THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Sustainability roles in the making

Exploring the work and agency of sustainability professionals in the Swedish construction industry

STINA HELLSVIK

Department of Technology Management and Economics

CHALMERS UNIVERSITY OF TECHNOLOGY

Gothenburg, Sweden 2025

Department of Technology Management and Economics
Chalmers University of Technology
SE-412 96 Gothenburg
Sweden
Telephone + 46 (0)31-772 1000

Cover: *A visual metaphor for how sustainability professionals must constantly sort,
structure, and make sense of an ever-shifting sustainability agenda*

Photo: "Plastic beads" by Aney, licensed under CC BY-SA 3.0 and CC BY 2.5 (via
Wikimedia Commons) https://commons.wikimedia.org/wiki/File:Plasticbeads1.jpg

Sustainability roles in the making
Exploring the work and agency of sustainability professionals in the Swedish construction industry

STINA HELLSVIK

Department of Technology Management and Economics, Chalmers University of Technology

Abstract

The aim of this thesis is to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry. Building on a practice lens, the research is based on a qualitative research design, including interviews with sustainability professionals and an in-depth case study of a large infrastructure project.

The findings show that although sustainability roles have existed in the industry for about 30 years, a stable and clearly defined foundation for their work is still lacking. This is demonstrated by the way their work constantly changes direction depending on the sustainability issue "in fashion", and by how they adapt their roles and practices depending on the situation and with whom they interact. This contributes to the fragmented and continually evolving nature of sustainability roles. Sustainability professionals also take on significant responsibility for trying to create clarity around "who should do what" in sustainability work. This is demonstrated through their boundary work, aimed at influencing the boundaries between different professional groups' practices. In doing so, however, they are continuously reshaping their own role, which risks reinforcing the lack of clarity regarding what sustainability professionals actually do, and should do, within the company or in construction projects.

This thesis contributes by developing an empirical and theoretical understanding that builds on practice, that is, what professionals *do*, as a way to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry. To theory, this thesis contributes by providing rich details about what it means to work as a sustainability professional, their roles, and daily work practices. To practice, this thesis contributes by providing knowledge that may support the future development of sustainability roles.

Keywords: boundary work, construction industry, institutional entrepreneurship, institutional logics, interviews, practice, professionalization processes, roles, shadowing, sustainability professionals, work.

LIST OF APPENDED PAPERS

This thesis is based on the work in the following papers:

Paper I:

Månsson, S. (2019). Reviewing the role of sustainability professionals in construction. In *Emerald Reach Proceedings Series* (Vol. 2, pp. 393–399). Emerald Publishing Limited.

The paper was peer-reviewed and published as a conference paper and presented at the 10th Nordic Conference on Construction Economics and Organization in Tallinn, 7–8 May 2019. This volume of proceedings comprises selected papers presented at the conference. All selected papers have undergone a rigorous, double-blind, peer review process under the auspices of a scientific committee of internationally recognized researchers.

Paper II:

Gluch, P., & Månsson, S. (2021). Taking lead for sustainability: Environmental managers as institutional entrepreneurs. *Sustainability, 13*(7), 4022.

Both authors contributed equally to the design of the study and to writing the paper. Månsson collected the empirical data and conducted the analysis of interviews, while Gluch collected and analyzed the secondary data (document study of research reports). Both authors reviewed and approved the final version of the paper.

An earlier version of this paper was peer-reviewed and presented as a working paper at a conference: Månsson, S., & Gluch, P. (2020, July 15–17). *Taking lead for sustainability: Environmental managers as institutional entrepreneurs*. Paper presented at the 26th annual International Sustainable Development Research Society (ISDRS) Conference, Budapest, Hungary.

Paper III:

Gluch, P., & Hellsvik, S. (2023). The influence of multiple logics on the work of sustainability professionals. *Construction Management and Economics*, *41*(11-12), 893-909.

The study was initiated and designed jointly by Gluch and Hellsvik, with data collection conducted by Hellsvik. Both authors contributed to the data analysis. The first draft was primarily written by Hellsvik, with editing and support from Gluch. Gluch conducted main revisions and conducted the final editing of the manuscript. Both authors jointly wrote the introduction, theory, findings, and methods sections, while Gluch wrote the literature review developed the analytical model as well as discussion/conclusion sections. Both authors reviewed and approved the final version of the paper.

Paper IV:

Hellsvik, S., & Bosch-Sijtsema, P. (2025, September 1–3). Supportive hero and troublemaker? Diverging environmental work expectations in construction. In *Proceedings of the 41st Annual ARCOM Conference: Building Regenerative Cities, Dundee, UK*. Association of Researchers in Construction Management.

This paper was peer-reviewed and published as a conference paper. The study was designed by Hellsvik. Hellsvik collected and analyzed the data, and wrote most of the introduction as well as the theory, methods, findings, and discussion sections. Bosch-Sijtsema wrote part of the introduction, edited the manuscript, and provided supervisory guidance. Both authors reviewed and approved the final version of the paper. For the purpose of this thesis, the appended paper has undergone minor editorial amendments.

Paper V:

Hellsvik, S., & Gluch, P. (2025). Thriving through? Exploring the configurational boundary work of environmental managers [Submitted manuscript].

The study was designed by Hellsvik and Gluch. Hellsvik collected the data and performed the analysis. Hellsvik wrote the findings and methods sections. Both authors jointly wrote the introduction and discussion sections. The conceptualization of the paper was initiated by Hellsvik with guidance from Gluch, who wrote the theory section. Both authors edited the final manuscript.

An earlier version of this work was peer-reviewed and presented as a working paper at a conference: Hellsvik, S. (2024, September 2–4). *Boundary work in a Swedish infrastructure project: Shadowing an environmental manager*. Paper presented at the 40th Annual ARCOM Conference, London, United Kingdom.

ACKNOWLEDGEMENT

TABLE OF CONTENTS

V

LIST OF TABLES

1 INTRODUCTION

"Working as a sustainability manager, I would say, means constantly
being a change leader—one who never stops wanting to drive change.
I always want to take the next step, and then the next and the next—I
am never satisfied!"

The quote from the sustainability manager above illustrates how these professionals see themselves as persistent drivers of change, motivated by a strong inner commitment to advance sustainability. This resonates with previous literature portraying them as champions, actively working to implement and legitimize new sustainability practices (e.g., Argento et al., 2019; Buhr et al., 2023; Lahtinen & Yrjölä, 2019; Schaltegger et al., 2023; Thakhathi et al., 2019). Such literature often highlights their success in advancing change, showing how they manage to convince key stakeholders, mobilize organizational members, and institutionalize sustainability practices despite significant challenges. This message produces an idealized and heroic narrative of sustainability professionals as change agents, which risks overlooking the complexity, ambiguity, and emotions involved in their work. For sustainability professionals, such narratives may also create expectations that are difficult, if not impossible, to meet. At the same time, other research points to how they frequently encounter internal resistance and organizational inertia (Wright et al., 2012; Hoppmann et al., 2023; Loos & Spraul, 2024), enduring a continuous struggle for their role and identity (Carollo & Guerci, 2017; Gluch, 2009).

In this thesis, I use the term *sustainability professionals* to describe professionals who work with and are responsible for sustainability as a primary component of their jobs – for example, environmental and sustainability experts, managers, coordinators, consultants, and strategists. Sustainability professionals often navigate ambiguous roles, torn between competing demands (Carollo & Guerci, 2018; Gluch & Bosch-Sijtsema, 2016; Hunoldt et al., 2020). Research has also shown that uncertainties arise regarding who is actually responsible for sustainability work. As a result, sustainability professionals may find themselves in what Boucher et al. (2018) refer to as "imaginary silos", where they become disconnected from decision-making and the wider organization, which in turn hampers sustainability efforts. The academic literature further illustrates how sustainability professionals struggle to define their role in

relation to the continuously changing sustainability agenda (Augustine, 2021; Borglund et al., 2023), in relation to other people within organizations, and in relation to traditional roles such as financial officers and project managers (Akotia & Opoku, 2018; Gluch & Bosch-Sijtsema, 2016; Loos & Spraul, 2024; Risi & Wickert, 2017; Troje & Gluch, 2020).

This raises important questions for both practice and research. If sustainability transitions are to succeed – as both society and the industry claim they must – we need a deeper understanding of the professionals driving these changes: not only in terms of what they do, but also how they do it and how their roles evolve as part of their everyday work and interactions. However, despite the increasing importance of sustainability, the professionalization processes of sustainability roles remain highly underexplored (Brès et al., 2019).

A seminal work on professions is Andrew Abbott's *The System of Professions* (1988). It addresses the ways in which different professional groups define their work and compete for jurisdiction over specific tasks. From this perspective, professional groups are characterized by their specialized skills, abstract knowledge, and the right to carry out particular types of work and address specific problems. For example, architects may see themselves (and be seen by others) as responsible for designing buildings in ways that are not only functional but also aesthetic and culturally appealing. Engineers, by contrast, focus on the structural and technical performance of these buildings. Although Abbott's work at the time challenged the prevailing functionalist view of professions as stable and unchanging by offering a perspective of them as contested and dynamic, this framework is best suited for studying change within already established professions (Abbott, 1991).

To better understand emerging professions, such as in sustainability, scholars have instead called for alternative conceptualizations of professions and professionalization (e.g., Anteby et al., 2016; Brès et al., 2019; Muzio et al., 2011; Muzio et al., 2013; Suddaby & Viale, 2011). These scholars suggest that professionalization should be understood as the creation of shared principles for how to do things, based on the competences, skills, and experience acquired "on the job" (Gherardi, 2009). This tells us that professions and processes of professionalization cannot be separated from their organizational and institutional context. Importantly, an established knowledge domain is not always a prerequisite for professionalization. Instead, other factors, such as

companies' need for new competences and roles (Muzio et al., 2011), how knowledge is applied in a professional manner (Anteby et al., 2016), or the unifying force of common normative goals and collaborative practices among networks of stakeholders (Brès et al., 2019), play a part in how professions emerge and evolve.

1.1 Research interests, context and focus

The growing urgency of addressing environmental and social challenges has made sustainability a central concern for companies. Within these organizations, sustainability professionals have become important actors responsible for translating broad sustainability ambitions into concrete practices. The construction industry is a particularly relevant context for studying this, as it significantly contributes to environmental challenges as well as holds substantial potential to shape sustainable cities and communities (Adamec et al., 2021; Fei et al., 2021).

The construction sector exerts a major influence on environmental conditions, social well-being, and long-term economic development, and therefore plays a central role in shaping a more sustainable society in line with the 17 Sustainable Development Goals (Adamec et al., 2021; Fei et al., 2021). However, the way buildings and infrastructure are currently planned, designed, and delivered makes the industry a major contributor to environmental degradation and climate change, for example through extensive consumption of raw materials and the resulting waste, pollution, and greenhouse gas (GHG) emissions (Kadefors et al., 2020). If managed differently, however, the construction industry holds significant potential to contribute positively to many of the sustainability goals (Adamec et al., 2021; Fei et al., 2021), particularly as it provides the foundation for developing sustainable cities and communities (United Nations, n.d.). In Sweden, for example, Boverket (2020) outlines how the construction sector can contribute to sustainability by applying a life-cycle perspective to buildings' environmental impacts, integrating greenery and ecosystem services, improving resource efficiency, and moving toward a circular economy with non-toxic material flows. It also stresses the importance of adapting the built environment to climate change and ensuring that people are not exposed to harmful pollutants, chemicals, noise, or other health and safety risks. Achieving such a reorientation, however, depends not only on technological innovation but also on the professionals who translate sustainability goals into everyday construction practices.

My main research interest therefore is to understand the ongoing professionalization of sustainability "in the making" by problematizing the role and work of sustainability professionals in the Swedish construction industry. This includes developing an understanding of their everyday work, how they drive change, and how their roles evolve within a construction project context.

The construction industry is characterized by its project-based nature, meaning that most operations are carried out in individual projects, each involving multiple actors and professionals who work together to coordinate and perform activities sequentially in order to deliver a final product (Dubois & Gadde, 2002b). Professionals in the construction industry operate in an inter-organizational and inter-professional context, where different firms and professions engage in a form of competitive collaboration to achieve the project's goals while also remaining competitors in the market (Winch, 2010). These projects are characterized by a strong focus on cost, time, and the need to carry out activities in a specific order. This emphasis on cost and time reinforces the pursuit of efficiency, which favors immediate and decentralized decision-making to handle unpredictable environments and to enable local adjustments (Dubois & Gadde, 2002b).

The delivery of buildings and infrastructure is a complex process that requires the involvement of multiple professionals with specialized skills and expertise across different stages of project delivery (e.g., design, planning, and construction). In construction projects, however, the same team seldom works together from one project to the next. Instead, institutionalized construction practices enable professionals to collaborate effectively without having worked together before (Kadefors, 1995; Lieftink et al., 2019). A consequence of this high degree of institutionalization is that the industry becomes slow and less receptive to change. New roles entering projects can therefore be perceived by others as a disruption, and professionals occupying such roles may experience a sense of being "in between" viewed as part of the project when they conform to established practices yet positioned outside of it when they challenge traditional ways of working in production (Gustavsson, 2018).

A further characteristic of the construction industry is managing the tension between the short-term demands of delivering individual projects and the long-term goal of learning across projects (Sydow et al., 2004), which may in turn slow down sustainable development. In addition, the norm of immediate and decentralized decision-making

(Dubois & Gadde, 2002b) further reinforces short-term rather than long-term thinking. Together, these tensions between the temporary and the permanent, the short-term and the long-term, combined with a constant inflow and outflow of people across projects, make it difficult to drive and improve sustainability work. Attempts to alter established practices add further complexity, a challenge that sustainability professionals have to manage when pushing for a sustainability agenda in construction (Gluch & Bosch-Sijtsema, 2016; Gluch & Räisänen, 2012; Knoth et al., 2022).

