RAUNO SAIRINEN, MINNA SANTAOJA, EEVA BERGLUND, PASI HEIKKURINEN, LASSE PELTONEN & CORINNA CASI

Three decades of environmental social science in Finland

Today ecology, climate, waterways, soil, and energy are perceived as clearly societal phenomena and subjects of social science research.1 Environmental social science examines how environmental issues become societal problems and how these could be addressed in society. If the social sciences play a significant role in creating and critically understanding this shift, this has not been the case for very long. The Finnish Society for Environmental Social Science² (YHYS) was established 30 years ago in 1994. Around the same time, Finland saw the creation of its first professorship in environmental policy, and gradually the field began to gain an institutional foothold in universities. The multidisciplinary field is now established, and it has diversified and developed a clear profile of its own over these decades. The purpose of this book is to celebrate YHYS's anniversary, assess developments

in environmental social science research, and reflect on future challenges.

In fact the roots of environmental social science in Finland stretch further back than the founding of YHYS, by several decades even. Thus, this book begins by looking into the past. Each Finnish university has had a unique development path, and so the book allocates ample space to describing them. In the very challenging process of establishing a new research field, the role of pioneers has been crucial. Personal accounts provide an interesting glimpse into the various historical dynamics of science policy and its politics. Moving closer to the present day, there are accounts by researchers from key universities in the field, where they assess more recent developments in the field and its forms of disciplinary institutionalization.

We are grateful for the enthusiasm of the many

¹ This text is translated from the book's Finnish Introduction. The first iteration for a translation was produced with the help of ChatGPT and developed by E.B., M.S., C.C. and R.S.

^{2 &}quot;Yhteiskuntatieteellinen ympäristötutkimus", translated word-by-word, would be "social scientific environmental research". However, the English name for the field and the society has been "environmental social science". The society's name refers to the field of research in the singular. In translation, we have used the singular form, though we felt slightly uncomfortable with the choice. As described in the text, the field is thoroughly multidisciplinary and thus it could be more adequate to speak of "environmental social sciences" in the plural. At the same time, this volume and the introduction still perform some demarcation work. This is necessary whether we consider our subject an academic discipline, a field of research or even more loosely, a domain of scholarship or research.

contributors who joined in the book project. YHYS has always stood for collaboration and collective work, which this book exemplifies. It is also a reminder that the world of research thrives on cooperation as well as fierce competitiveness. This book is not just about environmental social science but about how science and research relate to policy and how this relationship has developed in our universities. In part the story of environmental social science as an emerging research community makes for a difficult read. How hard it is for new fields of research - no matter how important to gain visibility, acceptance, and institutional stability! Hopefully, the stories in this book will provide broader lessons for the makers of science policy. Could the development paths of emerging, socially relevant, fields of research be made less difficult even?

At the same time, as we survey our own activities, it's good to keep an eye on the adjacent disciplines collaborating with us. Environmental research today operates on a highly multidisciplinary terrain, where the social sciences play their part. And so environmental social science collaborates widely with the natural sciences, engineering, health and medicine, as well as educational sciences. There is constant interaction and mutual learning. We hope that this book, for its part, provides other disciplines an understanding of how the social sciences have developed their relationship with things environmental and how the picture is evolving.

THE ENVIRONMENT AS A SOCIAL PROBLEM PRIOR TO THE (ENVIRONMENTAL) SOCIAL SCIENCES

The foundations of environmental social science lie in efforts to understand the relationships between the entities we now call society, the environment, and nature as historical realities. The emergence of something we now know as the environment as a social issue has been a slow process, which continues to evolve and develop.

In Finland, traditions of nature protection date back to the 19th century. The first Nature Conservation Act is from 1923. However, for a long time there was a strong sense of a divide between untouched nature to be preserved and culture, the world of urbanization and modernization. The idea that nature conservation was a societal issue only arose in the 1950s, when the ideas of social and economic nature conservation emerged. In Finland, as in many Western countries, a broad environmental awakening emerged from the mid-1960s onwards. Young activists raised concerns about environmental pollution and dangerous toxins, giving rise to the notion that the environment in general needed protection. The ecological debate of the late 1960s highlighted the need to think about environmental issues as social, something that was also reflected in public debate. Yet, for some reason, social scientists were not quick to awaken to this challenge.

There were, however, numerous pamphlets that contributed to debate on environmental issues, some of which Rauno Sairinen presents in his text. Growing numbers of young environmental experts, planners, and activists published environmental pamphlets between 1968 and 1972, followed later by more scientific works. One of the initiators of the debate was the fisherman and environmental thinker Pentti Linkola. Linkola and other activists considered society and its modes of operation as the causes of the environmental crisis, but they placed little hope in the social sciences, viewing them more as part of the problem. The message was that ecology and natural science needed to be integrated into social and public policy.

Through society-wide debate environmental issues also entered party politics. As Sairinen writes, the first environmental program by any political party in Finland was Vår rätt att leva – miljödebatt (Our Right to Live - Environmental Debate) published in 1970 by Svensk Ungdom, the youth organization of the Swedish People's Party. Although most struggles were local, as a movement environmentalism was essentially international, or at least "trans-local". Young activists read international environmental literature, and influential pamphlets were quickly translated into Finnish. A key event was the United Nations Conference on the Human Environment in Stockholm of 1972, which led to the publication Natural Resources and the Environment. The Club of Rome's report The Limits to Growth was translated into Finnish in 1974. Meanwhile discussions on limits to economic growth went on in Finland for several years, instigated by both scientists and politicians. One of the most visible figures in this debate was professor Pentti Malaska, founder of

futures research in Finland and a member of the Club of Rome.

In the mid-1970s there was a clear break in environmental activism, likely due how strongly party-politicized Finnish society became then. In the early 1970s, student and leftist movements shifted strongly to the left and environmental issues, like other themes, became caught up in political games and ideological battles. It was in the same period that Finland began to devise new administrative and planning systems for protecting the environment. In turn this meant that environmental issues appeared as societal issues, even as they were compartmentalized into a bounded sector within social policy. However, due to political disagreements, establishing a Ministry of the Environment had to wait until 1983.

In the late 1970s, a new generation of young people became active in alternative and grassroots movements, with the campaign to save Koijärvi (a controversial waterfowl wetland) leading the way. Discontent with parties and government was becoming widespread, whilst environmental concerns were only growing. The emerging Green movement presented environmental issues as cutting across social divisions and emphasized citizens' own responsibility for greening their lifestyles. For the first time, energy was brought to the forefront of ecological politics.

From the late 1960s to the early 1980s, young activists, environmental scientists and other professionals set the tone for debates that challenged societal developments contributing to the environmental crisis, and fed ecological politics. On the whole, this environmental awakening made little impact on the social sciences, and there was little understanding of its social implications, which were, in fact, already apparent.

