Green Care practices and place-based sustainability transformations

A participatory action-oriented study in Finland

Angela Moriggi

Propositions

1. By caring for nature we express our sense of self.
   [this thesis]

2. Social innovation requires passion and ethics, not merely money.
   [this thesis]

3. The most important ingredients for meaningful participatory action research are researchers' moral agency and resourcefulness.

4. Encouraging PhD students to engage in Green Care activities alongside the writing process fits the university's ambition for health promotion.

5. Engaged sustainability scholars have much more in common with social entrepreneurs than with academics caught up in their ivory tower.

6. Science's ability to have a societal impact is hindered by the extractive, compartmentalized and fragmented modes of knowledge production that still dominate parts of academia (based on: Fazey et al. 2020. Transforming knowledge systems for life on Earth: Visions of future systems and how to get there. *Energy Research & Social Science*, Vol.70, 101724).

Propositions belonging to the thesis, entitled

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Thesis

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Table of Contents

List of Figures

List of Tables

List of Textboxes

Chapter 1

Introduction

'There is no power for change greater than a community discovering what it cares about'
Margaret J. Wheatley (1944 -)

1

Abstract

This chapter provides an overview of the main topics presented in the thesis, as well as their interconnections and relevance in exploring the empirical case of Green Care practices in Finland. It starts by introducing the debate on sustainability transformations and moves on to explain the importance of place and agency in this study. It then presents the phenomenon of Green Care practices in Finland, and the use of care ethics as a novel lens to investigate the transformative aspects of Green Care in relation to place-based sustainability. The final sections of the chapter lay out the research questions, discuss the study's contribution in filling the knowledge gaps previously identified, and give an overview of the content of the thesis.

'The end of the world as we know it': a call for radical change

'This is the end of the world as we know it. Either we are going to have transformation through massive impact from things like climate change, or we're going to get transformations through the active proactive processes that help us navigate through this period of change. Transformations themselves are inevitable.'[1]

With these words, Prof. Ioan Fazey opened the day at the 'Leverage Points 2019: International Conference on Sustainability Research and Transformation' (Fazey, 2019). His quote conveys a sense of urgency about the ongoing debate in sustainability science around the concept of transformation. Over the last decade, the term 'sustainability transformations' has been used to describe significant, radical changes in development trajectories (at all scales) away from 'business as usual' (unsustainable) and towards sustainability (Feola, 2015). The proponents of this concept argue that the current system must be fundamentally reconsidered by addressing the root causes of inequality and vulnerability, and by engaging with issues of power and resource distribution (Bai et al., 2016; UNRISD, 2016). Moreover, transformative change needs to take place at multiple scales, including the individual and the collective, and in governance and management regimes (O'Brien & Sygna, 2013; Westley et al., 2011).

The concept of transformation has rapidly gained popularity, and is now a buzzword both in academic and non-academic contexts. Scientists use it to describe socio-ecological phenomena and interactions (Feola, 2015; Moore et al., 2014) as well as to advocate for action- and impact-oriented modes of knowledge production (Fazey et al., 2018; Moser, 2016); policy-makers employ the term transformation to prescribe actions in ways that are instrumental to their agenda and make claims about the actions they will take (Blythe et al., 2018; United Nations, 2015); civil society movements use it to advocate and legitimize change in line with their needs and visions (e.g. Transition Network). In parallel, the debate around sustainability transformations has given rise to critical voices. These highlight the fact that scholars tend to use it as a metaphor, without providing either a rigorous conceptual basis nor solid empirical proof of what transformational outcomes entail (Feola, 2015). As far as the policy and practice fields are concerned, pompous statements promising transformative change often conceal vague and ambiguous intentions, creating implementation challenges, and ultimately leading to ineffective or business-as-usual practices (Blythe et al., 2018). As a result, scientists warn against the temptation of 'attributing a transformative character to any instance of social change' (Feola 2015, p. 387). There is a risk that the term 'transformative' is used to describe phenomena that perpetuate mainstream approaches to sustainability, including anthropocentric and extractivist modes of development (Bai et al., 2016). Thus, in order to contribute to the theoretical and applicative development of the field of sustainability

1 Fazey, I. (2019). Knowledge and a transforming world. Youtube. Retrieved from https://www.youtube.com/watch?v=Ie1SZWPJoqg

transformations, there is a great need for both conceptual clarity and empirical evidence and testing (Feola, 2015).

Inspired by this gap of knowledge, this PhD thesis aims to contribute to the debate on sustainability transformations, theoretically as well as empirically. Informed by care ethics and relational approaches to sociology, its goal is to offer a novel theoretical perspective on transformative change, exploring two main drivers of change. It attempts, first of all, to study change agency by drawing attention to the role of values, emotions, and mind-sets (i.e. the inner dimension of change); secondly, it explores how change agency relates to place and its resources. At the same time, this study engages with the sustainability transformations debate from a methodological perspective, by employing an in-depth qualitative approach, combining tenets and practices of participatory action research and transdisciplinary research.

To realize all the above, this research focuses on the empirical case of Green Care practices in Finland. Green Care is an umbrella term used to describe nature-based activities aimed at wellbeing and therapy, social inclusion, pedagogy, and recreation. As explained in more detail in the remainder of this chapter, these initiatives can be understood as examples of place-based practices; they are initiated by individuals and local communities, in response to different societal needs while drawing from the resources available in places (Gibson-Graham, 2011; Horlings, Roep, Mathijs, & Marsden, 2020). According to many scholars, such place-based practices can be transformative, as they may promote a re-appreciation of places, and a re-generation of social, ecological, economic, and cultural relations (Horlings et al., 2020).

This introductory chapter delves deeper into the societal issues outlined above and provides a general overview of the topics addressed in this study. It establishes the major gaps in knowledge and understanding in the academic literature, and gives an introduction to the concepts and approaches chosen foundational to the development of a comprehensive theoretical framework, such as: sustainability transformations, place-shaping, change agency, and social entrepreneurship, as well as care ethics and relational approaches to sustainability.

The following section explains the use of 'place' and 'agency' as the two main entry points into the study of sustainability transformations. The phenomenon of Green Care practices in Finland is then introduced, including a short overview of the empirical cases analysed in this research. Next, I explain how a care lens can be used to uncover and highlight the transformative aspects of Green Care practices in relation to place-based sustainability. The last three sections present the aim of the study and its research questions, discuss the study's contribution to the academic literature, and explain the outline of the thesis.

Entry points into the study of sustainability transformations: place and agency

A place-based approach to sustainability transformations

For many years, studies of sustainability challenges have relied on wide-scale approaches, focusing on decision-making processes at the national and international level. There were only few small-scale studies (Leach, Scoones, & Stirling, 2007; Morgan, 2010), as 'local' issues were considered of no relevance given the complexity and magnitude of environmental change. This idea was sustained by the assumption that places were an expression of static, bounded, and parochial social issues (Horlings, 2016).

Over the last few decades, endogenous approaches to sustainable development have contributed to a paradigm shift, according to which local vitality and innovation are foundational to local, regional, and even national change (Smith, Fressoli, Abrol, Arond, & Ely, 2017). During the last decades, the EU Territorial Agenda has advocated for a place-based approach to policy-making, asking local administrators and deliberators to develop strategies tailored to specific territories (European Commission, 2015). This approach is based on the assumption that interventions can only be effective when they recognize the place-specificity of natural and institutional resources as well as local needs and capacities, and grassroots knowledge and preferences (Barca, 2009; Markey, Halseth, & Manson, 2010). One result of this territorial turn has been a growing interest in bottom-up solutions to sustainability and in place-based particularities and assets.

While the recognition of place-based development is not new, there is currently a growing belief that place can be the locus of transformative pathways towards sustainability (Balvanera et al., 2017). The transformative element is the capacity of people to shape places in novel ways and employ innovative practices. This assumption is grounded in a relational approach, according to which places are not spatially and-temporally fixed, but rather are constantly re-made and re-configured through socio-economic relations (Duff 2011; Horlings 2016). With this perspective, places represent lively sites of experimentation and alternative transformation pathways. Through place-shaping processes, individuals and communities take an active role in developing their territories, in line with their visions and needs, in order make them more liveable for present and future generations (Balvanera et al. 2017; Horlings et al. 2020). Examples of place-shaping practices include the development of community-based renewable energy systems, community food initiatives, alternative forms of health care provisioning, as well as innovation hubs – such as makerspaces[2] and DIY (Do-It-Yourself) collectives (Franklin, 2018; Horlings et al., 2020).

2 A makerspace is a collaborative workspace inside a school, library, or separate public/private facility for making, learning, exploring, and sharing, in which both high tech and no tech tools are used and shared (See for instance Taylor, Hurley, & Connolly, 2016).

These practices have received considerable scientific attention, and have been framed in a variety of ways: notably, as expressions of local resilience and/or resourcefulness (Franklin 2018), as practices of social innovation (Bock, 2016), as forms of community-led sustainability initiatives (Gibson-Graham, 2008), or as expressions of endogenous development (Horlings 2015). Yet, despite the wealth of literature produced so far, there are many aspects of place-shaping practices that warrant further investigation. As a result of being embedded in different contexts, for example, practices may vary greatly in nature and in outcome. More research is needed to explore the diversity of practices and outcomes as well as their evolution (across both space and time). Additionally, many place-shaping practices have been only marginally researched and many questions remain regarding about how these practices unfold, what defines their transformational character, and how their physical and relational context (their 'place') is important to their unique trajectory.

This thesis focuses on the case of Green Care, as one of the place-shaping practices targeted by the programme SUSPLACE (https://www.sustainableplaceshaping.net), a Marie Skłodowska-Curie Innovative Training Network funded by the European Commission between 2014 and 2019. The overall objective of the programme was to explore the transformative capacity of place-shaping practices to enhance sustainable development (Horlings et al., 2020). This study approaches Green Care from the perspective of its practitioners, using the lens of social entrepreneurship.

Social entrepreneurship and place-based resources

The literature on sustainability transformations and place-based development both stress the centrality of people's agency in shaping diverse sustainability pathways (Horlings, 2018). Thus, understanding and investigating place-based practices must include appreciating *what* people do and *how* they do it, emphasizing the specific individuals and groups who 'make things happen' (Westley et al. 2013, 27). In sociology, change agency is a well-established concept, according to which agents are actors who imagine alternatives and are able to transform themselves, their relationships, and their social contexts (Emirbayer & Mische, 1998). Change agency has been conceptualized in a variety of ways, often using the term 'entrepreneurship' to describe the capacity of agents to mobilize a variety of resources conducive to their aims (Pyysiäinen, 2011). The literature differentiates between various types of entrepreneurship, such as institutional entrepreneurship, social entrepreneurship, moral entrepreneurship, and sustainability entrepreneurship. Institutional entrepreneurship, which explains how actors change institutions in ways that fundamentally alter the existing systems (Battilana, Leca, & Boxenbaum, 2009), is the most commonly used in the field of sustainability transformations. When looking at Green Care, however, the concept of social entrepreneurship seemed more applicable. Social entrepreneurship emphasises the process in which actors combine resources in new ways to meet social needs, often outside of cohesive institutional structures or crossing between multiple institutions. Indeed, Green Care practitioners focus on social

needs and, in the cases examined in this study, are only partially embedded in traditional care institutions.

In the initial phase of this research, two fairly unexplored dimensions of change agency – and social entrepreneurship in particular – emerged as warranting further investigation. First, scholars in the field of transformative change frequently highlight the paucity of research into the 'inner dimension of sustainability' – the personal and collective repertoire of mind-sets, emotions, values, and worldviews that play a vital role in determining people's choices, behaviours, and thus influence practices (Horlings, 2015; O'Brien & Sygna, 2013). From a 'systems thinking' perspective, the inner dimension of sustainability represent one of the most powerful (and often dismissed) leverage points to achieve fundamental change (Abson et al., 2017). Exploring this dimension requires a thorough investigation into the deep reasons and ethical and emotional drivers that motivate, trigger, and sustain change agency through time.

Second, the literature on place-shaping affirms that change agency, and thus social entrepreneurship, is not an innate disposition or ontological characteristic of any individual or group. Rather, it is a process which is constantly in a state of 'becoming' as a result of its embedded and situated nature (Battilana et al., 2009; Pyysiäinen, 2011). A relational approach is thus appropriate for the study of place-based practices, because it supports the exploration of the intricate web of connections that enmeshes people and their places, as well as the related processes of co-construction and co-evolution (Duff, 2011; Massey, 2004).