Hence, although sustainability professionals are widely recognized as key actors in the sustainability transition (e.g., Buhr et al., 2023; Schaltegger et al., 2023), they often face uncertainty about what they should do, who is responsible for sustainability, and how their work fits into the company or the project (Akotia & Opoku, 2018; Augustine, 2021; Borglund et al., 2023; Boucher et al., 2018; Gluch, 2009; Gluch & Bosch-Sijtsema, 2016). However, previous research has paid relatively little attention to what sustainability professionals actually do on a day-to-day basis. This calls for research that studies sustainability professionals not only in terms of what their work consists of, but also how they carry it out and how their roles develop through day-to-day practices, which require theoretical perspectives that capture ongoing, context-dependent, and dynamic processes of change. To accomplish this, a practice perspective (Feldman and Orlikowski, 2011; Gherardi, 2009; Nicolini, 2013) is applied in this thesis, specifically drawing on the theoretical concepts of institutional entrepreneurship, institutional logics, and boundary work. These perspectives provide conceptual and analytical tools that place the work of sustainability professionals at the center of analysis. Such an approach frames professional roles as emerging through situated, everyday activities rather than as predefined or static (Nicolini, 2013). Using a practice lens makes it possible to acknowledge both institutional and organizational contexts as well as individual agency, offering a dynamic view for studying evolving roles, one that understands them as continually shaped and reshaped through human actions and interactions.

1.2 Aim, scope and research questions

The aim of this thesis is to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry. This entails investigating how sustainability professionals' roles

and work influence the institutional and organizational context they are embedded in, and how this context in turn influences their roles and work, and the reciprocal dynamic in between.

Addressing these questions, I have explored how sustainability professionals, as carriers of an environmental sustainability agenda, have actively contributed to the development of a sustainability profession since the early 1990s. I have further investigated how the institutional field of sustainable construction shapes sustainability professionals' work and roles and how these are developed in relation to other professional roles within the construction industry. I have further examined sustainability professionals' roles and work within an infrastructure project, and how their work both shapes and is shaped in interactions with other project participants. The professionals studied in this thesis have primarily worked with environmental sustainability in roles as sustainability and environmental managers, coordinators, and specialists. Regardless of their specific title and position, they are part of populating a sustainability profession and are therefore referred to as sustainability professionals.

1.3 Outline of the thesis

The introductory chapter is followed by a review of previous research on sustainability professionals, which forms the foundation for the discussion. After the chapter on previous research, the theoretical lenses of institutional theory and boundary work are introduced, through which the empirical data are understood and analyzed. This is followed by the methodology chapter, which describes the studies and explains how and why they were selected. Next comes the discussion chapter, in which the research questions are discussed. Finally, the thesis concludes with implications for theory and practice, as well as suggestions for future research. In addition, five appended papers inform the thesis.

2 PREVIOUS RESEARCH ON SUSTAINABILITY PROFESSIONALS

In this chapter, I review previous research on sustainability professionals in order to situate my study within the existing field of knowledge. My focus has been on highlighting how the literature describes sustainability professionals, their work, and their roles, as well as how role expectations and contextual conditions shaping their roles have been problematized. It should also be acknowledged that this overview is not exhaustive, as the very nature of the sustainability professional role is diverse and continually evolving.

2.1 Labelling their roles: Who are they?

Literature labels individuals working with sustainability in different ways, ranging from "sustainability professionals", "sustainability managers", and "CSR managers" to "environmental professionals" and "environmental experts". This variety, illustrated with examples from the literature in Table 1, reflects the fragmented nature of the role as well as the field of study, with little cross-referencing between different streams of literature. It also suggests that the construct of a "sustainability professional", and the various sustainability roles they occupy, is defined empirically within each study rather than derived from a shared understanding of what a sustainability profession actually entails. As a result, the distinctions between the labels are fluid, with terminology often used interchangeably across individual studies.

The description of sustainability professionals in Table 1 on the next page is drawn from a wide range of empirical studies conducted across industries and countries. In the construction industry specifically, research has examined sustainability professionals at the organizational level (e.g., Opoku et al., 2015), the project level (e.g., Gluch, 2009; Akotia & Opoku, 2018), and in relation to the link between micro-level practices and industry-level institutional dynamics (e.g., Gluch & Bosch-Sijtsema, 2016). Outside the construction industry, scholars have investigated professionals in large corporations across multiple sectors in Australia (Wright & Nyberg, 2012) and Sweden (Borglund et al., 2021), as well as in Germany and Switzerland (Risi & Wickert, 2017; Loos & Spraul, 2024), the UK (Dahlmann & Grosvold, 2017), and Spain (Argento et al., 2019).

Other studies focus on public organizations, such as Canadian municipalities (McDonald, 2020), or on higher education in the United States (Augustine, 2021). Finally, some take a global perspective, either through surveys of sustainability professionals worldwide (Lespinasse-Camargo et al., 2024) or through international interview studies (Mitra & Buzzanell, 2017, 2018).

Table 1. *Labels, definitions, and literature examples describing sustainability professionals*

Label	Definition/Description	Example
Sustainability professionals	Individuals explicitly responsible for some aspect of their organization's sustainability performance; professionals developing sustainable strategies; sustainability specialists, strategists, consultants and managers; professionals belonging to a profession directly related to sustainability; self-identified practitioners in the emerging profession of sustainability	E.g., Archer (2021); Opoku et al. (2015); Wright and Nyberg (2012); McDonald et al., (2020); Lespinasse-Camargo et al. (2024); Mitra and Buzzanell (2017); Mitra and Buzzanell (2018)
Sustainability managers	Professionals with specific responsibility for sustainability; managers holding sustainability-dedicated roles; professionals responsible for strategizing, making decisions, and executing sustainability initiatives; practitioners managing sustainability aspects including environmental issues; defined as a specific occupational group	E.g., Borglund et al. (2023); Carollo and Guerci (2017); Lahtinen and Yrjölä (2019); Akotia and Opoku (2018); Augustine (2021)
CSR (corporate social/sustainability and responsibility) managers	Professionals with competences in corporate sustainability; professionals responsible for promoting socially and environmentally sound business practices; professionals responsible for integrating sustainability principles (e.g., environmental aspects) into the organization's operations and decision-making	E.g., Argento et al. (2019); Risi and Wickert (2017); Wickert and de Bakker (2018); Loos and Spraul (2024)
Environmental professionals	Professionals explicitly tasked with responding to environmental issues; environmental experts; environmental managers	E.g., Dahlmann and Grosvold (2017) Gluch (2009); Gluch and Bosch-Sijtsema (2016)

Although the labels differ, the literature highlights several similarities in how sustainability professionals are described. They are typically portrayed as individuals working on certain aspects of their company's sustainability performance (e.g., Archer, 2021; Augustine, 2021), often in dedicated roles such as sustainability specialists, strategists, consultants, or managers (Carollo & Guerci, 2017; McDonald et al., 2020). These roles are commonly discussed as part of an emerging sustainability profession (Lespinasse-Camargo et al., 2024; Mitra & Buzzanell, 2017, 2018), and those occupying them are often described as "organizational professionals" (Argento et al., 2019; Borglund et al., 2021; Risi & Wickert, 2017), that is, professionals whose professionalism lies in organizational expectations and mandates, while simultaneously promoting sustainability within their companies. Being organizationally bound suggests

that their roles and work are shaped more by organizational structures than by those of an independent profession, one that typically entails greater autonomy, a distinct body of knowledge, and clearly defined jurisdictional boundaries (Abbott, 1988). Sustainability professionals are often expected to lead sustainability initiatives and to integrate sustainability principles into operations and decision-making (e.g., Opoku et al., 2015; Lahtinen & Yrjölä, 2019; Thakhathi et al., 2019). They are often portrayed as devoted professionals, united by a belief that their work contributes positively to society and by a shared objective of institutionalizing sustainability practices (e.g., Archer, 2021; Brés et al., 2019; Dahlmann & Grosvold, 2017), whether within their own companies or in specific contexts such as construction projects (Akotia & Opoku, 2018; Gluch & Bosch-Sijtsema, 2016).

Having outlined how sustainability professionals' roles are described, the following section reviews what previous studies reveal about their work, that is, the strategies they employ and the traits that characterize this work.

2.2 Work strategies and traits: What are they doing?

Several studies focus on the work strategies and traits employed by sustainability professionals as they drive organizational change and implement sustainability practices (e.g., Argento et al., 2019; Gallagher et al., 2020; Lahtinen & Yrjölä, 2019; Thakhathi et al., 2019). This body of research shows how sustainability professionals actively collaborate with actors outside their companies, often with the aim of influencing public opinion and shaping broader debates on sustainability (e.g., Mitra & Buzzanell, 2018; McDonald et al., 2020). In the literature, their work is often described as being driven by an inner motivation or personal commitment, which enables them to strategically convince, persuade, and influence others within their companies to implement sustainability practices (Argento et al., 2019; Thakhathi et al., 2019). For example, drawing on a five-year longitudinal case study of a Spanish electricity company, Argento et al. (2019) examined the implementation of new sustainability practices that were largely driven by the company's CSR manager. Based on interview material, documentary data, and an exhaustive reconstruction of the Integrated Report implementation process, the authors attributed the successful legitimization of these practices to the manager's persistence, intrinsic motivation, and extensive networking, through which the manager demonstrated both humility and patience. The study showed

that the CSR manager's persistent legitimizing activities became effective when supported by influential internal actors and favorable external conditions, which together enabled the institutionalization of new corporate reporting practices.

While Argento et al. (2019) highlight the role of individual persistence and credibility in driving sustainability change, Thakhathi et al. (2019) focus on the collective and strategic dimensions of sustainability professionals' work. Using a set of predefined influencing strategies as an analytical framework, they examined how a sustainability department in a large commercial organization applied these strategies in practice to implement sustainability initiatives. The study identified seven influencing strategies that were used to drive strategic change, including sharing best practices, involving employees in decision-making, and promoting change messages both inside and outside the company. These efforts were found to help persuade organizational members, disseminate change through knowledge-sharing forums, and institutionalize it by adapting tasks, processes, and structures. The study concludes that by employing these influencing strategies, sustainability professionals can drive large-scale organizational and institutional change, thereby contributing to more ethical and sustainable business practices.

Other studies highlight the multifaceted nature of sustainability professionals' work, emphasizing how they operate across organizational levels and boundaries to promote change (Lahtinen & Yrjölä, 2019; Troje & Gluch, 2020). For example, Lahtinen and Yrjölä (2019), in their interview study of sustainability managers from different sectors in Finland, examined how managers make sense of their actions, roles, and purposes in managing sustainability. They found that these professionals perceived their work as both strategic and operational. This meant that they worked analytically and intuitively across organizational silos, management levels, and organizational boundaries to mobilize change, foster collaboration, and challenge the status quo. Their study concluded that sustainability managers work both broadly and deeply within the company in their efforts to drive sustainability change and implement sustainability practices. Similar findings were reported by Troje and Gluch (2020) in a study of sustainability managers seeking to diffuse new practices within social procurement in the Swedish construction industry. Here too, sustainability managers were found to operate at both strategic and operational levels, being directly involved in solving

problems, communicating information, sharing knowledge, and creating collaborative spaces across organizational boundaries.

Sustainability professionals' work within the construction industry is found to be closely linked to project delivery and the development of sustainable construction practices (Akotia & Opoku, 2018; Opoku et al., 2015). For example, they may work with sustainable design, procurement, waste management on site, and the efficient use of materials and resources (Opoku et al., 2015), or provide expertise on the reuse of building materials (Knoth et al., 2022). The literature also notes that sustainability professionals have a role in ensuring that other actors, such as client representatives, are aware of their responsibilities regarding sustainability in construction projects (Akotia & Opoku, 2018).

However, not all work by sustainability professionals leads to change, which was demonstrated in a study from the Swedish construction industry (Gluch & Bosch-Sijtsema, 2016). Based on multiple cases, the study showed that even though environmental experts wanted to change industry practice, they had to adapt their change efforts in a way that reinforced existing project practices rather than transforming them (ibid.). This meant that environmental professionals' ambitions to work in a visionary and future-oriented way clashed with the immediate and reactive demands of their job, leading to stress and a sense of not being able to do a "good job".

Having reviewed what previous studies reveal about the work of sustainability professionals – the strategies they employ and the traits that characterize this work – the following section examines how they are expected to perform these roles and the contextual conditions that affect their ability to do so.

2.3 Role expectations and contextual conditions: How can they do it?

The literature highlights how external demands, conflicting goals, and shifting agendas influence expectations of the role and work of sustainability professionals. Much of this research suggests that the need for specific sustainability roles has emerged in response to companies' growing need to manage issues related to sustainable development (e.g., Augustine, 2021; Carollo & Guerci, 2018; Dahlmann & Grosvold, 2017; Gluch, 2009; Loos & Spraul, 2024). As a result, sustainability professionals have been hired (Augustine, 2021; Carollo & Guerci, 2018; Dahlmann & Grosvold, 2017) to manage

the triple bottom line – the ecological, economic, and social dimensions of sustainability – which entails navigating multiple and often conflicting demands. Dahlmann and Grosvold (2017), for instance, demonstrate how sustainability professionals are simultaneously expected to address concerns of environmental protection while responding to market-based pressures for growth and profit maximization – an expectation that other scholars (Carollo & Guerci, 2018; Guix & Petry, 2024) have found gives rise to a hybridity characterized by conflicting expectations about who to be and what to do. In an interview study, Carollo and Guerci (2018) further identify three types of conflicting expectations that sustainability professionals encounter in their role, relating to a business versus values orientation, an insider-outsider perspective, and a short-term versus long-term view. Similar tensions are found in the construction industry (Gluch, 2009), where different worldviews between environmental work and project practice lead to environmental experts experiencing a limitation to their agency as they must adapt to the rules of the game of construction management practice.

In a more recent interview study, Loos and Spraul (2024) explored issues of limitations in sustainability professionals' agency. They noted that sustainability professionals often struggle to achieve internal legitimacy and, consequently, face difficulties to realize their objectives of implementing sustainability initiatives. The authors therefore sought to understand why, how, and when sustainability professionals work to establish legitimacy within their organizations. Drawing on 30 interviews with sustainability managers from companies and public organizations of varying sizes in Germany, they found that sustainability managers draw on a repertoire of legitimizing strategies to navigate a range of organizational challenges. These challenges included attitudinal barriers towards sustainability among organizational members, difficulties in engaging stakeholders, structural challenges related to organizational support, and practical challenges associated with implementing initiatives under conditions of limited resources, where sustainability managers must work to increase colleagues' willingness to help. To legitimize themselves, sustainability managers would, for example, provide benefits, exert coercion, establish commitment based on people's emotions, create comprehensibility, or demonstrate professionalism by showcasing their expertise. The study also found that the managers' choice of legitimizing strategy depended on how they perceived their own role, whether as a strategist, change agent, collaborator, or facilitator, which also shaped the types of challenges they encountered in their work.

