that is difficult for individual organizations to manage (Schneider et al., 2017; Seidl & Werle, 2018).

If complexity is not recognized, understanding of the field among both researchers and practitioners will be hampered. By empirically examining several aspects of the complexity that characterizes strategic sustainability communication, the study contributes material that deepens the understanding of the conditions and potential for this communication. Empirical material is needed to further develop complexity perspectives in communication research that usually remain at a conceptual level (Poutanen et al., 2016). For example, we know very little about how organizations deal with extreme levels of ambiguity that risk leading to a breakdown in organizational sensemaking (Pop & Seidl, 2020).

At the same time, reflexivity contributes to theory development by placing it in an empirical context and studying the results. Complexity theory is a multifaceted collection of concepts that lack distinct structure and context (Gilpin & Miller, 2013), and identification and analysis of concepts of particular importance for research on sustainability communication is needed. The thesis identifies some of the complexity concepts that are useful for research on strategic sustainability communication and places them in an empirical context.

In addition to unpredictable external conditions and paradoxical tensions within organizations, conceptual ambiguity and changeability are another challenge for organizations engaged in sustainability issues. For researchers, the challenge is perhaps even greater, since language is such an important instrument. Lack of rigor, ambiguities and conceptual confusion easily become major obstacles to knowledge development. Despite this, the prospects for increased clarity and consistency in the foreseeable future are bleak, which instead speaks in favor of embracing the dynamics that complexity creates. The complexity of language and the complexity of society and the environment are mutually dependent on each other (Siebert, 2011). The situation is reflected in the thesis's introductory summary in a brief analysis of sustainability language and concepts.

When looking at sustainability issues from a macro perspective, the investment community is a key player in addressing the “wicked problems.” To state the obvious, financing solutions will be needed regardless of the measures decided, but equally important is that owners are the only ones with a formal mandate to govern companies and enforce accountability within the bounds of the law. In addition to allocating resources and governing companies, investors also have an increasingly strong voice in the societal dialogue necessary to address grand challenges. The thesis contributes empirically based insights into this important group of “sustainability agents”.

Furthermore, the thesis contributes research on strategic sustainability communication among investors, i.e. research on investor organizations' communication about their own sustainability perspectives and practices, which is rare. Research on organizational sustainability-related communication in general has largely focused on companies, whether it concerns green branding (Chen, 2010), CSR communication (Du et al., 2010) or investor relations (Hockerts & Moir, 2004). In current literature, the emphasis is still largely on reporting standards and regulations, where investor communication plays a marginal role (Bednárová & Soratana, 2025; Neumann & Forthmann, 2024) as it does in corporate communication where investors are primarily stakeholders (Thaker, 2025). In addition, there is also other research, such as on the connection between investments and sustainability in finance (Friede et al., 2015) and on ESG reporting in accounting (Brooks & Oikonomou, 2018), which is related but does not focus on communication.

Thesis outline

The thesis is a compilation with an introductory summary (“kappa” in Swedish) and two articles (an article and a book chapter). After the introduction in the “kappa”, an analysis follows in the second chapter of the concept of strategic sustainability communication and complexity in sustainability language. The third chapter presents the theoretical framework, which has two parts, where the first part introduces the analytical distinction between functionalist and formative communication. The second part presents the theories used to capture different dimensions of complexity in the article and in the book chapter: complexity theory and paradox theory. The fourth chapter presents methodology and research design as well as the role of values and ethical considerations. The fifth chapter summarizes the article’s central content, and the sixth chapter summarizes the thesis’s overall conclusions and contributions.

Strategic sustainability communication

This chapter consists of two parts. The first part analyzes strategic sustainability communication as an emerging research field at the interface between strategic communication and sustainability communication. The second part explores the complexity of language and concepts related to sustainability.

Mapping the components

Communication research related to sustainability issues has been a theme in various disciplines for many decades (Carroll, 2021; Kemper & Ballantine, 2019; McDonagh, 1998). Now, strategic sustainability communication is slowly emerging as a new field of research (Weder, 2022). Judging by terminology, the field materializes at the interface between *strategic communication* and *sustainability communication*, two research areas that have emerged themselves over the past two decades.

Strategic communication was already used as a research concept in the early 2000s (Falkheimer & Heide, 2022), but as a discipline, development took off in 2007 with the publication of the first issue of the *International Journal of Strategic Communication*. According to Heath (2022) no moment in intellectual history of strategic communication was more important than this publication. Originally, strategic communication was defined as "an organization's purposeful use of communication to fulfill its mission (Hallahan et al., 2007, p. 3). Later, the definition has evolved to "an organization's or other entity's purposeful use of communication to engage in conversations of strategic importance to its goals" (Zerfass et al., 2020, p. 493).

As part of the process of developing the definitions, there has been criticism from researchers who believe they have been too narrow (Zerfass et al., 2020). Among other things, these definitions have been considered to neglect emerging strategies and strategies-in-practice, to be too organization-centric,

and to fail to include stakeholder interests. They have also been perceived to ignore the constitutive role of communication in strategy formulation and to overemphasize communication experts at the expense of the day-to-day communication activities of other organizational members. Although some of the criticism has been based on misunderstandings, Zerfass et al. (2020) see these observations as valuable.

So, what are the implications of communication being strategic? First, not all communication is strategic, for example when it comes to routine issues that are handled through well-established routines (Zerfass et al., 2020). Annual reporting is important, but hardly strategic communication in itself. Conversations of strategic importance are also not tied to a specific context but develop over time and can take place in a variety of arenas. As circumstances are constantly changing, the parties involved must ensure that they keep pace with changes in the communication landscape, technological drivers and actors that influence it. The conversation participants include many types of actors with given responsibilities, resources and purposes that are often contested due to competition or antagonism. Strategic conversations will therefore inevitably have elements of dissent, but include both messaging and listening, and all types of earned, paid, owned and shared media can be used. Communication does not have to be tied to top management to be strategic, but it must contain elements of complexity and uncertainty, otherwise the use of the term "strategic" is simply pretentious, according to Zerfass et al. (2020).

Although the subject has achieved some stability, there are competing theoretical preferences within strategic communication research. Historically, for example, European scholars have tended to study strategic communication as a phenomenon that affects society, while American scholars have typically studied the field as a process that includes goal setting, audience analysis, message design, choice of communication channels, and evaluation (Heath, 2022). Recent criticism concerns the lack of integration between the concepts of strategy and communication. Existing research tends to emphasize dialogical communication over strategy and persuasion (Reissner & Falkheimer, 2025). While it is understandable that engagement and participation are seen as ideals, this does not reflect all aspects of practice. In contemporary organizations, strategic communication has a dual role, balancing a persuasive side and a dialogical participatory side. The distinction between transmission and reciprocal communication approaches has explanatory value and can be used to analyze, explain, and understand why organizational communication does not always work optimally.

Sustainability communication as a separate research field is less established than strategic communication, but there are notable parallels. In the first decade

of this century, theoretical approaches in public relations began to be linked to the concept of corporate communications on sustainability, and professionalization was seen as crucial to securing a growing field (Signitzer & Prexl, 2007). A first handbook on the subject was published in 2011, identifying sustainability communication as a new concept for an integrated strategy that brings together core elements from different communication perspectives (Adomßent & Godemann, 2011). The book emphasizes the central role of complexity and uncertainty in sustainability debates and their core concepts, given the lack of conclusive answers on how to deconstruct complex issues and make them understandable and relevant to all stakeholders (Godemann & Michelsen, 2011).

Like many researchers, Godemann (2021) conceptualizes sustainability communication as an interdisciplinary field grounded in a broad spectrum of disciplines, knowledge bases, and methodological approaches. The sustainability discourse emerges from several discourses, with environmental communication, risk communication, climate communication, and science communication identified as some of the most important. As the social and environmental consequences of human behavior become clear in the form of global climate change and increasing inequality, Godemann (2021) argues that the role of sustainability communication has become at least as important as the scientific content itself in shaping how people interpret information and make decisions.

Weder et al. (2021) refer to Elkington and Rowlands (1999) to recall the core idea behind sustainability as a balance between economic prosperity, planetary resilience and acceptable living conditions for people. They identify three forms of sustainability communication: communication *about* sustainability issues in public discourse (construction of meaning), communication *of* sustainability as a one-way transmission of information about policy or practice (instrumental), and communication *for* sustainability (a call to action, NGOs).

A study by Golob et al. (2023) confirms the view that sustainability communication is an emerging field. Their analysis shows an exponential increase from a low level of academic articles on the topic, with the majority published after 2015. The large volume of new publications further underlines that sustainability communication is still a young academic field. Today, it encompasses a wide range of theories, research methods and approaches from related fields such as marketing, communication, advertising and sustainability studies (Golob et al., 2023). The growing popularity of the field indicates that academia is responding to global challenges. At the same time, the authors warn that the rapid expansion of research has led to inconsistencies and

contradictions that require more rigorous methods and systematic organization.

In an analysis of the development of the strategic sustainability narrative over three decades, Weder (2023) states that sustainability is not only a principle of action but also a norm that has increasingly become a token for sustainable behavior. The dominance of instrumental sustainability communication is an explanation for the tokenistic, symbolic use or misuse of sustainability in marketing and business communication. This has been reinforced by the increasing amount of research aimed at further optimizing sustainability communication. Lock (2025) makes a similar observation, attempting to turn the dominant organization-centric perspectives upside down and focus on societal issues rather than business goals. The focus then becomes an analysis of how actors can influence the public sphere through strategic communication, not how organizations can achieve their goals through strategic communication within societal constraints. For practitioners, this would mean a shift in the dominant stakeholder logic, with better signals for predicting future problems and the ability to contribute solutions to grand challenges as a result (Lock, 2025).

Synthesis

Against this background, *strategic sustainability communication* can be seen as an organization's or other entity's purposeful use of communication to engage in conversations about sustainability of strategic importance. From its interdisciplinary origins, strategic sustainability communication has materialized as a research area. Different disciplines that have united around global sustainability challenges have created dynamic conditions where different theoretical frameworks and methodological approaches have met and integrated into new, expedient forms. From this point of view, a natural step for further developing the field is to identify some of the most central features of this rich diversity, both to provide a clearer direction and to deal with inconsistencies and contradictions.

In line with the criticism of narrow definitions of strategic communication, the dominant, organization-centered perspective has been criticized for hindering the development of sustainability communication in both research and practice (Hahn et al., 2018; Lock, 2025; Schoeneborn et al., 2024; Weder, 2023). The main focus of strategic sustainability communication must be the societal problem, rather than the organization's business goals. Of course, business goals cannot be neglected in any way, but for strategic sustainability

communication, business goals are part of the prerequisites rather than the purpose of the communication.