For the above-explained reasons, I chose to investigate the processes of social entrepreneurship in Green Care practices applying a relational lens. Additionally, when investigating the 'inner dimension of sustainability' of these practices, I used a care ethics and feminist approach as a way to shed light not only on the values, mind-sets and emotions motivating change, but also to understand to what extent these would translate into concrete everyday practices in places. This caring dimension is further explained on page 10 and in chapter 2, and explored in length in chapters 4 and 5. A relational lens was also relevant when investigating the embeddedness of Green Care practices in specific places, paying attention to the array of place-based resources that entrepreneurs rely on when initiating and developing their innovative initiatives. Chapter 6 is dedicated to exploring this dimension, aiming to map and understand the resources that are important for place-based entrepreneurship, using the empirical case of Green Care practices.

Zooming into the case of Green Care as an example of an innovative place-based practice

During the last decade, interest has surged around innovative practices initiated by individuals and communities at a local level which respond to societal needs and shape developments trajectories related to specific concerns. One key concern is health and social care which

relates to many contemporary challenges, such as:

- the increasing demand for costly long-term care related to non-communicable diseases (World Health Organization, 2015) and in response to an ageing population affected by disabling syndromes like dementia (Alzheimer Europe, 2015);
- the overriding phenomena of social alienation and exclusion – intensified by globalization, rampant consumerism, and technological advancements (García-Llorente, Rubio-Olivar, & Gutierrez-Briceño, 2018);
- the growing need to promote healthy lifestyles and maximize contact with nature, in the context of an urbanizing world (Hansen-Ketchum & Halpenny, 2011).

In many countries, these challenges are exacerbated by structural issues, such as the inability to provide for sufficient healthcare and social services, due to strained national welfare systems vis-a-vis growing demands (Begg, Mushövel, & Niblett, 2015). Rural areas have been particularly affected by this trend, as a result of geographical remoteness, socio-economic marginalization, and insufficient infrastructures (Bock, 2016).

The current health-care 'Zeitgeist' emphasises the need to deinstitutionalize health care and to shift to community-based care provision and personalized care approaches (European Expert Group on the Transition from Institutional to Community-based Care, 2012). As a result, place-based initiatives have sprouted across Europe, several of which are clustered under the term Green Care. This umbrella concept is not used consistently and includes diverse practices – such as social and care farming, therapeutic horticulture, animal-assisted interventions, and nature-based recreation and therapy. Different aspects and priorities are pursued depending on the activity, including health and well-being, social inclusion, education for the personal development of particular target groups, as well as pedagogical and recreational benefits for people of all generations (Sempik, Hine, & Wilcox, 2010). In addition to health and well-being, both policy and research have focused on the potential of Green Care to support innovation and rural development.

The innovative dimensions of Green Care practices have been widely investigated (García-Llorente et al., 2018). The vast majority of studies illustrate Green Care's potential to promote well-being and social reintegration, complementing or providing an alternative to state-based and reductionist biomedical models of health and social care (Elsey et al., 2014; Rappe, 2005). They aim to prove the effectiveness of interventions for different target groups, such as people with mental disabilities, vulnerable children, demented elderly, recovering addicts, long-term unemployed, offenders serving community orders, and refugees (Elings & Hassink, 2008; Sempik et al., 2010). Typically, studies in this field explore how exposure to nature can support healing and recovery processes (Berman, Jonides, & Kaplan, 2008; Ulrich, 1984) and other concomitant benefits. The latter includes the quality of the place where the activities are carried out, which may be perceived as rewarding and supportive, offering space for individual enjoyment and contacts with animals and biotic elements, that generate feelings of acceptance (Kaley, Hatton, & Milligan, 2019). Additionally, beneficial effects are linked to the possibility of

being part of an active community, which can result in social acceptance and fellowship, and the creation of relationships of trust and alliance amongst those involved (Haubenhofer, Elings, Hassink, & Hine, 2010). Moreover, especially in the case of social and care farms, engagement in meaningful activities, tailored to the needs and capacities of each individual, creates the chance for people to master tasks without pressure, in turn enhancing their self-esteem and self-efficacy, while providing them with a rhythm and structure in their lives (Haubenhofer, Hassink, & Elings, 2008; Steigen, Ragnfrind, & Hummelvoll, 2015).

Green Care, especially care and social farming initiatives, has also been studied for its potential to support rural development and agricultural innovation. At the crossroad of the agricultural and healthcare sectors, many consider care farming as a promising example of 'multifunctional agriculture' (Hassink, Grin, & Hulsink, 2013), referring to the potential of agriculture to fulfil many functions for society, beyond the production of food and fibres (Dessein & Bock, 2010). Over the past few decades, the transition of European rural areas from an agriculture-based to a service-based economy has brought along not only a new way of managing natural resources but also a new demand for farmer skills. As the case of Green Care exemplifies, the 'new' farmers are increasingly viewed as entrepreneurs, capable of forging alliances across sectors, building networks with interested stakeholders, and starting new collaborative arrangements – to guarantee the provision of different services (Di Iacovo et al., 2017; Hassink et al., 2013). A few studies have investigated the success of social and care farming initiatives and the importance of entrepreneurial skills (Hassink et al., 2013). Others have explored how practices have developed thanks to (or despite) existing institutional settings and regulatory frameworks in different countries, often with an explicit attempt to influence policy and governance at various levels (Di Iacovo & O' Connor, 2009; Guirado et al., 2017; Haubenhofer et al., 2010). Other studies have highlighted the contribution of social and care farming to the socio-economic viability of rural areas. As a result, we now know that these initiatives may support the re-organisation of local economies around principles of solidarity, reciprocity, and inclusiveness (Di Iacovo, 2009), and that they may produce several added-values, in both monetary and non-monetary forms (Dessein & Bock, 2010). This has raised interest in how care and social farming matters for the socio-ecological sustainability of rural and peri-urban areas (García-Llorente, Rossignoli, Di Iacovo, & Moruzzo, 2016).

At the start of this research, all the above suggested that Green Care initiatives were an interesting case of socially innovative practices. Many cases yield potential to not merely provide new services and products, but also to contribute to altering systems of knowing and acting upon specific challenges, thus contributing to processes of socio-economic transformation at the local level (Elkington & Hartigan, 2008; Mair & Marti', 2006). Such practices can, for example, help re-conceptualize traditional health-care provision, re-establish virtuous connections across the urban and the rural — including marginalized areas — and re-frame values around conventional food production, disability, and disempowerment (Di Iacovo, 2020; Sempik et al., 2010). Green Care thus represents a case in which both place and agency

have a central role, line-up with the entry points chosen to explore questions of transformative change in this research project. Neither agency – social entrepreneurship in particular – nor place, however, have been given sufficient attention in the relevant literature. Two major gaps invite further investigation. The first one, related to processes of change agency, has to do with the 'inner dimension of sustainability' of Green Care practitioners, taking into account their needs and desires to care for both humans and non-humans. The second gap relates to the role of place embeddedness, and how it can enable or constrain the development of Green Care practices in different contexts, and in turn, contribute to envision different pathways of place-based sustainability.

Green Care revisited: applying a caring lens to unpack its significance for sustainability transformations

In order to detect, analyse, and conceptualize the sustainability implications of Green Care social innovation experiments, it is important to clarify the definition and significance of the term 'Green Care'. To start with, relevant literature frames Green Care practices as 'caring' and 'green' by default. They are 'caring' because they are focused on providing health and social care to individuals and groups; they are 'green' because they rely on natural resources and landscapes to meet rehabilitation, social inclusion, and recreational goals.

After my initial exploration and immersion in the world of Green Care, I realized that the idea of caring and its relation to the 'green' aspect of Green Care deserved further examination. During a preliminary phase of my fieldwork (May-December 2016), I visited several farms and enterprises offering Green Care services in Southern and Central Finland; concurrently, I also surveyed the field through informal interviews with experts based in Finland, Netherlands, and Italy. The knowledge and impressions gathered during that period raised several empirical questions that helped to shape the final research questions and aims of this project. In particular, I wondered: Why do practitioners engage in Green Care practices? How do sustainability and caring for their places (in both social and environmental terms) play a role in the realization of the practices? What is the connection between the values expressed by the practitioners I met and what they implement and achieve in practice? Are caring practices benefiting both humans and non-humans in the places I visited, and if so, how?

To address these questions, I turned to scholarship on care ethics. At the start of this research project, there was no systematic research that applied a care lens to the study of Green Care practices. The care lens, however, had been applied to other place-based practices in which both social and ecological values play an important role, such as community-supported agriculture (Cox, Kneafsey, Holloway, Dowler, & Venn, 2013; Wells & Gradwell, 2001) and permaculture farming (Puig de la Bellacasa, 2015). In these cases, care ethics highlighted people's commitment to maintain and regenerate relations with both humans and non-humans, which stemmed from both ethical principles and tangible doings situated in specific

contexts (Moriggi, Soini, Franklin, & Roep, 2020). The care lens has thus proven to be a useful tool for unpacking people's experiences in places, looking at the dual dimension of values on the one hand, and practices on the other (Tronto, 2013).

Moreover, along with other feminist approaches to sustainability issues, the care ethics literature stresses the importance of interdependence and relationality, offering a novel perspective on socio-ecological relations that has thus far been given little consideration in the debate on sustainability transformations (Mol, Moser, & Pols, 2010; UNRISD, 2016). Consequently, applying a care lens had the potential to not only contribute to scholarships on Green Care, but also to enrich the debate on sustainability transformations. Thus, chapter 4 is dedicated to exploring how a care ethics approach can contribute to transformative change, drawing from both theoretical and methodological perspectives, but with no explicit reference to the case of Green Care practices. Chapter 5 is specifically dedicated to exploring the significance of care ethics into the study of Green Care, drawing from rich empirical accounts gathered during fieldwork.

An in-depth participatory action-oriented study of Green Care in Finland

The growing academic interest in sustainability transformations is not only directed at *what* researchers study but also at *how* scientists can play an active role in processes of change (Fazey et al., 2018; Feola, 2015). Lines of inquiry focus on how knowledge is produced and by whom, calling for transdisciplinary and action-oriented methodologies that foster more inclusive, collaborative, and empowering ways of engaging research participants (Fazey et al., 2020). The research in this thesis reflects this trend towards more inclusive modes of knowledge production, as I explain at length in chapter 3. The methodology developed is strongly inspired by principles of Participatory Action Research (PAR) combined with the tenets of Transdisciplinary Research (TDR) (Lang et al., 2012; Reason & Bradbury, 2008b). It draws from a rich array of traditions, including Appreciative Inquiry, participatory planning, system and design thinking, arts-based research, and experiential learning. Methods encompass more conventional forms of data collection – such as semi-structured interviews, survey questionnaires, and participant observation – as well as innovative creative and visual techniques – such as Photo-voice, video interviews, and co-creation workshops. In order to generate theories and concepts that are socially robust and relevant, I rely on a semi-grounded theory approach, putting empirical findings and interpretative schemes constantly in dialogue (Fletcher, 2016).

The development of the methodological approach has gone hand in hand with the definition of the research questions and the choice of the case studies. The issues this thesis aims to address can best be answered through an in-depth qualitative approach, which demands a great deal of time and commitment also by the participants. After an initial visit to several Green Care initiatives in Southern and Central Finland, three enterprises agreed to be part of this study: a

care farm, a biodynamic farm, and a nature-tourism company. These cases represent different types of Green Care practices, as well as different sectors, including agricultural and tourism. They are also at different stages of certification of their practices, according to the process of institutionalization of Green Care in Finland.

This research work focuses solely on the Finnish context, with no ambition to compare across countries. Rather, I hope to appreciate the cultural and institutional peculiarities of the 'Finnish way' of practicing Green Care, delving into the reality of the three cases selected. Additionally, there are only few studies in English language focusing on Finland (García-Llorente et al., 2018) and to my knowledge, there are no in-depth case studies about Finnish Green Care practitioners and their entrepreneurial process. Chapter 3 provides additional details about the case studies selection and the peculiarities of the Finnish context.