THE EARLY YEARS OF ENVIRONMENTAL SOCIAL SCIENCE

Stimulated by public debate, the scientific establishment in Finland began to consider the research challenges posed by environmental problems as early as the late 1960s. The comprehensive report Ympäristön pilaantuminen ja sen ehkäiseminen (Environmental pollution and its prevention, 1970) by the state scientific committees, marked the start of a systematic development of On the whole, this environmental awakening made little impact on the social sciences, and there was little understanding of its social implications, which were, in fact, already apparent.

environmental research. The publication even mentioned environmental sociology, although it did not see it as a practical necessity at the time.

Not all social scientists were blind to environmental issues. In a few universities, there were moves toward environmental social science research in the early 1970s. At the University of Tampere, inspired by the human ecology approach of the Chicago School, a department of economic and social ecology was established as early as 1968. However, it did not evolve into environmental research and later became regional studies. Another significant development at Tampere occurred in the fall of 1971 when Briitta Koskiaho, a researcher at the Department of Social Policy, initiated the establishment of environmental policy as an academic subject. In 1972, Koskiaho published the textbook Ympäristöpolitiikka (Environmental Policy, Part I), which justified the need for the new subject and shaped its content, particularly as a new sector of social policy. Around the same time, at the University of Helsinki, Jussi Raumolin was gathering together a small group of students interested in ecology at the Department of Social Policy, but this activity did not develop into an established research field.

Other universities also began moving forward in the 1970s. In Turku, interdisciplinary studies in environmental protection were introduced in the late 1970s, which involved sociology courses and students. Timo Järvikoski initiated research into the sociology of environmental and natural resources at the Department of Sociology. Additionally, under the leadership of Pentti Malaska, futures studies were developed, leading to the founding of Turku's Futures Research Centre in 1992, which has continued to be a key site for environmental social science in Finland. In Joensuu, environmental social science themes were developed in the 1970s by professors Kyösti Pulliainen (economics) and Leena Aho (education).

A more pronounced launch of environmental social science took place in the 1980s, when young researchers, students, and environmental activists in various universities began building a new research field in informal seminars and smallscale research projects. Participants included social scientists from many disciplines, with scholars from geography, biological sciences, and environmental protection also involved. From the mid-1980s onwards, environmental policy could be studied as a specialization within social and public policy at the University of Helsinki, in a study program developed by Ilmo Massa.

Young researchers, students, and environmental activists in various universities began building a new research field in informal seminars and small-scale research projects.

In the early 1990s, work on environmental policy was given more resources at the University of Tampere. First, a lecturer position in environmental policy was established in the Department of Regional Studies, with Jussi Raumolin appointed to the role. In 1992, the same department created a professorship in environmental policy, which Raumolin took up, while Jyrki Luukkanen was appointed as a temporary lecturer. The first students to major in environmental policy were admitted in 1994. In this book, Jarmo Vehmas describes the explosive growth in the popularity of environmental policy as a minor. The professorship in environmental policy at Tampere was made permanent in the fall of 1994, and Yrjö Haila recruited to the position, which he held until 2014, while Briitta Koskiaho and Jussi Raumolin had also applied. Importantly, from the fall 1999 onwards, resources for teaching environmental policy in Tampere stabilized, with the lecturer position also becoming permanent.

Thus, we can say that environmental social science gained its first professorship in 1992 at Tampere. In other universities, chairs in the field took longer to establish. There was significant resistance to change. In their contributions to this book, Ilmo Massa (Helsinki), Pekka Jokinen (Turku), Yrjö Haila (Tampere), Timo Järvikoski (Turku and Oulu), and Pertti Rannikko (Joensuu) vividly describe how the field emerged through the efforts of individuals and how challenging the process was amid skepticism and failures. At the same time, the texts highlight the communities of enthusiastic and motivated students and young researchers, whose solidarity and group spirit helped support them as they navigated the bureaucratic struggles.

In Finland, ministries and government research institutions have played a significant role in developing new socially relevant fields. However, the state's role in the early development of environmental social science was lukewarm at best. As Ilmo Massa describes, even the recently established Ministry of the Environment viewed social scientists and interdisciplinary approaches with suspicion and outright opposition. For a long time, within the administration all environmental research was viewed as primarily natural science. This was also reflected in the personnel of the Finnish Environment Institute (SYKE). The contrast with the present is stark, as social scientists are now an integral part of SYKE's work.

An interesting early exception to state support for the research field was the energy sector. In 1986, the Energy Department of the Ministry of Trade and Industry launched an extensive social science research program into energy, which ultimately lasted nearly ten years in two phases. In the background of this initiative were debates around energy and nuclear power, which had been intensified by the Chernobyl nuclear accident. The program funded numerous political scientists, historians, social psychologists, and researchers in futures studies and environmental policy. It produced a broader report on research needs titled Yhteiskuntatieteet ja tulevaisuudentutkimus energiatutkimuksessa (Social Sciences and Futures Studies in Energy Research, Nurmela et al. 1989), which had a strong connection to environmental social science. Later, the Energy Department

funded social science research on nuclear waste for many years (see Litmanen et al. in this volume on the development of the field at the University of Jyväskylä).

For a new research field to take shape there must always be events and publication. In 1990, Ilmo Massa, Rauno Sairinen, and Jari Paldanius organized a seminar on environmental social science at the University of Helsinki, which drew considerable public attention. As an outcome, the book Ympäristökysymys - Ympäristöuhkien haaste yhteiskunnalle (The Environmental Question: The Challenge of Environmental Threats to Society), edited by Massa and Sairinen, was published in 1991. The book became a key work in environmental social science laying the foundation for many other books and articles, and becoming a core textbook for students. In its preface, Massa and Sairinen noted that the reaction of the social sciences to environmental problems had been surprisingly passive. They viewed the absence of the social sciences among those addressing environmental issues as a significant barrier to developing ecological perspectives in society at large.

The academic foundations of environmental social science in Finland were thus initially established at the universities of Tampere, Helsinki, and Joensuu (later the University of Eastern Finland) through teaching and research on environmental policy, as well as in environmental sociology at the universities of Turku and Jyväskylä. The development of the field in these universities in the 1990s and continuing into the 2000s is described in detail in several texts in this book.

In the 1990s, environmental social science (or the environmental social sciences in the plural, bearing in mind the still ongoing breadth of the field) developed more or less in parallel across Finnish universities. Teaching began to emerge more strongly in the late 1990s but after the experiences of Tampere, established professorships had to wait until the 2000s. The University of Joensuu created a professorship in environmental policy in 2000, and appointed Pertti Rannikko. In Helsinki, Ilmo Massa held a professorship in environmental policy from 2001 to 2006, after which the professorship was made permanent and Janne Hukkinen took up the role. From the late 1990s onwards, several professors pursuing strongly environmental research themes worked the field, such as Marja Järvelä (University of Jyväskylä in social policy), Esa Konttinen (University of Jyväskylä in sociology), and Erland Eklund (Åbo Akademi in rural studies).