Recent research has turned attention to the ambiguities that accompany conflicting expectations placed on sustainability professionals. Based on an interview study with environmental managers, Borglund et al. (2023), for instance, identified several ambiguities that they argue are inherent features of the sustainability manager role – ambiguities that sustainability professionals must continually navigate and manage. One such ambiguity, according to Borglund et al. (2023), relates to the evolving nature of the sustainability field itself, as new issues are continually added to the agenda. They argue that, as a consequence, each new issue brings additional actors who need to be engaged, and this constantly changing network of people makes the work particularly complex and challenging to manage.

Expectations of the role can also change over time, something that Augustine (2021) investigated by examining the formation of the occupational group of sustainability managers in higher education in the United States. She found that the managers' jurisdiction gradually drifted from the original mandate and expectations of the role that were derived from the social movement that had initiated their appointment. Augustine described this jurisdictional drift as a process in which the managers first faced jurisdictional ambiguity, having to determine what their work should entail. In this process, they traded external politics (i.e., the visions of the social movements) for internal politics (i.e., the organizational realities) and values for workable standards. Consequently, this ultimately led them to perform tasks that diverged from those originally envisioned.

The ambiguity characterizing sustainability professionals' roles also extends to how their work is perceived by others within companies. For example, Boucher et al. (2018) conducted a series of case studies in which they interviewed environmental managers, top managers, middle managers, and employees from seven companies within different sectors, including the construction industry. They found that no one within the company took full ownership of environmental performance and that the role of the environmental manager in relation to other employees was often ambiguous. Many employees were unsure about what the environmental managers actually did or where their responsibilities began and ended. For the environmental managers, this created an unclear role without clear boundaries, which in turn hampered their work to improve environmental performance.

Based on this review, it is evident that few studies have focused on the ongoing professionalization of sustainability and sustainability roles "in the making". In the next chapter, I will introduce the theoretical framework I have used to study this.

3 THEORETICAL LENSES

In this chapter, I present the main theoretical concepts I have used in my thesis to investigate the empirical phenomenon studied. More detailed descriptions of chosen theoretical concepts as well as additional reference frameworks applied in individual studies are discussed in appended Papers I-V.

A main assumption underpinning this thesis is that achieving sustainable development requires a shift in how we organize and carry out our activities. In other words, sustainable development entails changes to the norms and cultural prescriptions that define what is considered legitimate, appropriate, or acceptable, and shape how individuals interpret their roles – that is, their work. Thus, by adopting a practice lens, my focus is to problematize the role and work of sustainability professionals in the Swedish construction industry. In other words, I apply complementary theoretical concepts to understand how something *is*, rather than how something *should be done*.

A practice lens brings "work" back into the study of organizations by placing what people do at the core of explaining organizational outcomes, such as sustainability roles "in the making" (Feldman & Orlikowski, 2011; Gherardi, 2009; Nicolini, 2013;). From this perspective, professions emerge through situated, everyday activities rather than as predefined or static entities. Overall, this thesis draws on two main theoretical frameworks: institutional theory (Lawrence & Suddaby, 2006; Thornton & Ocasio, 2008) and boundary work (Langley et al., 2019). Both theoretical lenses support practice-based studies, providing conceptual and analytical frameworks that place the work of sustainability professionals at the center of analysis. Through the chosen theoretical approach, it is possible to acknowledge both institutional structures and individual agency, which offers a dynamic view of professionalization processes that enables me to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry.

3.1 Institutional theory

At the heart of institutional theory lies "the idea that there are enduring elements in social life – institutions – that have a profound effect on the thoughts, feelings and

behavior of individual and collective actors" (Lawrence & Suddaby, 2006 p. 216). However, institutions are not external to human actions but are constituted through the more or less conscious actions of individuals and collective actors. Hence, institutions are materialized in reoccurring patterns of social actions, i.e., practices, which rely on the action of individuals and collective actors for their reproduction over time. Thus, individuals are both influenced by and influencing institutions, a mechanism referred to as *embedded agency* (Battilana & D'Aunno, 2009). Here, agency refers to individuals' capacity to act within institutional structures rather than upon them. In the context of this thesis, *agency* is therefore understood as professionals' ability to act within socially prescribed sustainability roles, such as those of sustainability experts or environmental managers. With this perspective, sustainable development implies a need to change existing institutions, which influence what actions are seen as legitimate, appropriate, or expected within a given context.

A concept that addresses key actors in institutional change processes is *institutional entrepreneurship.* Institutional entrepreneurship can be defined as "the activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones" (Maguire et al., 2004, p. 657). This concept offers an actor-centered perspective within institutional theory, reintroducing agency into the study of institutional change. The related concept of *institutional entrepreneurs* are thus actors who both initiate "divergent change" and work to implement it, for example by creating visions, mobilizing resources, and building alliances (Battilana, 2006; Rothenberg 2007; Argento et al., 2019). In this thesis, the concept of institutional entrepreneurship is used to analyze the interplay between field-level changes and the actions of environmental pioneers in their efforts to introduce and establish sustainability practices within the construction industry as part of a professionalization process. See Paper II for more details.

Research on institutional entrepreneurship highlights the importance of enabling conditions, that is, factors that increase the likelihood that individuals will initiate changes deviating from dominant institutional logics. These include social position, both formal (within hierarchies) and informal (through networks), with individuals at the organizational periphery often seen as more likely to act as institutional entrepreneurs (Battilana, 2006). Other enabling conditions include a perceived sense of urgency and external events such as scandals, accidents, or crises (Battilana et al.,

2009). The timing and context of such events further shape whether they open opportunities for institutional change (Hoffman & Jennings, 2011).

Previous empirical research has illustrated how institutional entrepreneurship and change unfolds in practice. For example, Etzion and Ferraro (2010) show how the Global Reporting Initiative (GRI) promoted sustainability reporting by employing discursive strategies, such as drawing analogies to financial reporting, to gain legitimacy. Similarly, Rothenberg (2007) found that environmental managers acted as boundary spanners between technological and environmental discourses, reframing environmental performance as operational efficiency to gain support from technically oriented colleagues.

Acknowledging the importance of contextual conditions, the *institutional logics perspective* is used in this thesis to provide a lens for analyzing the work and agency of sustainability professionals within the institutional field of sustainable construction. This field is characterized by the coexistence of multiple logics that professionals must navigate and combine in different ways (see appended Paper III for an overview of these logics in construction).

Institutional logics perspective is an evolution within institutional theory and defined as "the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality" (Thornton & Ocasio, 2008, p. 101). This definition highlights the interplay between individual agency and broader institutional environments, linking situated practices to underlying beliefs, values, and rules. Institutional logics can therefore be understood as the "rules of the game" that guide individuals' actions and shape what is perceived as legitimate or appropriate ways of doing things (Thornton et al., 2012). Thus, institutional logics guide sustainability professionals in their work (Borglund et al., 2023) making this a relevant theoretical concept for this thesis.

Research has increasingly examined how institutional logics interact within *institutional fields*, defined as communities that partake of a common meaning system and whose participants interact more frequently with one another than with actors outside the field (Scott, 1995). Institutional fields are often characterized by institutional complexity, where multiple logics coexist (Greenwood et al., 2011). Studies of logic

17

multiplicity show that such logics can coexist within the same organization (Besharov & Smith, 2014) or co-evolve within a profession over time (Dunn & Jones, 2010). A central question in this stream of research is how actors interpret and enact multiple institutional logics (Glynn & D'Aunno, 2023). For example, professionals may interpret and enact multiple logics on the ground (Currie & Spyridonidis, 2016). Other studies highlight how individual responses to conflicting logics may differ and lead to internal divisions within a profession (Adams, 2020), or how reconciling conflicting logics can give rise to hybrid professionals (Blomgren & Waks, 2015; Guix & Petry, 2024).

3.2 Boundary work

While the boundary spanning role of professionals, i.e., the occupational function that bridge and/or broke across boundaries, have been widely studied in a project-based setting (see for example Bosch-Sijtsema and Henriksson, 2014; Brion et al., 2012; Fellows and Liu, 2012; Satheesh et al., 2024), less studies have focused on boundary work. In this thesis, the concept of *boundary work*, and specifically configurational boundary work, is applied to understand the role and agency of sustainability professionals as they work with other professionals in construction projects to achieve a well-functioning collaboration around environmental work.

Boundary work can be defined as the "purposeful individual and collective effort to influence the social, symbolic, material, and temporal boundaries, demarcations, and distinctions affecting groups, occupations, and organizations" (Langley et al., 2019, p. 704). From this definition it follows that *boundaries* are (re)created in human interactions. Boundary work is therefore important because of its consequences for collaboration among professionals, for example by determining the division of work – who is doing what, and also who is included or excluded – which in turn influences organizational practices, both within and across organizations (ibid.). Boundary work involves some degree of intentionality, meaning that there is a reason why individuals or groups try to influence boundaries. In this thesis, the intentionality in boundary work refers to the everyday work of sustainability professionals as they seek to ensure effective environmental management work together with other professionals in construction projects.

Research on boundary work highlights that individuals and groups often engage in boundary work for different reasons. For example, some individuals are creating,

protecting, or expanding boundaries to distinguish themselves and their practices from others (e.g., Bos-de Vos et al., 2019; Gibassier et al., 2020). Here, boundaries serve as a source of legitimacy and self-protection between professional groups (Bos-de Vos et al., 2019), or as a means of creating a professional domain (Gibassier et al., 2020). Other individuals realign boundaries to enable collaboration (Stjerne et al., 2019). Here, boundaries serve as points of alignment, where learning between professional groups can take place, or tensions between organizations can be resolved (ibid.).

A type of boundary work is what Langley et al. (2019) refer to as *configurational boundary work* in which individuals use boundaries as a way of differentiating and integrating groups to ensure that certain activities are brought together while others are kept apart. In this case, individuals are designing a new boundary landscape in which boundaries are used as instruments for (re)structuring interactions and facilitating desired outcomes. This can be done in different ways, for example by arranging boundaries of other groups to refocus interactions in order to do new things or the same things differently, buffering boundaries between groups with competing interests or different worldviews, or coalescing existing activities and thereby reshaping the boundaries among groups. A more extensive account of the concept of boundary work is provided in Paper V.

4 RESEARCH METHODOLOGY

In this chapter, I provide an overview of the methodological approach taken in the thesis. I outline the research approach, overall research design, data collection and analysis, ethical considerations, and reflections on research quality and process. Detailed descriptions of each study are presented in appended Papers I–V.

4.1 Research approach

To better understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals, a qualitative research approach was adopted. I selected a qualitative approach because it enables the generation of rich, contextualized data, well suited for interpreting and understanding social phenomena, such as social interactions and practices, and individuals' experiences within a social context and the meanings they invest in such experiences (Flick, 2014). Qualitative data from interviews and observations are often emphasized as a fruitful approach when exploring the underlying practices involved in institutional logics (Thornton & Ocasio, 2008), institutional entrepreneurship (Maguire et al., 2004), and boundary work (Langley et al., 2019).

The qualitative research in this thesis is grounded in a constructionist view of social reality, which holds that social phenomena are not objective and independent entities but are instead created through human interactions (Bryman & Bell, 2012). This means that social reality does not simply exist "out there" to be discovered; rather, it is socially constructed through shared meanings and practices that both shape and are shaped by how individuals perceive and engage with the world. From this perspective, there is no universal, objective truth, but rather multiple subjective "truths" or perspectives that depend on situated contexts, historical events, and the theoretical lenses through which reality is interpreted. Accordingly, my research aligns with an interpretivist epistemology, which assumes that knowledge of social phenomena is inherently subjective and shaped by context-specific interpretations and theoretical concepts (Bryman & Bell, 2012). This means engaging with individuals' perceptions and experiences and attempting to see the world through their eyes (Bryman & Bell, 2012).

4.2 Research design and process

The research design consisted of four studies: one literature study and three empirical studies, each contributing to the investigation of sustainability professionals' work within the Swedish construction industry (see Table 2 for an overview of the studies and their resulting papers). It has previously been suggested that professionals' roles and work can be studied through what professionals do, that is, through their social interactions and actions (Anteby et al., 2016), for example by examining their work tasks, how these tasks change over time, and how they relate to those of other professions. In designing this research, I have taken this into account and therefore chosen to mainly base my research on interviews and participant observations through shadowing. The focus has been on investigating how sustainability professionals perceive and do their work.

Table 2. *Summary of studies and their resulting papers*

Studies	Data collection methods	Year(s)	Papers
Study 1	Systematic literature review	October 2018 (literature search)	Paper I
Study 2	Interviews	March 2019 – April 2019 (n=8)	Papers II and III
Study 3	Interviews	October 2019 – February 2020 (n=23)	Paper III
Study 4	Shadowing Interviews Workshop	2021 (40 h) & 2023 (40 h) 2021 (n=2) & 2023 (n=18) April 2024	Papers IV and V

The first study (Study 1), a systematic literature review, was conducted at the beginning of my doctoral studies. Its purpose was to identify the current "state of the art" on sustainability professionals and their roles in the construction industry, as well as to familiarize myself with the literature and create a research space. Study 1 resulted in a conference paper later published in a proceeding (Paper I), which was presented at an academic construction management conference. The conference was valuable, as it provided an opportunity to familiarize myself with the academic side of the industry and to discuss my preliminary research questions with a broader community of researchers at an early stage.

This systematic literature review also informed the design of the first empirical study (Study 2), an interview study with environmental pioneers who have long experience of working with sustainability issues in the industry, which resulted in Paper II of the appended papers. From these first interviews, I learned that sustainability issues have become increasingly important for the industry as a whole, and that sustainability work has grown in both scope and complexity, with increasingly specialized roles.

Study 3 was a second interview study in which I interviewed sustainability professionals with varying years of work experience and job titles, and from different types of companies across the Swedish construction industry. These interviews complemented the first empirical study by providing a broader perspective on what it is like to work with sustainability issues across the construction industry. Together with Study 2, Study 3 formed the basis for Paper III of the appended papers. Overall, the interviews highlighted that sustainability professionals often perceived their work as dependent on others, which raised further questions about how sustainability professionals' roles and work relate to those of other professionals, which informed the decision to conduct a case study (Study 4). In this case study, it was possible to investigate how sustainability professionals working for the contractor in a construction project collaborated with other project professionals.