Aims & Research questions

Green Care practices can be seen as a bottom-up response to societal needs for health, wellbeing, and inclusion, as well as an innovative solution that builds on the contextual place-based realities in which they are embedded. In this chapter I have set out the need for research on transformative change that a) takes into account place-based needs, aspirations, and resources; b) appreciates the sustainability visions and values of the main actors pushing processes of change. I have also identified the knowledge gaps in the debate on sustainability transformations as well as in the study of Green Care practices; moreover, I have discussed that a care lens can help to fill those gaps while departing from an integrative and innovative perspective.

The intention of this PhD thesis is to produce a rigorous empirical study of place-based practices of Green Care, and their significance for and contribution to processes of transformative change, taking into consideration actors' sustainability values and visions. I do so by involving a group of Green Care practitioners in Finland – and to a lesser extent, their larger network of stakeholders in an action-oriented participatory process aimed at gathering in-depth information while allowing for reflection and capacity building.

The focus is on people's motivations to engage in Green Care, on the caring relations enacted through the practices, on the role of place-based resources in sustaining change agency, and on the potential contribution of a care lens to the study of sustainability transformations.

Figure 1.1 summarizes the main topics and approaches chosen in the thesis.

The overarching research question is:

> What is the significance of Green Care practices for processes of place-based sustainability transformations?

This question is answered by looking into the following sub-questions:

1. How does caring matter for sustainability transformations?
2. What are the multiple dimensions of caring in Green Care? How do they relate to place-based sustainability?
3. Which place-based resources do practitioners use to make Green Care happen? How do these resources enable practitioners' change agency?

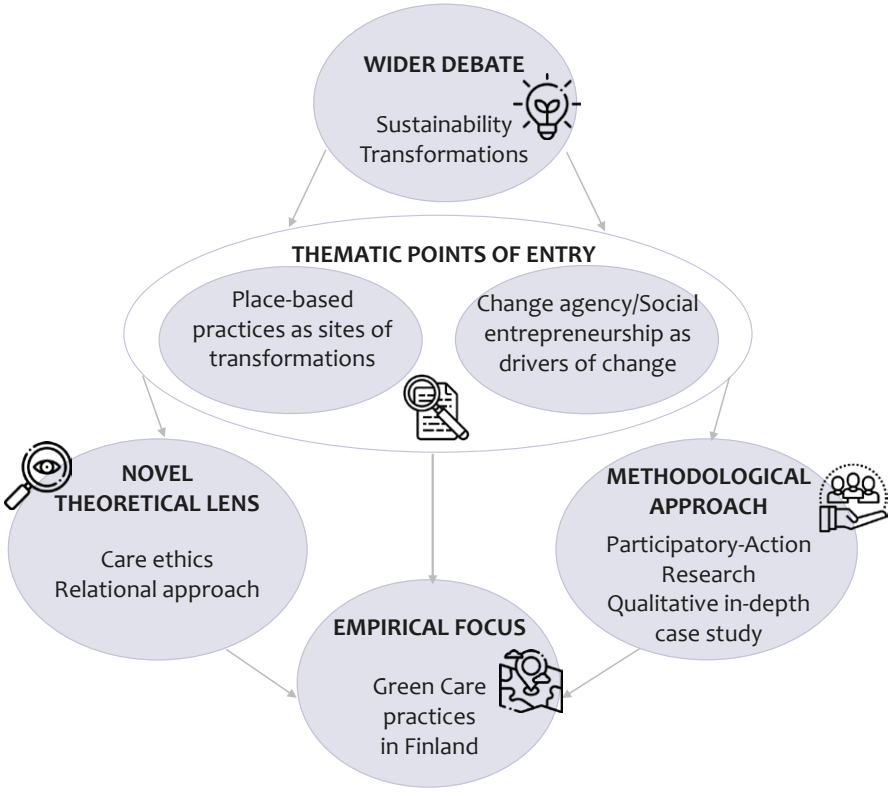

FIGURE 1.1 | Thesis overview: topics and approaches

Outline of the thesis

The thesis consists of seven chapters. Chapter 1 – the Introduction above – provided an overview of the main topics, their interconnections, and their relevance in exploring the empirical case of Green Care practices in Finland. This chapter highlighted the societal and scientific relevance of these topics as well as the major knowledge gaps while positioning the study in the context of current socio-economic developments.

Chapter 2 introduces the theoretical framework and presents the conceptual building blocks of the thesis. It departs from key references in the sustainability transformation scholarship and highlights the major points of interest relevant to this thesis. It moves on to prove the importance of a care lens as a way to shed light on ethics and practices concerning sustainability issues. The last two sections elaborate on the concepts of place and agency.

Chapter 3 outlines the methodological approach employed during the research. It presents Participatory Action Research (PAR), and its key principles and purposes, as the main body of literature underlying the data collection process. It explains how PAR tenets were integrated and enriched with insights from Transdisciplinary Research (TDR), as well as other traditions, to form the conceptual background of the participatory engagement. After introducing the case studies, it details the structure and phases of fieldwork, as well as the techniques employed, including semi-structured interviews, participatory mapping, Photo-voice, co-creation workshops, surveys, and video interviews.

Chapter 4 addresses the first sub-research question. It discusses the theoretical foundations of the ethics of care and investigates the contribution of care theory to the sustainability transformations debate. It elaborates on three dimensions that are considered relevant for transformative change from an ethics of care perspective: a) ethically-informed practices as an expression of relationality in places; b) emotional awareness as a trigger of transformative agency; c) response-ability as a forward-looking commitment to engage in regenerative acts. It discusses the relevance of a caring approach for the further development of sustainability theory and methodology when using action-oriented approaches.

Chapter 5 reports on the empirical part of the thesis answering sub-research questions no.2. After discussing the relevance of a relational and care-based approach for the study of Green Care, it offers an analytical framework to unpack the different dimensions of caring that characterize the practices. Furthermore, it contributes to the study of Green Care by providing an in-depth empirical analysis of why and how practices are performed in the three Finnish cases object of this study. It ends with discussing the value and limitations of the framework proposed, as well as Green Care's implications for place-based sustainability.

Chapter 6 addresses sub-research questions no. 3. It introduces the concept of social entrepreneurship as a useful way to understand the efforts of Green Care practitioners. It critically engages with the literature on change agency, place-making, and social farming, and broadly revises how entrepreneurs' resources have been conceptualized so far. Additionally, it builds a comprehensive map of resources for place-based social entrepreneurship, grounded in a process of co-production involving the three empirical cases of the research. It discusses the enabling and constraining character of the different resources and highlights relevant contributions to the literature.

Chapter 7 presents the discussion and conclusions, synthesizing and reflecting on the major findings of the PhD thesis. It answers each of the research sub-questions in detail. It highlights the challenges and contributions of an action-oriented methodological approach, as well as the limits of the study and avenues for future research. It ends by providing concluding remarks.

Chapter 2

Theoretical background: finding pathways to sustainability transformations

'To pay attention, this is our endless and proper work'
Mary Oliver (1935 – 2019)

2

Abstract

This chapter presents the theoretical framework and conceptual building blocks of this thesis and gives an overview of the most relevant scientific debates. In particular, I highlight the connections between concepts, and how they relate to each other. The chapter starts by introducing sustainability transformations as a point of departure when developing both the conceptual and methodological approaches that underpin this thesis. It then explains the value of a care-based approach for interrogating transformative change from the dual perspective of ethics and practices. Moving on, I consider the literature on place and highlight its relevant focus on localness, relationality, and embeddedness. I end with a recap of how agency and social entrepreneurship are understood throughout the following chapters.

Sustainability transformations as a red thread

Throughout this thesis, the theme of transformation is a red thread that connects theory to methodology, influencing deeply not only *what* type of knowledge I produced, but also *how* that knowledge was produced and *for whom*. Feola (2015) identifies two research approaches that help problematize the concept of sustainability transformations as it has evolved in the literature: descriptive-analytical and solution-oriented. This thesis takes inspiration from and aims to contribute to both. It uses tools and frames offered by the sustainability transformations debate to explore and describe Green Care practices. In parallel, it engages in impact-driven research through the use of participatory action research methodologies and a transdisciplinary approach. In this chapter, I explore the theory of transformative change from the descriptive-analytical perspective and in the following methodological chapter (chapter 3) I delve deeper into the literature on solution-oriented research.

There are many ways to conceptualize sustainability transformations, but two are particularly relevant to this thesis. First, O'Brien posits that transformation can be understood as 'a psycho-social (DT) process involving the unleashing of human potential to commit, care and effect change for a better life' (O'Brien, 2012, p. 4). Second, Olsson argues that the 'transformative capacity' to initiate social transformation is the ability to move away 'from unsustainable and undesirable trajectories to new ones with the capacity to strengthen and enhance management of desired ecosystem states and associated values' (Olsson, 2003, p. 23). Both definitions emphasise the crucial importance of human agency in prompting and sustaining change.

The focus on change agency is by no means novel in the social sciences. The urgency of multiple environmental crises, however, has exposed the inability of governments and supranational organizations to divert the trend, and thus contributed to growing expectations about the potential role of individuals, organizations, and movements. This trend responds to societal challenges by devising new ways of understanding the world from a bottom-up perspective, confronting dominant norms, values, and beliefs (Avelino & Wittmayer, 2015). For decades, literature in the sociological and political science fields has studied the interrelation between agency, networks, institutions, and innovation, and its relation to sustainable development (Olsson, Galaz, & Boonstra, 2014).

Particularly interesting in the sustainability transformations debate is a renewed interest in the 'deliberative' nature of transformations. In this arena, change processes are understood as a result of intentional choices of individuals and groups, who wish to challenge existing assumptions, and in doing so, responsibly choose, take, shape, and reshape sustainable pathways day after day (Tschakert, Tuana, Westskog, Koelle, & Afrika, 2016); it is less important to understand transformations 'of what and to what' than it is to ask 'from whose point of view and for what purpose' (Arora-Jonsson, 2016).

Departing from the deliberative perspective, this thesis focuses on human intentionality and attempts to provide an 'in-depth insight to what people appreciate, feel responsible for, and are willing to commit to in the context of their own place' (Horlings, 2015, p. 257). It also frames transformation as a dialogic and communicative process, rather than a one-time decision or single act. Transformations do not happen in isolation, but as a result of the perpetual interaction and negotiation with the social and ecological environment (Emirbayer, 1997; Tschakert & St.Clair, 2013). In this thesis, the situated nature of change agency is linked to the concept of place embeddedness and thus to place-based resources in processes of social entrepreneurship (chapter 6). Additionally, this thesis investigates the 'caring' nature of human intentionality and explicitly recognizes the ethical and emotional dimensions of deliberation. Ethical obligations are not seen as abstract moral norms, but rather as grounded in concrete relationalities that find manifestation in tangible practices in places (Puig de la Bellacasa, 2010; West et al., 2018). Chapters 4 and 5 delve deeper into this dual dimension of ethics and practices.

'Systems thinking' is another important lens proposed by the descriptive-analytical strand in the sustainability transformations literature. While maintaining a focus on people's agency, sustainability transformations literature privileges a systemic view, claiming that radical shifts are needed at multiple levels. Westley (et al. 2011) for instance, affirms that transformations start from the individuals and their deeply held values and beliefs, moving on to patterns of thinking and behaving performed by the collectives, and investing also multi-level governance and management regimes. O'Brien, drawing from the work of Sharma, identifies three spheres of transformations: the practical (e.g. behavioural changes, socio-technical innovations), the political (e.g. socio-ecological systems and structures), and the personal (e.g. individual and collective values and worldviews) (O'Brien & Sygna, 2013). Lonsdale (Londsale, Pringle, & Turner, 2015) as shown in Figure 2.1 on page 21, offers a useful framework that differentiates between two levels of transformation – internal and external – and two scopes – individual and collective. In the individual internal realm, there is a process of personal transformation that influences personal mind-sets, identities, emotions, and self-development. In the internal collective realm, processes of transformation may change collective patterns of thinking, understanding, and behaviour, as well as collective identity and culture. In the individual external realm, transformations affect relationships and the interaction with the socio-political environment and, as I emphasise, with the socio-ecological environment. Finally, in the collective external realm, a wider systemic change takes place with the transformation of societal institutions, public policies, judicial procedures. The personal (both internal and collective) and relational dimensions of this framework are particularly relevant in this thesis.