ENVIRONMENTAL SOCIAL SCIENCE OR SOCIAL ENVIRONMENTAL RESEARCH?

By the 1990s, a significant number of social scientists were becoming interested in environmental issues, especially the younger generation. There were only a few senior academics, let alone professors. This created a strong demand for a new scientific society. National networking among environmental social scientists in Finland began properly in 1994, with the creation of both YHYS and the Yt-ymp email list, which is still in active use.

As Jarmo Vehmas writes, setting up environmental policy as a discipline at the University of Tampere and founding the society were closely linked processes. On the one hand, the environmental policy professorship provided an institutional basis for the society, while on the other hand, the society was expected to support the development of research and teaching in environmental policy. The trio preparing for the founding of the society included Juhani Tirkkonen, Jukka Tuomela, and Jarmo Vehmas.

The field fought for a place and some standing within the Academy of Finland's committees and its recognized arenas of research.

YHYS (the Finnish Society for Environmental Social Science) was established in 1994 to bring together researchers and resources in an emerging research area that was recognizable as a field but still fragmented. On the one hand, it did not have a clearly defined disciplinary basis, encompassing as it did sociologists, philosophers, international relations scholars, political scientists, social policy researchers, geographers, historians, and futures studies experts. On the other hand, these researchers were geographically dispersed across Finland, and furthermore, those whose interest in environmental issues emerged from within the social and human sciences often worked on the margins of their own disciplines and institutions. People felt a need for collaborative, multidisciplinary work and better networking. One of the motives from the outset was claiming space. The field fought for a place and some standing within the Academy of Finland's committees and its recognized arenas of research, something that was crucial to secure research funding.

There was a need to demonstrate that although environmental concerns had largely arisen from within the natural sciences, it was not their exclusive right to study environmental issues.

Social scientists emphasized that the field should draw from the theoretical, conceptual, and methodological traditions of the social sciences, arguing that the field is not a theme-based research area. The term "social science" was used to construct and justify the scientific validity of the field, which was not initially self-evident. There was a need to demonstrate that although environmental concerns had largely arisen from within the natural sciences, it was not their exclusive right to study environmental issues. When discussions about the name of the new society were held at the founding meeting - should it be called the Society for Social Environmental Research – Jussi Raumolin, the society's first chair, was clear: the society should specifically be for social scientific research - after all, self-respecting natural scientists couldn't even imagine founding a "Society for Natural Environmental Research."

And yet the question remains: do we talk about environmental social scientific research or social environmental research? The issue is not merely technical, it touches on deeper questions about the nature of environmental social science – or, indeed, the environmental social sciences in the plural. The debate should also be treated within its historical context. For instance, emeritus professor of environmental policy, Yrjö Haila, consistently uses the term social environmental research (yhteiskunnallinen ympäristötutkimus in Finnish), for instance in his texts for this book. This choice may partly be explained by Haila's background in the natural sciences, which may have made it difficult for him to align more strictly with the research traditions of the social sciences. At the same time, in the "Tampere school" of environmental policy research, shaped during Haila's term, environmental social research has been understood as a thematically focused and problem-based multidisciplinary research field.

Nonetheless, the field can be seen as extending beyond social scientific research. It is not strictly located within established social science institutions and it accommodates research from varied starting points. In this sense, social environmental research may be closer to the multidisciplinary sustainability science that has grown in recent decades than the more narrowly defined environmental social science. This topic is explored further in this book by Jarkko Levänen in his essay on the relationship between sustainability science and environmental social science. In the society's annual meetings, the question of changing the society's name to reflect the broader research field, for instance to the Society for Cultural and Social Environmental Research or the Society for Sustainability Research, has been raised occasionally. Some members have also brought up the question of including environmental humanities. However, these changes have ultimately not been deemed necessary. The society has been found to represent a wide, multi- and interdisciplinary environmental research field despite its name, and it continues to welcome researchers from diverse backgrounds. Internationally, the society's name still defines the field in a relevant manner, as evidenced by Stanford's recently created, similarly named Environmental Social Sciences department.

THE FINNISH SOCIETY FOR ENVIRONMENTAL SOCIAL SCIENCE (YHYS)

The founding meeting of the YHYS society took place in Tampere in February 1994. Invitations to the meeting were sent via the "yt-ymp" email list, which became the society's official communication channel. The society's activities began with statutory meetings paralleled by the organizing of an interdisciplinary environmental research seminar in Tampere, and the publishing of a regular newsletter. After Raumolin, Matti Kamppinen was elected as the chair and Markku Wilenius as vice-chair. During their time, the first bibliography of environmental social science from 1990-1996 was compiled. The review, based on surveys sent to researchers in the field and edited by Tytti Viinikainen, was produced in cooperation with the Finnish Environment Institute. The review looked at the development of environmental social science through disciplinary lenses, including environmental philosophy, policy studies, history, economics, and law. Compiling a similar bibliography today would be nearly impossible, the field has grown so much; even at that time, the bibliography of Finnish environmental social science spanned over 60 pages.

The society's purpose is to promote research and education in the field, act as a national body for collaboration between researchers and students, and advocate for the interests of environmental social science. Yrjö Haila, the society's longest-serving chair, was elected in 1998, and it was under his leadership that the society established its key regular activities. The most important of these are the annual scientific conference, which came to be known as the YHYS Fall Colloquium, and the annual "Spring Consultation" (kevätneuvokki), originally organized with environmental administration, with Environmental Counselor Sauli Rouhinen being a driving force. The Spring Consultations eventually led to the Policy Dialogues, organized in collaboration with the Forum for Environmental Information, established in 2010, with varying themes (see Höijer et al. in this volume).

YHYS'S international research conference was first held in Tampere in 1995. Since then, the colloquium has been organized annually in collaboration with different Finnish universities and research groups, ensuring a new flavor and perspectives from different disciplines and locations each year. The main responsibility for organizing it has so far fallen on environmental policy and environmental sociology research groups, but as the field has expanded to different universities, the organizing base for the colloquium has also grown. Support from the Federation of Finnish Learned Societies has allowed the society to bring international keynote speakers to Finland, and so despite its small size and relatively young age, the society has built significant bridges between Finland and the rest of the world. An example could be Jouni Paavola from the University of Leeds, whose professorship is precisely in Environmental Social Science. In addition to keynotes, the colloquium hosts a wide range of thematic workshops where both doctoral researchers and senior scholars have an opportunity to present their work and ideas. (See the table for past colloquium locations, themes, and keynote speakers.) The Fall Colloquium has also become an important venue for the society's student activities. A networking event for doctoral researchers from different universities has been organized in connection with the colloquium. Since 2014, the society has also granted the Yrjö Haila Master's Thesis Award for outstanding theses in the field. In his contribution to this volume, emeritus professor Haila reflects on the vision of societal environmental research that has guided his choices for the awarded books.