With this in mind, strategic sustainability communication needs to highlight the constitutive function of communication as a neglected key component in solving complex societal problems (Zerfass et al., 2020). This is important because it can stimulate creative and engaged solutions for nature and society (Golob et al., 2023), but above all, without some kind of general agreement on what the problem is among the parties involved, effective solutions will remain a pious hope. Similarly, emergent strategies need to be emphasized, which gradually adapt goals and activities to the complex conditions of recurring, unpredictable changes in the organization's environment. To have a realistic perspective on strategic sustainability communication, one must embrace the messiness, risk-taking, and chaos of communication practices. The view of strategy as control is widely dismissed (Holtzhausen & Zerfass, 2014). Rather than long-term planning, strategizing is a process of assumptions, exploration, and adaptation for the participating organization.

The criticism of the lack of integration between the concepts of strategy and communication (Reissner & Falkheimer, 2025) is worth considering, as there will always be elements of transmission and persuasion that are important for understanding the whole. Routine issues that are handled through well-established routines, such as producing sustainability reports in accordance with legal requirements and regulations, do not in themselves qualify as strategic sustainability communication. However, routine issues and tactical elements can still play a role as part of conversations of strategic importance about sustainability. A broadening of the selection of decision-makers is also justified, as pure communication experts become too narrow when it comes to sustainability issues. The lack of consideration of stakeholders' expectations and interest in strategic communication research is less relevant, as these are a well-established part of sustainability communication with low risk of neglect.

Sustainability language

Sustainability communication within organizations is not only about insoluble problems, unpredictable changes and conflicting goals, but is also characterized by a lack of clear concepts and consistent language. This section explores the complexity of the overall concept of sustainability and then the diversity of acronyms and concepts that are more rooted in practice.

An umbrella concept

The concept of sustainability rests on the “three pillars” of social, economic and environmental sustainability. These are three distinctly different perspectives that are nevertheless the subject of persistent integration ambitions (Purvis et al., 2019). The fact that the conceptual foundation does not come from a single source makes it difficult to develop operational frameworks grounded in theory. Since the concept brings together a variety of approaches, across different sectors and levels of society, it is not surprising that its content is both complex and contested (Ruggerio, 2021).

Definitions of sustainability are mostly linked to the so-called Brundtland Report, which has shaped development since it was first published (Weder et al., 2021). "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 41). The report was used as the basis for the UN's so-called Millennium Development Goals, which set the development agenda for the period 2000–2015.

Today, sustainable development and the UN's 17 Sustainable Development Goals (SDGs) are the most important guideposts for addressing sustainability challenges, such as climate change. Yet, sustainability is a term that must be handled with caution as it is characterized by high complexity and uncertainty for both organizations and individuals (Weder, 2021). The concept of sustainable development is often associated with the concept of sustainability, notes Ruggerio (2021) and the terms are used synonymously despite criticism, even in academic and scientific fields. Ziemann (2011) calls for more analysis of the sustainability concept, its discourse context and operationalization. He argues that research on sustainability communication often gives it a secondary status, when in fact it is the opposite. Once something has become an issue, it is communication that gives an event its social relevance and significance.

Society needs to develop a language for sustainability that can describe complex aspects of nature and society, while being simple enough for those affected to absorb the content (Coombs & Holladay, 2021). For sustainability communicators, it leads to a latent tension between conflicting needs that require continuous conceptual development and multiple layers of coherent descriptions. This is a challenge, and therefore also a crucial contribution from communicators. Social order is produced and reproduced in communication, and the more successful it is, the more coherent the social order becomes (Siebert, 2011). However, consensus is not the primary goal or prerequisite of communication. On the contrary, a diversity of different voices is important

for communication to continue, which in turn requires conversational arenas that can accommodate the multivocal process.

Every event that is well-known today has already passed through the selection and production of media machinery (Ziemann, 2011). A study by Lock et al. (2024) shows that sustainability has become a widely used term in public discourse with a variety of meanings and implications. However, although perceptions differ between news media, businesses and consumers, this variation is not reflected in news coverage. The authors conclude that mainstream news does not adequately reflect the public debate and therefore does not provide a sufficient arena for different perspectives on sustainability.

The alphabet soup

Anyone entering the field of sustainability is easily overwhelmed by the number of acronyms, sometimes called the “alphabet soup” (Blomme & Basha, 2021). There are many overlapping concepts of sustainability that have emerged in different contexts and coexist without clear distinctions, which is reflected in research where different researchers argue for different positions. Some of the most common terms are “sustainability,” CSR (Corporate Social Responsibility), CS (Corporate Sustainability), ESG (Environment, Social, Governance), and “sustainable development”. However, there is broad agreement on one thing: clarity is lacking.

In a 2021 article, Sheehy and Farneti argue that “sustainability” and the related terms corporate social responsibility (CSR) and corporate sustainability (CS) have been used so extensively that they risk losing all meaning. Over time, they have come to be used synonymously, confusing policymakers, managers, regulators, activists, and the public. The ambiguity hinders efforts to improve businesses globally, and the differences need to be clarified. Other scholars argue that concepts such as CSR and CS, despite their different backgrounds, are converging towards a “common future.” The development reflects existing approaches where the concepts are completely interchangeable. This in turn opens up the possibility of increased collaboration between scholars in different subfields, which could lead to the broader field of management research (Montiel, 2008).

Adi and Stoeckle (2021) point out that CSR and sustainability are concepts under development that must be understood in their context. The terms are blurry defined, they overlap, and they are often treated as synonymous. Indeed, in the joint article, the authors go so far as to state that they do not even agree with each other. While Adi sees CSR as an umbrella concept where sustainability is a subcategory, Stoeckle sees CSR as a narrow business

perspective and sustainability as a broader concept that includes consideration of the society and ecosystem within which the organization operates. Aslaksen et al. (2021) note in a study of the development of the CSR concept that it is used less and less in public conversations, where CSR discourse is increasingly integrated into the sustainability discourse, at the same time as interest in CSR has increased in academic literature over the past decade.

Another related concept is ESG, which is used to integrate environmental, social and governance issues into the business models of companies and investors. The acronym ESG was introduced in a 2004 report by 18 financial institutions in response to a call from UN Secretary-General Kofi Annan (Pollman, 2024). CSR is thus a predecessor to ESG. Today, corporate responsibility is linked to ESG risk (Karwowski & Raulinajtys-Grzybek, 2021). A difference between the two concepts is that ESG explicitly includes governance, while CSR often includes governance issues indirectly in environmental and social considerations (Gillian et al., 2021). ESG focuses on investment risk and tends to be a more comprehensive terminology than CSR, with systematic and detailed analysis of a variety of criteria by global service providers.

Other concepts that have previously received much attention are the *triple bottom line* (Elkington & Rowlands, 1999), which provides a rough categorization of the field into "profit, people and planet", and *corporate citizenship* which has a certain emphasis on ethics and philanthropy. Like many others, neither concept is clear nor used in a consistent manner (Alhaddi, 2015; Valor, 2005).

The most common view of the prevailing conceptual ambiguity is negative, but some researchers perceive that the lack of unambiguous standards can be a good thing. Christensen et al. (2017) do indeed view sustainability as an amorphous phenomenon that affects contemporary organizations, but see a positive potential, not as a clear agenda, but as a forum for sensemaking and debate about expectations linked to corporate activities. When research identifies sustainability as an arena in constant flux and a continuing state of emergence, it acknowledges the ambiguity of the phenomenon but also its communicative potential to stimulate debate and the search for better practices.

Similarly, Weder (2025) advocates that sustainability should be viewed and managed in a way that acknowledges its non-definiteness and unfinishedness. She argues that strategic sustainability communication, rather than seeking the most concrete and narrow definition, should encompass all processes and structures that trigger conversation and new conceptual thinking around the situation. "This means that sustainability communication is not (only) intentional

communication toward what already exists but rather communication that intentionally searches for what doesn't exist yet" (Weder, 2025, p. 9).

As is clear from the above review, there is complexity and paradoxical tensions even in sustainability language. It needs to develop a high level of complexity to relate to the physical and social world in sufficient detail, but it also needs simplicity to achieve broad understanding and decision-making functionality. High functionality requires agreement on the validity of the description, and the regulation of terminology creates order, predictability and conditions for accountability. At the same time, a diversity of different aspects creates a dynamic discourse where the disagreement between different actors and interests is a force that drives development forward in a field that is far from mature.

All in all, this means that linguistic complexity is an unavoidable circumstance that both researchers and practitioners simply have to accept. It is driven by our attempts to deal with intractable problems that shape and are shaped by our language. As long as the problems are urgent and the solutions are distant, linguistic diversity with recurring changes and limited coordination is the only reasonable expectation. On the other hand, it may be exactly the driver that the process needs to continue to develop and not lose momentum.

Theoretical framework

This section provides an in-depth description of the theoretical framework for the study of complexity that characterizes strategic sustainability communication. The theoretical framework includes a communication part that distinguishes the dominant functionalist view of communication from formative perspectives that have significant importance due to the complex conditions. The second part of the framework concerns the characteristic itself and presents the two theories that are used to operationalize complexity and analyze how it affects organizational communication processes.

Functionalist and formative communication

The development of strategic communication as a discipline has been described as a tension between the paradigms of “organizing to communicate” and “communicating to organize” (Heath, 2022). This type of dichotomization is of course a simplification of a complex reality, and only one among many categorizations. Another division is into one-way and two-way communication, and in combination with power symmetry, this results in additional classes (Grunig & Grunig, 2013; Kent & Lane, 2021). Communication can also be seen as focused on either goal effectiveness or public participation, which can even be used to distinguish on a metatheoretical level between effectiveness-oriented and participation-oriented communication theorists and practitioners (Torp, 2014). Craig (1999) presents a more sophisticated categorization by sorting communication theories into seven different traditions and considering the constitutive model as a metamodel that opens a conceptual space for different theoretical models of communication to interact.

Holtzhausen and Zerfass (2014) identify the transmission model, which focuses on conveying information from one point to another, and constitutive communication, which focuses on process and meaning-creation, as two strong theoretical traditions in communication. They argue that from a theoretical

perspective, it is the convergence of these two traditions that distinguishes strategic communication from other communication disciplines. In line with this view, this thesis uses a division into functional and formative communication (Schoeneborn et al., 2020) as an analytical distinction to illuminate different aspects of organizational communicative practices, without rejecting either side. It thus acknowledges the dichotomy and convergence of traditions as characteristic of strategic communication but does not delve further into different ways of categorizing approaches and traditions within research or practice.

Shannon and Weaver's (1949) transmission model remains simple and useful for practitioners to connect audiences, media, and message construction in communication processes. However, for the communication strategist, it is important to understand that all meaning is constructed through a process of communication, either face-to-face or through other channels, which often focuses on conflicting arguments (Holtzhausen & Zerfass, 2014). Strategic communicators cannot simply view media as channels of communication and audiences as recipients of messages but must also consider how meaning is formed in the process of interaction with stakeholders who interpret and reproduce media content in the process. Only then can strategic communicators understand how their practices influence and shape society. This forces academics and practitioners to consider both the constitutive nature of all communication and the mediated transmission in the strategic communication process.