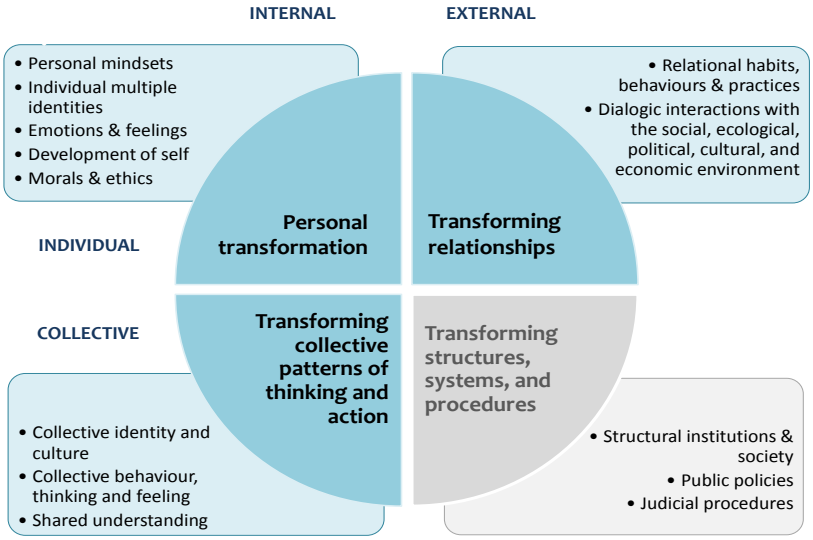

FIGURE 2.1 | Levels of transformational change. In blue the ones most relevant for this PhD thesis. (Adapted from Lonsdale et al. 2015)

For decades, the internal spheres of transformation, also called 'inner dimension(s) of sustainability' (Horlings, 2015, p. 163) or 'cognitive domain of change' (Fazey et al., 2018, p. 61) were largely dismissed in the scholarly debate on sustainability (Ives et al 2020). Advocates of a systems thinking approach, have, to some extent, brought them to the fore (Abson et al., 2017). In the late '90s, the seminal work of Donella Meadows drew attention to the importance of the leverage points in a system – places where a 'small shift in one thing can produce big changes in everything' (Meadows, 1999, p. 1). The most effective leverage point is the power to transcend paradigms by questioning our own habituated ways of thinking and understanding the world and our position in it. How people perceive, value, and interact with the natural world fundamentally shapes the paradigms underpinning socio-ecological systems (Abson et al., 2017; Ives, Freeth, & Fischer, 2020). In our current geological epoch, humans have become a dominant driver of Earth systems change. The term 'Anthropocene' reflects the nature, scale, and magnitude of human impacts on the planet, driven by an anthropocentric paradigm, that is dismissive of planetary boundaries and only preoccupied with the wellbeing of a minority of the worlds' population (Bai et al., 2016; Steffen et al., 2011).

Against this background, a notion and practice of change that recognizes humans and ecosystems as an integral whole holds the potential to be truly transformative; such a 'regenerative paradigm' emphasizes restoring and regenerating both social and natural resources which leads to the flourishing of both (Reed, 2007). A regenerative paradigm, moreover, moves beyond the idea of environmental harm reduction and neutrality. Instead, it posits that socio-economic well-being and prosperity must be integrated with restoring

and rebuilding ecological systems; and that human activity has the potential to increase the resilience and vibrancy of the environment (Mang, Reed, Mang, & Reed, 2017). Such a paradigm shift requires us to rethink the current system of socio-economic development and interrogate the philosophical underpinnings of the current system. As of yet, however, only a handful of sustainability transformations scholars have attempted to do so (Bai et al., 2016; Tschakert & St.Clair, 2013). Chapter 4 in this thesis addresses this knowledge gap. Informed by feminist scholarship, including philosophers of the ethics of care and (to a lesser extent) of ecofeminism, spiritual ecology, and environmental ethics, it explores the transformative potential of alternative ways of understanding human-nature relations.

Care ethics, caring practices

Foundational to this research is the precept that care matters: at some point in our lives, we are all caregivers and care receivers (Tronto, 2013). Caring has been long dismissed in scholarly debates and only recently has become the subject not only of nursing and medical studies, but also of sociology, anthropology, geography, philosophy, and ethics debates (Mol, Moser, Piras, et al., 2010). In order to unpack the significance and relevance of caring in the context of Green Care, I refer to the literature of care ethics. First, this body of literature suggests promising philosophical foundations with potential to enrich the debate on sustainability transformations (chapter 4); second, it offers useful analytical tools for exploring integrative dimensions of Green Care practices (chapter 5). Following is a brief account of the merits of an ethics of care approach from these two perspectives.

In 1982, Carol Gilligan's 'In a different voice' introduced a feminist approach to morality that had previously been dismissed in liberal Western philosophical traditions (Gilligan, 1982). This ground-breaking text ignited lively debate, along with other important scientific and philosophical contributions by Virginia Held, Nel Noddings, Sara Ruddick, and others. These scholars opposed the mainstream notion that individuals are isolated and abstract entities, primarily moved by self-interest and selfish emotions (Tronto, 2013). In contrast, they proposed two fundamental conditions at the heart of moral choices and actions: interdependence and relationality (Noddings, 2013). From an ethics of care perspective, an awareness that our human existence is inextricably entangled with other humans and non-humans is the starting point to understand the transformative power of caring (Conradi, 2015). These scholars argue that insight into our fundamental vulnerability (due to our interdependence) may translate into choosing and enacting ethical trajectories that protect and nurture the resources at the very basis of our existence (Pulcini, 2013). Tronto and Fisher explain that:

'Care is a species activity that includes everything we do to maintain, continue and repair our "world" so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web.' (1990 in Tronto 2013, p.19)

From this perspective, caring is not a practice relegated exclusively to the private and intimate sphere (Tronto, 2013), but rather it offers a novel light to understand human intentionality. It is also extremely relevant to sustainability. Caring subjects are responsible humans, capable of committing to maintain and regenerate relations with a forward-looking orientation to the future (Puig de la Bellacasa, 2010). Notions of caring for the Earth are not only the prerogative of the ethics of care, however. Traditionally, the idea that humans have a moral/ethical obligation to care for the environment has been at the core of spiritual and philosophical traditions such as Buddhism and Hinduism, and of indigenous cosmologies all around the world (Whyte & Cuomo, 2016). These traditions have long informed various fields, such as ecofeminism, spiritual ecology, environmental ethics, and eco-theology (Spretnak, 1997; Warren, 2000). The literature on sustainability transformations, however, has given little attention to relational and caring perspectives. As Tschakert puts it, 'the transformation language emphasizes systemic thinking, yet it tends to avoid a relational sense of connectedness between the human and non-human world, and the willingness to embrace the future with responsibility and care, despite its intrinsic complexity and unknowability' (Tschakert & St.Clair, 2013, p. 267). Moreover, 'little is said about the conditions under which this relationship can flourish and when it is constrained' (Tschakert & St.Clair, 2013, p. 267). Chapter 4 in this thesis attempts to bridge this knowledge gap, using a care lens to enrich the sustainability transformations debate. It identifies three dimensions – practices, response-ability, and emotions – that can serve as points of inquiry to understand how people come to express their relational dependence on the living environment, what motivates their desires to care, and how do they learn to do so. It also discusses the implications of a care approach for transformative research theory and practice. In other words, it reflects on how a care lens can contribute to both the descriptive-analytical as well as the solution-oriented strands of the sustainability transformations debate.

In another vein, the literature of care ethics offers useful analytical tools for exploring Green Care practices and their significance for place-based sustainability. From a care ethics perspective, through embodied practices, enacted in particular times and spaces, caring subjects set forth the possibility for change, for transformations of the ways of relating to other humans and places, and in doing so, construct new subjectivities (Singh, 2013). Practices, according to this school of thought, are expressions of ethical principles; they are not abstract moral norms, but rather, they take on meaning and value only when reconnected to the fabric of caring relationships (Pulcini, 2017). This dual nature of caring is captured in a model proposed by Tronto, which forms an important part of the conceptual framework of this thesis. Tronto (2013) sees caring as an iterative cycle unfolding in five stages, each of which is motivated by a moral principle. The first stage is *caring about*, fuelled by *attentiveness,* which allows individuals and groups to notice unmet caring needs. When attention becomes intention to act upon those needs, then we enter the stage of *caring for*, motivated by *responsibility*. In the next stage the actual work of care is done through *care giving*, a practice that requires *competence,* understood here not merely as technical skills but also as ethical commitment.

The fourth stage recognizes the active role of the person/group/animal/plant that has been cared for and their capacity for *responsiveness*: it is *care receiving*. Finally, the final phase, *caring with*, encompasses all the other ones, and it is based on *solidarity,* as it presupposes that caring practices should be consistent with principles of justice, freedom, and equality for all. Overall, caring is not understood as a unilateral doing, but rather as an interactivity that can lead to empowerment and learning for both sides of the caring spectrum (Tronto, 2013). Chapter 5 in this thesis applies Tronto's five stages of caring to uncover the multi-dimensional nature of Green Care practices and expand the notion of caring beyond the provision of well-being services. Caring is revealed as a way for people to express who they are, and who they wish to be, through everyday interactions with both the human and non-human world (Moriggi, Soini, Franklin, et al., 2020). Furthermore, this chapter operationalizes Tronto's theoretical framework into an analytical approach by deriving a set of empirical questions for each stage in the caring process. Such questions are then used to scrutinize the data relevant to the three Green Care cases surveyed in this thesis: the care farm, the biodynamic farm, and the nature-tourism company.

Place, place-based sustainability, place embeddedness

As mentioned above, the situated nature of caring practices, particularly as interpreted through the lens of place-oriented literature, is a cornerstone of the theoretical and practical approach taken in this research. The concept and implications of 'place' have shaped this research project from its inception; in fact, funding for the project came from the EU Marie Curie ITN programme called 'Susplace', which is short for 'Sustainable Place-Shaping'. The programme aimed to explore the transformative capacity of different place-shaping practices for sustainable development and therefore introduced the literature of 'place' early on. As the exploratory phase of the research proceeded, I found that the place-oriented literature complemented and enriched the other theoretical building blocks of this thesis. Below I briefly introduce three aspects borrowed from place-oriented literature that have influenced my theoretical approach: local pathways toward sustainability, relationality of place, and place embeddedness.

A focus on place goes hand in hand with an interest in local pathways toward sustainability. Even in an increasingly globalized world, place specificities (social, ecological, cultural, and institutional) matter (Horlings, 2016). At the same time, understanding the specificities of a local context still requires an understanding of place-specific relations to more global forces and an awareness of the broader economic, political, and social phenomena that co-constitute the local (Heley & Jones, 2012). Some scholars have referred to 'erasure of place' as one of the outcomes of globalization (Escobar, 2001 in Horlings et al., 2020), with standard solutions being applied to issues happening in different places. Partially in reaction to the failures of this approach, a new consensus has emerged that it is, in fact, more effective to

adapt solutions to specific ecological, economic, social and cultural conditions (Bai et al., 2016; Olsson et al., 2014); there is no single synthesis or framework that can function in all places. On the contrary, studies have found that solutions are more successful when they allow for the emergence of diverse and multiple innovative trajectories of change at a place-based level (Leach et al., 2007; Markey et al., 2010; Scoones, 2016). To enable emergent and diverse solutions, communities and policy makers should embrace a 'procedural sustainability' approach, defined as the 'emergent property of a discussion about desired futures that's informed by some understanding of the ecological, social, and economic consequences of different courses of action' (Miller, 2013, p. 284). Rather than being defined in universalist terms, the meaning of sustainability is revealed through a participatory process, contingent on place and time. Bearing this in mind, this research explores how Green Care practices can play a virtuous role in supporting and highlighting alternative pathway for local sustainable development (chapter 5).

The concept of place as a web of relationality has also influenced my research substantially – both in theory and in practice. Geographers understand place as a 'complex node in a network of relations' (Duff 2011, 152, drawing from Latour 2005). In this conceptualization, places are constructed and continuously reconstructed through social and political processes that assign meaning (Cheng, Kruger, & Daniels, 2003). Thus places are not simply geographical locations, but the ever-changing outcomes of practices, situated at the intersection of ecological, political-economic, and socio-cultural processes (Horlings, 2016). A relational epistemology of place reflects a shift from the macro-level of institutions to the micro-level of agents and their everyday doings (Van Dam, 2016). Practices have the potential to shape places because they influence processes of change in line with the needs, ideas, and values of the people who enact the practices (Horlings et al., 2020). Places can become sites of social inclusion, of innovative agro-ecological solutions, of novel economic arrangements at the interface between the rural and the urban. In chapters 5 and 6 of this thesis, the case of Green Care practices offers an investigative ground to understand change agency as relationally organized in places, and thus resulting from continuous processes of bonding, connecting, and interacting in its complex web. The relational nature of agency and its connection to place is also elaborated in chapter 4, which explores caring practices in general (not specifically related to Green Care).