Another important form of international, especially Nordic, collaboration for researchers in environmental social sciences is the NESS (Nordic Environmental Social Science) series of conferences. NESS began in the early 1990s when interest in environmental social science emerged in various places, and the need for international cooperation was recognized. NESS collaboration started in 1993 with a workshop held at a political science conference in Oslo. The first actual NESS conference was held two years later in Gothenburg. NESS has been held three times in Finland: in Turku in 2003, in Tampere in 2017, and again in Turku in 2024, organized by Åbo Akademi. Additionally, in 2009, the Finnish Environment Institute (SYKE) organized the conference in London in collaboration with UCL Environment Institute.

NESS is an excellent example of a self-organizing research community: there is no formal organization behind the conferences, the responsibilities for organizing them rotate between different countries and universities. Apart from the break caused by the COVID-19 pandemic, the NESS conference has been held regularly every two years since 1993. The

чнчя Fall Colloquiums 1995–2024

YEAR	PLACE	THEME	KEYNOTES
1995	Tampere	Environment & Society	Matthias Finger, John O'Neill, Franqois Ost, Göran Sundqvist
1996	Tampere	Global Environmental Problems and Contemporary Society	Gert Spaargaren, Steven Yearley
1997	Turku	Natural Resources and Social Institutions: Cultural Management of Biodiversity	Monica Hammer, Susan H. Hanna, Ann-Mari Jansson, Timothy Swanson
1998	Tampere	Society and the Environment. Environment Policy Implications of Large Infrastructure Projects	Walter Wermeulen, Thomas Hughes, Dieter Rucht
1999	Helsinki	Society and the Environment: From Routine to Risk	Jacqueline Kramer, Avner de-Shalit, David Rapport, Gene Rochlin
2000	Tampere	Society and the Environment: Environmental Social Science Status and Perspectives	Andrew Dobson, Riley Dunlap, Andrew Jamison, Timothy Luke, Knut Sørensen, Brian Wynne
2001	Turku	Society and the Environment. Knowledge – Environment – Information	Sonja Boehmer-Christiansen, Luigi Pellizzoni
2002	Jyväskylä	Globalization, Governance and Conflicts	James M. Jasper, Roger Keil, Steven Yearley
2003	Tampere	The Problem-Oriented Nature of Environmental Social Science: Integrating Knowledge with Practices	Stewart Lockie, Phil Macnaghten
2004	Helsinki	Governing the Environment: From Everyday Life to Organizational Practices	Duncan Liefferink, Elizabeth Shove, Gert Spaargaren
2005	Turku	Issues in Green Democracy	Karin Bäckstrand, Tim Hayward
2006	Tampere	Case Study as a Methodological Perspective in Environmental Social Science	David Demeritt, James Throgmorton, Frank Fischer
2007	Jyväskylä	Energy and Environment – Competing Powers?	Joyeeta Gupta, Frede Hvelplund, Michael Redclift
2008	Joensuu	Challenges of European environmental policy: from environmental integration to global responsibility and better regulation	Andrew Jordan, Ludwig Krämer, Susan Baker
2009	Helsinki	Environmental governance of natural resources, the economy, and consumption	Marina Fischer-Kowalski, Arild Vatn, Inge Røpke
2010	Tampere	Science – Policy – the Environment: Interpretative Policy Analysis in Environmental Social Science	Silvio Funtovicz, Susan Owens, Dvora Yanow
2011	Joensuu	Social Pathways Of Environmental Change: Vulnerability, Tradeoffs And Livelihoods	Kevin Hanna, Marie Appelstrand, Terry Marsden
2012	Turku	Environmental Justice and New Metaphors	Gert Goeminne, Brendon Larson, Kerri Woods, Janne Hukkinen, Karoliina Lummaa
2013	Jyväskylä	Green Consumerism – Exploring Dilemmas of Sustainable Consumption	Yrjö Haila, Bente Halkier, Peter Oosterveer
2014	Helsinki	Practising environmental social science: 20 years of contested methodologies	Aidan While, Stephanie Lavau, Matthew Cashmore
2015	Tampere	Creating experiment-driven environmental policy	James Evans, Vanesa Castan Broto
2016	Joensuu	Public or private sustainability?	Karin Bäckstrand, Harro van Asselt, Helga Pülzl
2017	Turku	Environmental Politics, Economy and Knowledge	Elisa Morgera & Louisa Parks, Karin Edvardsson Björnberg, Jouni Paavola, Juha Hiedanpää
2018	Rovaniemi	Naturecultures	Philip Vannini, Laura Watts, Rauna Kuokkanen, Päivö Kinnunen
2019	Jyväskylä	Wisdom in crisis	Nicole Klenk, Tero Mustonen, Rolf Lidskog, Taru Peltola
2020	LUT University, etänä	Measuring and valuing sustainability	David P. Carter, Stephen Morse, Anna Kuokkanen, Christopher Preston
2021	Aalto University	Sustainable welfare: States and capabilities of transformation	Shane Epting, Julia Steinberger, Susan Chomba, Lauri Rapeli
2022	Tampere	Messy sustainability: Uncertainties in policy implementation	Jens Lachmund, Stephanie Lavau, David Laws, Sina Leipold
2023	Joensuu	Polycrisis – eco-social linkages, responses and reconstruction	Ulrich Brand, Patience Mususa, Ville Lähde
2024	Lappeenranta	The Anthropocene: Action and agency for preventing collapse	Steffen Böhm, Katriina Soini

history of NESS conferences has been compiled on the YHYS website.³ In this volume, one of the key figures in NESS collaboration, professor emerita Katarina Eckerberg from Umeå University, writes about the significance of this Nordic cooperation within environmental social science. She also highlights the uniqueness of YHYS as a society, even in the Nordic context.

In the early years, there was a dream of establishing a joint Nordic publication, but for such a small society, the effort would have been too much.

For a time, the society's regular annual program also included a spring seminar organized in collaboration with another scientific society. For example, in 2007, a discussion event titled "The Women of Environmental Policy - Genders under Scrutiny" (Ympäristöpolitiikan naiset – Sukupuolet syynissä) was held in collaboration with the Finnish Society for Women's Studies (now the Association for Gender Studies). Johanna Kohl and Minna Kaljonen wrote in the YHYS newsletter how "during the seminar, several common interfaces and theoretical foundations were discovered between feminist and environmental research." The fifth and so far last spring seminar was held in 2008 in collaboration with the Finnish Cyclists' Federation (Pyöräilykuntien verkosto ry) on the topic of "Cycling in Traffic and Landscapes of the Mind" (Pyöräilyä liikenteessä ja mielenmaisemissa). The YHYS newsletter also belongs to history now, with the society's communications having moved online and to the "yt-ymp" email list. The last newsletter, edited by Tapio Litmanen and Teea Kortetmäki, was published just before Christmas 2013. At present, the "yt-ymp" list has about 400 subscribers, meaning it reaches a broader audience than the society's membership alone. The list is used to share information about conferences,

publications, and dissertations. In recent years, the society has also communicated about its events on X (formerly Twitter), and has more recently created a LinkedIn profile for itself.