Although both perspectives capture essential aspects of communication practice, formative approaches come to the fore due to the inherent complexity of the subject of communication. Functionalist research is based on the assumption that communication transmits information that represents an "external reality", in this case the sustainability practices of organizations, between different parties. The focus of the research is often on the correspondence between actions and words (walk and talk), i.e. whether companies live up to their expectations or not. The walk-talk dichotomy is taken as a starting point by Schoeneborn et al. (2020) in an article on formative perspectives on communication and sustainability. The formative research approach differs from common studies of reporting, greenwashing and hypocrisy, which is based on the assumption that sustainability communication reflects sustainability practices, as it instead considers practices as wholly or partly constructed by sustainability communication.

Three Types of Formative Communication

Based on the phrase “walk the talk”, Schoeneborn et al. (2020) define three types of formative sustainability communication defined by three different relationships between words and deeds. In the first case, sustainability practice is the starting point for sustainability communication, which means that action precedes words. In the second case, the order between words and deeds is the reverse, the sustainability practice is shaped by the sustainability communication. The third category is more complex. While the first two types of relationship between words and deeds have a clear sequential succession where one follows the other, the third type is characterized by simultaneity. Words and deeds are two sides of the same coin, and the very dichotomy is erased.

(i) Walking-to-talk

The first type of formative sustainability communication is similar to functionalist communication in that it is preceded by sustainability practice but differs in that it involves feedback that in turn influences the organization's sustainability practice. Communication has an indirect impact on the design of the practice in that stakeholders' reactions to reporting and communication of implemented sustainability practice become an important vantage point for future sustainability practices. On the same theme, a pure legitimacy strategy can be compared to a genuine stakeholder dialogue. While the purpose of a functionalist legitimacy strategy is primarily to influence stakeholders' perceptions of the organization, a central idea of stakeholder dialogue is that the organization also is influenced and develops its sustainability practices. The ambition of stakeholder engagement is not only communication *to* stakeholders, but also communication *with* stakeholders. Kujala and Sachs (2019) see this as a transition from stakeholder *debate* to stakeholder *dialogue*, that ideally is an interactive, developing and exploratory, sensemaking process for organizational learning.

Kujala and Sachs (2019) believe that respecting critical and silent voices is part of effective stakeholder communication but emphasizes the importance of consensus around the process itself. Otherwise, the specific agendas of stakeholders risks developing into conflicts that can no longer be managed through dialogue and compromise. Developing a common ground in the form of ideas, experiences, values and information shared by the parties is particularly challenging when faced with “wicked problems” that involve many different parts linked to other problems. Sensemaking is a crucial component and Lehtimäki and Kujala (2017) propose a discourse perspective

on the process because language reflects but also shapes dynamic stakeholder relationships. In this study, feedback from stakeholders about a lack of transparency seems to have led to adjustments on the initiative's part, while accusations of collusion could not be managed through dialogue and compromise, as there was never any common ground.

Inspired by democratic ideals, Morsing and Schultz (2006) place participation, dialogue and involvement at the heart of stakeholder theory. They question the general assumption that managers need to improve their information strategies to keep the public better informed about sustainability initiatives, thereby achieving legitimacy and a good reputation. Such a communication strategy has a narrow focus on one-way communication and risks falling victim to the self-promoter paradox. Instead, "minimal" publications like annual reports and websites are a form of sustainability communication that stakeholders prefer over advertising, promotions, and public relations.

Most importantly, Morsing and Schultz (2006) argue that the meaning organizations create and convey about themselves and their activities, are not neutral activities but constitutive actions that contribute to the continuous enactment of organizational reality. This statement reflects a speech act theoretical perspective where utterances are considered performative. According to this view, words not only represent reality but also do things (Austin, 1975), something that the next form of formative communication develops further.

(II) Talking-to-walk

In this category of formative perspectives, sustainability communication and sustainability practice are also separate phenomena, but with a talk-to-walk logic, the temporal order is reversed. Sustainability communication has the main role in creating sustainability practices, especially through the exploratory and anticipatory potential of sustainability communication (Schoeneborn et al., 2020). The concept of "aspirational talk" (Christensen et al., 2013) exemplifies the logic. Differences between companies' sustainability communication and sustainability practices cannot automatically be condemned as greenwashing. On the contrary, they can be an important driver for organizational and social change. Communicating future sustainability ambitions paves the way for their realization.

Organizations are seen as communication systems where language has "performative" properties that entail practical consequences. Management communication is a speech act that not only describes "how it is" but above all constitutes a confirmation of how things "should be" (Winkler et al., 2020).

The inconsistency between “what is” and “what should be” is then the very driving force for change. Aspirational speech that conveys management’s visions of sustainability also contributes to realizing them. The core is a view of organizations that, in the process of understanding their environment, simultaneously create it. By interpreting their situation and imposing an order on the environment, e.g. in the form of a plan, strategy or concept, the organization limits its operational possibilities and shapes the world around it in a way that it can relate to (Christensen et al., 2013).

With this view, communication is not just a temporary activity that organizations engage in alongside other essential functions. It is a fundamental prerequisite for all forms of organizational life and sensemaking (Christensen et al., 2013). The production and reproduction of organizations consist of a constant flow of communication in which a self-referential chain of decisions (decisions that refer to decisions that refer to decisions and so on) organizes the activity and moves it forward. In this way, decision communication becomes the raw material for constructing the organization, even when decisions are not fully implemented. In the study, it is the initiative itself that primarily shows examples of aspirational communication, for example by making future commitments in progress reports, while the investor organizations perceive it as an unnecessary risk they avoid.

When communication is considered the medium of the organization, there is no meaningful distinction between what the organization says and what it does. Saying is doing, and actions inevitably “speak.” Aspirational communication cannot be dismissed as misleading “fluff” disconnected from organizational practice. Talking about sustainability plans and intentions is a form of action, just as sustainability activities themselves communicate. However, Christensen et al. (2013) observe that aspirational communication poses an inherent challenge as it still distinguishes between words and actions, which can lead to resistance or even demands for consistency, despite being crucial for driving development forward.

Against this background, Winkler et al. (2020) advocate a dynamic interpretation of the relationship between words and actions, rather than a linear and evolutionary understanding. Furthermore, a shift from “self-persuasive” to agonistic rhetoric is necessary for aspirational communication to have a constitutive function. They argue that self-persuasive rhetoric forces decoupling, while agonistic rhetoric sees visions as provisional and engagement in tensions as a central driver of substantial sustainability practice. This allows researchers to move beyond simplistic binary thinking and create a better understanding of the reverse, selective, and circular dynamics between

words and actions. This argumentation can be seen as a prelude to the last type of formative communication.

(iii) T(w)alking

The third formative perspective has a higher degree of complexity and goes beyond the analytical separation of sustainability communication and sustainability practice, which instead continuously constitute each other and create meaning. There is thus no linear temporal sequence between words and actions in the perspective. Time is always now in the sense that the past and future are always seen through the present and are part of the present. Christensen et al. (2020) call this "reflexive time".

An example of this perspective is Hoffmann (2018), who investigates how dominant academic discourses either constitute or deny potential paradoxes related to sustainability. He argues that paradoxes are constructs, but that the same applies to their opposite, and notes that non-paradoxical approaches dominate, which limits research. The tendency to deny tensions is found in several places. From the perspective of management, paradoxical tensions are rejected in order to create unity and harmony in the organization. Critical stakeholders, on the other hand, acknowledge the existence of tensions but attribute them to a discrepancy between rhetoric and practice. As a result, they interpret the discrepancy not as a paradox but rather as a form of organizational hypocrisy. If organizations instead are viewed as places of persistent tension between equally legitimate claims, it becomes possible for decisionmakers to engage in proactive management of organizational tension and for researchers to reflect on the constituted nature of academic discourses.

An organization's sustainability function is stabilized and maintained by a number of communicative paradoxes that constitute and reconstruct it (Hoffmann, 2018). The implementation of sustainability practice depends on the continuous activation of these paradoxes to recreate sustainability as a communicatively constituted institution. In line with this approach, Strauß and Šimunović (2025) introduce a model of net zero communication and argue that net zero should not be seen primarily as a practice, but as an organizational institution that constitutes net zero through communication in a recursive process. Transforming business practices in line with net zero goals thus means simultaneously communicating net zero (talking) and implementing net zero (walking), whereby practices and communication about net zero continuously influence each other. Organizations that are proactive about paradoxes and communicate them perform better because it is not possible to manage organizational tensions without putting them into words. Although this naming

may sound like a simple task, Hoffmann's (2018) analysis points to the amount of sophisticated communication efforts devoted to paradox denial.

The reflexive state of time where words and actions continuously constitute each other is well illustrated by the system-level discourse that takes place between different actors around sustainability issues. This endless process is simultaneously a contribution to the exchange of meaning that shapes an ongoing practice and a monitoring of changing conditions that require adaptation from the organization. As the most holistic perspective, the t(w)alking formative communication is the main focus of the study.

Complexity

This thesis places the complexity that characterizes strategic sustainability communication, which researchers as well as practitioners are forced to deal with, at the center of the investigation. It examines both the external dimension of the complexity that is part of the intractable problems that the organization has chosen to engage in, and the internal complexity in the form of goal conflicts and tensions that arise when the organization adds sustainability goals to the financial goals. To study external influences, I use complexity theory to operationalize the abstract and ambiguous concept of complexity, and to study the internal consequences in organizations, I use a paradox theoretical lens.

The edge of chaos

Various attempts have been made to provide a precise definition of complexity, and the most widespread involves the edge of chaos. The "edge of chaos" phenomenon can be broadly seen as an area between rigid order and chaos (Hiett, 1999). The edge of chaos can be specified as a zone where order turns into complexity. Essentially, all living systems operate in the zone of complexity (Balci, 2013). This zone is not a comfortable place, but contrary to what one might think, neither is rigid order, at least not in the long run. A well-ordered and organized structure is an insensitive organization that does not respond to change and is not self-adaptive. Diversity, adaptability, interconnectedness and interdependence between actors are low, and the system quickly enters a predictable and repetitive cycle of behavior where novelty is rare (Benbya et al., 2020). Over time, it becomes static. However, change can also go in the opposite direction.

As the diversity, adaptability, interconnectedness and interdependence of a static system increase, it will at some point transition to the edge of chaos. If the system remains in this intermediate state, it never reaches a stable equilibrium, but it does not completely fall apart either. Instead, it exhibits continuous change, adaptation and evolution (Benbya et al., 2020). One can say that the system has undergone a phase transition, where the state has gone from solid to fluid. It has become sensitive to its environment and learns from it. The system changes its environment and is changed by it during interaction processes (Balci, 2013). However, if stress levels rise and exceed thresholds, chaos or extreme outcomes such as disasters and crises can occur. The system is no longer on the edge of chaos. In the thesis the edge of chaos concept only serves to label the instable everchanging nature of complex systems and to frame some implications.