Third, the concept of 'embeddedness' in place-oriented literature has implications for the development of Green Care practices. Research about embeddedness has looked at how sense of place and place attachment can motivate collective agency in the form of place-protective actions (Horlings, 2016). Unwanted spatial developments or socio-spatial reordering processes (e.g. gentrification) can ignite processes of place identity, which may compel people to resist imposed change. At the same time, place identity and attachment can also lead to bottom-up initiatives to protect and nurture places that are in danger of being destroyed because of land management choices made at higher levels of decision-

making processes (Cheng et al., 2003). A less researched angle highlights that the knowledge and concern for a place that comes with place embeddedness can be viewed as an added economic and social value for communities (Dale, Ling, & Newman, 2008). This is particularly relevant in entrepreneurial processes, as a place can provide material and immaterial resources, in terms of human, social, built, natural, and economic capitals to support innovative initiatives and entrepreneurial ventures (Cinderby, Haq, Cambridge, & Lock, 2015). The extent to which such resources are re-appreciated sustainably can have important implications for place-based development (Horlings et al., 2020). Chapter 6 explores the role of place-based resources in processes of social entrepreneurship in Green Care. It attempts to provide a comprehensive overview attentive to various levels: personal, community, organizational, and structural level.

Agency, social entrepreneurship

Throughout this chapter, I have mentioned 'change agency' as a key concept of this thesis. Essentially, 'agents' are individuals who imagine alternatives, and are able to transform themselves, their relationships, and their social contexts (Emirbayer & Mische, 1998). Highlighting different particular aspects of 'agency' can support a more nuanced understanding of processes of transformative change in general and, at the same time, provide insights into Green Care practitioners' experiences more specifically.

Chapters 4, 5, and 6 in this thesis deal with agency from different angles, while maintaining some points of contact. Below is a brief overview.

First, all chapters embrace a relational view of agency. Certain strands of literature – especially in the economic field – characterize an agent as an atomized individuals, a jack-of-all-trades capable of confronting existing institutions thanks to some heroic, innate disposition or ontological characteristic (Emirbayer, 1997). In contrast, sociological studies increasingly favour an understanding of agency as relationally organized (Korsgaard & Anderson, 2011; McKeever, Jack, & Anderson, 2015), because 'the greater the array of relations an actor is able to maintain, the greater the array of actions that actor will be capable of' (Duff, 2011, p. 152). Relations are typically framed within the socio-political context, wherein actors rally supporters, form coalitions, and build common ground for cooperation towards certain goals (Westley et al., 2013). Relations with the socio-*ecological* context are often ignored or glossed over. This is due in part to an habitual focus on the institutional and social context, with little consideration for spatial dimensions and their material and symbolic features, including the ecological dimension (McKeever et al., 2015; Schaefer, Corner, & Kearins, 2015).

It is important to account for agency as situated, understanding how actors' cognition and actions are influenced by the context (Marquis & Battilana, 2009). Situated agency requires a focus on localness, including the ecological, geographical, and infrastructural characteristics of the place in which entrepreneurs operate (McKeever et al., 2015; Schaefer et al., 2015). In

response to these knowledge gaps, chapter 4 elaborates on the idea of place-based practices as tangible manifestations of human-nature interdependence. Chapter 5 focuses on the agency of Green Care practitioners, and attempts to investigate the relational connections they establish with both human and non-humans (with a place-based perspective). Chapter 6 takes into account the role of place in constraining or enabling practices of Green Care, including both its material aspect (i.e. living ecosystems and non-living components) and its symbolic aspect (i.e. sense of place).

A second element common to all chapters is a focus on the personal dimension of agency, especially the ethical and emotional motives that drive and sustain change. In the literature, agents have typically been represented as overtly rational individuals, driven by strategic thinking and instrumental calculations (Battilana et al., 2009; Schaefer et al., 2015). Research has shown that they are capable in terms of political and interactional skills, such as incentivizing, bargaining, and networking (Avelino & Wittmayer, 2015; Hassink et al., 2013) and that they have effective rhetorical skills, such as sense-making and inspirational discourse, which help to build a desired collective scenario based on a common vision (Emirbayer & Mische, 1998; Pyysiäinen, 2011; Wittmayer et al., 2015). Only recently, however, the literature on moral, social, community, and sustainability entrepreneurship begun to explore morality and values as important dimensions of the entrepreneurial process (Antadze & McGowan, 2017; Mair & Marti', 2006; Schaefer et al., 2015). This relatively new research has found that 'a language of morality' can be a crucial part of the 'agent's discursive quiver' as they attempt to shift norms and bring about systemic change (Antadze & McGowan, 2017, p. 2). Additionally, emotions can act as motivational forces supporting beliefs and judgements guiding choices and actions (Pulcini, 2010). Still, emotions and affective sentiments (e.g. hope, passion) appear rarely in literature on change agency and entrepreneurship (Johnstone & Lionais, 2006; McKeever et al., 2015).

Chapter 4 elaborates the role of ethics and emotions in the context of change agency. Ethics allow actors to express their sense of self, community, and agency, by becoming responsive to the needs they discover and claim as their own, through place-based practices. At the same time, emotional awareness can fuel individual and collective capacity for imagination, and thus support the ability to crystalize a vision, and design possible pathways of action. Chapter 5 takes another perspective on the personal dimension of agency, by exploring the motivations and concerns of Green Care practitioners about what they do and how they do it. Finally, chapter 6 frames both ethics and emotions as part of the array of resources that Green Care practitioners mobilize to make their initiatives happen.

In chapter 6 I frame change agency through the conceptual lenses of social entrepreneurship. From a sociological perspective, it is useful to talk about entrepreneurship rather than change agency, because the concept of entrepreneurship shifts the attention to the agents' capacity to seize opportunities and mobilize resources (Westley et al., 2013). Among the various conceptualizations of entrepreneurship, *social* entrepreneurship is particularly useful for

understanding Green Care, as it emphasises the specific entrepreneurial skills of people who combine resources in new ways, in order to meet social needs (Dacin, Dacin, & Tracey, 2011; Mair & Marti', 2006). Historically, social entrepreneurs have focused on a variety of causes, such as poverty alleviation, nature conservation, health and sanitation, microfinancing, and education (Martin & Osberg, 2007). In all cases, both ethical and business intentions are combined in the entrepreneurial activity. Similarly, Green Care practitioners make use of natural environments in order to respond to different social needs, providing wellbeing, social inclusion, educational, and recreational services. In chapter 6, I explore the role of place-based resources in enabling or constraining the development of Green Care, while offering a comprehensive, empirically grounded account of the resources needed in the processes of the practitioners' social entrepreneurship.

Chapter 3

Methodological approach: pursuing transformative engagement through participatory action research

'If you have come to help me you are wasting your time. But if you have come because your liberation is bound up with mine, than let us work together'
Lilla Watson (1940 -)

3

Abstract

The development of the methodological framework constituted a substantial part of this PhD thesis. While I was investigating sustainability transformations through the empirical case of Green Care practices in Finland, I also tried to implement transformative processes via the use of a participatory action-oriented approach. This chapter lays out the details of such approach. It starts by briefly introducing transformative research as a new paradigm of knowledge production. It then moves on to clarify how I interpreted the idea of transformative change, borrowing from two main traditions: Participatory Action Research (PAR), and Transdisciplinary Research (TDR). It details the philosophical principles that inspired this approach and the various roles I took as 'researcher in action'. Next, the methods of data collection are explicated at length. The last two sections are dedicated to data analysis and ethical issues.

Transformative research in sustainability science: towards a new paradigm of knowledge production

One of the most interesting features of research in the field of sustainability transformations is its exhortation to simultaneously *observe* and *enable* change. This dual purpose for research stems from a growing sense of urgency in universities and research centres around the need to contribute to infrastructures and cultures that can support turning ideas into action (Keeler et al., 2017). Despite the wealth of scientific knowledge produced over the last decades about socio-ecological dynamics, neither policies nor behaviours have shifted far enough to avert the multiple environmental crises. This can be partially ascribed to science's failure to communicate and engage with societal stakeholders in effective ways, including government, business communities, and civil society (Fazey et al., 2020). If science is to serve societal advancement, critics posit, we must shift from mode-1 science to mode-2 science (also called post-normal science). Table 3.1 below displays the main properties of the two modes of knowledge production. Mode-2 science should reflect the complexity and multidimensional character of sustainability, thus going beyond disciplinary silos, i.e. using inter- and trans-disciplinary approaches, while embracing uncertainty and exploration. Moreover, it should foster the production of knowledge and solutions *for* and *with* society through a participatory approach, inclusive of different kinds of knowledge and different ways of knowing (Martens, Roorda, Sustainability, & Corvers, 2010).

In response to this debate, sustainability science has emerged as a solution-oriented arena transcending disciplinary boundaries and involving non-academic stakeholders in resolving complex, multi-dimensional socio-ecological problems (Abson et al., 2017; Miller, 2013). Blackstock et al. define sustainability science as 'the co-generation of knowledge about socio-ecological systems drawing on multiple understandings in an ongoing collective dialogue, where academics and stakeholders all contribute to create knowledge and shape solutions' (Blackstock, Kelly, & Horsey, 2007, p. 729).

TABLE 3.1 | Properties of Mode-1 and Mode-2 science (Martens et al. 2010).

Mode-1 science	Mode-2 science
Academic	Academic and social
Monodisciplinary	Trans- and interdisciplinary
Technocratic	Participative
Certain	Uncertain
Predictive	Explorative

Over the course of this PhD project, I found myself increasingly aligned with the principles, practices, and methodological innovations advocated by the sustainability science community. In particular, I have been inspired by empowerment-oriented methodologies

that engage and support societal stakeholders working toward sustainability transformations (Fazey et al., 2018). This action and empowerment approach to research is considered a part of the solution-oriented strand of the sustainability transformations literature (as I described in chapter 2) or in, simpler terms, it can be referred to as 'transformative research' (Feola, 2015).

According to Fazey et al. (2018, p. 56) there are four preconditions essential to the practice of transformative research. The researcher must: 1) take into account the real world of politics, values, and ethics in societal change; 2) work with forms of knowledge that are both practical and academic; 3) embrace creativity, innovation, and imagination as form of knowledge production; 4) clarify how they position themselves toward society and what kind of impact they expect their research to have. Although these preconditions sound sensible in the abstract, there is still much to learn about the practicalities of implementation and how to support transformative change in our role as scientists (Abson et al., 2017). In part, this gap between the abstract and the practical stems from a long-standing stigma around implementation, which has traditionally been confined to the domain of practice (as opposed to research) (Fazey et al., 2018). Additionally, when committing to transformative research, a researcher is confronted with the challenge of balancing scientific rigour, validity and credibility on the one hand, while guaranteeing the usefulness, relevance and salience of research processes and results from a societal standpoint (Tschakert et al., 2016). As a consequence, there is a paucity of information about which formats of knowledge production and which practical tools and techniques are effective at the science-society interface (Abson et al., 2017).

Transformative research thus requires an experimental attitude in which different research approaches are combined and modified to fit a specific case or context. The methodological framework for this thesis was inspired chiefly by Participatory Action Research (PAR) and, to a lesser extent, Transdisciplinary Research (TDR), which I discuss in more detail in the following section.

The best of two worlds: Participatory Action Research and Transdisciplinary research

Although the design and implementation of my methodological framework was inspired by both Participatory Action Research (PAR) and Transdisciplinary Research (TDR), there are key differences in my approach in terms of definitions and objectives. The divergences are due to a number of discretionary choices I made, in line with the scientific aims of the study on the one hand and the characteristics and needs of my case studies on the other. In this section, I explain my interpretation of PAR and TDR and lay out the key guiding principles I borrowed from both bodies of work.