Scientific publishing is at the core of many academic societies' activities. Over the years, it has been discussed in YHYS meetings whether the society needs its own scientific publication. In the early years, there was a dream of establishing a joint Nordic publication, but for such a small society, the effort would have been too much, and existing publication channels had to suffice. For researchers in the field, Finnish peer-reviewed publication channels have included Alue ja Ympäristö, Kulttuurintutkimus, niin & näin, Sosiaalipolitiikka, Sosiologia, Terra, Tiede ja Edistys, and Trace – Jälki. In 2018, YHYS began publishing the online magazine Versus⁴ in collaboration with the Finnish Society for Regional and Environmental Studies and the Finnish Geographical Society. Its purpose is to popularize research in regional geography and environmental societal research. Versus started as a column in Alue ja Ympäristö journal and became an online publication through the Julkea! project led by Kirsi Pauliina Kallio. Versus now offers a diverse platform for research-based commentary on the Critical space section, science-based discussion on the Research debate page, and for highlighting Master's thesis results in the Thesis corner section.

An important domestic publication channel for the society members has been the peer-reviewed journal Alue ja Ympäristö,⁵ which has been published for a long time by the Finnish Society for Regional and Environmental Studies (Ays). Several of the journal's editors-in-chief have come from YHYS. While the journal has been published regularly since 1971, it was initially known under the name Aluesuunnittelu (Regional Planning) for the first 20 years. It is worth mentioning that the open-access journal received the Finnish Scholarly Publishers Association's Science Journal of the Year award in 2022. However, as a small academic society, AYS's resources for publishing and developing a scholarly journal have been limited. Thus discussions with YHYS led to the decision that, starting in 2024, AYS and

³ https://www.yhys.net/toiminta/ness-konferenssi

^{4 &}lt;u>https://www.versuslehti.fi/english</u>

^{5 &}lt;u>https://aluejaymparisto.journal.fi</u>

YHYS are publishing the journal jointly with the hope that this collaboration will bring greater capacity for its production. In a context of increasingly limited resources, discussions have also taken place about merging the two academic societies.

In 2024, YHYS has about 230 members, many of whom have participated actively in the society's activities. The board has been formed annually with little difficulty. This has been facilitated by the tradition of including both young and more established researchers on the board. Since Yrjö Haila's long period, the length of the chairmanship has become standardized to three years. Another important practice encouraging participation and inclusivity has been to ensure representation from all universities across the country where environmental social research is conducted. The board does not just wait for potential volunteers to step forward but actively reaches out to researchers instead. The reception has been positive - volunteers can still be found when given a little nudge. However, academic societies are facing various pressures for change affecting their future, which Minna Santaoja explores in her text on future scenarios for scientific societies.

YHYS EXPANDS ITS ACTIVITIES IN THE UNIVERSITIES

In the early 1990s, the field of environmental social science developed across many of our universities simultaneously but with local emphases, shaped by the interests of researchers in each institution. Initially, studies in the field consisted of book exams and a few scattered courses, then gradually expanded to include more lectures and seminars. Haila describes developing environmental policy teaching in his memoir as "muddling through." He quickly realized that a professorship is a service profession. Massa conveys a similar message in his writing: professors' time was spent preparing lectures for basic courses, supervising graduate seminars, guiding numerous master's theses, and securing research funding for young researchers and research groups. Still, Haila also describes the basic course as a beautiful way of consolidating the foundations of environmental social research and writes about how teaching, research, and writing work feed into each other.

The social and public policy departments (Helsinki, Joensuu), the regional studies department

(Tampere), and the sociology departments (Turku, Jyväskylä, and Oulu) played significant roles in establishing the field in Finland. The environmental policy disciplines that gradually formed have been hybrids of social and political sciences and, alongside environmental sociology, institutional anchors of the field within the universities. It is worth noting that political science departments were absent from the early development of the field. Social and public policy departments, which straddle the boundary between sociology and political science, may have prevented the sharp division into environmental sociology and environmental political science seen in many countries. Research in environmental policy has focused more on the politicization of environmental issues, policy practices, and multi-level, multi-actor governance, rather than on explicitly political actors, values, and structures such as party politics. In Tampere, there has been a strong connection between regional and administrative sciences and social policy. Since the mid-1990s, these departments have also formed the basis for organizing the YHYS Fall Colloquia.

Sociology at both the University of Jyväskylä and the University of Lapland has had close ties with political science, contributing to broad approaches and interdisciplinary crossovers. In 2020, LUT University in Lappeenranta took over the responsibility for the YHYS colloquium as a new organizer, but the COVID-19 pandemic meant the event had to be held remotely. In recent years, LUT has expanded from the fields of technology and economics towards the social sciences, particularly as they engage with environmental issues. In 2024, LUT once again took up the organization of the conference. The next milestone will be to host the colloquium for the first time at the University of Oulu in 2025. In addition to environmental sociology, diverse cultural and social environmental research is being conducted there, including environmental history, anthropology, and multispecies studies. Nor has Åbo Akademi yet hosted the colloquium, although it did organize the Nordic NESS conference in Turku in 2024.

In his chapter, Pekka Jokinen discusses how one feature of Finnish environmental social science has been its extensive cooperation and mobility, for example, between the social and political sciences. For this reason, it may be difficult and perhaps unnecessary to define a particular piece of research strictly as environmental sociology or environmental policy research. Jokinen views this kind of "impurity" as characteristic of Finnish environmental social science, which avoids rigid disciplinary boundaries, and as unconditionally positive. This is illustrated by the fact that the first-generation environmental policy professors in Helsinki, Tampere, and Joensuu all came from fields other than political science. These Finnish characteristics have created fertile ground for developing the broadly understood field of environmental social science. Institutional university structures have not prevented researchers from a range of disciplines from being active within the YHYS society. The multidisciplinary approach has further expanded in recent years, particularly with the growth of sustainability science and research on sustainability transitions.

Multidisciplinarity extends widely beyond the YHYS field, creating entirely new networks and events. A good example is the Sustainability Science Days held annually in Helsinki. Similarly, since 2021, the University of Eastern Finland has hosted the multidisciplinary International Conference for a Sustainable Resource Society, which brings together sustainability researchers from various fields related to natural resources (water, forests, mining, energy).

Trends in academic politics have encouraged universities to give themselves identifiable profiles, while organizational changes have led to research groups being restructured and renamed. Although environmental social science across all universities encompasses a wide variety of research, some locally developed and intentionally built strengths can be identified. Research at Tampere University has focused on environmental policy and governance, research on nature policy, and urban studies. Topics have ranged from climate to biodiversity or natural resource policy to questions of everyday environmental policy and consumption. Circular economy research is an emerging area in Tampere. Environmental social science research at the University of Jyväskylä has focused on the ecowelfare state and developed an ecosocial perspective on social work. The university also has a long tradition of research on energy transitions whilst environmental sociology research has focused, for example, on food and sustainability in everyday life. In Jyväskylä, the JYU.Wisdom resource wisdom community was established to bring together multidisciplinary environmental research.