Study 4 began in June 2021 and ended in April 2024 (with a break from November 2021 to September 2023). The purpose of this study was to explore the everyday and practical realities of sustainability professionals' work and to examine their role in relation to other professionals. In doing so, this study complemented the overall thesis project by offering an in-depth look at the day-to-day work of an environmental manager within a large infrastructure project. This part of the research design provided detailed insights into how sustainability professionals are able to drive sustainability issues in practice, and how they are both shaped by and shape the work they engage in. The study resulted in Papers IV and V of the appended papers.

As for the general research process, it was an iterative process, moving between data collection and analysis, between empirical data and theory, and between interpretation and reflection. Rather than following a linear path, the research design evolved over time with new insights and questions emerging throughout the process (Dubois & Gadde, 2002a).

4.3 Literature studies

The aim of the initial systematic literature review was to explore what was currently known in the body of literature on sustainability professionals in the construction industry. Details of how this review was conducted can be found in Chapter 5 (Summary of Papers) and in appended Paper I. Since then, I have continuously reviewed the literature throughout the research process as a way to develop the theoretical frame of

reference and to situate the findings in relation to previous research. Developing the frame of reference was an iterative process, shaped abductively alongside my empirical studies. A substantial part of this work involved reviewing reference lists in relevant articles as well as examining the citations of those articles. Over the course of the research, I found that the literature on sustainability professionals is fragmented across different disciplines and research communities that are disconnected from one another. I therefore conducted a second literature review aimed at integrating studies across these different research communities. Unlike the initial review, which was conducted to provide a foundation for the thesis by focusing on sustainability professionals in organizational contexts within the construction industry, this review sought to identify studies on sustainability professionals within any organizational, professional, or institutional context, regardless of industry. The search string was therefore broader in scope but had a more specific focus on sustainability professionals' roles and work. This review contributed to the framing of Paper V and to the previous research section (chapter 2) of this thesis by providing examples of empirical studies on sustainability professionals.

4.4 Data collection

Primary data in this thesis were collected through interviews with environmental pioneers and sustainability professionals from various parts of the construction industry. In addition, a case study was conducted, which involved shadowing an environmental manager in her day-to-day work, interviews with project professionals, a review of project documents, and a workshop.

4.4.1 Interviews with environmental pioneers

To better understand sustainability roles and work in relation to the broader field level change of sustainability within the construction industry, I conducted interviews with eight environmental pioneers between March and April 2019. These individuals were specifically selected because of their extensive experience in environmental management and their recognized status as "environmental pioneers" within the Swedish construction industry. They were known from previous research projects and identified as being frontrunners of environmental sustainability progress through industry-specific news media, conferences, and innovation projects. Each of the eight interviewees was contacted via email and invited to participate in the study. See Table

3 for an overview of participants, the roles they had, their educational background, and the types of organizations they have worked in. The role and type of organization at the time of the interview are presented in bold.

Table 3. *Background information of interview participants in Study 2*

No.	Role	Education	Work experience	Type of organization
1	**Sustainability consultant** Sustainability manager Environmental manager Environmental coordinator	Civil engineering and Environmental science	21 years	**Consultancy** Construction clients Contractor
2	**Environmental consultant** Sustainability manager Environmental manager Environmental coordinator	Civil engineering	25 years	**Consultancy** Contractor
3	**Environmental strategist** Environmental manager	Technical upper secondary education	39 years	**Contractor**
4	**Sustainability manager** Environmental manager Quality, environment, health & safety manager	Technical upper secondary education	19 years	**Contractor**
5	**Business development** Consultant Line manager Environmental manager	Civil engineering	25 years	**Architecture firm** Contractor Real estate company
6	**Sustainability specialist** Environmental manager Quality & environmental coordinator Environmental engineer	Chemical engineering	29 years	**Architecture firm** Real estate
7	**Sustainability manager** Quality & environmental manager Environmental coordinator	Civil engineering	24 years	**Construction client** Contractor
8	**Sustainability manager** Environmental manager Environmental coordinator	Chemical engineering	34 years	**Contractor**

The eight interviews were conducted either face-to-face (six interviews) or via Skype (two interviews), and each lasted between one and two and a half hours, resulting in a total of 11 hours of interview material. All interviews were semi-structured (Kvale, 2007), allowing participants to freely elaborate on the questions. This approach enabled follow-up questions and supported a more natural flow, where topics could be addressed in the order that felt most natural. All interviews were audio-recorded and transcribed verbatim.

Topics in the interviews included their career stories, their perceptions of how their roles had changed in relation to the development of sustainability, and their views on how the profession might evolve in the future. The interviews also explored specific

milestones during which they perceived a shift in their roles or in how environmental sustainability work was practiced. These milestones were probed for in the interviews to capture how their roles and work had evolved over time.

4.4.2 Interviews with sustainability professionals

Additional to the interviews with the environmental pioneers, and to better understand sustainability professionals' role and work, I conducted interviews with 23 sustainability professionals who were working in the Swedish construction industry at the time, representing a broad set of environmental and sustainability consultants, managers, experts, coordinators, and specialists.

These interviews were conducted between October 2019 and February 2020. Participants were selected based on their various experiences, roles, and lengths of professional experience. The aim was to capture a wide range of perspectives to ensure a rich and varied data set. Participants were identified through sustainability-related news media, company websites, and a list of attendees from a 2018 conference on sustainable construction. The list of attendees helped identify professionals who working in sustainability roles that are not visible to the outside. Seven participants were contacted based on referrals from previous interviewees. In total, 33 individuals were contacted via email and invited to participate in the study, of whom 23 agreed to participate. See Table 4 for an overview of participants.

The interviews were conducted in a semi-structured manner (Kvale, 2007), either face-to-face (21 interviews) or via Skype (2 interviews), and each lasted between one and one and a half hours. All interviews were audio-recorded and transcribed verbatim. In these interviews, the participants were asked to elaborate upon how they perceive their role and how their role has developed over time. They were also asked to describe their own day-to-day work, including both typical tasks and more challenging conditions. Topics included what they perceived as the most engaging, challenging, and least interesting aspects of their work. Participants were also asked to provide examples of situations from their daily work and to elaborate on what they did in those situations. This approach yielded rich insights into perceptions of sustainability professionals' personal experiences and everyday work.

Table 4. *Background information of interview participants in Study 3*

No.	Role	Education	Work experience	Type of organization
1	Environmental consultant	Industrial ecology	3 years	Construction engineering consultancy
2	Sustainability manager	Political science	12 years	Property developer/ Construction client
3	Sustainability consultant	Civil engineering	9 years	Construction engineering consultancy
4	Sustainability manager and project leader	Civil engineering	6 years	Construction engineering consultancy
5	Project leader	Environmental science	13 years	Construction engineering consultancy
6	Environmental accountant	Macroeconomics	19 years	Construction engineering consultancy
7	Environmental consultant	Industrial ecology	5 years	Construction engineering consultancy
8	Sustainability manager	Civil engineering	4 years	Contractor
9	Sustainability manager	Environmental law	20 years	Contractor
10	Strategic sustainability advisor	Civil engineering	12 years	Architecture
11	Environmental manager	Civil engineering	15 years	Property developer/ Construction client
12	Sustainability strategist	Civil engineering	25 years	Architecture
13	Sustainability manager	Civil engineering	9 years	Contractor
14	Quality, environment, health & safety manager	HVAC engineering	10 years	Contractor
15	Environmental specialist	Civil engineering	19 years	Architecture
16	Environmental coordinator	Civil engineering	9 years	Construction engineering consultancy
17	Sustainability manager	Environmental science	12 years	Property developer/ Construction client
18	Environmental coordinator	Industrial ecology	1 years	Contractor
19	Sustainability expert	Civil engineering	30 years	Construction engineering consultancy
20	Sustainability manager	Civil engineering	11 years	Property developer/ Construction client
21	Environmental coordinator	Environmental coordinator (Vocational diploma)	3 years	Construction engineering consultancy
22	Quality, environment, health & safety manager	Geology	15 years	Contractor
23	Sustainability manager	Environmental science	15 years	Property developer/ Construction client

4.4.3 Case study

To gain a deeper understanding of the everyday work of sustainability professionals in projects, I conducted a case study within an environmentally ambitious infrastructure project. In this case, data was collected through 80 hours of empirical field observations based on shadowing an environmental manager, 20 semi-structured interviews with 18 project participants, a review of project-specific documents, and a workshop.

The study was conducted within a large-scale and complex infrastructure project in a densely populated Swedish city. The construction phase of the £300-million project began in 2018 and is scheduled for completion in 2025. It involves both bridge and railway construction. The project's environmental requirements were subject to a decision by the environmental court, and project participants described it as a project operating under strict environmental demands.

To manage environmental issues, the contractor had an assigned environmental management team within the project organization. The team was responsible for monitoring environmental compliance and escalating issues when necessary. The team included two environmental managers, who worked proactively with overarching environmental management, such as developing procedures and training programs, updating key environmental plans, and communicating with the client on environmental matters. Two environmental coordinators who worked at an operational level, supporting production professionals, monitoring compliance, and reporting to the environmental managers.

The construction client had a full-time environmental specialist assigned to the project, responsible for auditing the contractor's activities, reviewing environmental documentation, and reporting to the authorities. The client's environmental specialist and the contractor's environmental managers collaborated closely, maintaining regular contact and conducting joint site inspections.

The case was selected primarily based on convenience but was deemed relevant because it offered the opportunity to shadow an environmental manager working full-time in an infrastructure project with high environmental demands. How this choice of case may have influenced the findings is discussed later in the section on reflections (in Chapter 4.9). For a more detailed description of the case, see appended Papers IV-V.

Observations through shadowing
Shadowing is a suitable method for studying situated practices and interprofessional interactions as they occur in everyday work (Czarniawska, 2007), and it has been described as a promising method for exploring practice-oriented concepts such as boundary work (Langley et al., 2019). In total, I conducted 16 days of shadowing the same environmental manager across four periods between October 2021 and August 2023, amounting to approximately 80 hours of observation.

The environmental manager was identified with the help of a contractor participating in the research project, who assisted in finding a suitable participant. She was selected because she worked full time as an environmental manager on a large infrastructure project and was involved both with the construction client and with production professionals. This made her role particularly relevant for studying the environmental manager role and work in relation to other roles and practices. Her work intersected with several other professionals, such as the client representative and site managers. Shadowing this manager therefore enabled an understanding of the environmental manager role and responsibilities in relation to other roles in the infrastructure project, all of which are affected by increasing environmental requirements and follow-up demands in infrastructure construction projects.

The shadowing took place in a variety of settings, including the office, construction sites, and online meetings, and covered a broad range of activities such as meetings, informal interactions, computer-based work, site inspections, handling environmental deviations, a chemical audit, water sampling, and the development of environmental training. Table 5 provides an overview of the observation periods, their duration, and the main activities observed.

Table 5. *Overview of on-site shadowing sessions*

Period	Number of days	Total hours	Activities observed
October 2021	6	40	Meetings and informal interactions; computer work; environmental site inspection; handling environmental deviations; chemical audit; development of environmental training
May 2023	3	12	Meetings and informal interactions; computer work; handling environmental deviations
June 2023	5	20	Meetings and informal interactions; computer work; environmental site inspections; handling environmental deviations; water sampling
August 2023	2	8	Meetings and informal interactions; computer work; environmental site inspection

To complement the observations, I held short conversations with the environmental manager throughout the observation sessions and at the end of each day. These conversations helped clarify what was happening, deepen my understanding of the reasoning and meaning behind certain actions, and avoid misinterpreting routines, relationships, or events. They also contributed to building trust and maintaining an ethically transparent research relationship.

My role during the observations was to shadow the environmental manager in her daily work, which meant following her around as she carried out her tasks. In the office, I sat next to her desk, from where I could observe what she was reading, writing, or otherwise working on. Outside the office, I accompanied her as she moved around, and during meetings I sat beside her. I sought to keep a low profile and not disturb the field, and I did not actively participate in the activities taking place. My primary task was to translate what I observed and heard into written notes, including not only visual impressions but also auditory, spatial, social, atmospheric, and contextual aspects. To do so, I used an observation schedule to structure my observations (see Table 6) and a set of symbols to organize my notes and facilitate later stages of analysis (see Table 7).

Table 6. *Observation schedule*

Observation focus	Explanation
What happens	What is the environmental manager doing? (e.g., reviewing documents, writing reports, checking lists, attending meetings, conducting inspections, answering questions, discussing problems, etc.)
When it happens	At what time and for how long (e.g., noting start and end times)
Where it happens	At what location (e.g., in the office, corridor, break room, construction site, or meeting room)
By/with whom	Who is involved in the interaction?
How it happens	How are they interacting? (e.g., spoken or written, joking or serious, tone, facial expressions, body language)
Why it happens	Based on informal interviews with the people involved

In practice, I took notes in three steps. First, I wrote shorter notes during the observations in a field diary (a paper notebook), leaving space between entries so that I could return to them later. Second, I elaborated on these notes at the nearest possible moment when there was less activity. For example, I sometimes took a short break to expand on what I had written while it was still fresh in my memory, prioritizing more detailed notes over being constantly present (Aspers, 2007). Third, after each observation day, I elaborated the field notes from my diary into a more detailed account in Word, where I included as much as I could recall from the day. Because this was time-consuming, I sometimes recorded myself retelling the day, which I later transcribed. I also took photographs to support my observations.

Table 7. *Symbols used in field notes*

Symbols	Usage
" "	Verbatim quotation
' '	Paraphrase (not word-for-word)
( )	Parentheses with my own annotations
< >	First order constructs (codes)
/ /	Second order constructs (themes)
{ }	My own comments (e.g., if I said something during fieldwork, such as asking questions)

Interviews with project participants

Interviews were conducted as part of the case study to complement the observations and to understand why certain practices and interactions occurred. I conducted semi-structured interviews (Kvale, 2007) with 18 project participants, most of whom were part of the environmental management team or production management. The client's environmental specialist was also interviewed. See Table 9 for an overview of the participants.

The interview participants were selected because their work and responsibilities were interrelated with those of the shadowed environmental manager and the environmental management team. In total, 21 individuals were invited to participate, of whom 18 agreed to be interviewed. The interviews were conducted face-to-face and lasted between 45 minutes and one and a half hours each. All interviews were audio-recorded and transcribed verbatim.