Complexity theories have been developed mainly in natural sciences such as physics, computer science and biology, and in social sciences such as economics (Mirbabaie et al., 2022). Consequently, the process of theory formation itself is characterized by great complexity. Complexity science combines different epistemologies such as positivism, interpretivism and realism to question assumptions, deal with tensions and paradoxes, and reconsider views on sociotechnical phenomena (Benbya et al., 2020). Advocates of complexity theory describe it as a revolutionary break with the "reductionist" approach (Cairney, 2012), which shifts the analysis from individual parts of a system to the system as a whole. Like chaos theory and in contrast to reductionist normal science (Mason, 2008), complexity theory focuses on the sensitivity of wholes to initial conditions that result in unexpected and seemingly random behaviors, elegantly described as the "butterfly effect" (Lorenz, 1972). Benbya et al. (2020) see the theories as particularly valuable when the research community is faced with new phenomena and questions that do not lend themselves well to traditional methods.

For communication scholars, complexity theory provides a framework for explaining how organizations are affected by communicatively constructed interactions involving a wide range of entities. By taking patterns that arise from the unpredictable nature of reality as a starting point, complexity theory offers a way to understand uncertainty and systems that lack stable order, and phenomena that are characterized by emergent patterns and unpredictability (McLean et al., 2021). Complexity concepts have been used to understand everything from change communication (Ströh, 2007), reputation management (Murphy, 2010) and strategic communication planning (Gilpin & Murphy, 2010) to identity formation in organizations (Gilpin & Miller, 2013), conflict

management (Poutanen et al., 2016), social media activities (McLean et al., 2021) and crisis communication (Mirbabaie et al., 2022).

As the background suggests, complexity is far from a unified theory, but rather a set of conceptual tools used by researchers who adopt the complexity framework. Although complexity researchers disagree on many aspects of the theories, there is broad agreement that complex systems exhibit certain properties, according to Gilpin and Miller (2013), including diversity, interdependence, nonlinearity, emergence, and unstable boundaries. A more recent summary is presented by Lock (2023) who synthesizes several previous works by complexity and social scientists who have transferred properties of complex systems to human systems. The article then introduces a framework inspired by complex adaptive systems thinking based on ten properties: emergence, adaptability, heterogeneous actors, nonlinear effects, feedback mechanisms, self-organization, phase transitions, networks, scaling, and cooperation. Four key concepts are central to this thesis.

Diversity can strengthen an organization as well as a system. Heterogeneous actors make complex systems more resilient and “requisite variety” among actors and activities is often considered to promote system robustness, although Gilpin and Miller (2013) caution against oversimplification, especially when it comes to sweeping statements about the possible benefits of diversity for a system. From the perspective of the organization, heterogeneous actors shape the communication environment in which it encounters different audiences, with different perceptions to which it needs to respond through a variety of channels (Lock, 2023).

Interdependence is a characteristic of all complex phenomena, which are the result of recurring interactions. The “connectedness” between actors in a complex system influences all forms of behavior and communication within the system (McLean et al., 2021). Complexity theorists therefore emphasize the relational ties between system actors over the actors’ own properties and think in terms of relationships, patterns, processes and contexts. Each actor in a complex system is dependent on the actions of the other actors. Thus, complex interdependence is about interconnectedness, but also about structure. Oatley (2019) identifies structure as a necessary component and exemplifies it with the global financial system, which is characterized by a hierarchical order with increasing heterogeneity from the large, central actors to a multitude of smaller, peripheral actors.

Nonlinearity is sometimes considered the primary definition of complexity (Gilpin & Miller, 2013). The implication is that linear chains of cause and effect are difficult to establish in the highly interconnected networks of

relationships that make up complex systems. Small changes in initial conditions can lead to disproportionate or surprising outcomes (Lock, 2023). The interactions between the actors in the system create change and uncertainty, which is not the same as “chaos” or random outcomes. Complexity is a state of tension between certainty and uncertainty, between predictable outcomes and randomness.

Emergence is the result of relational aspects and communication processes in complex systems. Complexity theories are process-oriented and describe or explain patterns of change and development. In human social systems, emergent properties are not only behavioral but also include values, beliefs, and perceptions. Gilpin and Murphy (2010) argue that identity is even such an emergent phenomenon. Emergent communication strategies are not stable over time because emergence is dynamic. The strategies are always potentially temporary because the situational factors and reactions that give rise to them are not static (King, 2009).

Paradoxical tension

The complexity of grand challenges generates conflicts and paradoxical tensions at both individual, organizational and system levels (Alosi et al., 2023; Carmine & De Marchi, 2023). Paradox theory is a way to approach this complexity and go beyond the instrumental business perspective to improve the sustainability performance of organizations. The theory sees paradoxes inherent in organizing as persistent contradictions between interdependent elements that actors in organizations encounter (Alosi et al., 2023). By considering social, environmental and economic problems in this way, it can overcome the instrumental view of sustainability (Carmine & De Marchi, 2023). It can embrace the tensions, raise awareness of them and analyze their characteristics, instead of suppressing them (Heide et al., 2020). Paradox theory is an appropriate lens for understanding and managing organizational complexities such as competing performance goals and stakeholder interests, enabling researchers and practitioners to examine organizational contradictions holistically (Farrukh & Sajjad, 2024).

Organizations that are beginning to engage with sustainability issues need a paradoxical perspective to become aware of the tensions that arise. This is a necessary prerequisite for effective management (Vallaster et al., 2021) as long-term sustainability requires continuous efforts to meet competing demands (Argento et al., 2022). Situations repeatedly occur where the organization must simultaneously achieve multiple desirable but conflicting

economic, environmental and social outcomes at the corporate and societal levels that operate within different time frames and follow different logics (Hahn et al., 2015). Under these conditions, paradoxical frames can, for example, help organizations build complex relationships with stakeholders, envision challenges over time and promote creative responses to sustainability issues. Paradoxes that are discovered and verbalized can also alleviate decision-makers' concerns by making it clear that there is no optimal solution on which to base decisions about concrete actions (Vangen, 2017).

Paradox scholarship has emerged as a distinct approach thanks to the development of a coherent conceptual core (Berti & Cunha, 2023). This core, which builds on the pioneering contributions of Wendy Smith and Marianne Lewis (Lewis & Smith, 2022; Smith & Lewis, 2011), includes a well-accepted definition of organizational paradox as interdependent contradictions that persist over time and are reflected back on each other. Yet there are variations, including on the ontological level (Hahn & Knight, 2021). One view of paradoxes is that they are naturally inherent phenomena in organizational systems, regardless of actors' recognition of them. Paradoxes exist "out there" waiting to be discovered. Another view of paradoxes is that they are constituted through social construction, i.e. through actors' cognitions, rhetoric, and actions. With this perspective, paradoxes have no status until they are recognized by those affected.

In the true spirit of paradox theory, Hahn and Knight (2021) argue that the latent, intrinsic phenomena and the emergent, constructed dimensions of organizational paradoxes are interdependent, dissolving the "either-or" perspective. Organizational paradoxes are not pure mental representations, but they cannot be said to exist without someone perceiving them. In line with this view, Hoffmann (2018) acknowledges organizational paradoxes as constructed but points out that they are more than mental constructs. They are constructs that are transformed into social structures that in turn affect future communication and the communicators who first gave them life. Paradoxes are communicated into existence, or they are communicated into non-existence.

A paradox lens is helpful in deepening the understanding of complex phenomena by revealing underlying assumptions (Sparr et al., 2022). Rather than choosing between competing demands, a researcher with a paradox lens can explore how to deal with contradictions simultaneously. This is the premise of this thesis.

Summary of theoretical framework

The theoretical framework of the thesis contains a communication section where formative perspectives on communication are highlighted as an alternative to the dominant functionalist view. The formative view of communication is of significant importance due to the complex conditions. Within this view, there are three variants based on different relationships between words and actions. The other section of the framework concerns the complexity that characterizes strategic sustainability communication. This section presents two theoretical starting points that are used to operationalize complexity and analyze how it affects organizations' communication processes. One starting point is complexity theory, where the concepts of diversity, interdependence, non-linearity and emergence are identified as particularly relevant to capturing the complex conditions that sustainability problems entail. The second starting point is paradox theory, which is used as a lens to highlight tensions that arise within organizations as a result of engagement in sustainability issues. Awareness is considered a prerequisite for effective management of organizational tensions.

Methodology and empirical material

As organizations engage with sustainability issues, they must manage increasing complexity. The thesis examines the implications of this complexity for their strategic communication by interviewing professionals who deal with it on a daily basis. A qualitative interview study is conducted with managers and experts in organizations that have engaged in CA100, an investor initiative to fight climate change (Climate Action 100+, 2025), complemented by contextualizing reporting. This chapter presents the reflexive methodology applied in the gathering and analysis of the empirical material, and addresses the role of values, given that the topic is strongly value laden. It then presents the Climate Action 100+ (2025) investor initiative that the organizations in the study have chosen to engage in, as well as the research design. Finally, ethical considerations are presented, and methodological choices are reflected upon.

Reflexive methodology

The concept of reflexivity is elusive and has many meanings in the social sciences (Bryman, 2018; Gabriel, 2015). It has been central to academic discussions about knowledge production for many decades, and in recent years there has been an increased interest in how to practice reflexivity (Subramani, 2019). One aim of reflexive methods is to improve the rigor and accuracy of research by clarifying limitations and biases. Before the reflexive turn in research, objectivity and neutrality were seen as characteristics of valid and robust research. Today, researchers such as Gani and Khan (2024) argue that it is no longer possible to claim a neutral perspective that comes from “both everywhere and nowhere”. All research is situated in time, place and experience. Unreflexive research lacks legitimacy and validity, as it does not make subjectivities visible or even denies them.

Reflexivity is inseparable from the property of being a subject, of being human. Thus, even “non-reflexive” researchers practice reflexivity, albeit not consciously (Gabriel, 2015). Conscious reflexivity begins with a recognition that what we do as researchers defines and redefines both ourselves and the texts we produce. Consciously reflexive researchers do not treat empirical material as something separate from themselves and do not pretend to be value neutral. Data are not facts or representations of facts but documentation of social encounters. However, reflexivity does not transform boring fieldwork into something interesting, emphasizes Gabriel (2015). It cannot replace the intelligence and skill of the researcher in generating the empirical material and then examining and questioning it. Above all, it cannot replace active and inquiring imagination.

A reflexive methodology is useful in the thesis for several reasons. The research concerns sustainability issues, an increasingly value-laden area characterized by strong *political tensions*, something that investors have witnessed. As a researcher, I am also a *subject* with a professional background in the industry I study that inevitably influences the understanding of the topic and the empirical material I collect. Furthermore, *sustainability language* is a battlefield in itself, reflecting the value pluralism between different actors and practitioners, as well as rapid development. Conceptual complexity is a challenge that affects both the development of knowledge and the constitution of practice. Finally, in social science research, both the topic, the case, and the researcher are shaped by *values* that need to be made visible in the research process, which will be touched upon later in this chapter.