At the University of Eastern Finland, environmental social science research has always been interdisciplinary. Environmental policy, environmental law, social geography, education, environmental aesthetics, history, forest policy, and economics have all contributed to the development of research and teaching in the field. Collaboration has been consciously and systematically developed. During 2007–2010, Rauno Sairinen was appointed professor of environmental social science to coordinate the field within the Forest, Environment, and Society (MYY) center of expertise (then still part of the University of Joensuu). Since then, environmental social science has been part of the University of Eastern Finland's strategic strengths as various network organizations, through which the field has received resources. The field has grown significantly at the University of Eastern Finland, as measured by the number of professors in environmental policy and law. Environmental policy also has its own Finnish-language master's program and an international master's program in collaboration with environmental law. The university's strong research areas have included sustainable natural resource management, environmental conflict research, forest sociology, mining research, animal studies, and environmental issues in development research. Alongside these, environmental law research has expanded into climate and energy law and policy.

The professorship in environmental policy at the University of Helsinki is shared by three faculties and is responsible for the master's program in global environmental change. Environmental policy research in Helsinki operates close to science and technology studies. The university also has a professorship in environmental policy focusing on Russia in the Faculty of Arts, a professorship in urban environmental policy in the Faculty of Biological and Environmental Sciences, and a professorship in sustainable consumption in the Faculty of Social Sciences. Environmental policy-related themes can be found more broadly across the university's research, for example, in the Faculty of Agriculture and Forestry's research group "Sustainable Economy Process Studies," led by a university lecturer in sustainable entrepreneurship. The University of Helsinki has also established the Helsinki Institute of Sustainability Science, though its resources are limited, as Janne Hukkinen notes in his text.

At Åbo Akademi, environmental social science began in the late 1980s and early 1990s, based on political science and the administrative sciences, where thanks to Swedish as the working language, cooperation has naturally been oriented toward Sweden. Environmental research and teaching collaborations have also been established with the Baltic countries as part of the Baltic University Program. Ann-Sofie Hermanson and colleagues write that the European funding channels that opened up with Finland's EU membership enabled larger projects, international cooperation, and theoretical development. In recent years, multidisciplinary Baltic Sea research has been strengthened at Åbo Akademi, leading to a new professorship in environmental policy, held by Nina Tynkkynen.

Just as Åbo Akademi's research has a strong regional focus, environmental social science at the University of Lapland focuses on the Arctic region and northern issues, and through these, environmental dimensions are comprehensively present in the research. Jarno Valkonen writes that Lapland has become a kind of laboratory for global environmental change, not always in a positive sense. An important role for both researchers and students in environmental social science has been played by the environmental studies minor, which led to the development of the joint environmental humanities and social sciences program at the Universities of Lapland and Oulu. Strong research themes in environmental social science at the University of Lapland include tourism and mining research. In recent years, the faculty of social sciences has strengthened the Sustainable Naturecultures and Multispecies Futures research group. Additionally, much of the work in Sámi and Indigenous studies falls under environmental social research, generating new and valuable theoretical contributions.

The foundations and methodological guidelines of environmental social science have been presented

in many textbooks over the years. After the book Ympäristökysymys, the volume Ympäristöpolitiikka – mikä ympäristö, kenen politiikka? (Environmental policy - what environment, whose policy? 2001), edited by Haila and Jokinen, served as an important general textbook for many years. Jarno Valkonen's Ympäristösosiologia (Environmental sociology, 2010, revised edition 2016) became a foundational textbook for environmental sociology, while Markku Oksanen's Ympäristöetiikan perusteet (Environmental ethics, 2012) and Suomen ympäristöhistoria 1700-luvulta nykyaikaan (Finnish environmental history from the 18th century to the present, 2021), edited by Ruuskanen et al., were important texts for environmental philosophy and history respectively. Ilmo Massa's extensive editorial work with various partners has resulted in several books collecting key themes of the field: Riskiyhteiskunnan talous (The economy of risk society, 1995), Arkielämän ympäristöpolitiikka (Environmental politics of the everyday, 2006), Vihreä teoria (Green theory, 2009), and Polkuja yhteiskuntatieteelliseen ympäristötutkimukseen (Paths to environmental social research, 2020). Other important publications in the field include Tapaustutkimuksen taito (Skill in case study research, edited by Laine et al. 2007), Hyödyllinen luonto – Ekosysteemipalvelut hyvinvointimme perustana (Useful nature - Ecosystem services as the basis of our well-being, edited by Hiedanpää et al., 2010), Eläimet yhteiskunnassa (Animals in society, edited by Aaltola & Keto, 2015), Kaivos suomalaisessa yhteiskunnassa (Mining in Finnish society, edited by Mononen & Suopajärvi, 2016), and Tiedeneuvo – ihmistieteen näkökulmia luonnonvarapolitiikan muotoiluun (Scientific advice - Perspectives from the human Sciences on shaping natural resource policy, edited by Hiedanpää, 2021).

APPROACHES IN ENVIRONMENTAL SOCIAL SCIENCE

"By now empirics we have aplenty, but not so much theory of our own." This is how, as part of her farewell lecture, professor emerita of social policy Marja Järvelä characterized the field in 2014. Indeed, as an interdisciplinary research endeavor, environmental social science doesn't have its own clear, well-defined approach or a fixed set of conceptual tools. Drawing from various fields, the research also lacks a defined theoretical tradition, and in addressing research questions scholars draw from a variety of sources and disciplines. In this book, Haila notes the liveliness of the environmental policy domain: the nature of the problems is constantly changing, and the theoretical perspectives on the processes underlying them change according to their own rhythms. And so must scholarly approaches. While this idea may be challenging for a young researcher working on their dissertation, it is also liberating and encouraging: there is no predetermined "right way" to conduct research waiting out there. One is free to justify one's research approach without too much concern for theoretical currents. The primary task of research training, as Haila writes, is to create an understanding of how to develop a clearer grasp of the issues and to seek answers to research questions.

Theories developed elsewhere may not necessarily be transferable to the Finnish context.

Depending on their background and interests, each environmental social scientist would likely give a slightly different answer to the question of which thinkers, theories, and works have most influenced their work. In the 1990s, the theoretical literature in the field was still limited, and its development was marked by the adoption of strong, change-driven perspectives, such as the theory of the risk society or conceptual frameworks like ecological modernization, or the language of social sustainability and social constructivism. In the 2000s, the theories and concepts have only become more diverse. Yrjö Haila writes about how research traditions vary across countries, thanks to differences in political thought and to how politics appears in different countries, which means that theories developed elsewhere may not necessarily be transferable to the Finnish context. Differences between the theoretical and the pragmatic, and divergences among critical, institutional, and applied perspectives also create significant variety in how researchers might want to make use of existing theories and conceptual tools.