In the interviews, the participants were asked about their role and daily work, and how they perceived environmental work in the infrastructure project. Topics included their main challenges, the most enjoyable aspects of their work, and the least interesting aspects. They were also asked to draw the project organization as they perceived it, explain how they thought environmental work was organized, and reflect on collaboration around environmental issues. During the interviews, participants were also probed for concrete examples of situations that illustrated their reflections and experiences.

Table 8. *Interview participants in Study 4*

No.	Roles in project	Actors	Interview occasions	Time and duration of interviews
1	Environmental manager (shadowed)	Contractor	3	70 min, Sep 2021 2x60 min, Nov 2023
2	Environmental specialist	Contractor	1	75 min, Sep 2021
3	Staff manager	Contractor	1	50 min, Nov 2023
4	Project manager	Contractor	1	80 min, Nov 2023
5	Production manager	Contractor	1	45 min, Nov 2023
6	Environmental coordinator	Contractor	1	50 min, Nov 2023
7	Environmental coordinator	Contractor	1	70 min, Nov 2023
8	Environmental manager	Contractor	1	50 min, Nov 2023
9	Environmental coordinator	Contractor	1	55 min, Nov 2023
10	Block manager	Contractor	1	65 min, Dec 2023
11	Block manager	Contractor	1	45 min, Dec 2023
12	Environmental specialist	Client	1	75 min, Dec 2023
13	Site manager	Contractor	1	65 min, Dec 2023
14	Quality coordinator	Contractor	1	45 min, Dec 2023
15	Health and Safety manager	Contractor	1	90 min, Dec 2023
16	Site manager	Contractor	1	90 min, Dec 2023
17	Environmental specialist	Client	1	130 min, Dec 2023
18	Site manager	Contractor	1	70 min, Dec 2023

Note: Interviewees 2, 9, and 12 provide support in demand; the others work full time in the project. Interviewees 1, 6, 7, and 8 formed the environmental management team.

Project documents

A document review was carried out to gain contextual and organizational insights into the infrastructure project. The reviewed materials included both internal project documents and publicly available information. Internal project documents were accessed and reviewed on-site during fieldwork but were not collected as data. In reviewing the documents, I took detailed notes. These documents included the Environmental Control Plan, Environmental Procedures, Environmental Training materials, Environmental Tertiary Report, Material lists, Non-Conformities, Environmental Plan, and Work Preparations and organizational charts.

To complement, publicly available project-related information was reviewed from the client's and contractor's official websites and recorded into a filed diary. The document study served to contextualize field observations, triangulate data gathered through other methods and provide background on environmental management and organizational processes within the project.

Workshop

To corroborate preliminary findings and collect additional data, I conducted a workshop in April 2024 together with two other researchers (my supervisory team), the shadowed

environmental manager, one environmental coordinator, the staff manager, and the contract manager from the project.

The workshop lasted for three hours and was divided into two parts. The first part (60 minutes) focused on preliminary findings from my case study. This session provided an opportunity for the invited project participants to respond to and provide feedback on. My role in this part was to facilitate the discussion, while my supervisors took notes. In the second part of the workshop (120 minutes), the group was asked to discuss the topic of environmental responsibility and collaboration around environmental work in construction projects, with a focus on expectations and tensions related to the environmental manager/coordinator role. The discussion questions were as follows:

- What makes the role important?
- In what areas does the role need improvement?
- How can the role be developed in the future?

Participants were first given five minutes to reflect individually and write down their thoughts on post-it notes. This was followed by an open group discussion. The post-it notes were also collected afterwards and recorded. The workshop discussions were not audio-recorded but were documented through detailed note-taking by the research team.

4.5 Secondary data

To understand the context in which sustainability professionals work, secondary data were continuously collected throughout the thesis project. This included reviewing grey literature, such as trade reports, to trace the development of sustainability practices in the Swedish construction industry over time. This literature helped me contextualize the career stories shared by the environmental pioneers in the first interview study.

Secondary data were also gathered from various media sources: (1) daily news media covering environmental or sustainability issues or developments in the construction industry; (2) industry-specific newspapers (e.g., *Byggindustrin*); (3) sustainability-focused newspapers (e.g., *Aktuell Hållbarhet*); and (4) LinkedIn posts from professional groups such as Sustainability Professionals, Climate Change / ESG Professionals Group, and *Hållbarhetsgruppen* (Sustainability Group).

In addition, job advertisements on a career website targeting sustainability professionals (*Aktuell Hållbarhet*) were read twice a month between October 2018 and June 2020. These advertisements provided insights into how companies' expectations of sustainability roles were framed and reframed over time, which helped me anchoring my phenomenon in practice.

Insights from these various sources were primarily documented in a research diary, where I recorded reflections and observations over time. Particularly relevant articles or LinkedIn posts were occasionally saved in full for future reference. This ongoing engagement in the professional discourse supported the identification of potential interviewees, helped maintain the relevance and timeliness of the study, and contributed to the informal validation of my findings.

4.6 Empirical data analysis

The empirical data analysis was an iterative process that involved moving back and forth between data and theory in search of patterns across the data set. For a detailed description of the respective data analyses, see appended Papers II–V. In Paper II, the focus of the analysis was on how environmental managers have perceived changes to their roles and practices over time, and how they had led the development of sustainability practices. In Paper III, the analysis focused on how sustainability professionals perceived their work under different conditions and how they responded to those conditions. In Paper IV, the analysis focused on how environmental managers' work expectations were shaped by spatial and temporal perspectives within a construction project. In Paper V, the analysis focused on the day-to-day practices and interactions of an environmental manager within the construction project.

In general, the data analysis involved using thematic analysis, which is a fundamental method for qualitative analysis that can be used across a range of theoretical and epistemological approaches (Braun & Clarke, 2006). It is a flexible and useful research tool that can provide a rich and detailed, yet complex, account of data (ibid.). Thematic analysis is a method for identifying, analyzing, and reporting patterns (or themes) within data.

In line with the guidelines outlined by Braun and Clarke (2006), I first familiarized myself with the data. This process began already during data collection, as I wrote

memos about aspects I found interesting during interviews or while shadowing the environmental manager in the field. Familiarizing myself with the data continued as I transcribed interviews and checked the transcriptions against the original audio recordings. I also read and reread the entire data set in an active way, searching for possible patterns and noting down insights or ideas about how to code (sort) the data.

I began generating initial codes as I tried to organize the data into different groups. This was done inductively, as I sought to make sense of the material. In this step, I coded (or sorted) extracts of texts from the interview transcripts and field notes into different groups. Initially, this process was messy, and the same data extracts could be assigned to several codes. Once I felt satisfied with the initial coding, I began searching for overarching themes and sub-themes among the codes to make sense of how the extracted data within each theme cohered while remaining distinct from other themes. This was an iterative process in which I would code and re-code the data in the search for coherent patterns.

I also used theoretical lenses as tools to help organize, interpret, and conceptualize the data, which meant moving back and forth between the empirical material and theoretical concepts in an abductive manner (Van Maanen et al., 2007). Thereafter, I presented the findings in written form, often using narratives or vignettes to provide contextual details and rich, layered descriptions of the data, allowing others to assess the transferability of the findings to different contexts (Langley, 1999; Treharne & Riggs, 2015).

Although the description above might sound straightforward, the data analysis was in fact an intuitive and iterative process, with different steps unfolding simultaneously and informing one another. Identifying coherent and distinct themes was particularly challenging, since the work of sustainability professionals is an entangled phenomenon, with practices that overlap and intersect – sometimes without clear boundaries. The defining of themes also required considering both individual actors' agency and structural constraints, as their work depends on their roles, yet there are no roles without their work. Here, the theoretical concepts were particularly helpful as tools for organizing and interpreting the data. Moreover, the analysis benefited from ongoing discussions with supervisors and colleagues, whose perspectives helped refine interpretations, challenge assumptions, and strengthen the overall analytical rigor

4.7 Ethical considerations

In the research conducted for this thesis, all participants provided their informed consent to participate in the studies. During the interviews, participants were also asked for permission to record the interview, as well as to transcribe and use quotations in the papers and the thesis.

Consideration was given to the General Data Protection Regulation (GDPR) and the storage of data, which was handled systematically to ensure data privacy and participant anonymity. For example, interview transcripts and observational notes were stored separately from any personal information. Personal information deemed unnecessary for the purposes of the study was either not collected or removed. All data were stored securely and pseudonymized to further protect participants' identities. Only generic quotations have been used in the papers and in the thesis to ensure participants' anonymity. Quotes that could potentially identify a particular interviewee, such as detailed work-related information or highly personal expressions, have not been included in any of the texts.

In the editing of this kappa, Microsoft Copilot and ChatGPT were used to enhance clarity, coherence, and overall language quality. All ideas and content are entirely my own; the AI was used solely for language refinement, and I take full responsibility for the writing.

The following section discusses the measures taken to ensure the quality and trustworthiness of the research.

4.8 Research quality and trustworthiness

In qualitative research, the concept of trustworthiness has been proposed as a framework for ensuring research quality (Bryman & Bell, 2012). It encompasses four key criteria: credibility, transferability, dependability, and confirmability – originally developed by Lincoln and Guba (1985) and subsequently widely adopted in qualitative research since then.

Credibility refers to the extent to which the findings are believable and accurately reflect the participants' experiences and perspectives (Bryman & Bell, 2012). Because words have different meanings for different people, interviews are socially and

linguistically complex situations (Alvesson, 2003), and there is always a risk of misunderstandings and, in the long run, incorrect interpretations of the interviewees' experiences, feelings, and thoughts.

To minimize misunderstandings, the interviews were conducted in the interviewees' mother tongue, Swedish. Quotations have since been translated into English. Participants were asked to elaborate on and clarify the meanings of specific words or expressions, for example, by providing examples or describing situations that illustrated what they meant.

Similarly, after each observation session during the shadowing process, I conducted informal conversations with participants to hear their reflections on specific events and clarify my interpretations. Preliminary findings were also continuously discussed with my supervisor team and presented to a reference group, and I engaged in ongoing interaction with the field, for example, through participation in a network on climate leadership, which served as an additional forum for reflection and informal validation.

Transferability refers to the extent to which findings can be transferred to other social contexts (Bryman & Bell, 2012). In the work of this thesis, I have aimed to provide thick descriptions of the empirical context and data, for example through vignettes and narratives, to enable readers to assess the potential transferability of the findings to similar organizational or professional settings.

Dependability refers to the extent to which the research process is well documented and clearly described (Bryman & Bell, 2012). In qualitative research, this criterion corresponds to the concept of reliability in quantitative approaches, emphasizing transparency and consistency in the research process so that others can follow how interpretations were reached, rather than replication. Throughout this thesis, I have strived to carefully document the selection of data sources, data collection procedures, interview guides, and analytical steps to support this.

Confirmability refers to the extent to which the findings are grounded in the data and not shaped by researcher bias (Bryman & Bell, 2012). Reflexivity therefore becomes important, not only for minimizing researcher bias but also because reflections on field observations, impressions, intuitions can themselves be valuable and contribute to the development of interpretations (Flick, 2014).

In my case, I have worked with research diaries, in which I recorded thoughts, observations, and reflections throughout the research process. I have also used analytical memos, mind maps, and visual sketches to trace the development of interpretations. Moreover, regular discussions with my supervisors provided critical feedback and helped challenge assumptions, thereby supporting reflexive awareness and grounding interpretations in the data.

4.9 Reflections on my research process

The reflections below are intended to clarify the methodological conditions under which the findings were generated, in keeping with the interpretivist approach of this thesis. The qualitative, interpretivist approach adopted entails recognizing that the subjectivity of both the researcher and the participants is an integral part of the research process (Flick, 2014). My own interpretations of sustainability professionals' work have been shaped by my personal background, the theoretical lenses used, and the evolving nature of the research process.

I originally come from a natural science background in bioengineering, but I changed direction when it was time to choose my master's degree. Although I knew in my heart that I wanted to study sustainability, I took a year off and studied business administration, which was my first encounter with organizational theory, something I found both unfamiliar and intriguing. Thereafter, I returned to pursue a master's in Industrial Ecology. Before starting my doctoral studies, I worked for a year in the chemical industry. This meant that I initially had few preconceptions about what it means to work in the construction industry and how it operates. Over time, this understanding has gradually evolved. A strength of coming from outside the industry is that I was able to observe it with fresh eyes. At the same time, my background in Industrial Ecology enabled me to understand and communicate with sustainability professionals who work practically with these issues.

Interviews as a data collection method have been useful for capturing the perceptions of sustainability professionals on their role and work, but they are somewhat limited in what they can reveal about what people actually do in practice. To balance this, I asked for practical examples of situations during the interviews. Who I interviewed also influences what can be said. In my case, it is primarily the sustainability professionals'

own perspectives on their role and work that form the basis of my findings, along with the perspectives of the production team in the urban infrastructure project in Study 4.

In terms of Study 4, shadowing as a data collection method was well suited to capture what professionals actually do in practice and in context. However, it is important to consider how one's presence influences the field. I mitigated this by being transparent about who I was and why I was there, and by asking whether events were normal or out of the ordinary – for example, "Was this a normal meeting?" or "Is this how you usually talk to each other?" – as well as by taking notes when I suspected that people were acting differently because of my presence.

The shadowing was limited to one manager and one project, which makes the findings case-specific and influenced by the unique circumstances of this particular project. What was specific about this infrastructure project was the size and complexity of the project and the strict environmental requirements. The project itself was described by its participants as a special and ambitious one, where environmental issues were taken very seriously. Environmental requirements were followed up carefully, and the contractor had an unusually large team dedicated to environmental work, including two environmental managers and two environmental coordinators. This differs from more typical construction projects, where one person often combines quality, environment, and health and safety (QHSE) responsibilities, although in projects of a similar scale this is more common.

Lastly, the research process rarely unfolds exactly as planned. For me, this meant an unplanned interruption in my studies during the data collection for the case study, which explains the gap between the first and second periods of shadowing and between the initial and later interviews. However, when I returned to the project after the break, I noticed that my presence felt more natural and that the people around me were more relaxed, which is beneficial when observing actual practices. Reflecting back, I could have made better use of the temporal gap between fieldwork periods – for example, by focusing more explicitly on changes in the interrelationships between roles. Although I noticed such changes anyway, I did not explicitly investigate them. In sum, these reflections are important for understanding how the findings came to be. The next chapter provides a summary of the appended papers and shows how the findings are presented in each study.