Value-driven *political tensions* are a factor that requires reflexive awareness. Sustainability issues such as climate change have risen high on the societal agenda in just a few decades and are now considered among the most pressing global challenges. As a result, the drivers behind society’s sustainability efforts look different today than they did in the early 2000s. At the same time, the general view in global politics and markets has shifted in recent years from an almost hegemonic support for comprehensive measures to a polarized situation with strong counterforces. This situation undoubtedly affects how sustainability communication is understood and practiced and is therefore something I choose to highlight rather than ignore in the empirical analysis. To further develop reflexivity, the interview study is complemented by a thematic document analysis (Bowen, 2009) of CA100 reports which, in addition to contextualizing data collected during interviews, provides research material for tracing the changing conditions within and around CA100. Reflexive methodology is well suited to document analysis because it does not prevent qualitative insights in the same way that a “coding reliability” or a

“codebook” approach does (Morgan, 2022). Like complexity theory, it is "anti-reductionist".

Reflexive research is an activity in which *subject* and object co-create each other (Gabriel, 2015). Empirical material is always the result of an interpretation made by a researcher who is inevitably a co-creator. Empirical material is not considered as a ‘reflection of reality’ that can falsify or verify theories, but as arguments for or against theoretical ideas and ways of understanding the world. I have worked with sustainability and communication at a pension fund for many years and I have been active in a human rights organization. These experiences have likely contributed to a richer contextual understanding, more initiated interviews and a multidimensional analysis throughout the data collection and analysis process. At the same time, this pre-understanding carries the risk that an outsider's perspective is lost, which can lead to an uncritical acceptance of the interviewees' implicit assumptions and claims. To the extent possible, I have managed these risks through a reflexive approach to the subject. A critical approach to dominant perspectives and a clear theoretical foundation creates an interpretive framework that counteracts the tendency to be captured by empirical data and supports "research-driven" perspectives that are missing in the interviews (Alvesson & Sköldberg, 2018). Together with an abductive process that actively searches for unexpected patterns, this mitigates the risk of unreflective acceptance of the interviewees' implicit assumptions.

An examination of sustainability language and concepts in the introductory summary reveals linguistic complexity that undoubtedly influences how practice is constituted, giving the thesis an additional level of reflexive interpretation and contours of “quadrihermeneutics” (Alvesson & Sköldberg, 2018). The concept of quadrihermeneutics refers to a four-level interpretive framework for qualitative research that extends the idea of hermeneutics by adding multiple reflexive layers: participants’ meanings, researchers’ interpretations, critical/theoretical readings, and reflection on language and process. In this case each sustainability concept has been coined at a certain time in a specific context and emphasizes certain aspects of sustainability.

‘Sustainable development’ has a temporal aspect and emphasizes responsibility towards future generations while ‘CSR’ emphasizes responsibility towards existing stakeholders. ‘Triple bottom line’ categorizes sustainability in an accounting framework while ‘ESG’ focuses on risk analysis etcetera. The fragmented linguistic landscape, where new concepts are continuously introduced and an authoritative basis is lacking, is both a challenge and a dynamic force that drives development, and something that researchers and practitioners will have to struggle with for the foreseeable

future. Overlapping and contradictory concepts are a consequence of the ongoing process where words and actions alternately constitute each other, that requires reflexive awareness from researchers.

Abductive reasoning

With the interview study, I try to understand the consequences of complexity for organizations' sustainability communication from the perspective of the interviewees. In this way, I reveal their experienced reality (Kvale & Brinkmann, 2014). A qualitative approach is suitable, for example, when the aim is to explore perceptions and experiences of complex issues among key individuals in the field (Denscombe, 2014). According to Creswell and Creswell (2017), qualitative methods are characterized by an inductive process with a focus on individuals' sensemaking and exposure to complexity. The inductive qualitative methods are often considered the opposite of quantitative methods, which test theories through a deductive process to reach generalizable results (Creswell & Creswell, 2017). However, there is also abduction, who has features of both but is more closely linked to qualitative research and can even be considered a form of induction for exploratory data analysis (Agterberg, 2021).

Abductive reasoning is a central part of the reflexive methodology. With its focus on underlying patterns, Alvesson and Sköldberg (2018) argue that abduction differs advantageously from the two more superficial explanatory models of induction and deduction. "The difference is, in other words, that it includes *understanding* as well" (p. 5). During the research process, the empirical scope of application gradually develops, and the understanding of theory is adjusted and refined. Metaphorically, one can say that empirical material engages in a critical dialogue with the theory and argues for and against different positions. An abductive research process also resonates well with the reflexive methodology's emphasis on surprising phenomena as a path to interesting contributions. Alvesson and Sköldberg (2018), who put the research contribution at the center, answer the rhetorical question of why a phenomenon is interesting: "Because it contradicts expectations from established knowledge and thinking" (p. 387).

Abduction is about developing new concepts and explanations from surprising phenomena or data that are not explained by existing knowledge. To do this, qualitative researchers use a selective and creative process to investigate whether empirical material supports existing theories or whether it

requires modification of existing understandings (Flick & Kennedy, 2018). In the social sciences, a crucial difference from induction is that an abductive research process, after describing and understanding reality from the perspectives of the participants, continues and presents an account of social reality from these perspectives (Bryman, 2018).

Epistemic values

As previously mentioned, social science research is influenced in several ways by values, whether acknowledged or not. These need to be addressed to establish the legitimacy and validity of the research. In my case, the topic of the thesis itself requires reflexive awareness. Many who choose to research sustainability issues probably do so because they perceive that we are facing urgent societal challenges. I am one of them. Therefore, I believe that a clearer demarcation between facts and values in both research and public debate could improve the outcome. Sometimes in the debate it appears as if scientific facts could dictate the political decisions that are required, an unreasonable position if one believes that facts and values can be separated at all. By publicly highlighting where values play a role in the choice between available alternatives (based on accepted facts) the possibilities of identifying solutions with broad support increase.

General reflexivity is a way for researchers to better manage the inevitable values in the research process regardless of approach (Bryman, 2018). Reflexive methodology takes it a step further and not only acknowledges subjectivity and values as an inevitable part of research but even advocates their systematic integration into the research design. Yet this does not exclude research with an agnostic approach to the topic and an ambition to avoid bias, as I see it. One could even argue that an important point of the methodology is to avoid a confirmation bias against dominant but unstated assumptions (Alvesson & Sköldberg, 2018), including values.

My ambition is a high level of awareness and transparency about values in the process, combined with an agnostic approach and avoidance of bias as far as possible. In this chapter I clarify some value aspects of the research process, for example regarding the choice of theory, case studies, methodology and design. The agnostic approach and avoidance of bias in collecting empirical material means that I give interviewees space to develop reasoning and relate to their own experiences when the question is presented, and then highlight both expected and unexpected perspectives in the analysis. In the imagined

dialogue between empirical material and theory, the core of the abductive process, I consider material that both confirms and contradicts theoretical premises. And similarly, in the analysis of the reporting from CA100 and the public debate, I highlight the contested nature of the topic and initiative, rather than confirming one side or the other.

A traditional view has been that scientific objectivity requires that the production of evidence and empirical claims be value-free (Brown, 2019). From this perspective, values are understood as inherently subjective and biased. They may provide answers to how we want the world to be, and what might be interesting to know, but they are irrelevant to how the world actually is. To claim otherwise is an unacceptable form of wishful thinking in scientific contexts. The “wishful thinking problem” is essentially about researchers accepting or rejecting a theory simply because they want it to be true or false (Elliott, 2017). Today, the “objectivist” position is not credible, as there is a broad awareness that it is impossible for researchers to avoid values (Bryman, 2018). Values can enter everywhere in the research process, including in the choice of research area and research questions, in the choice of method, research design and data collection, in the analysis and interpretation of data and of course in the conclusions drawn. Thus, few researchers claim that a completely value-free science is possible.

An alternative position is instead that some values are acceptable, but not all. Kuhn (1977), for example, argues that scientific theory selection is impossible without some form of valuation, which must therefore be seen as legitimate. In doing so, he introduces what has become known as “epistemic values.” The values that Kuhn identified (accuracy, consistency, scope, simplicity, and fruitfulness) have since been both challenged and developed but still constitute a cornerstone of the “ideal of value-free science” (Douglas, 2014). The ideal of value-free science states that the justification of scientific results should not be based on non-epistemic values (e.g. moral or political). Proponents of the ideal, such as Betz (2013), argue that it follows directly from democratic principles and the ideal of personal autonomy, which are compromised if the scientific results we rely on are soaked with moral assumptions. He admits that it is easier to distinguish between facts and values in theory than in practice, but instead of opening to all forms of values and arbitrariness, he suggests that scientific methods be developed to deal with epistemic uncertainty and points to the UN's Intergovernmental Panel on Climate Change (IPCC) as a role model.

The case

CA100 is a global investor-led initiative that was formed in the wake of the 2015 Paris Agreement to persuade the world's largest corporate greenhouse gas emitters to take action against climate change (Climate Action 100+, 2025). Launched in December 2017, CA100 now includes 600 global investors across over 30 markets, that seek to convince companies they own to reduce emissions, improve governance, and strengthen climate reporting and transition plans. The 169 companies targeted by CA100 account for 80 percent of global emissions from industry and are thus key to the transformation of this part of society.

Since its launch, CA100 has become the largest-ever global initiative for investor engagement on climate change. The signatories believe that engagement and cooperation with corporate emitters is needed to achieve the goals of the Paris Agreement and ultimately to reduce financial risk and maximize the long-term value of assets. The work is coordinated by five regional investor networks: Asia Investor Group on Climate Change (AIGCC), Ceres, Investor Group on Climate Change (IGCC), Institutional Investors Group on Climate Change (IIGCC) and Principles for Responsible Investment (PRI). Initially CA100 was launched as a five-year initiative (2018-22), but in 2023 it announced a second phase that will run from 2023 to 2030 (Climate Action 100+, 2025).

Investors in the initiative recognize their exposure to climate risks and their fiduciary duty to respond and can, for example, invest in the transition to clean technology to reduce risk. But they also have a clear opportunity to engage large emitters around climate transition through their equity and fixed income holdings, to achieve corporate practices that are consistent with long-term value creation. Investors use a variety of methods to manage climate-related financial risks in their portfolios, and CA100 promotes the right of signatories to independently exercise their fiduciary duty to manage climate risks.

CA100 clearly communicates that the initiative is not intended to be a collective decision-making exercise. Signatories are independent managers responsible for their own investment and voting decisions based on their own interests. The use of specific tactics is at the discretion of the individual signatories, and they must avoid coordinating strategic behavior between different actors that affects competition. CA100 and its investor network entities do not provide investment or voting recommendations.

Asset owners in particular have a key role to play in the transition to net-zero emissions in the global economy. They set the direction for the financial market by promoting and integrating ESG (environmental, social and

governance) factors throughout the investment chain. Asset managers also have a role to play within the framework of their stewardship mandate. CA100 signatories have access to several tools to protect long-term value, including frameworks to track progress in emissions reductions against targets, working groups with access to management, industry experts and other investors, and the opportunity to participate in collaborations.

In addition, experts and information available to signatories provide insights into one of the greatest systemic risks to all investments: the global impact of greenhouse gas emissions from the world's largest emitters. Decades of scientific evidence from the UN Intergovernmental Panel on Climate Change (IPCC) have shown that a significant transformation is needed to limit climate-related risks to food production, infrastructure, water supply, human security and economic growth. Without comprehensive action to achieve the goals of the Paris Agreement, global temperature increases of around 4 degrees Celsius are expected to result in an estimated \$23 trillion in global economic losses over the next 80 years (Climate Action 100+, 2025). This will harm all economies, asset classes and industries, with severe consequences for all financial market participants.