Each researcher also draws on general conceptual

frameworks from their own discipline. According to Pekka Jokinen, for example, environmental sociology's relationship with sociology's theoretical tradition has always been somewhat problematic, and this has put a distance between environmental and mainstream sociology. Indeed, American scholars Riley Dunlap and William Catton constructed their environmental sociological theory specifically as a critique of traditional sociological thought, which they believed had been dominated by the idea of human separation from nature. However, as Jokinen argues, the emergence of environmental sociology in the 1990s did not rest on a handful of big names or specific schools of thought. Rather, debate in the new research field was characterized from the start by theoretical and conceptual heterogeneity, which has added dynamism to the research.

Environmental social science is thus not born of a single perspective. Rather, it is constantly open to many theoretical and practical proposals for organizing the relationship between humans and environments in a sustainable way. Thus differences in perspectives can be significant. Jokinen writes about forceful scientific debate in the 1990s between European ecological modernization theory and the American "treadmill of production" theory, which drew from structural power research. These theories offered very different macrosociological perspectives on how environmental problems arise and how they should be addressed. Jokinen notes that ecological modernization research was optimistic about social change and the potential of environmental policy, while the treadmill of production school saw the slowing down of scientific and technological developments as the only viable path for environmental policy, accusing ecological modernization of mainly serving corporate greenwashing. Currently, the debate has fragmented and gone in many directions. Research features many new and old concepts and vocabularies from multidisciplinary endeavors, such as anthropocene, sustainability transitions, resilience, capacities for change, environmental justice, degrowth, collaborative governance, sustainable naturecultures, ecological reflexivity, disinformation, regenerative approaches, multispecies approaches, decolonizing research, and more. The criticisms once presented by the treadmill of production school have evolved into

degrowth and sufficiency research (see Nyfors et al. and Ruuska et al. in this book). And questions about the redeeming power of technology and the justice of markets or global capitalism have certainly not disappeared. Philosophical reflections on human hubris, which have troubled minds since ancient times, are more relevant than ever in an age marked by global commerce and digitalization.

The new research field was characterized from the start by theoretical and conceptual heterogeneity, which has added dynamism to the research.

The implications of these conceptualtheoretical, even philosophical, disputes are not limited to academic discussions. They can have significant effects on how social life is organized and sustained, both temporally and spatially. One such debate concerned the idea of ecological modernization. Massa writes that public administration in Finland was so tightly committed to sustainable development ideals that its agenda would not accommodate ecological modernization. Sustainable development, conceived as three parallel dimensions of capital that could be exchanged for one another, was perhaps a better fit with the sectoral divisions of the administration, whereas ecological modernization would have required an entirely new way of thinking and a corresponding social policy framework. Massa suggests that ecological modernization may also have lacked appeal because the idea came from outside the administration, from social scientists who were considered marginal at the time. Over a couple of decades, the situation changed. Today, sustainability transformation and the green transition are firmly on the state administration's agenda and represent a mode of thinking very similar to what ecological modernization once embodied.

Nowadays, these different social scientific approaches have also found a place within the Finnish Environment Institute (SYKE). Minna Kaljonen writes about how many SYKE researchers have completed doctoral theses in the environmental social sciences at various universities, thus enabling fruitful exchange between the everyday practicalities of administration and theoretically motivated research. Through this connection, more direct pathways to societal impact have been opened up.

IN A CIRCULAR MOVEMENT

While seasoned experts in the field consistently view the breadth of approaches as positive and as a guarantee of dynamism in research, from the perspective of an individual researcher, especially a young one, such interdisciplinarity can also feel overwhelming. Where do I anchor myself? Out of what elements do I build a valid research framework for my own efforts? Jarkko Levänen's text captures this quest in a relatable way while Haila provides guidance on forming a problem-based research theory. One relevant issue is that environmental social science emerged out of the efforts of young researchers, some of whom were also environmental activists. Environmental researchers today are similarly presented with opportunities for action and influence. Many often ponder whether one can operate on multiple fronts simultaneously, and if so, how. Anna Mustonen and Ari Lehtinen describe in their text what happens when researchers are engaged in local environmental struggles. In her farewell lecture, Marja Järvelä reflected on the role climate policy, as a future-oriented field of social policy, leaves for social scientists: "One easily adopted role operates at the scale of a flea, aiming its biting critique at others' actions. But what if you want to be coordinating climate policy interventions? In that case, it might be worth rereading Ulrich Beck and maybe generating entirely new theory on the characteristics and management of risks." Järvelä's comment deserves further exploration. Environmental social scientists already occupy many societal and institutional roles (such as on governmental panels on climate and nature/biodiversity), and these will only increase as the need to transition away from old structures intensifies. Moreover, the field is training experts to address both the processes of transition and the needs of a world in multiple crises. Researchers and educators must increasingly reflect on their roles and abilities to function as part of such transitions.

The ability to think about the future and continually and quickly reflect on societal changes is becoming ever more crucial. Critically reflecting on our identities as agents in this context is likely a central future challenge for YHYS to take up.

The history of how environmental social science has developed is both encouraging and disheartening. It's encouraging because of the power the environmental activists and researchers of the 1960s and 1980s had in starting the societywide conversation about environmental issues. It's encouraging to see the field's consolidation and expansion into a recognized area of research, however frustrating the slow pace of progress may have been. Environmental social science has become a strong partner alongside the natural and technical sciences, and the field contributes in various ways to interdisciplinary research on sustainability challenges, whether related to circular and bioeconomy, energy transition, critical metals, or preventing biodiversity loss. One important set of questions affecting environmental thought and policy is the seemingly growing backlash against environmental initiatives, sometimes associated with anti-intellectual, perhaps even authoritarian, political agendas that appear to be moving from margins to mainstreams. Resistance and outright opposition to green agendas is worrying to environmental social scientists, but it is beginning to receive academic attention, including in Finland. New research themes, including but not limited to forms of anti-environmentalism, may rehearse older debates, whether about (limits on) freedom, right versus left versus neither, alternative lifestyles and so on. But this work ideally proceeds according to academic standards, that is, in relation to current conditions and avoiding ahistoricism and easy moral judgements.

Some believe that the sustainability-related research agenda is still too strongly dictated by approaches from engineering, natural sciences and economics. However, in a world of multiple crises and sustainability transitions, the environmental social sciences have an ever stronger role, as societal challenges, the problematique around wicked problems and equally wicked solutions, a better understanding of global trajectories, and the complexity of governance come more clearly into focus. Straightforwardly good solutions do Researchers and educators must increasingly reflect on their roles and abilities to function as part of such transitions.

not exist, as indicated, for example, by the way that sustainability transition and climate actions are causing significant worry and resistance. To understand and spell out these issues requires strong social science. At the same time, significant differences in perspectives are emerging. For instance, in the text by Toni Ruuska and colleagues, they argue for the importance of social sciences alongside natural sciences in discussions about the Anthropocene and call for a critical break from growth-oriented economics and humancentered science. Meanwhile, Ilona Mettiäinen's text argues for the role of environmental social science alongside natural science and technology in developing climate intervention methods. Given how claims to universalism in policy, politics and science are being challenged and already giving way to pluralism, it is likely that such differences will turn out to be strengths rather than weaknesses.