5 SUMMARY OF PAPERS

5.1 Paper I: Reviewing the role of sustainability professionals in construction

Purpose: To support the formulation of research questions for my studies, the aim of Paper I was to explore what was known in the body of literature on sustainability professionals in the construction industry.

Method: A systematic literature review was conducted using the databases *Scopus* and *Web of Science*, using the keywords (sustainability OR environmental) AND professional* AND organization* AND roles AND (construction industry" OR "AEC industry). The literature search returned 1,012 journal papers published between January 2000 and October 2018. Of these journal papers, 88 papers were selected for closer examination and were read completely, whereof 22 papers were selected for inclusion in the focused review because of their relevance to the topic of sustainability professionals in the construction industry.

Findings: The findings indicate that while research on sustainability professionals within the construction industry is emerging, it still remains limited in terms of in-depth studies on what these professionals actually do. Most studies focused on environmental assessment tools or sustainable project management, acknowledging that sustainability professionals play an important role in implementation but offering little detail on *how* they do so. Some studies described sustainability professionals as key actors in sustainable construction projects – often referred to as "green consultants", "LEED consultants", or "environmental auditors" – but portrayed their roles in vague terms, often lacking clear articulation of their specific contributions. With few exceptions, the review shows that the literature tends to treat sustainability professionals as relatively hidden and underexplored actors within the industry, either by not mentioning them or by not giving their roles sufficient analytical attention. In particular, there is a lack of in-depth studies examining sustainability professionals' roles.

Conclusions: Based on the identified gaps, the paper concludes that further research is needed to better understand the roles of sustainability professionals. In particular, it

suggests a need to explore professionalization processes as mechanisms of institutionalization towards enhanced sustainability within the construction industry.

Contributions: This paper contributes with a systematic review of the literature on sustainability professionals in the construction industry. For the thesis, Paper I provides a state-of-the-art overview of the literature available at the outset of the research project. It served as a foundation for the thesis by highlighting the need to explore sustainability professionals' roles and what they actually do, especially if sustainability is to be achieved in practice. The paper also informed the design of Study 2, which explored the professionalization process of sustainability work in the Swedish construction industry from the perspective of environmental pioneers.

5.2 Paper II: Taking lead for sustainability: Environmental managers as institutional entrepreneurs

Purpose: Paper II aims to explore how the sustainability profession has developed, by identifying critical events that have affected the practices of sustainability professionals when leading sustainability work in the continuously changing sustainability field.

Method: This was done based on semi-structured interviews with eight pioneering environmental managers who have extensive experience introducing new sustainability practices in the Swedish construction industry since the mid-1990s. Their career stories were analyzed and interpreted through the theoretical lens of institutional entrepreneurship, and a literature and document study was conducted to contextualize the development of sustainability practices in the construction industry, as presented in Swedish research reports.

Findings: The findings illustrate a professionalization process in six episodes, in which both the focus of environmental managers' work and the expectations on their role shifted over time. From starting with a critical event, the Halland's ridge accident in 1997, which became an enabling condition for the start of a new professional role, later changes such as the introduction of different assessment instruments, the reintroduction of an energy dialogue, social sustainability and sustainability reporting, and climate change and Agenda 2030 have all influenced how these professionals work with sustainability.

Conclusion: A conclusion from the paper is that environmental managers continuously engage in institutional entrepreneurship to create and establish sustainability practice through interorganizational mobilization, finding internal ambassadors, creating organizational structures, changing position within and between organizations, and seizing opportunities for going beyond environmental compliance requirements. Yet temporary selective discourses in society and reorganizations that disrupted established networks were found to be critical disabling events that led to a contested and or temporarily "lost" agency to act for change.

Contributions: This paper provides insights into how critical events, both enabling and disabling conditions, shape how these professionals engage in institutional entrepreneurship. It also shows that individuals and professionals at the micro level can engage in field-level organizational change. Specifically, it demonstrates how environmental managers can act as institutional entrepreneurs in introducing sustainability practices into the construction industry.

In the context of this thesis, Paper II contributes by showing that the work and agency of sustainability professionals are closely connected to a shifting sustainability agenda, which requires a flexible approach to sustainability challenges. The paper further shows that as the scope of sustainability has grown, the work has become increasingly complex to manage. This raises questions about how sustainability professionals navigate and maintain agency within the institutional complexity of sustainability in their everyday work, which became the focus of Paper III.

5.3 Paper III: The influence of multiple logics on the work of sustainability professionals

Purpose: The aim of Paper III is to investigate the intrinsic influence of multiple institutional logics on the work and agency of sustainability professionals.

Method: The paper draws on semi-structured interviews with 31 sustainability professionals from various parts of the industry and with various experiences of working with sustainable development. Their experiences of working with sustainable development were analyzed through the theoretical lens of institutional logics.

Findings: The findings show that sustainability professionals perceive their everyday work as a mix of three types of work, each of which describes how they cope with different conditions in which multiple logics coexist.

In *thankless work*, the primary logics that play out are project and governance logics. The primary mission in this sort of work is to inform and control. Here, sustainability professionals detect ignorance and compensate for lack of compliance, aligning sustainability work with situated project management, attending to immediate needs, handling a "miscellaneous bin" of tasks, and continually reminding others of their responsibilities. To maintain agency in these situations, sustainability professionals negotiate and create the meaning of missions, adapt sustainability work to a project logic to make it tangible, act in symbolic roles as proxies for sustainability work, and channel authority via regulations, certification schemes, and clients' demands. Altogether, this work is described by sustainability professionals as a continuous fight.

In *rewarding collaborative work*, the primary logics that play out are project and sustainability logics. In these situations, sustainability professionals find counterparts, often in construction projects, with whom they can create joint goals for sustainability and construction work. The primary mission in this work is to communicate and collaborate on how to manage the complexity of sustainable construction by developing the work beyond clients' demands in individual projects. Here, sustainability professionals participate in decision-making processes, manage different temporal perspectives and topics in flux, interweave sustainability and project practices, set shared sub-goals, solve problems, and make sustainability relevant for multiple actors. To maintain agency in such situations, sustainability professionals gain legitimacy based on highly valued expertise, influence decisions, collaborate on shared problems, pursue joint ambitions, enhance project performance to achieve project success, and alternate between generalist and expert roles.

In *visionary work*, the primary logics that play out are corporate and sustainability logics. The primary mission in this work is to set the agenda and justify future actions. In this type of work, sustainability professionals set the agenda for sustainability, identify mechanisms for transition, increase the relevance of sustainability issues, support transitions to long-term sustainability, solve industrial challenges, set and implement goals, act proactively, forecast future conditions, and constantly aim for change. They maintain agency by ensuring that environmental sustainability is always

44

topical, taking ownership and acting as the "project leader of sustainability," using diverse sources of accountability and credibility to sustain legitimacy, and capturing the overall picture and challenges of sustainability as a driver for creating business value.

Conclusions: Taken together, these three forms of work illustrate how sustainability professionals do not merely respond to coexisting institutional logics but actively combine and integrate them in practice. One conclusion made from the findings is that sustainability professionals continuously combine and integrate logics in order to satisfy multiple institutional expectations. In doing so, they create situated hybrid logics that are flexible and dynamic enough to adapt to different situations, whether they call for hands-on project support or long-term corporate strategic work.

Contributions: This paper contributes to the emerging research on sustainability professionals' work in the construction industry by showing how such professionals cope with institutional contexts defined by multiple, coexisting logics, as exemplified in sustainable construction. By describing the role of sustainability professionals as navigators of multiple institutional logics, the paper extends earlier work by demonstrating how they must reconcile and combine conflicting practices in order to maintain agency and move sustainability work forward.

For the thesis, Paper III explains the complexity involved in managing the vastness and ambiguity of sustainability and shows how this requires individuals to remain flexible and sensitive to multiple logics in their immediate work context. It underscores that the role of sustainability professionals is situational and depends on the people with whom they interact. These insights raise questions about boundaries between professional roles and tasks in sustainability work, which informed the design of the next study (Study 4) and Papers IV and V, where the day-to-day work of sustainability professionals is investigated in relation to the work and roles of other professionals.

5.4 Paper IV: Supportive hero and troublemaker? Diverging environmental work expectations in construction

Purpose: Given that sustainability and environmental requirements in infrastructure projects are likely to increase, and that clarity around responsibilities, practices, and roles is essential for delivering projects accordingly, this research aims to explore why

environmental managers/coordinators often have difficulties performing their work in relation to other professionals in projects with high environmental ambitions.

Method: The paper draws on Study 4, a case study of a large-scale infrastructure project in Sweden, characterized by high environmental demands, complex construction processes, and a dense urban setting. The data collection is based on 20 semi-structured interviews and 80 hours of field observations from shadowing an environmental manager in the contractor's environmental team.

Findings: The paper identifies spatial and temporal tensions that environmental managers and coordinators must navigate in their work. Here, "tension" refers to contrasting activities and meanings that different project actors invest in the practices of space and time. In this context, space refers to the physical space – specifically the construction site and its spatial boundaries – while time concerns temporal dimensions, that is, the pacing of activities. These tensions, in turn, contribute to diverging expectations regarding the environmental work that environmental managers and coordinators are expected to perform.

First, spatial tensions arise from contrasting ways of using the construction site: the client treats space as regulated through controlling activities, whereas the contractor treats space as immediate, temporary, and a flexible resource for production – prioritizing progress over order. Second, temporal tensions arise from contrasting ways of pacing activities: from the client's perspective, environmental requirements dictate the pace of production activities, while the contractor paces production through continuous rescheduling.

For environmental managers and coordinators, whose work overlaps with both production and the client, this means being caught in the middle – trying to satisfy both the client's regulatory expectations and the contractor's need for adapting the construction process.

Conclusions: One conclusion of the paper is that environmental managers and coordinators are working between contrasting spatial and temporal perspectives: one that values flexibility and immediate responsiveness, and another that demands foresight, planning, and control. Navigating these expectations requires both technical competence and relational sensitivity and strategic timing.

Contributions: Paper IV contributes to research on sustainability professionals' work in construction by showing how contrasting spatial and temporal perspectives between the contractor and the client organization give rise to diverging expectations on environmental managers and coordinators' work.

For the thesis, Paper IV contributes by demonstrating how environmental managers and coordinators end up in a role where they act as a bridge between the client and the contractor. While this bridging helps sustain environmental management, it may lead to role conflict for the professionals holding these roles. They perceive themselves as both "the supportive hero who clears the way and lays the groundwork so we can build" and "the troublemaker who throws a wrench in the works for our colleagues".

5.5 Paper V: Thriving through? Exploring the configurational boundary work of environmental managers

Purpose: The aim of Paper V is to investigate environmental managers' configurational boundary work and how it influences their role and agency.

Method: This was done based on a case study of a large-scale urban infrastructure project. Data were collected through 80 hours of empirical field observations while shadowing an environmental manager, 20 semi-structured interviews, and an analysis of project-specific documents. The environmental manager's daily interactions with other project participants were analyzed through the theoretical lens of configurational boundary work and interpreted in relation to the interview material.

Findings: By studying the interactions between the environmental management team, the production team, and the client representative, our findings suggest that sustainability professionals reshape the boundary landscape to create and mobilize for effective environmental management by arranging, buffering or coalescing boundaries. For example, they *arrange the boundaries* of others by temporarily positioning themselves outside the production team, as seen when they instruct others on what to do, return tasks, or refuse to perform work that belongs to others. In other situations, sustainability professionals take on tasks that fall outside their formal responsibilities, such as managing documentation for the production team or even cleaning up after them on site, as seen when *buffering boundaries*. In yet other situations, they gain openings

47

where they are *coalescing boundaries* by working alongside the production team, jointly addressing environmental issues as they arise.

Conclusions: A conclusion is that through configurational boundary work, the environmental manager role is continuously reshaped, which in turn creates unclear boundaries, role ambiguity, and an uncertainty about who is responsible for doing what. The ambiguity in turn, may hinder the enactment of environmental work in the temporary organization and the work of environmental managers becomes reactive.

Contributions: Paper V advances previous understanding of the consequences of role ambiguity by showing how sustainability professionals employ different forms of configurational boundary work to ensure that environmental work is enacted and sustained in a temporary organizational setting. For practice, the study offers an enhanced understanding of inter-professional collaboration, aiding professionals working in multi-boundary environments and those responsible for managing boundary activities.

To the thesis, Paper V contributes with an in-depth perspective on the work and agency of sustainability professionals within construction projects, particularly how they are maintaining agency in a landscape of ambiguous and changing responsibilities.

6 DISCUSSION

One of the conclusions reached in Paper I is that further theorizing is needed regarding the role of sustainability professionals, with particular emphasis on research at the intersection of professionalization and institutionalization. This thesis contributes to that need by developing an empirical and theoretical understanding that builds on practice – that is, what professionals do – as a way to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry. Rather than viewing professionalization as a predefined or linear process with a fixed end, I conceptualize it as an ongoing accomplishment that is enacted in professionals' work practices. In their work practices, sustainability professionals contribute to defining and legitimizing their roles – work that, in turn, forms part of the broader institutionalization of sustainability within the construction industry.

6.1 Work strategies sustainability professionals employ to influence context

Paper II shows that, because of temporarily dominant sustainability discourses in society, sustainability professionals' ability to engage in institutional entrepreneurship (Maguire et al., 2004) has often revolved around "one issue at a time", meaning that the long-term agency of these professionals to act on certain environmental questions has been limited. From initially focusing on risk management related to chemicals and hazardous waste in the late 1990s, the environmental focus "in fashion" shifted to quality management and environmental management systems in the following years, where setting environmental goals became increasingly important for companies. Later, the focus shifted again toward energy efficiency which became the next "hot topic" in the early 2010s, followed by an emphasis on sustainability reporting and social sustainability in line with new legislation. Today, the focus is largely centered on climate change and the integration of the 17 Sustainable Development Goals. To "survive" when a new "sustainability fashion" sweeps across society, sustainability professionals seek to develop a more stable foundation for their work. To do this, they employ a number of work strategies, which are discussed in Papers II–V from various points of view.

One strategy is to mobilize allies across organizational boundaries and build internal alliances (Battilana, 2006). Sustainability professionals identify and mobilize internal ambassadors, including those in top management roles, line managers, site managers, and other construction professionals, as a means to facilitate implementation and legitimize sustainability practices. Prior research similarly highlights the decisive role of influential actors in helping to legitimize sustainability practices (e.g. Argento et al., 2019; Loos & Spraul, 2024). This becomes evident, for instance, in how sustainability professionals in the home organization develop guidelines to be followed in construction projects. However, for these guidelines to be put into practice, they need to build friendly relationships with production professionals who hold influence within each construction project.