Key principles and ways working in PAR and TDR

Reason and Bradbury define Participatory Action Research (from now on PAR), as

> 'orientation of change *with* others' that 'seeks to create participative communities of inquiry' and 'address questions and issues that are significant for those who participate as co- researchers', engaging them 'in more or less systematic cycles of action and reflection'
> (Reason & Bradbury, 2008a, p. 1).

In line with this definition, I chose to do research *with* communities and not *on* them. Research that relies heavily on engaging people and communities can be exploitative, as it preoccupied with extracting data useful for scientific aims without considering the needs and expectations of those involved (Long, Ballard, Fisher, & Belsky, 2016). PAR scholars have warned against the risks of 'token participation' and the 'tyranny of participation' (Evans, Jong, Cronkleton, & Nghi, 2010, p. 606). 'Token participation' refers to a mismatch between the degrees and outcomes of engagement as promised versus as practiced, which can reduce participants' willingness to be involved over time (Brombal, Moriggi, & Marcomini, 2017). 'Tyranny of participation' points to the practice of research centres, NGOs, and development agencies of employing participatory methods while continuing to validate top-down planning and solutions (Cooke & Kothari, 2001). To avoid these well-documented traps, PAR scholars suggest using an interactive, empathic, and transparent approach, whilst putting substantial effort toward fostering relationships of trust and constant communication with the people involved (Evans et al., 2010; Sanginga, Kamugisha, & Martin, 2010). These principles guided my collaboration with the primary practitioners of the three Green Care cases selected for this study (7 people, out of 75 people involved in total). PAR also suggests that participants be considered 'co-researchers', as they should participate in the definition of research problems early on in the process (Reason & Bradbury, 2008b). In my cases, however, the primary practitioners were not in the position to be 'co-researchers' but, following the principles of responsiveness and relevance to context, I worked closely with them as co-collaborators. As I explain in the next section, after the first exploratory phase, I adapted the methods to the needs and capacities of the case studies, so that the questions and issues addressed would be pertinent for the development of their practices, and not only for my research aims. Participants took part in framing issues and 'co-designing' methods' goals only in certain stages of the research. It was always clear that their role was that of participants (and advisors) who would be respectfully consulted throughout the various stages of fieldwork.

Although 'change' is a recurrent word at the heart of action research, it can be interpreted in many ways and is frequently not clearly elaborated in relevant literature. In this research, my conceptual and practical understanding of change was inspired by the tenets of Appreciative Inquiry (AI), which is a form of action-research that emerged from the field of organizational learning and management (Busche 2013). AI challenges the notion that change is about the implementation of actions towards a goal; rather, it is 'about chang*ing* . . . convening, conversing

and relating with each another in order to tap into the natural capacity for cooperation and change that is in every system' (Ludema & Fry, 2008, p. 281). This process of chang*ing*, according to AI, sets the conditions for people to feel an increased sense of competence, relatedness and autonomy that can lead to innovation (Gervase R. Busche & Coetzer, 1995; Ludema & Fry, 2008). A crucial principle underlying AI is, as the term suggests, its appreciative and generative orientation, as differentiated from our default tendency to apply a problem-solving attitude when dealing with complex issues. A problem-solving orientation, for example, is central to transdisciplinary research (TDR) even to the extent that TDR has been defined as a collaborative approach that 'generates solutions to practical problems' (Holzer, Carmon, & Orenstein, 2018, p. 809). Conversely, AI is framed as a way to 'explore, discover, and appreciate everything that gives "life" to organizations when they are most vibrant, effective, successful, and healthy in relation to their whole system of stakeholders' (Ludema & Fry, 2008, p. 280). Inspired by this enabling approach, the goal of my participatory engagement was not to change the participants' realities nor to provide practical solutions to their problems, it was rather to appreciate and uncover their resources and their potential (Franklin, 2018). My aim was to observe and reveal what was already there – not what was lacking.

It is important to note that an appreciative orientation includes the present reality and its past patterns, as well as future possibilities. In my final co-creation workshops, I employed the AI framework for 'anticipatory learning,' which is a way to explore the trajectories a specific business, organization, or community may take in the future. A future-oriented approach to collaborative engagement is common in transformative research (Moser, 2016; Pereira et al., 2020), and it is believed that developing the capacity to imagine, crystalize, and create both viable and desirable visions is crucial to design and activate alternative change pathways (Tschakert et al., 2014).

Many of AI's philosophical groundings are aligned with the ethics of care, and thus, as a methodological approach, it resonates with the conceptual building blocks of this thesis. Notably, AI recognises the interdependent nature of human existence (Wicks, Reason, & Bradbury, 2008), which translates into an 'ethos of appreciation' that can stretch beyond the human species as we expand our concept of 'relatedness' to include also the non-human and more-than-human worlds (Zandee & Cooperrider, 2008, p. 196). In this spirit, my methods and ways of working were designed to help people appreciate *all* the relations that give life to their enterprise, organization, and community, emphasising that they are embedded in particular socio-ecological systems in both biological and spiritual ways (Zandee & Cooperrider, 2008, p. 196). The 'relational know-how' inherent in embeddedness can be explored and evoked in both the rational and emotional spheres (Reason & Bradbury, 2008b, p. 88). In this research, I relied on a systems thinking approach to knowledge generation, which is commonly used in both PAR and TDR to position relevant issues within the context of a larger whole and to gain awareness of the various relations in the system (Kemmis 2008; Schneider et al. 2019). Additionally, I employed somatic and bodily ways of knowing, involving the senses, and spurring imagination, heartfelt connection, and emotional attachment through the use of creative and arts-based techniques

(Pearson et al., 2018).

In order to understand the world, and as an epistemological approach, PAR processes foster collective inquiry and experimentation and apply a constructive and critical stance that takes into account participant's experiences and social history (Long et al., 2016). Knowledge is neither static nor the exclusive prerogative of researchers or experts; rather, knowledge is 'in becoming', co-created by both researchers and participants, who constantly question theoretical assumptions against its relevance on the ground (Moriggi, Soini, Franklin, et al., 2020). If knowledge is co-created, then the knowledge creation process must be inclusive and must enable the people involved to express what matters to them in ways appropriate to their capacities (Kaley et al., 2019). In fact, PAR can have an emancipatory effect, in the sense that it does not only lead to new practical knowledge, but also new *abilities to create* knowledge (Reason & Bradbury, 2008a). In this study inclusive knowledge co-creation was supported through the use of creative and visual methods combined with systems thinking and design thinking techniques.

Another key tenant of PAR is combining action with reflection in an iterative process (Gaventa & Cornwall, 2008; Sanginga et al., 2010). Participatory engagement is framed as a cycle made of steps that feed into each other. Reflection at the end of each fieldwork phase is crucial, as it allows the project to adapt to insights and needs as they emerge (Gaventa & Cornwall, 2008). A responsive, adaptive research design is in line with a grounded approach to theory generation, as employed in this research (see the data analysis section for more details). It does, however, diverge from more traditional models of research driven by a priory theory, arm's length data gathering, and hypothesis confirmation (Kowalski, Yorks, and Jelinek 2008).

The iterative orientation towards collaborative work that underpins the methodology of this thesis is inspired not only by PAR and TDR but also by design thinking. Design thinking is a solution-oriented approach that evolved in the context of product development, but it has become increasingly popular in sustainability science over the last decade (Moser, 2016). In line with PAR, it departs from an empathic understanding of the needs and thoughts of participants, which are fed into an ideation phase wherein methods are defined and prototyped. A prototype is a simple representation of one or more ideas that can be shown to others for further adaptation and validation, until subsequent testing and implementation (Maher, Maher, Mann, & McAlpine, 2018). This approach inspired the design and implementation of the co-creation workshops in this study, as I will explain in more detail below.

Embracing the collaborative engagement as a learning cycle also implies striking a balance between 'knowledge-first' and 'process-oriented' approaches (Miller, 2013; Wittmayer & Schäpke, 2014). Not all the activities and methods implemented are meant to yield relevant data; some are intended to make people feel involved, to provide incentives for continuous participation, and to foster reciprocity, so that participants feel that the process is beneficial for them – not only for the researcher (Robertson, 2000).

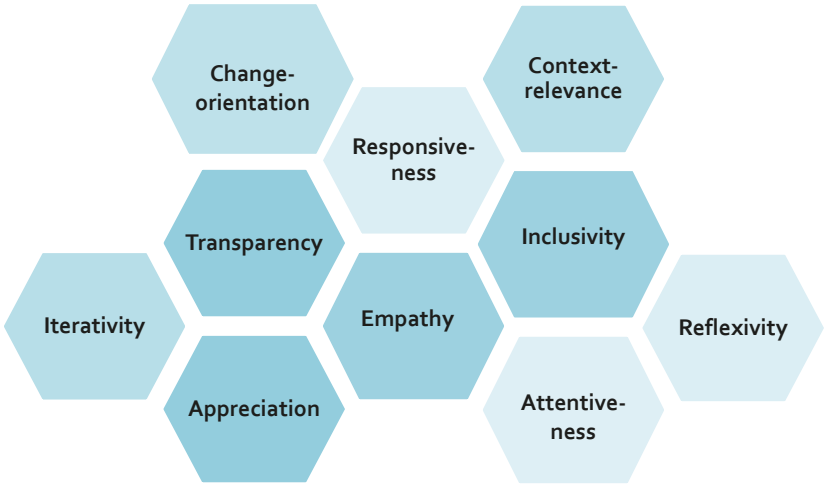

FIGURE 3.1 | Key principles underlying the collaborative engagement in this PhD thesis.

Finally, the role of ethics is also worth highlighting: action-oriented work is laden with values that inspire and support the research process (Fazey et al., 2018; Robertson, 2000). Over the course of this study, I looked to the literature on care ethics for conceptual tools to a) decipher the caring practices in my empirical work and b) to explore the linkages between care and sustainability transformations. The philosophical groundings of care ethics also ended up guiding my methodological approach. Specifically, the moral principles that characterize the five stages of the caring cycle (as proposed by Tronto 2013 – also in chapter 5 of this thesis) became a type of moral compass that guided my collaborative engagement. I interpreted the five principles as follows:

1) *Attentiveness* – to the needs and expectations of the main research participants involved in the study. It was crucial to foster continuous communication and explore people's expectations towards the research project, especially in its later phases when some of the methods were co-designed with participants;
2) *Response-ability* – the ability to respond to specific, emerging needs by designing ad-hoc methodologies and processes. An emblematic example is the use of Photo-voice, which, as I will explain later, was specifically designed and adapted to give voice to the mentally disabled people living on the care farm;
3) *Competence* – respecting the time and commitment of participants by dedicating thorough, thoughtful, and meticulous preparation for each fieldwork phase. It was helpful to engage in specific trainings and to consult peers in my research community prior to the application of a method;
4) *Responsiveness* – adapting the process to the feedback of participants in an iterative way. Being responsive entailed constant communication and monitoring at the end of each fieldwork stage;

5) *Solidarity* – being mindful of issues of social justice and equality, and trying to provide empowering tools whenever possible. When designing methods, the aim was twofold: collecting relevant data and benefiting participants. These included providing participants an opportunity for reflection, for collaborative decision-making, and/or for gaining stronger awareness their own resourcefulness and capacities.

Well aligned with the principles of PAR and TDR, these five caring principles highlight the importance of a) doing research *with* people (rather than *on* them), b) a reflective, iterative processes, and c) conducting research not only to produce knowledge, but also to foster new *abilities to crea*te knowledge. With particular regard to the principle of *competence,* the next section discusses the role(s) of the researcher.

The role(s) of the researcher

Both PAR and TDR are research approaches that attempt to shift the paradigm of knowledge production from mode-1 to mode-2 science. They are a) highly integrative; b) impact-oriented; c) process-focused. As such, researchers need to take on multiple roles, which go beyond those required in more conventional approaches to data collection in the social sciences. Wittmayer and Schäpke (2014) differentiate between the following 'hats' taken on by action-researchers: change agent, knowledge broker, reflective scientist, self-reflexive scientist, and process facilitator. In reality, these different roles are not so clear-cut, as they are likely to overlap over the course of the collaborative engagement.