If environmental social science seems sufficiently established that it no longer needs to justify its disciplinary basis, its institutional position cannot be taken for granted. While universities are eager to incorporate sustainability into their strategies, for example at the University of Helsinki, the future of its environmental policy professorship, located across several faculties, is uncertain, as Janne Hukkinen writes. The need for environmental social science to operate alongside natural scientific research can be firmly justified by invoking the principle known as Hume's guillotine: from how things are one cannot infer how they ought to be. Environmental degradation can be perceived through the natural sciences, but such knowledge will not directly lead to policy action. In a democracy, this must happen through societal discussion, value formation, and decision-making. Understanding and facilitating these processes in turn requires research of an environmental social scientific kind. In any case, in the environmental social sciences of the 2020s, natural and technical sciences more often appear as important partners rather than competitors, while researchers drawing on posthumanist thought and theorizing also move fluidly across the fields of environmental humanities (see Santaoja and Nygren in this volume).

The discussion around the global character and decolonization of Western environmental social science has been ongoing elsewhere for quite some time. Although its arrival in Finland has been slow, the debate is now lively. The pressure for decolonization comes from various directions not least from students. Decolonization has been thought to concern primarily the Global South or at most those of European descent who have enriched themselves by exploiting resources turned into colonial goods for over five hundred years. However, through the structures of the global economy, Finland is also part of colonial practices, where benefits and harms are distributed unjustly. There is also work to be done domestically, as the country has a history of spatially uneven forms of resource extraction, as well as an unedifying past affecting the well-being of indigenous peoples. Sámi research, and particularly the growing field of Sámi environmental social research, makes visible the colonial structures related to northern natural resources and ways of life and calls for efforts to dismantle them. Sámi research has examined, in interesting ways, the concept of multispecies livelihoods, which connects to the growing international research on posthumanism and environmental justice. It aims to decolonize multispecies relationships, while emphasizing that multispecies thinking has much longer traditions than recent Western theorizing. The multidisciplinary environmental research being conducted at the universities of Oulu and Lapland undoubtedly contributes to their growing appeal.

Although there has been research data for several decades, environmental problems have rarely been addressed with the urgency that their seriousness demands. The systematic skepticism crucial for research can be misused as an excuse for procrastination. Climate change is now part of societal discussion, yet actions remain insufficient, and the future worrying. Importantly, the issue is no longer defined solely by a cadre of technical experts; it is a multifaceted matter, and understanding, experiencing, and coping with it are always influenced by culture. Developing effective climate policy has taken decades and will continue to do so. The European Union's biodiversity strategy includes the goal of protecting 30 percent of all land area, something that was proposed 50 years ago. Many research topics that have recently emerged as new and gained popularity – such as circular economy and degrowth thinking – were first introduced in the 1960s, almost half a century ago. Are we still reinventing the wheel, making no progress, or have we learned nothing?

It's encouraging to see the field's consolidation and expansion into a recognized area of research, however frustrating the slow pace of progress may have been.

As Massa notes, among many others, cultural change progresses slowly, stumbling over political power and administrative practice. However, new developments in the field are exciting to younger generations of researchers, and dozens of scholars have defended their dissertations in environmental social sciences over recent decades. The field has become incorporated into the mainstream social sciences and is valued within both environmental sciences and social sciences. Timo Järvikoski contemplated a decade ago that environmental social science could do more to consider the possibilities of changing the international economic system and other power structures, even if making change requires citizen action. The development of environmental social science could perhaps be conceptualized as a heuristic spiral, where the same questions are revisited time and again, not in a way that takes them back to their starting point however, but to new understanding, always armed with new theoretical and methodological tools.

Against the background of a strong global imperative for sustainability transition, the environmental social sciences have an important role in developing methods and concepts to keep pace with and even direct large-scale technological change. The slogan from the 1970s, "Think globally, act locally," is still relevant in the 2020s. In the Anthropocene, as planetary conditions are being altered, in important respects we live in an entirely globalized world. Existential threats like climate change do not adhere to administrative borders. However, the underlying decisionmaking and the sources of the emissions, as well as the impacts and the people and other species affected, are always place-based. Dominant narratives highlight the significance and the speed of technological change and its potentially drastic impacts on social - including nonhuman - life. Regardless of how these developments actually play out, there is no doubt that the multiple crises gripping world society at present will affect areas of expertise and professional communities, as well as everybody's relationship with environmental issues. Whether at issue is geospatial data, platform economy, social media, artificial intelligence, or something as-yet less well-known, it is clear that environmental social science must vigorously develop its methods to be able to engage with these changes.

CONCLUSION

Although these are times of somber shadows, the future of our research field looks bright. As Janne Hukkinen puts it: "Environmental social science is doomed to succeed in the universities." This is driven by societal changes. Society has become thoroughly "environmentalized." Many have woken up to the climate and other crises, and in many places concrete steps are being taken towards a sustainability transition. The scale and seriousness of our era's problems - often referred to as the polycrisis - have made it clear that interdisciplinary research and cross-disciplinary collaboration are a must. There will be a great need for environmental social sciences in the future, both as a field of research and as a discourse with an important societal role. Scientifically speaking, we need a better understanding of the diverse and changing relationships between the things that compose our shared world and make it hospitable for life, things that might be called society, environment, humans, and nature, but that in some (posthumanist) contexts are already referred to in other ways. On

Although these are times of somber shadows, the future of our research field looks bright.

the other hand, research provides the knowledge and understanding needed for public debate, informing decisions, and preparing solutions. Education, or the training of skilled individuals, is also crucial, and in this regard the field is of great interest: environmental social science is among the most popular subjects at many universities.

The contributions in this collection paint a picture of environmental social science research in Finland over three decades. The composition we get is colorful and multifaceted - research and teaching in the field have developed as a result of a multitude of events at different universities and in various institutional structures. Individual people, persistent trailblazers, have significantly influenced the development of both the society and the field, so that environmental social science can continue to carve out a space for itself at the intersection of established academic values, practices, and institutions. Environmental social science is a thoroughly interdisciplinary research field and approach, included as a significant domain in the Research Council of Finland's classification and recognized internationally. And yet it is not a standalone discipline so much as a composite made up of many fields of study. To use a metaphor, environmental social science is an umbrella under which many environmentally related research areas fit, along with research conducted in adjacent disciplines concerned with similar research topics and problems. It gives us shelter and strength in our growing numbers and the fun and excitement of new possibilities.