When successful, this is perceived as rewarding collaborative work, as described in Paper III, where they jointly create goals for sustainability and construction work. In these situations, sustainability professionals gain legitimacy based on highly valued expertise and by contributing to improved project performance and overall project success. When this fails to happen, this is perceived as thankless work, where sustainability professionals have to try to channel authority through regulations, certification schemes, or clients' demands.

Sustainability professionals also collaborate with colleagues from competing firms to secure professional legitimacy and develop shared practices for sustainability management. Prior research highlights the importance of such cross-organizational collaboration, for example in diffusing new practices in sustainable procurement (Troje & Gluch, 2020) and influencing sustainability discourses more broadly (Mitra & Buzzanell, 2018; McDonald et al., 2020). Paper II shows that such cross-organizational collaboration is not only instrumental for disseminating practices and shaping discourses, but also for building networks that provide emotional support, guidance, and opportunities to collaboratively develop industry manuals and standards on how to handle various environmental issues. This indicates that the development of sustainability roles is not only an intra-organizational process but is also shaped through inter-organizational professional networks, complementing research that has primarily adopted an intra-organizational perspective. Moreover, this underscores the importance of sustainability professionals' having access to such networks.

A further strategy is to take control over how sustainability is organized by engaging in the creation of sustainability departments and specialist roles. In doing so, sustainability professionals establish structural conditions that later legitimize and reproduce their work. This aligns with research showing that dedicated sustainability departments are important for the collective and strategic dimensions of sustainability professionals' work (Thakhathi et al., 2019), for example by supporting the implementation of sustainability initiatives, facilitating the sharing of best practices, and enabling the dissemination of change across the company. As part of this organizing, sustainability professionals may also strategically reposition themselves by moving within or across organizations, for instance, by seeking new positions or resigning when they lack the organizational support needed to advance sustainability initiatives. Paper II demonstrates how such mobility can strengthen professionals' social position within formal hierarchies and informal networks (Battilana, 2006), underscoring their entrepreneurial agency (Maguire et al., 2004) in driving change.

Additionally, sustainability professionals mobilize resources and legitimize sustainability by drawing on global sustainability frameworks, such as Agenda 2030, and by linking sustainability to established practices like quality management. In line with Etzion and Ferraro (2010), such analogies help to normalize sustainability management by connecting it to familiar organizational practices. To accomplish this, sustainability professionals must span multiple disciplinary discourses, as acknowledge by (Rothenberg, 2007). This suggests that sustainability roles lack a single disciplinary "home"; unlike architects or engineers, they do not build their professional and organizational identity on one stable knowledge base but on the capacity to move between different disciplines. Doing so requires them to understand how others think, their assumptions and values, and to communicate sustainability in ways that make sense to them. This, in turn, makes sustainability professionals work complex to navigate and manage. The complexity is further intensified by the continually expanding sustainability agenda as described earlier (Borglund et al., 2023), and by ongoing changes within disciplines driven by technology, regulation, and client demands. As new issues are added, sustainability professionals must engage with new actors, and this constantly shifting network of people further increases the complexity and demands of sustainability work.

A similar relational complexity is evident in construction project environments, where each project brings together a new constellation of actors, client demands, and individuals who enter and exit the project over time to perform specialized work. This dynamic is further elaborated in Papers IV and V, which examine how sustainability professionals are working together with other project actors in a large infrastructure construction project. For example, sustainability professionals employ different forms of configurational boundary work to ensure that the client's environmental requirements are sustained in the temporary organization. In doing so, they are reshaping the boundaries within which environmental responsibilities are enacted. Findings, however, show that sustainability professionals are caught in the middle, as they attempt to satisfy both the client's regulatory expectations and the and the contractor's need for adapting environmental requirements to the construction process. Navigating these expectations, they rely on technical competence, but also relational sensitivity and strategic timing.

6.2   The context's influence on the role and work of sustainability professionals

Paper III investigates how sustainability professionals navigate contexts characterized by the coexistence of multiple institutional logics (Greenwood et al., 2011; Glynn & D'Aunno, 2023), exemplified by sustainable construction. Paper III demonstrates that these professionals actively combine and integrate institutional logics to address diverse institutional demands, that is, what is perceived as legitimate or appropriate ways of doing things (Thornton et al., 2012).

Anchored primarily in a governance logic, they define both the means and ends of long-term sustainable development to meet environmental and societal goals and develop new sustainability practices that are primarily informed by a sustainability logic. At the same time, they adapt these practices to align with project delivery requirements and broader corporate business models, thereby engaging with logics of project and corporate management.

While previous research has shown that sustainability professionals operate in multiple logics context (e.g., Dahlmann & Grosvold, 2017; Guix & Petry, 2024), Paper III extends this understanding by showing that sustainability professionals cultivate a capacity to shift and rebalance their work practices depending on which institutional logics are most salient within a given context. For example, in some situations, they act

as specialists anchored in deep sustainability expertise, while in others they adopt a generalist orientation, drawing on a wide repertoire of skills to integrate sustainability into organizational and/or project contexts. This continual shifting between work practices gives rise to a hybrid professional identity, described here as that of "specialist-generalists", which corroborates emerging views of sustainability roles as hybrid (e.g., Carollo & Guerci, 2018; Guix & Petry, 2024). A consequence of this hybridity is that it risks leading to role fragmentation, making the role difficult to define.

A conclusion in Paper III, is that sustainability professionals create situated hybrid logics that are flexible and dynamic enough to adapt to different situations, from hands-on problem-solving in projects to more future-oriented strategic development. This also means that sustainability professionals must learn how to shift between different institutional logics on a continual basis instead of transitionally. Unlike prior research that characterizes sustainability professionals' logic shifts as transitional in change processes (Dahlmann & Grosvold, 2017), this study demonstrates how they continuously rebalance multiple logics on a day-to-day basis. This in turn leads to the role becoming fluid, with shifting boundaries, and a possible consequence of this is that different people will hold different expectations about the work that sustainability professionals should perform.

Paper IV investigates this further by examining the tensions that shape sustainability professionals' work expectations in relation to production and the client in an infrastructure project. In this case, diverging work expectations stemmed from contrasting spatial and temporal perspectives of environmental work between production and the client, which sustainability professionals had to reconcile, assuming a role similar to that of a broker (Bosch-Sijtsema and Henriksson, 2014). It also meant that sustainability professionals shifted between being present in day-to-day production and being more distanced and aligned with external, formal environmental requirements. This reinforces the view of the role as fluid, with shifting boundaries, which in turn may lead to ambiguity regarding what sustainability professionals actually do. This resonates with Boucher et al.'s (2018) investigation of how sustainability professionals' roles are perceived by others within organizations, which shows that sustainability professionals' roles in relation to other employees are often ambiguous, and that many employees tend to be unsure about what sustainability professionals actually do or where their responsibilities begin and end.

Paper V continues to examine how context influences the role and work of sustainability professionals by showing that sustainability professionals' practices in construction projects are fluid and situational. Complementing previous research that characterizes sustainability professionals as boundary spanners (e.g., Mitra & Buzzanell, 2018; Rothenberg, 2007; Wright & Nyberg, 2012), this paper conceptualizes their work as boundary work (Langley et al., 2019), thereby contributing to an understanding of how sustainability professionals actively work to shape and influence boundaries.

6.3 The reciprocal dynamic between sustainability professionals' roles and work and context

By studying the work between environmental professionals, production professionals, and a client representative, Paper V demonstrates how environmental professionals engage in arranging, buffering, or coalescing boundaries within environmental work. This boundary work allows them to shape the practices of other professionals, meaning that they enact change *through others* (Langley et al., 2019). For example, in arranging boundary work, sustainability professionals are shifting environmental responsibility to the production team and positioning themselves outside it while aligning with the client, environmental managers prompt production management to assume ownership of environmental requirements. In doing so, they encourage production management to develop environmental practices and expand their boundaries of responsibility. In this configuration, the environmental manager's role becomes more advisory and supporting, which allows them to focus on oversight and strategic guidance rather than operational work. In other situations, sustainability professionals take over work from the production team to bridge the gap between the client's expectations for environmental work and the production team's practices; in doing so, they engage in buffering boundary work (Langley et al., 2019). In these cases, their work becomes reactive, positioning the environmental manager in a semi-production role focused on "cleaning up" or addressing unattended tasks.

This dynamic echoes previous findings that it is difficult to change institutionalized construction management practices (Gluch & Bosch-Sijtsema, 2016), as it risks reinforcing environmental management roles as proxies for environmental work rather than as drivers of change. In yet other situations, sustainability professionals work alongside the production team to jointly address environmental issues as they arise,

engaging in coalescing boundary work (Langley et al., 2019). In these situations, environmental managers temporarily step into the construction workflow, not to take over production tasks, but to collaborate in resolving the issue and shaping the environmental solution together. As environmental and production practices are combined, the environmental manager becomes more embedded within the project team, strengthening their position and increasing their influence – not through formal authority, but through participation in shared decision-making and problem-solving.

Paper V advances understanding of the consequences of role ambiguity previously identified by Boucher et al. (2018) by showing how sustainability professionals employ different forms of configurational boundary work to ensure that environmental work is sustained in construction projects. While arranging boundaries can clarify roles and responsibilities in environmental work, buffering boundaries may blur these same boundaries by temporarily taking over others' tasks, thereby risking the persistence of role ambiguity for sustainability professionals in relation to other project actors. This suggests that the ongoing professionalization of sustainability roles is not merely a matter of defining responsibilities and spanning boundaries (Mitra & Buzzanell, 2018; Rothenberg, 2007; Wright & Nyberg, 2012), but also of reshaping the boundaries between practices within which those responsibilities are enacted.

7 CONCLUSION AND FUTURE RESEARCH

This thesis set out to understand the ongoing professionalization of sustainability by problematizing the role and work of sustainability professionals in the Swedish construction industry. By applying a practice perspective and investigating what sustainability professionals do in their day-to-day work, the thesis contributes to current research and practice to the empirical fields of sustainability and construction management as well as organizational studies with new knowledge about what sustainability professionals do, how they do it, and how their roles evolve through everyday work and interactions.

Although sustainability professionals contribute to institutional change, they are also constrained by the institution they are part of (Battilana & D'Aunno, 2009). This is evident in how their agency is closely connected to the sustainability discourses that are "in fashion", which are temporary and unilateral in focus. As a consequence, change tends to revolve around "one issue at a time", affecting sustainability professionals' agency in two ways: on the one hand, a strong discursive focus can help initiate institutional change by allowing them to leverage momentum around a dominant sustainability issue; on the other hand, it generates frustration when their ability to act is challenged or temporarily "lost" due to a unilateral discourse that prioritizes one issue over others.

As a result, the role becomes structurally fragile: mandates, priorities, and sources of influence are repeatedly redefined in response to discursive cycles rather than consolidated through the profession itself. When sustainability work is intertwined with evolving discourses, the development of the role becomes co-evolving rather than cumulative. For example, the role of implementing environmental management systems is different from working with energy efficiency, which in turn differs from working with sustainability reporting. This dynamic may also help explain why sustainability professionals experience jurisdictional drift (Augustine, 2021), as they must repeatedly redefine what their work entails, what counts as expertise, and on what basis they claim legitimacy.

Another conclusion is that sustainability professionals continuously combine and integrate institutional logics on a day-to-day basis in order to satisfy multiple

institutional expectations. The continuous shifting between different work practices gives rise to a hybrid role identity. Consequently, sustainability roles become fluid, which makes them difficult to define with blurred boundaries as a result.

However, sustainability is not a one-person job; it requires collaboration, the development of new practices, and that everyone involved takes responsibility for doing their part. This thesis shows how this is not easy, especially in situations where it is unclear who is responsible for what. In these situations, the sustainability professionals take on significant responsibility by trying to create clarity. In this thesis, this is demonstrated through their boundary work, aimed at influencing the boundaries between different groups' practices. However, in doing this work, sustainability professionals are also continuously reshaping their own role, which risks reinforcing a lack of clarity regarding what sustainability professionals actually do, and should do, within the company or construction project. In turn, this further contributes to the fragmented and continually evolving nature of sustainability roles, and risks establishing roles that are not sustainable over time.

To make sustainability roles more sustainable, this thesis also urges that both time and organizational support must be allocated for the development of sustainability roles and their work practices. This entails clarifying expectations and ensuring that these professionals have the proper mandate to do their job. If sustainability professionals are dependent on the willingness and "kindness" of others to perform their mission, there will always be a risk that sustainability work will be deprioritized.

Although this thesis has contributed to knowledge about what sustainability professionals do, it has not explicitly examined questions of leadership. Since the work of sustainability professionals depends a lot on getting others on board, their specific role as leaders and how they enact leadership skills and traits within organizations could be an interesting area for future investigation.

Another area that warrants further investigation concerns career pathways and how these pathways reciprocally shape the power and status of sustainability roles. To explore this, future scholars first need to examine whether clear career trajectories exist and, if so, what they look like – and if not, why they are absent.

Questions of career pathways also relate to the role of higher education. Although research exists on how to design sustainability education and specific degree programs or courses, there still appears to be a discrepancy between what graduating students expect to work with and what they actually do once employed. Future research could therefore further investigate this discrepancy, both from the perspective of students and from that of companies.

A further research direction concerns the identity work of sustainability professionals. As the workforce becomes more sustainability-oriented, what will this mean for sustainability professionals' identity and distinctiveness? Who will they become when "everyone" is expected to work with sustainability? While identity work has only been briefly touched upon in this thesis, it is central for continuing to understand sustainability roles in the making; which is why this represents a fruitful avenue for future research, particularly since a fragmented identity may contribute to unnecessary and unsustainable work-related stress. Future studies could also explore sustainability professionals' psychosocial health and work environment.

REFERENCES

Abbott, A. (1988). *The system of professions: An essay on the division of expert labor*. University of Chicago Press.

Abbott, A. (1991). The order of professionalization: An empirical analysis. *Work and Occupations*, 18(4), 355-384.

Adamec, J., Janoušková, S., & Hák, T. (2021). How to measure sustainable housing: A proposal for an indicator-based assessment tool. *Sustainability*, *13*(3), 1152.