During this PhD project, I took on each of Wittmayer and Schäpke's roles to different extents over the course of my fieldwork. First, although most of the qualities listed in the 'reflective scientist' role were always present in my work, I was also engaged with normative questions about sustainability. Next, the role of facilitator and knowledge-broker proved extremely useful during the co-creation workshops; I developed my skills by taking ad-hoc trainings and experimenting with different techniques and approaches prior to the implementation of the final workshops. My role as a change agent was less present during fieldwork, but became more prominent later during various outreach activities aimed at raising awareness about the innovative nature of Green Care practices, such public talks, a video documentary, a summary report, etc. Finally, the role of self-reflexive scientist became increasingly important as the research progressed. Both TDR and PAR emphasise reflexivity due to its capacity to 'encourage processes of critical assessment and social learning on the background values and assumptions guiding research, and on the socio-institutional structures supporting particular norms and practices' (Popa, Guillermin, & Dedeurwaerdere, 2015, p. 47). The reflexive dimension is crucial to ensure a balance between scientific rigour and societal relevance and to avoid the risk that collaborative engagement becomes merely social consultation, with no impact on knowledge generation or integration (Popa et al., 2015). At the same time, reflexivity should prompt researchers to articulate how the (transformative) values and normative stances they claim to take are actually embodied in practice (Blackstock et al., 2007;

Zandee & Cooperrider, 2008). If reflexivity is integrated into praxis, it can reduce the risk that transformative sustainability science remains a lofty concept with no substantial effectiveness on the ground (Blythe et al., 2018; Knickel, Knickel, Galli, Maye, & Wiskerke, 2019).

TABLE 3.2 | Roles of researchers. (Horlings et al. 2020, adapted from Wittmayer and Schäpke 2014)

Roles	Activities of researchers
Reflective scientist	• Collects, analyses, interprets and reports data • Observes, reflects and analyses actions • Provides knowledge on the basis of the analysis • Analyses dynamics and actors • Strives for objectivity and provides recognizable results, while generally not engaging in normative questions related to sustainability
Process facilitator	• Initiates processes • Facilitates processes and experiments • Selects participants, facilitates learning process • Encourages expression of all viewpoints • Aims to create a 'sustainability' process (including justice, inclusiveness, and future orientedness)
Knowledge broker	• Mediates different perspectives • Provides space for critical reflection • Supports in making sustainability meaningful in the given context • Results in socially robust knowledge which recognizes system complexity • Acknowledges multiple ways of knowing and incorporates normativity and ethics
Change agent	• Networks with stakeholders outside the group • Initiates and participates in a learning journey based on sustainability values • Motivates participants and empower participants to lead/own the process • Supports in policy formulation
Self-reflexive scientist	• Sees themselves as part of the dynamic actions • Is reflexive about their own positionality and normativity • Considers themselves their own research instruments that changes throughout the research process • Believes that experience of personal transformation and awareness may be a precondition for facilitation transformation processes

The multiple roles demanded by PAR and TDR requires the researcher to master a rich set of soft and technical skills, including: strategic planning (Schneider et al., 2019), analytical abilities (Fazey et al., 2018; Maher et al., 2018), humility (Home & Rump, 2015; Popa et al., 2015), empathy and interpersonal skills (Home & Rump, 2015; Schneider et al., 2019), wisdom (Fazey et al., 2020; Wicks et al., 2008), creative thinking (Long et al., 2016; Reason & Bradbury, 2008a). 'Visualization' skills turned out be especially important to my research process (Holzer et al., 2018). Visual thinking is considered essential in collaborative engagement, as visuals and 'presentational knowledge' serve as bridging elements between research and practice (Tobias, Ströbele, Buser, & Tobias, 2019; Zandee & Cooperrider, 2008). Moreover, visual artefacts can act as 'boundary objects' that enable shared language and facilitate processes of knowledge co-creation (Home & Rump, 2015; Maher et al., 2018; Tobias et al., 2019).

It is important to note that taking on multiple roles in this research came with a cost. During the later stages of fieldwork, because of the human-oriented design of the methods (i.e. departing from participants' needs) I felt that I was behaving more like a consultant providing a service, rather than a researcher. At the same time, I always remained loyal to the research aims, and tried to exercise some level of 'detachment' towards problematic issues which were out of the scope of the project. I recognised that my research offered no panacea for their problems and it was not always clear to which extent it could positively impact their operations. Still, I felt personally invested in helping the participants in my cases, which made me feel frustrated that I could not do more. For this reason, I never felt comfortable defining myself a 'change agent' in respect to their realities.

In order to execute many of the research roles, building trust is important. In reality, however, with such a diverse array of participants, each with their own complex characters and contexts, trust building is a substantial challenge. Over the course of my fieldwork, with different participants, there were different levels of trust and different levels of understanding regarding the methods and choices made. This created some tensions during the co-creation workshops, which were systematically structured in a way that offered limited room for last-minute adaptations. Looking back, I can speculate that more experience with facilitation and a higher degree of flexibility in structuring the workshops from my side would have been beneficial. Time constraints also played a role. I found that balancing agreed upon objectives with the limited amount of time laypeople can dedicate to research is one of the biggest conundrums in action-oriented work.

Green Care in Finland: an in-depth case-study qualitative approach

This PhD thesis investigates Green Care practices from a place-based perspective. A case study approach was appropriate to understand Green Care as a situated phenomenon (Flick, 2009), to explore it in its real life context, and build detailed narratives displaying the entrepreneurial/agency process (Korsgaard, Ferguson, & Gaddefors, 2015). Thus I chose to work with three different case studies, all located in Finland. In order to understand the experiences, meanings, and perspectives attached to the different themes of the research from the standpoint of the participants, I chose a qualitative approach (Hammarberg, Kirkman, & de Lacey, 2016). A qualitative approach is more fitted to the action-oriented modes of knowledge production, enabling empathic and reciprocal relations with the subjects involved (Robertson, 2000; Schaefer et al., 2015). Representativeness was not an issue in this research; rather, priority was given to information-rich cases that demonstrated different characteristics with regards to ways of doing Green Care and different places of embeddedness (Korsgaard et al., 2015).

Below I provide a short description of the context of Green Care in Finland, followed by an introduction to the three case studies. The names and details of the enterprises are left anonymous for confidentiality reasons.

The concept and practice of Green Care in Finland

In Finland, the concept and practice of Green Care was introduced in mid-2000s. Since then, roughly 90 projects have been implemented at regional and national level for training, communication, and networking purposes. In 2010, the Green Care Finland Association was established, serving as a forum for practitioners and researchers interested in developing a common understanding of the concept and supporting the development of the field. Unlike the majority of European countries that limit the concept of Green Care to practices related to the agricultural sector (e.g. care farming or therapeutic horticulture), Finland departs from a broader interpretation which includes nature-based activities of many kinds, including equine therapy (and other types of goal-oriented animal-assisted activities), nature-oriented tourism, and nature-oriented pedagogy (Luke & THL, 2017). This broad interpretation of Green Care reflects a desire to valorise the abundance and diversity of natural ecosystems in the country, as well as the recognition of the strong relationship that Finnish people have had for centuries with the outdoors, rooted in national and regional cultural trajectories, history, and folklore (Tredinnick-Rowe, J., Taylor & Tuohino, 2018).

The Green Care Finland Association has been important in establishing a certification process for enterprises interested in obtaining a quality mark. Since 2017, there are two typologies of Green Care practices certified by the quality mark: (1) *Nature Care* (*Luontohoiva*), referring to a number of services mainly financed by the public sector, provided by health and social care professionals, and targeted at vulnerable groups; (2) *Nature Empowerment* (*Luontovoima*), including goal-oriented services in nature-assisted well-being, education, and recreation, often purchased by private users (Luke & THL, 2017). The case studies analysed in this PhD project represent both Nature Care and Nature Empowerment typologies, as I explain below.

Case studies selection

During the research design phase for this PhD thesis, I combined the review of literature with expert interviews and preliminary visits to Green Care activities in Southern and Eastern Finland. This initial contact with practitioners in the field allowed me to gain familiarity with the reality on the ground, as well as with relevant stakeholders, and identify promising case studies early on.

After 8 months of exploration (from June 2016 to February 2017), three enterprises were selected: a care farm, a biodynamic farm, and a nature-tourism company. The three cases present similar characteristics: they are all small ventures with the core management in the hands of family members and with the founders engaged to varying degrees in Green Care activities. At the same time, they represent different sectors—namely, farming and tourism—and thus involve very diverse activities. Each case is at a different stage in the quality mark certification process. The choice of these three cases was also influenced by practicalities: the practitioners could communicate fluently in English, they were interested in being part of a

research project, and their locations were accessible by public transport. Below I provide a more detailed introduction to each case.

Case study no.1 - Care farm

The care farm is located 25 km away from the city of Tampere and it covers roughly 30 hectares of land. It produces organic lamb meat which is sold to the local community and through the owners' networks. The farm was acquired by a young couple in the early 2000s, who gradually restored the land and the buildings in order to make it both their home and a care farm. Since 2015, it welcomes mentally disabled clients to work and live on the farm, providing rehabilitation pathways in cooperation with the local health and care services of surrounding municipalities. There are roughly 15 clients involved in both husbandry and farming practices (the latter mainly aimed at self-sustenance). Up to 10 of them (depending on the period) also reside on the farm, in a so-called communal 'guided-living unit'. The female owner, specialized in social care, is the coordinator of most operations on the farm. The male owner holds a professional position outside the farm, while providing substantial support with land maintenance and animal husbandry, including sheep shearing activities. All daily activities done by the mentally disabled clients are supervised by a highly specialized staff, knowledgeable in nursing and social care, as well as animal husbandry and gardening. Apart from caring services, the farm owners are committed to periodical educational activities in local schools, related to rural livelihoods. Moreover, they sometimes welcome students for traineeships. The farm has recently obtained the *Nature Care* quality mark.

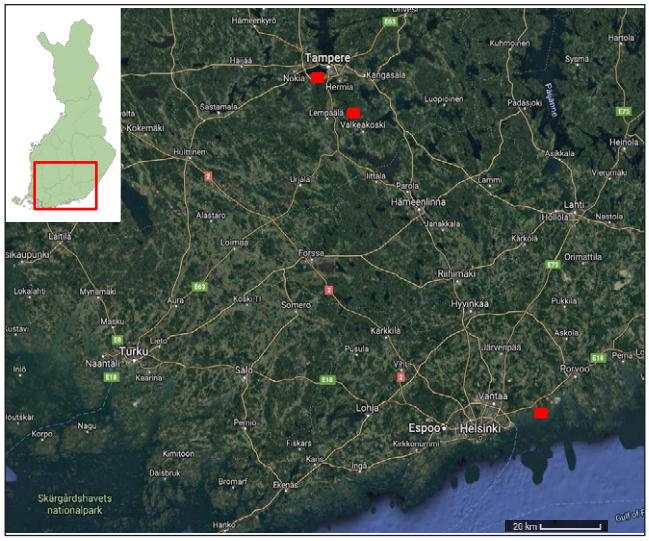

FIGURE 3.2 | Geographical location of the cases (indicated with red rectangles).

FIGURE 3.3 | Pictures from the care farm: a shed in the fields; plants in the greenhouse.

Case study no.2 - Biodynamic farm

The biodynamic farm is located in the Sipoo municipality in a fringe area bordering the Helsinki metropolitan area. It spreads over 60 hectares, 30 of which are covered by forest and 20 are cultivated. It produces vegetables, potatoes, and grains following biodynamic principles which, along with flowers and eggs, are sold in a small self-service on-farm shop and to nearby restaurants, schools, and kindergartens. Since the beginning of the 1980s, the farm has welcomed different kinds of people eager to nurture a stronger connection with land and nature. Later, the farm joined the WWOOF (World Wide Opportunities on Organic Farms) organization, a worldwide movement that links volunteers with organic farmers and producers, which has guaranteed a continuous inflow of people taking part in the operations. The farm also welcomes university students for traineeships and organizes pedagogical activities (including activities for children with special needs) in collaboration with local Waldorf and Steiner schools. Additionally, it periodically hosts recreational events for the wider public (e.g. festivals). Between 2013 and 2014 the farm hosted two Green Care projects, involving long-time unemployed people, in collaboration with the local municipality and NGOs. Since then, no systematic Green Care project has been carried out. Interestingly, however, Green Care is part of a long-term regional plan to regenerate the area, which was developed in negotiation with the bordering municipality, which envisions spaces to be allocated to farming activities, residential buildings, a kindergarten, and care facilities. Ideally, an elderly home will be built and managed following Green Care principles in the future. The farm has never taken formal steps to obtain a Green Care quality mark.