I chose this case for both principled and practical reasons. Climate change is one of the greatest challenges of our time and when CA100 was launched it was an unprecedented collaboration on sustainability within the financial industry. As I mentioned in the introduction, the case offered rich opportunities to study multiple dimensions of sustainability-related complexity (Flyvbjerg, 2006). The initiative highlighted the need for inter-organizational sensemaking processes to address grand challenges. This was the main reason why I found it an interesting topic to investigate.

After many years of searching for relevant research as a sustainability communication practitioner, I found that there was an abundance of research on companies while investor organizations' own sustainability communication was barely touched upon. This was somewhat puzzling. After all, from a systemic perspective, the investor community is a key actor in addressing grand challenges such as climate change. Since the initiative was entirely voluntary, organizations that joined had to have a certain level of ambition. Consequently, I saw that I could contribute by exploring investors' perspectives on sustainability communication. I also believed that I had sufficient understanding of the subject to be able to conduct initiated interviews, and a realistic chance of reaching enough interviewees from the Swedish group, since I knew who many of them were from several years in the industry.

Collecting and analyzing empirical material

The empirical material comes from semi-structured interviews with Swedish members of the CA100 and six years of CA100 progress reports supplemented by media reporting on contextual events mentioned in the interviews and reports. Of the more than 600 global investors in the CA100, 23 came from Sweden and consisted of 14 asset owners, 8 asset managers and 1 service provider in phase one of the initiative. This group contains the lion's share of Sweden's largest investment organizations, which together with some European peers are at the forefront of sustainability issues in a global comparison and may therefore be of wider interest. Global assets in sustainable fund markets reached a record high of USD 3.5 trillion in 2025, with Europe being the leading market and accounting for 85% of global assets in sustainable fund markets, followed by the USA with 10% and the rest of the world accounting for the remainder (Morningstar, 2025). Sweden stands out among EU member states by being the largest contributor to climate finance per capita (McCauley et al., 2023).

Interviewees were selected based on involvement and knowledge of CA100 and collaborations. In the organizations, participation is normally managed by 1-2 people, in some cases with additional people on the periphery. I conducted 18 interviews with 21 employees in 17 different organizations, two of which were supplementary interviews with experts involved in the project and with participants. The biggest obstacle to gaining access to the organizations was the interviewees' busy calendars, which made the process somewhat more protracted than intended. Participants in the initiative that are not included in the study are mainly smaller organizations where the responsible employee has left. The interviewees in the member organizations consist of 11 managers, of which 5 are C-suite level, and 8 specialists, with responsibility for sustainability, corporate governance and communication.

Overview of interview dates, interviewees and position levels

Organization	Interview	Level: C-suite	Top exec	Specialist
A	Sep -22	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
B	Sep -22			<input checked="" type="checkbox"/>
C	Oct -22		<input checked="" type="checkbox"/>	
D	Jan -23	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
E	Jan -23			<input checked="" type="checkbox"/>
F	Feb -23		<input checked="" type="checkbox"/>	
G (I)	Feb -23		<input checked="" type="checkbox"/>	
H	May -23		<input checked="" type="checkbox"/>	
I	May -23	<input checked="" type="checkbox"/>		
J	May -23			<input checked="" type="checkbox"/>
K	Nov -23	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
L	Dec -23		<input checked="" type="checkbox"/>	
M	Jun -24	<input checked="" type="checkbox"/>		
G (II)	Jun -24		(<input checked="" type="checkbox"/>)	
N	Jun -24			<input checked="" type="checkbox"/>
O	Dec -24		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The gathering of empirical material was divided into three stages. The first step took place in 2022-2023, when 13 interviews were conducted on the interviewees' perceptions of the initiative, drivers of participation and communication, with a focus on complexity in the form of paradoxical tensions. The second stage of the empirical collection was carried out in 2024, when five more interviews were conducted against the background of the first 13 interviews, with further in-depth analysis of the impact of complexity on the organizations' communication strategies. The third step was carried out in 2025 with analysis of the content of the progress reports and external events to monitor the progress of the initiative and the effects of societal values and political tensions. This part took on unexpected importance as major changes in and around the initiative occurred in 2024.

The interviews began with questions about general experience with the initiative, organizational drivers and development, and communication efforts. This was followed by an in-depth focus on complexity with both an internal and an external dimension. The internal part was structured around questions about paradoxical tensions connected to sustainability within organizations, such as contradictions related to (1) goals, (2) corporate governance, and (3) self-promotional communication. The external part was structured around questions about the effects of external complexity on (1) operations, (2) on strategy and planning, on (3) interaction and dialogue with stakeholders, and on (4) communication tactics. The interviews took between 50 and 80 minutes and were conducted in physical meetings or via Teams. One of the interviews was conducted in English, all others were conducted in Swedish and translated into English. The progress reports covered the years 2019 to 2024.

Although the interviews were loosely structured around a number of questions related to complexity, they left a lot of space for the interviewees to develop their own thoughts. In this way, the interviews partly developed into a conversation about issues that were more connected to their professional everyday life than to the initial question. Sometimes the dialogue led to unexpected and interesting perspectives emerging, in other cases the answers were less relevant to the study. The conversations were facilitated by my experience of working with sustainability in the financial industry and familiarity with the concepts, perspectives and challenges that practitioners face. Less time was needed to establish a basic understanding of the interviewees' descriptions of reality. Instead, the dialogue could delve into issues with the potential to contribute to knowledge development, such as the relationship between functionalist and formative communication practices.

I felt that awareness of the risk of uncritical confirmation of conventional positions gave the interviews a dynamic. By challenging the dominant organization-centric view in the interviews, it was revealed how practice has adapted to complex conditions, but also obstacles to adaptation. Paradox and complexity theory contributed to shedding light on phenomena and challenges that are not at the center of industry or societal discourse. Most interviewees had been active in the field for many years and reflected a lot on the changing conditions. In some cases, however, the view of the task seemed to be more rooted in a compliance perspective and there was little reflection.

Based on the complexity concepts and my pre-understanding, I analyzed interviews and progress reports in several rounds. The initial interpretation took place during the interviews themselves (Kvale & Brinkmann, 2014) and an early reading of transcriptions and progress reports to gain an overall understanding of the context and content of the interviewees' stories. The

progress reports are public and summarize developments over the past year, such as the proportion of focus companies with net zero commitments, board oversight and alignment with TCFD recommendations. The first two reports are extensive at around 90 pages, while later reports have shrunk to around 25 pages. Case studies are a recurring part of all reports, as is a forward-looking section. From the presentations of the results in the progress reports, forewords expressing the voice of the sender, and the contextual factors mentioned, a picture of the initiative and the changing circumstances was obtained.

This was followed by a secondary interpretation (Alvesson & Sköldbberg, 2018) where insights were constructed based on the "dialogue" between important elements from theory, interview data and progress reports, which then formed the basis for the study's conclusions. If the initial interpretation focused on the story told, the second interpretation highlighted parts that were not stated. The latter part of the abductive process involved an exploratory analysis of the transcripts against a theoretical background, searching for patterns and unexpected statements in the interviews to identify stated and unstated communication strategies and complexity concepts with high explanatory value. In light of the empirical material, the concepts could also be related to each other, which further increased explanatory value.

The document analysis aimed to contextualize the material collected during the interviews but also to provide complementary research data and to track the changing conditions within and around CA100 (Bowen, 2009). The analysis was therefore supplemented with external reports and media coverage related to influential external events. The different observations were then related to each other to construct a narrative for the development of CA100 over time.

Ethical considerations

Applied ethics studies moral issues in specific situations or fields, such as medicine or business, and research ethics is a branch of applied ethics that studies ethical questions and problems that arise in research (Shamoo & Resnik, 2015). Just like other professions, science has its own ethical standards that can be divided into different categories, for example, in quantitative and qualitative research. A review of 42 articles on ethical dilemmas in qualitative research, identified five dominant types of conflict related to *anonymity*, override of *autonomy*, potential *harm*, confusion about the researcher's *role*, and *evaluation* in research ethics committees (Taquette & Borges da Matta Souza, 2022).

In my thesis the interviewees are *anonymized* and cannot be identified in the texts. An important risk to be aware of when it comes to anonymity is that informants may be individuals who hold positions of power or unusual jobs that make them easy to identify when the results are published. Specific organizational affiliation and title are therefore also anonymized in the thesis. The principle of informed consent protects the *autonomy* of interviewees but also protects public trust in research. In other words, there is both a dimension that protects the individual's right to self-determination and a societal value when public trust in research is protected. In my study, I asked for participants' consent in writing and had them confirm it in the same way in advance. Potential *harm* can arise in situations that create discomfort, such as research targeting victims of discrimination, homophobia and racism or past traumas such as violence, war or loss of loved ones. This is not the case with my study, and the risk of harm is low. My research does not process sensitive personal data, for example ethnic origin, political opinions, religious beliefs, health, sex life or violations of the law. It does not involve any physical intervention or methods aimed at influencing the research subject physically or psychologically. The collection of empirical material consists of interviews that are transcribed and CA100 progress reports.

In general, my approach is relatively straight forward since the study focuses entirely on the participation of the organizations in the project and its development, not on the interviewees themselves. They participate in their professional role and are not particularly vulnerable individuals who are sick, imprisoned or children, for example. Thus, autonomy is not at risk and the *roles* between researcher and interviewee are clear. After consultation with the ethics advisor for the Faculty of Social Sciences at Lund University, it was therefore concluded that the study does not require any further ethical review. The final risk identified by Taquette and Borges da Matta Souza (2022), with research ethics review committees dominated by quantitative researchers with limited understanding of qualitative studies, has not materialized in my case.

Reflections on methodological limitations

Every research project is based on a series of choices regarding methodology (and theory). These choices all have pros and cons and inevitably involve valuation. I have tried to be transparent about my methodological choices and how I relate to values as part of a reflexive approach to the task. This means that I could have done something else with other pros and cons.

I could have chosen a quantitative approach to be able to survey all 600 participating investors globally. In this way, I could have drawn general conclusions about investors' attitudes based on statistical data. With the choice I made, this is not possible. Instead, I gained a deeper understanding of how investors perceive they are affected by the complex conditions related to strategic sustainability communication. When I had decided on a qualitative approach, there were still a series of different choices and decisions to make. For example, I was suggested to choose grounded theory by another doctoral student in a seminar I attended. This method could be expected to provide even richer empirical material and less influence of theory on conclusions, but it would also have brought a reductionist element that contradicts the fundamental holistic perspective of complexity theory. I could have focused on the communication between organizations, for example between investors and companies, which is very relevant as it is the core of the entire initiative, but then I would have had to abandon the focus on the effects of complexity on the investment organizations' own sustainability communication.