Adams, T. L. (2020). Professional employees and professional managers: Conflicting logics, hybridity, and restratification. *Journal of Professions and Organization, 7*(1), 101–115.

Akotia, J., & Opoku, A. (2018). Sustainable regeneration project delivery in UK. *Journal of Facilities Management, 16*(1), 87–100.

Alvesson, M. (2003). Beyond neopositivists, romantics, and localists: A reflexive approach to interviews in organizational research. *Academy of Management Review, 28*(1), 13–33.

Anteby, M., Chan, C. K., & DiBenigno, J. (2016). Three lenses on occupations and professions in organizations: Becoming, doing, and relating. *Academy of Management Annals, 10*(1), 183–244.

Archer, M. (2021). Navigating the sustainability landscape: Impact pathways and the sustainability ethic as moral compass. *Focaal, 2021*(91), 85–99.

Argento, D., Culasso, F., & Truant, E. (2019). From sustainability to integrated reporting: The legitimizing role of the CSR manager. *Organization & Environment, 32*(4), 484–507.

Aspers, P. (2007). *Etnografiska metoder*. Liber.

Augustine, G. (2021). We're not like those crazy hippies: The dynamics of jurisdictional drift in externally mandated occupational groups. *Organization Science*, *32*(4), 1056-1078.

Battilana, J. (2006). Agency and institutions: The enabling role of individuals' social position. *Organization, 13*(5), 653–676.

Battilana, J., & D'Aunno, T. (2009). Institutional work and the paradox of embedded agency. In T. B. Lawrence, R. Suddaby, & B. Leca (Eds.), *Institutional work: Actors and agency in institutional studies of organizations* (pp. 31–58). Cambridge University Press.

Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *The Academy of Management Annals, 3*(1), 65–107.

Besharov, M. L., & Smith, W. K. (2014). Multiple institutional logics in organizations: Explaining their varied nature and implications. *Academy of Management Review, 39*(3), 364–381.

Blomgren, M., & Waks, C. (2015). Coping with contradictions: Hybrid professionals managing institutional complexity. *Journal of Professions and Organization, 2*(1), 78–102.

Borglund, T., Frostenson, M., Helin, S., & Arbin, K. (2023). The professional logic of sustainability managers: Finding underlying dynamics. *Journal of Business Ethics*, *182*(1), 59-76.

Bosch-Sijtsema, P. M., & Henriksson, L. H. (2014). Managing projects with distributed and embedded knowledge through interactions. *International Journal of Project Management, 32*(8), 1432-1444.

Bos-de Vos, M., Lieftink, B. M., & Lauche, K. (2019). How to claim what is mine: Negotiating professional roles in inter-organizational projects. *Journal of Professions and Organization, 6*(2), 128–155.

Boucher, J., Jenny, C., Plummer, Z., & Schneider, G. (2018). How to avoid pigeonholing the environmental manager? *Sustainability, 10*(7), 2337.

Boverket. (2020, October 22). *Hållbart byggande och förvaltning*. Retrieved October 22, 2025, from https://www.boverket.se/sv/byggande/hallbart-byggande-och-forvaltning/

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Brès, L., Mosonyi, S., Gond, J. P., Muzio, D., Mitra, R., Werr, A., & Wickert, C. (2019). Rethinking professionalization: A generative dialogue on CSR practitioners. *Journal of Professions and Organization, 6*(2), 246–264.

Brion, S., Chauvet, V., Chollet, B., & Mothe, C. (2012). Project leaders as boundary spanners: relational antecedents and performance outcomes. *International Journal of Project Management, 30*, 708–722.

Bryman, A., & Bell, E. (2012). *Business research methods* (3rd ed.). Oxford University Press.

Buhr, M., Harms, D., & Schaltegger, S. (2023). Individual change agents for corporate sustainability transformation: a systematic literature review. *Benchmarking: An International Journal*, *30*(10), 4221-4247.

Carollo, L., & Guerci, M. (2018). "Activists in a suit": Paradoxes and metaphors in sustainability managers' identity work. *Journal of Business Ethics, 148*(2), 249–268.

Currie, G., & Spyridonidis, D. (2016). Interpretation of multiple institutional logics on the ground: Actors' position, their agency and situational constraints in professionalized contexts. *Organization Studies, 37*(1), 77–97.

Czarniawska-Joerges, B. (2007). *Shadowing: And other techniques for doing fieldwork in modern societies*. Copenhagen Business School Press.

Dahlmann, F., & Grosvold, J. (2017). Environmental managers and institutional work: Reconciling tensions of competing institutional logics. *Business Ethics Quarterly, 27*(2), 263–291

Dubois, A., & Gadde, L.-E. (2002a). Systematic combining: An abductive approach to case research. *Journal of Business Research, 55*(7), 553–560.

Dubois, A., & Gadde, L.-E. (2002b). The construction industry as a loosely coupled system: Implications for productivity and innovation. *Construction Management and Economics, 20*(7), 621–631.

Etzion, D., & Ferraro, F. (2010). The role of analogy in the institutionalization of sustainability reporting. *Organization Science, 21*(5), 1092–1107.

Fei, W., Opoku, A., Agyekum, K., Oppon, J. A., Ahmed, V., Chen, C., & Lok, K. L. (2021). The critical role of the construction industry in achieving the sustainable development goals (SDGs): Delivering projects for the common good. *Sustainability*, *13*(16), 9112.

Feldman, M. S., & Orlikowski, W. J. (2011). Theorizing practice and practicing theory. *Organization Science, 22*(5), 1240–1253.

Fellows, R., & Liu, A. M. M. (2012). Managing organizational interfaces in engineering construction projects: Addressing fragmentation and boundary issues across multiple interfaces. *Construction Management and Economics, 30*(8), 653–671.

Flick, U. (2014). *An introduction to qualitative research* (5th ed.). SAGE Publications.

Gallagher, V. C., Porter, T. H., & Gallagher, K. P. (2020). Sustainability change agents: Leveraging political skill and reputation. *Journal of Organizational Change Management, 33*(1), 181–195.

Gherardi, S. (2009). Knowing and learning in practice-based studies: An introduction. *The Learning Organization, 16*(5), 352–359.

Gibassier, D., El Omari, S., & Naccache, P. (2020). Institutional work in the birth of a carbon accounting profession. *Accounting, Auditing & Accountability Journal, 33*(6), 1447–1476.

Glynn, M. A., & D'Aunno, T. (2023). An intellectual history of institutional theory: Looking back to move forward. *Academy of Management Annals, 17*(1), 301–330.

Gluch, P. (2009). Unfolding roles and identities of professionals in construction projects: Exploring the informality of practices. *Construction Management and Economics, 27*(10), 959–968.

Gluch, P., & Bosch-Sijtsema, P. (2016). Conceptualizing environmental expertise through the lens of institutional work. *Construction Management and Economics, 34*(7–8), 522–535.

Gluch, P., & Räisänen, C. (2012). What tensions obstruct an alignment between project and environmental management practices? *Engineering, Construction and Architectural Management, 19*(2), 127–140.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management Annals, 5*(1), 317–371.

Guix, M., & Petry, T. (2024). CSR managers as hybrid professionals: Managing at the intersection of coexisting logics. *Journal of Sustainable Tourism, 32*(8), 1511–1533.

Gustavsson, T. K. (2018). Liminal roles in construction project practice: exploring change through the roles of partnering manager, building logistic specialist and BIM coordinator. *Construction Management and Economics*, *36*(11), 599-610

Hoffman, A. J., & Devereaux Jennings, P. (2011). The BP oil spill as a cultural anomaly? Institutional context, conflict, and change. *Journal of Management Inquiry, 20*(2), 100–112.

Hoppmann, J., Richert, M., & Busch, T. (2023). Not my business: How individuals' role identities shape sensegiving during corporate sustainability initiatives. *Organization & Environment*, *36*(4), 529-558.

Hunoldt, M., Oertel, S., & Galander, A. (2020). Being responsible: How managers aim to implement corporate social responsibility. *Business & Society, 59*(7), 1441–1482.

Kadefors, A. (1995). Institutions in building projects: implications for flexibility and change. *Scandinavian Journal of Management*, *11*(4), 395-408.

Kadefors, A., Lingegård, S., Uppenberg, S., Alkan-Olsson, J., & Balian, D. (2020). Designing and implementing procurement requirements for carbon reduction in infrastructure construction – international overview and experiences. *Journal of Environmental Planning and Management*, *64*(4), 611–634.

Knoth, K., Fufa, S. M., & Seilskjær, E. (2022). Barriers, success factors, and perspectives for the reuse of construction products in Norway. *Journal of Cleaner Production, 337*, 130494.

Kvale, S. (2007). *Doing interviews*. SAGE Publications.

Lahtinen, S., & Yrjölä, M. (2019). Managing sustainability transformations: A managerial framing approach. *Journal of Cleaner Production, 223,* 815–825.

Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review, 24*(4), 691-710.

Langley, A., Lindberg, K., Mørk, B. E., Nicolini, D., Raviola, E., & Walter, L. (2019). Boundary work among groups, occupations, and organizations: From cartography to process. *Academy of Management Annals, 13*(2), 704–736.

Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *The SAGE handbook of organization studies* (2nd ed., pp. 215–254). SAGE Publications.

Lespinasse-Camargo, B., Eustachio, J. H. P. P., Bonifacio, D., Macini, N., & Caldana, A. C. F. (2024). Corporate sustainability professionals: The landscape of sustainability job positions. *Business Ethics, the Environment & Responsibility, 33*(2), 184–200.

Lieftink, B., Smits, A., and Lauche, K. (2019). Dual dynamics: Project-based institutional work and subfield differences in the Dutch construction industry. *International Journal of Project Management, 37*(2), 269-282.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Loos, C., & Spraul, K. (2024). The why, how, and when of CSR managers' internal legitimation strategies. *Journal of Management Studies, 62(7), 2830-2858.*

MacDonald, A., Clarke, A., Ordonez-Ponce, E., Chai, Z., & Andreasen, J. (2020). Sustainability managers: The job roles and competencies of building sustainable cities and communities. *Public Performance & Management Review, 43*(6), 1413–1444.

Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. *Academy of Management Journal, 47*(5), 657–679.

Mitra, R., & Buzzanell, P. M. (2017). Communicative tensions of meaningful work: The case of sustainability practitioners. *Human Relations, 70*(5), 594–616.

Mitra, R., & Buzzanell, P. M. (2018). Implementing sustainability in organizations: How practitioners discursively position work. *Management Communication Quarterly, 32*(2), 172–201

Muzio, D., Brock, D. M., & Suddaby, R. (2013). Professions and institutional change: Towards an institutionalist sociology of the professions. *Journal of Management Studies, 50*(5), 699–721.

Muzio, D., Hodgson, D., Faulconbridge, J., Beaverstock, J., & Hall, S. (2011). Towards corporate professionalization: The case of project management, management consultancy and executive search. *Current Sociology, 59*(4), 443–464.

Nicolini, D. (2013). *Practice theory, work, and organization: An introduction*. Oxford University Press.

Opoku, A., Ahmed, V., & Cruickshank, H. (2015). Leadership style of sustainability professionals in the UK construction industry. *Built Environment Project and Asset Management, 5*(2), 184–201.

Risi, D., & Wickert, C. (2017). Reconsidering the 'symmetry' between institutionalization and professionalization: The case of corporate social responsibility managers. *Journal of Management Studies, 54*(5), 613–646.

Rothenberg, S. (2007). Environmental managers as institutional entrepreneurs: The influence of institutional and technical pressures on waste management. *Journal of Business Research, 60*(7), 749–757.

Satheesh, S. A., Verweij, S., Busscher, T., & Arts, J. (2024). Drivers of innovation in infrastructure development projects: A configurational analysis of boundary spanning roles. *International Journal of Project Management*, *42*(5), 102620

Schaltegger, S., Girschik, V., Trittin-Ulbrich, H., Weissbrod, I., & Daudigeos, T. (2024). Corporate change agents for sustainability: Transforming organizations from the inside out. *Business Ethics, the Environment & Responsibility, 33*(2), 145–156.

Scott, W. R. (1995). *Institutions and organizations*. Sage.

Stjerne, I. S., Söderlund, J., & Minbaeva, D. (2019). Crossing times: Temporal boundary-spanning practices in interorganizational projects. *International Journal of Project Management, 37*(2), 347-365.

Suddaby, R., & Viale, T. (2011). Professionals and field-level change: Institutional work and the professional project. *Current Sociology, 59*(4), 423–442.

Sydow, J., Lindkvist, L., & DeFillippi, R. (2004). Project-based organizations, embeddedness and repositories of knowledge. *Organization studies*, *25*(9), 1475-1489.

Thakhathi, A., le Roux, C., & Davis, A. (2019). Sustainability leaders' influencing strategies for institutionalizing organizational change towards corporate sustainability: A strategy-as-practice perspective. *Journal of Change Management, 19*(4), 246–265.

Thornton, P. H., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 99–128). SAGE.

Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: A new approach to culture, structure, and process*. Oxford University Press.

Treharne, G. J., & Riggs, D. W. (2015). Ensuring quality in qualitative research. In P. Rohleder & A. Lyons (Eds.), *Qualitative research in clinical and health psychology* (pp. 57–73). Palgrave Macmillan

Troje, D., & Gluch, P. (2020). Populating the social realm: New roles arising from social procurement. *Construction Management and Economics, 38*(1), 55–70.

United Nations. (n.d.). *Goal 11: Make cities inclusive, safe, resilient and sustainable*. Retrieved October 22, 2025, from https://www.un.org/sustainabledevelopment/cities/

Van Maanen, J., Sørensen, J. B., & Mitchell, T. R. (2007). The interplay between theory and method. *Academy of Management Review*, *32*(4), 1145-1154.

Wickert, C., & De Bakker, F. G. (2018). Pitching for social change: Toward a relational approach to selling and buying social issues. *Academy of Management Discoveries, 4*(1), 50–73.

Winch, G.M., 2010. *Managing construction projects*. UK: John Wiley & Sons.

Wright, C., & Nyberg, D. (2012). Working with passion: Emotionology, corporate environmentalism, and climate change. *Human Relations, 65*(12), 1561–1587.

Wright, C., Nyberg, D., & Grant, D. (2012). "Hippies on the third floor": Climate change, narrative identity, and the micro-politics of corporate environmentalism. *Organization Studies, 33*(11), 1451–1475.