Due to my choices, the thesis does not provide data that qualify for general conclusions about global investors in the initiative or elsewhere. Nor can my findings claim to be "pure" empirical observations free from theory or the influence of professional preconceptions. The thesis also leaves one of the most central dimensions of the collaborative initiative unexplored. These choices have been made along the way in a "funneling process" where one thing after another has been excluded from the original idea I had, which I can now conclude was too broad. I ruled out a quantitative approach early on, partly because there is an abundance of quantitative data but a lack of theory on sustainability communication in the financial industry, which led me to the assessment that the chances of contributing to research were weak. When I delved into reflexive methodology during the first year, I made the opposite assessment, i.e. that it would be an excellent fit for the young, value-laden field steeped in complexity, and decided on it without further ado. For a relatively long time, I thought that interorganizational communication would be a central part of the thesis until I realized that the scope would be too broad and skipped that part. All these unrealized possibilities are limitations of this study. At the same time, they are ideas for other studies.

Overview of the articles

The first article explores how investment organizations are affected by the complexity of sustainability issues, that is, how they relate to external conditions. Here, the central importance of communication in enabling solutions to sustainability challenges emerges. Both in finding common ground on what the problems are with the actors involved and in order for organizations to be able to keep up with constantly changing conditions in an unstable environment. Communication is at the core of complex systems whose existence is based on interacting entities. However, the central aspect is not the transmission of information but the construction of meaning (Lock, 2023). In this context, the diversity of actors involved is a challenge. Lack of predictability is also a characteristic of complex systems that organizations must adapt to. Participants testify that strategizing is characterized by constant adaptation to changing conditions. An example of complexity at the macro level is the shift from the global enthusiasm around the Paris Agreement in 2015 to the massive backlash in 2025. For organizations, this unpredictable and rapidly changing environment creates a need for recurrent adaptation that does not always fit with long-term planning. In the "dialogue" between theory and interviews (Alvesson & Sköldberg, 2018), the four complexity concepts of diversity, interdependence, nonlinearity and emergence appear as interesting in the context and are linked to each other in pairs, which is a new contribution to the application of complexity theory in communication research.

The second article is a chapter in an anthology that examines the internal complexities that arise within organizations when sustainability is integrated into their mission, for example when sustainability goals are added to financial goals. Sometimes the goals are fully aligned, but not always, and when they are not, paradoxical tensions arise. The organizations in the study do not consider sustainability to be incompatible with the goals of investment activities, but they acknowledge that there is a potential conflict that is sometimes realized. Nevertheless, they believe that this paradoxical tension is resolved in a long-term perspective. Another example of sustainability-related tensions is between actively communicating sustainability efforts at the risk of

being accused of greenwashing versus minimizing communication and going unnoticed (Ellerup Nielsen & Thomsen, 2018). Although long-term sustainability requires continuous efforts to meet competing demands (Argento et al., 2022), paradoxical tensions tend to be avoided in most sustainability discourses (Hoffmann, 2018). In organizations driven by financial goals, sustainability is primarily managed within a conventional business case frame where sustainability is addressed at the organizational level, and social and environmental aspects are only relevant if they improve the organization's financial performance (Hahn et al., 2018). In this way, tensions are eliminated. Even in research, the central paradigm is that communication should ultimately contribute to profit maximization, and the focus is on exploring how organizations can benefit from addressing societal challenges (Crane & Glozer, 2016; Verk et al., 2021). This instrumental perspective is poorly suited to strategic sustainability communication and an alternative frame is presented that recognizes paradoxical tensions as part of the dual ambition to achieve both financial and sustainability goals.

Conclusions and contributions

Today's society is the most complex ever (Smith, et al., 2017), and the grand sustainability challenges capture its very essence. This thesis highlights complexity as a defining characteristic of sustainability communication and contributes to the understanding of the phenomenon by studying it in an empirical context where its presence is tangible.

Sustainability issues constitute a complex framework of societal norms created by political, financial and non-governmental actors that influence organizations' external reporting and internal communication processes, as well as dialogue with stakeholders (Weder, 2022). The complexity of the sustainability framework entails a diversity of different political, economic, ecological and cultural interpretations and interests, which leads to conflicts, disagreements and paradoxes that challenge all communication processes.

This complex state requires clearer recognition. It is not something we can wish away, but it is not a problem to be solved either. It is a strategic premise we need to embrace if we are to achieve any change. Complexity constitutes a "bond between unity and diversity" (Morin, 2001, p. 15) that should be recognized, highlighting the importance of root metaphors that shape our perception of the world and that can both help us understand or lead us astray (Schoeneborn, et al., 2022; Swedberg, 2020; Tourish & Hargie, 2012).

The world is not a clockwork. A stable mechanism with occasional disturbances that sometimes need to be corrected, but which are otherwise fully predictable. Global society is a system on the "edge of chaos" where complexity replaces predictable order (Hiett, 1999), which is better understood by looking at natural phenomena such as insect swarms or ecosystems, than at clocks and machines (Ball, 2012). Communication is at the core of these systems where actors influence each other and modify strategies in recurring interactions (Holland, 2014; Lock, 2023).

Strategic sustainability communication as emerging discipline

The importance of communication in addressing society's sustainability challenges has not received the attention it deserves. To come close to anything resembling solutions, a broader view of communication and increased ambitions from the social actors involved are required.

Sustainability communication within organizations has primarily been seen as a means to achieve business goals, but by critics also as a problem rather than a solution (Hoffmann, 2018; Schoeneborn et al., 2020). The underlying assumption in these cases is that the task of communication is to accurately describe an observable practice, a given “reality” that is unambiguous and uncontested. The critical position argues that much sustainability communication does not fulfill this task and therefore recommends that it be reduced (Delmas & Burbano, 2011). This study shows that there is no such unambiguous and uncontested reality and draws the opposite conclusion. The problem is not too much communication, but too little.

Strategic sustainability communication as a research field is still in its infancy. The analysis of the concept as a merger of the areas of strategic communication and sustainability communication concludes that it denotes an organization's purposeful engagement in conversations of strategic importance about sustainability. No one knows whether sustainability communication will flourish as a specific focus within the strategic communication discipline, but the concept is undoubtedly becoming established (Weder, 2025). The distinct multidimensional complexity speaks to the need for specialized research as well as expertise among professionals. The challenges that need to be addressed are also multidimensional.

The purpose of strategic sustainability communication is fundamentally different from, for example, reporting or marketing communication. In addition to seeking common ground on sustainability issues with other actors in the system, participation in public discourse functions as a continuous monitoring of the organization's environment, which enables emergent strategizing and recurring adaptation of operations to the ever-changing subject area (Lock, 2023).

Empirical contributions: Complexity consequences

The empirical study examines how investor organizations that have engaged in sustainability issues perceive that complexity affects their communication. Since complexity is the focus of the study, it is a well-suited group to study, as

global equity investors are exposed to the full map of sustainability risks and complexity at multiple levels throughout the global system.

The responses show that investors perceive themselves as one of several actors, interdependent in a system that is constantly changing. The focus on sustainability issues has gradually begun to shift from purely organization-centric, to giving the grand challenges an intrinsic value. Investors provide examples of adaptations of planning and strategizing, but also of paradoxical tensions that arise in organizations when sustainability goals are added to financial goals. The results show the presence of complexity in daily operations, but they also contribute by identifying several challenges that arise because of it.

An agonistic mindset is still missing. Although investors recognize their interdependence with other societal actors and the need for collaboration, this awareness rarely shapes strategy due to limited understanding of the implications of actor diversity, combined with risk aversion and an internal control-oriented culture.

Internal resistance inhibits adaptive, emergent strategizing. Rapid and unpredictable external changes challenge traditional strategic planning and therefore encounter internal resistance.

Paradoxical framing is avoided. Organizations tend to "frame away" paradoxical tensions by viewing sustainability as a means to achieving economic goals, which reduces internal contradictions but strips sustainability of its intrinsic value.

Communication requires comprehensibility. Paradoxical framing, while revealing complexity, does not support effective sustainability communication which needs to reconcile openness around tensions with understandable narratives.

Agonistic mindset is missing

In the interviews, investors confirm their interdependence with other actors in society. They see no possibility of solving social problems on their own. All sectors need to contribute based on their respective conditions. They can also be said to implicitly support *engaged agonism* (Capizzo, 2023) as they emphasize the importance of participating in various public and semi-public conversations, even when other participants are critical or confrontational. At the same time, investors' risk awareness is high. The downside is often perceived as tangible, while the upside is vague, which limits participation and

openness. The broad awareness of the need for collaboration has some effects at the activity level but does not gain traction at the strategic level.

The lack of strategic awareness can be partly explained by internal dynamics where emerging elements of strategizing are subordinate to planning and control. In addition, however, there seems to be a lack of insight among investors about the full implications of the *diversity* of actors (Lock, 2023). All actors involved will to some extent pursue their own agendas, sometimes in conflict with others, which occasionally result in a high level of conflict. These disagreements are an inherent condition that cannot be avoided. On the other hand, differences of opinion must not become insurmountable, as the ambition to solve society's sustainability problems will then fail (De Almeida et al., 2021; George et al., 2016). The task for those involved is therefore to continue interacting despite the tensions and to find something to agree on, rather than trying to be right and defeat the opponent. This is the agonistic mindset put into practice.

The lack of insight into the practical consequences of diversity may have several explanations, but it is easy to recognize the dominant organization-centric perspective as one. As long as strategic sustainability communication is primarily seen as a means to achieve the organization's financial goals, the approaches that emerge in the interviews appear understandable. If sustainability communication is instead related to the grand societal challenges to be addressed, it becomes more obvious how both conflict-seeking and risk-averse approaches quickly become counterproductive.

Although the organizations in the study have not abandoned the organization-centric perspective, they have nevertheless taken some steps away from it, perhaps out of necessity. For example, interviewees emphasize the importance of selecting a limited number of issues to focus on over a longer period of time, in order to develop in-depth knowledge of them, understand the systemic context, and establish a position rather than supporting business goals. Communication that embraces complexity focuses on the macro issues at stake rather than the organization, which does not exclude financial goals or stakeholder expectations but makes them part of the terms of the conversation rather than being its goal.

Internal resistance inhibits adaptability

One recurring theme in the interviews is constant and *unpredictable change*. This change is of course driven by rapid knowledge development and shifting focus within the field itself, but the results also show that unpredictability is largely dependent on social factors such as changing opinion, politics and

regulations, as well as more physical factors such as war and commodity prices. The analysis of the initiative's progress reports and supplementary materials clearly illustrates how such factors can manifest themselves.

Changing circumstances have several consequences for organizations, for example, they affect strategies and planning. Long-term strategic planning of the traditional kind is made more difficult, as changing conditions cause plans to quickly lose relevance and become obsolete. Strategy as rational, top-down planning of a series of phases and steps to be implemented and reviewed (King, 2009; Ströh, 2007; Van Ruler, 2020) needs to give way to emergent strategizing that embraces the ambiguous uncertainty of the future and enable systematic adaptation based on input from daily operations. Every interaction with the external environment then becomes both a contribution to the societal process and a potential source of information for the organization.

The interviews provide examples of this shift from control to adaptation, where planning primarily becomes a short-term tool for managing predictable parts of the business to create space for adaptation and enable prioritization. However, a more common spontaneous comment is that unpredictable changes in the external environment constitute an internal challenge for the organization. Lack of understanding of the conditions surrounding sustainability issues leads to difficult-to-manage tensions, since the rest of the organization mainly has a traditional, rationalistic view of goals, strategies, planning and evaluation. Adaptations to complexity challenge management's control over operational development, which becomes a stumbling block (Holtzhausen & Zerfass, 2014). These internal tensions limit the impact of emerging processes and the organization's ability to adapt.

Paradoxical framing captures tensions

For organizations that choose to engage with sustainability issues, strategic communication is inevitably challenged by goal complexity and paradoxical tensions in the business (Carmine & De Marchi, 2023; Weder, 2022). The term paradox denotes contradictory yet interdependent elements that exist simultaneously and persist over time. Organizational paradoxes are understood as expressions of underlying tensions. They are thus materially rooted in systemic tensions between contradictory elements, but they are also socially constructed (Berti & Cunha, 2023; Smith & Lewis, 2011). Consequently, paradoxes have no status until they are recognized by those involved (Hahn & Knight, 2021) and one way for an organization to deal with them is to “frame away” the paradox (Child, 2020), i.e. simply not acknowledge any

contradictions. This approach is not entirely uncommon and appears to be partly the case in this study.

A clear example is the tension between financial goals and sustainability goals, which is indeed confirmed by several interviewees, but only as a (irrelevant) short-term phenomenon. With a long-term investment horizon, the organizations believe there are no contradictions between financial goals and sustainability goals. This way of managing tensions indicates adherence to the hegemonic business case perspective, where the only aspects of sustainability issues considered are those that contribute to the organization's financial goals.

By "framing away" the tension, the organization is relieved from internal conflicts between financial goals and sustainability goals, as the latter are defined as a means to the former. This is the upside to the organization. The downside is that sustainability, by being defined solely as a means to the organization's financial goals, is not given any value in itself (Hahn et al., 2018). For this reason, a multitude of researchers advocate that both practitioners and researchers instead look at operations from a paradoxical perspective to deepen their understanding of the complex phenomena (Carmin & De Marchi, 2023; Hahn et al., 2018; Heide et al., 2020; Hoffmann, 2018; Smith & Lewis, 2011; Sparr et al., 2022; Vallaster et al., 2021; Vangen, 2017)

Communication requires comprehensibility

The empirical study indicates that a pure paradox frame can take complexity a step too far for organizations that need to establish and explain positions and decisions. While it highlights tensions and reveals complexities, it does not provide the meaning and vision needed for sustainability communication and practice. For example, investors in the study cite companies' climate impacts as a reason for excluding them, while highlighting active ownership as their main opportunity to combat climate change.

This contradictory practice repeatedly creates a need to explain strategy, which may include clarifying tensions, but above all presenting convincing motives. Therefore, they explain climate exclusions with values, escalation and financial reasons, to name a few. Organizations need to be open about the tensions they manage, both towards themselves and the outside world, but at the same time continuously provide a comprehensible picture of their positions, motives and practices. A complex task in itself.

The second article in the thesis presents an alternative frame, the "sustainability agent frame". This frame acknowledges that organizations face paradoxical tensions as part of the dual ambition to achieve both financial and

sustainability goals. However, since the two goals are given equal importance as boundaries for operations, a field polarity is created in which financial and sustainability practices shape each other, and the organization's sustainability function is maintained and stabilized (Hoffmann, 2018).

Theoretical and practical contributions

The thesis emphasizes the inherent complexity of sustainability problems as a crucial factor for research on strategic sustainability communication. The question then becomes how to proceed to study the impact of complexity on organizational communication? In this study, complexity theory concepts are used to concretize and analyze different aspects of complexity in an empirical context. A challenge with this approach, as e.g. Lock (2023) illustrates, is that there are many different compilations of complexity concepts that partly overlap and partly differ.

The study identifies the concepts of *diversity*, *interdependence*, *non-linearity* and *emergence* as particularly relevant for capturing the implications for sustainability communication. For other concepts, the relevance has been less obvious, such as *unstable boundaries*, *phase transition* and *scaling*, and therefore they have not been selected. A concept that was not used in the analysis, but which could easily have been added, is *adaptability*. It captures a central part of the challenge for organizations, where there also seems to be development potential. Another concept that was not used is *feedback mechanisms*, which is one of the main functions of organizational formative communication. The omission of these complexity concepts was a trade-off between nuance and clarity. With additional concepts, more nuances could have been captured, while the conceptual ambiguity would have increased.

In the “dialogue” between theory and empirical evidence, connections between the selected concepts emerged that provided added value. The connection between *diversity* and *interdependence* partly explains why grand challenges such as climate change are so difficult to address, while *non-linearity* and *emergence* are related in that the latter is a consequence of the former. These are novel observations that constitute a theoretical contribution to complexity-oriented communication research. Together the two conceptual connections also clarify the fundamental importance of the continuous formative process. It integrates the interactive systemic task and the organizational strategizing task within strategic sustainability communication.

For practitioners, the empirical material offers a deeper understanding of the impact of complexity on communication strategy. The identified organizational consequences provide opportunities to prevent or at least prepare for future challenges that may arise when complexity is embraced in a more strategic and systematic way. The integrated approach presented for the interactive systemic task and the organizational strategizing task also provides opportunities to develop existing practices and explore new approaches in strategic sustainability communication.

The thesis contributes to the development of the field by placing the fundamental formative function of communication at the center of solving sustainability problems and in the strategizing of organizations. This formative function is overlooked in functionalist research on green marketing communication, reporting and greenwashing. In formative communication research that considers practices as constructed by sustainability communication, the constitutive function is recognized, but mainly in relation to the organization rather than to the sensemaking challenge inherent in societal sustainability issues (Lock, 2025; Schoeneborn et al., 2024; Wickert, 2021).

Much of the research on sustainability communication focuses on companies, including formative approaches. This thesis contributes to a less explored area by studying investors' own sustainability communication. The thesis' reflexive methodology adds a sociopolitical dimension to the analysis of the material. From a macro perspective, investors are key actors in addressing societal sustainability issues. Although communication scholars have highlighted their crucial role, empirical research on how sustainability communication is practiced in the financial sector is lacking, and little is known about how professionals strategically manage this communication (Cinceoglu et al., 2025).

Final reflections

One of the most important properties of complex real-world systems, especially in the social sciences, is that they never stabilize. They exist on the “edge of chaos” where there is no equilibrium (Ball, 2012). I experienced this changing order documented in the study up close for many years. In 2015, around the same time as the UN's global Sustainable Development Goals were launched, the Paris Agreement was adopted at the COP21 climate conference (UNFCCC, 2016). It opened up a whole new world. Political agreement at a

global level had not been the main scenario in any realistic analysis until then. Suddenly it was a reality. New strategies were being developed in a hurry. The atmosphere was slightly euphoric, and a number of new initiatives were launched, including Climate Action 100+, which is the subject of this study.

In the following years, a hopeful outlook dominated until the wind slowly began to turn. First, there was a general feeling that results were not coming fast enough. Strategies were revised to be more ambitious with an increased focus on real-world impact (PRI, 2021), rather than reallocation in investment portfolios. Efforts increased, collaborations developed and the original ambition remained, albeit with the realization that the situation was strained. Net zero emissions became a central concept (Strauß & Šimunović, 2025) and benchmarks, roadmaps and campaigns were launched. Then the tide turned completely.

In 2022, Russia invades Ukraine, which reinforces the geopolitical importance of oil, causes sharp price increases (Zhang et al., 2024) and eventually causes the entire oil industry to back down from its climate commitments for financial reasons (Moore & Millard, 2024). In 2024, the effects of a political campaign against ESG investors launched in the US in 2021 (PRI, 2024) become tangible with anti-ESG legislation in about 20 US states (ESG Dive, 2025) and major dropouts from many collaborative initiatives (ESG Dive, 2024). In 2025, the US leaves the Paris Agreement, again (The White House, 2025). The rules-based world order itself is crumbling. Once again, previous strategies must be abandoned and new ones created.

Topics for future research

I began the thesis by expressing skepticism about the ambition to make sustainability a field similar to accounting, mainly based on the difficulties I had experienced as a practitioner. The complexity created by the different goals and actors made traditional approaches with goals, strategies, planning and evaluation seem inadequate. Change was the only constant. The hope was to find another approach that would remove these obstacles to solutions to grand challenges. Today, that is no longer something I hope for.

During the work on the thesis, I gradually stopped considering complexity as an obstacle and started to see it as an asset. As long as further efforts are required to address the grand challenges, complex dynamics are a condition that promotes continued engagement and innovation. The ambition to close the forms of the process is misguided. They need to remain open. Of course, this does not mean that accounting is not needed. On the contrary, all respondents

attest that qualitative reporting is of great importance, but it will need to be adapted to the complexity of sustainability issues, not the other way around. My intention has not been to write a handbook, but to construct and convey a reality-based mindset around strategic sustainability communication. It therefore does not contain a list of practical how-tos. The ambition has been to empirically study the complexity that characterizes sustainability communication to provide a deeper understanding that could then, for example, form the basis for approaches that are better adapted to the conditions than the current ones. A topic for further study could thus be some form of applied research to develop strategic sustainability communication practice. In this context, the challenges identified in the empirical material can be a starting point.

Another topic that was only briefly touched upon in the thesis, but which constitutes promising areas for further research, is interorganizational communication. The relevance of the topic has increased as different forms of collaboration on sustainability issues have become increasingly common, but also increasingly questioned. The initiative in this thesis was something of a pioneer in the finance sector that has inspired several others. The constitutive function of communication in these initiatives has not been studied to a greater extent.

A third topic that recurs in several places in the thesis is the phenomenon of greenwashing. From a complex system perspective on sustainability issues, it is a real obstacle to finding common ground and solutions to problems. Mistrust significantly impairs the conditions for necessary sensemaking between actors in the system. Greenwashing is a topic that has already been written about a lot, but mainly as a lack of coherence between walk and talk. In this context, the topic would need to be studied as a social phenomenon that is constituted in the meeting between the communication practices of different actors.

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Formative conversations as foundation for strategic sustainability communication

Strategic sustainability communication is a research area that is still in its infancy. This communication is characterized by the inherent complexity of the issues it addresses, something that has been largely overlooked so far. Therefore, the thesis puts complexity at the center and argues for a more fundamental role for communication. The sustainability problems will be difficult to solve at all without increased awareness and ambition when it comes to communication among the actors involved. Without awareness, organizations will also have difficulty adapting to the challenging conditions that sustainability issues entail. The thesis is based on a qualitative study of how investor organizations participating in a global climate initiative perceive that they are affected by this complexity. Global equity investors with thousands of holdings in practically every industry and region in the world are a highly suitable study object, as they need to manage all types of sustainability-related risks at multiple levels and thus offer rich opportunities to study multiple dimensions of complexity.

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