FIGURE 3.4 | Pictures from the biodynamic farm: a cow in the shed; volunteers and researcher weeding in the field.

Case study no.3 – Nature-tourism company

Since it was founded in 1992, the nature-tourism company has offered a range of nature sports, including tour skating, skiing, paddling, hiking, and canoeing. Located on the shores of lake Näsijärvi, close to Tampere city, its clients include companies, hotels, Finnish and international tourists, associations and non-profit organizations, as well as local people. In collaboration with local research institutes, it has monitored the beneficial health effects of nature-based sports for some of its clients (e.g. company employees). It regularly welcomes trainees from universities and vocational schools. Its activities are also targeted at children, elderly homes' guests, and handicapped people, for recreational and experiential learning purposes. The company has designed canoes for disabled users and collaborates with associations committed to making nature sports accessible to everyone. One of the founders, now retired, was involved in the early years of the Green Care Finland Association, advocating for wider awareness and understanding of nature-based activities. The company was one of the first in Finland to obtain the *Nature Empowerment* quality mark.

FIGURE 3.5 | Pictures related to the nature-tourism company: a canoe; clients going on a guided tour in the forest.

3

Methods of data collection: an eclectic pluralism of approaches & techniques

Wicks, Reason, and Bradbury (2008, 26) frame action-researchers as *bricoleurs*: they integrate and make sense of various perspectives and approaches throughout the evolution of research process and their understanding of the issues being studied. As such, they 'make the road while walking', combining action with reflection, and experimenting with different techniques as the process unfolds (Wicks et al., 2008, p. 26). The final result is often an 'eclectic pluralism' of methods, which borrow from different academic disciplines as well as non-academic fields, used in different phases and for different purposes along the fieldwork process (Chambers, 2008, p. 297).

Although I was not intentionally trying to be a *bricoleur*, this is precisely what happened in this PhD project. My initial methodological design included many of the methods I ended up using, but I also borrowed from and integrated a variety of 'new' approaches in the final design and execution of the methods. This was partially due to access to trainings and connection to like-minded researchers offered through the SUSPLACE network, as well as inspiration from the sustainability science community that I encountered during conferences and workshops. Additionally, proximity to the case studies and a growing understanding of the evolving needs and attitudes of the research participants called for adaptive experimentation in order to fit their specific cases, places, and contingencies (Knickel et al., 2019). As a result, more conventional data collection activities, such as semi-structured interviews and participant observation, were coupled with visual and creative methods, such as Photo-voice and other arts-based approaches.

Fieldwork was organized in multiple stages, each with a different purpose and thus different data collection activities. Figure 3.6 below gives an overview of methods, clustered into three different data collection phases: *exploration, co-production,* and *evaluation*.

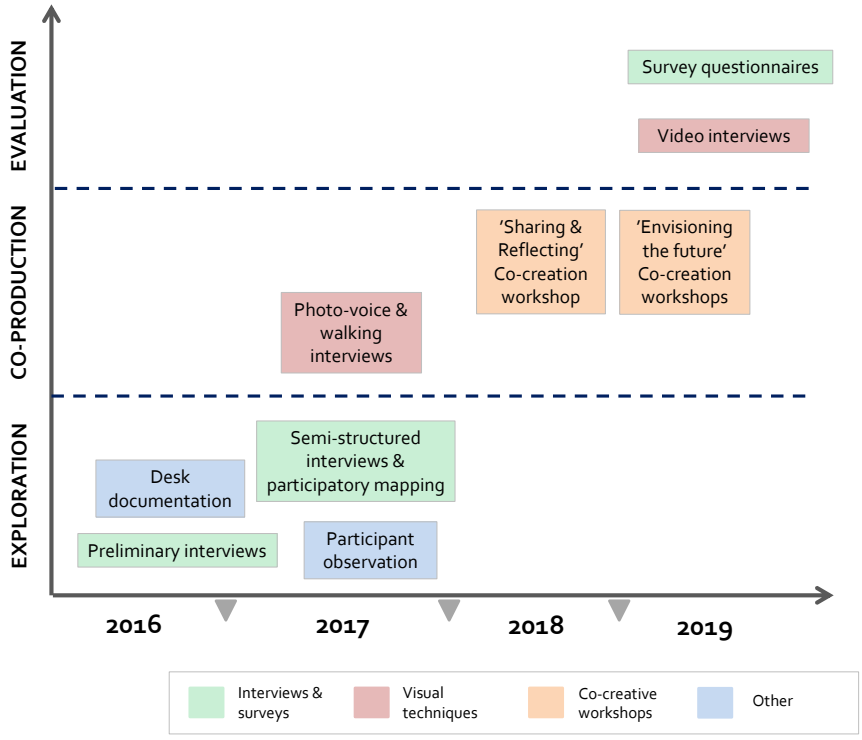

FIGURE 3.6 | Data collection phases and related methods

The *exploration* phase was intended to provide an in-depth understanding of the issues at stake by gathering information-rich data. This was possible thanks to 36 semi-structured interviews – coupled with participatory mapping exercises – which followed an initial set of preliminary interviews. In the same phase, I carried out desk documentation and participant observation at the case studies sites. The methods used in this phase required the continuous consultation with the practitioners in the three case studies, but I did not involve them heavily in the design or adaptation of the techniques. Even so, the methods were always implemented with potential benefits for the participants in mind; for example, some methods gave participants an opportunity for reflection through dialogue and through small structured exercises.

The design of the *co-production* phase was influenced by the information gathered in the *exploration phase* and by my growing understanding of the needs and expectations of the three cases. The Photo-voice method was designed in collaboration with the staff at the care farm, and specifically targeted at their mentally disabled clients, with the hope of making

their voices heard in a way that would fit their capacities and aspirations. The co-creative workshops drew heavily from the first round of data analysis and were designed, in part, to validate my interpretation of the data, as well as to create new knowledge together with the participants. The workshops' design was carried out in close dialogue with the three case studies; moreover, the workshops were implemented in an inclusive way, using a combination of different techniques to enable participants' active involvement.

Finally, the principal goal of the *evaluation* phase was to gather feedback from the primary members of each case about the effectiveness of the methods used via survey questionnaire and video interviews. The latter were also aimed at the production of a video-documentary for dissemination and visibility purposes.

In between fieldwork phases and activities, I held regular meetings with the primary practitioners of the three cases (in person at the case studies sites and on Skype when needed). These meetings were designed to ensure the iterative learning process that PAR processes demand. Additionally, I tried to maintain a constant flow of communication (mostly via email) about the progress of the research, the outputs produced, and my dissemination efforts.

Not all methods used over the course of the participatory engagement process served a data-collection purpose, and only some shaped the empirical findings presented in this thesis. The results of the survey questionnaires, for example, are not reported in this thesis. Similarly, many of the specific techniques used during the co-creative workshops were designed to facilitate participants' engagement at various cognitive levels, including the emotional and ethical spheres. As such, their purpose was mostly to 'prompt imaginative engagements' and 'excite people's hearts, as well as minds' (Newell, Robin, & Wehner, 2017, p. 2).

A total of 75 people participated in different stages of the collaborative engagement process. Figure 3.7 shows, however, that the vast majority of methods were targeted at the primary practitioners of the three cases (seven people total) who were the main entrepreneurs and community/company members. Staff members employed at the farms and nature-tourism company were also involved in most stages of fieldwork, excluding the *evaluation* phase. With the clients of the care farm I created a specific sub-project, using the method of Photo-voice. Stakeholders external to the three cases, termed 'external collaborators' (e.g. buyers, providers, or supporters of the Green Care practices), participated in semi-structured interviews and participatory mapping in the *exploratory* phase. Green Care experts and other practitioners were only involved in the very initial stage of fieldwork.

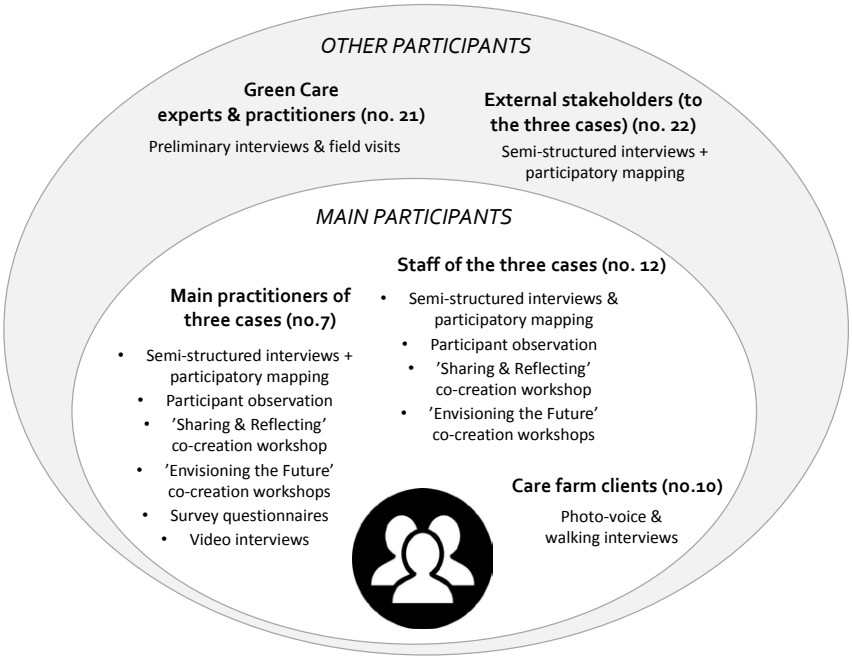

FIGURE 3.7 | Participants' involved and related methods used.

A detailed explanation of each method is provided below and in the following pages.

Exploratory methods

Exploratory activities comprise preliminary interviews, desk documentation, semi-structured interviews, and participatory mapping exercises (listed in chronological order of execution).

Preliminary interviews and field visits

Preliminary interviews were used to gain familiarity with the field under study (Flick, 2009) between June 2016 and February 2017. They were meant to (a) inform the design of both theoretical and methodological framework and the formulation of the research questions; (b) become acquainted with relevant Green Care stakeholders and build sound relationships useful to the long-term execution of the project; (c) gain access to possible case studies.

The interviews were mostly structured as informal conversations. Nine interviews were conducted with experts in the field of Green Care and social farming, mostly in Finland, and a few in the Netherlands and Italy. 12 additional interviews, coupled with field visits, were conducted with Green Care practitioners in Southern and Eastern Finland. Although none of the interviews were tape-recorded, I took written notes of the conversations and the observed realities, either during or after the conversations.

Textbox 3.1 - Documentation review

Documentation review (Flick 2009) included the consultation of websites, magazines, newsletters, and events' presentations, related to the field of Green Care in Finland in general, and to the three chosen case studies in particular. Most of these sources are in Finnish and thus required translation.

Documentation review was mostly carried out in the first year and a half of the research project. Materials directly linked to the three case studies (e.g. their respective website contents) proved useful to complement insights gained during fieldwork. Other materials, such as those accessed through the website of the Green Care Finland Association, or via participation to events like the Green Care Days, allowed me to understand the wider context and be updated with the latest field developments.

Semi-structured interviews

Semi-structured interviews are face-to-face conversations involving the researcher and the participant one to one, usually employed to obtain in-depth information. They afford a larger degree of openness and freedom than questionnaires or standardized interviews, enabling the participants to reveal their views and the researcher to explore their narratives. A structure is usually given in order to provide a thematic direction and favour the discussion of certain topics: thus the interview follows a set of predefined questions, while exploring impromptu themes emerging from the conversation (Flick 2009).

Semi-structured interviews represented a major part of the fieldwork process, and an extremely rich source of data, which informed much of the empirical findings of this PhD thesis. The interview protocol was designed after establishing the conceptual building blocks of the research project. It mostly comprised open-ended questions, coupled with participatory mapping exercises (briefly presented below). Moreover, it included a rating-scale question (using a Likert scale) to gather quantitative information about a specific theme of the interview (Fletcher, 2016). At the end of the interview, basic demographic data were collected.

A total of 36 semi-structured interviews were conducted during a period of 10 months (March–December 2017), resulting in 50 hours of transcribed conversations. The vast majority of interviews were carried out in English. A smaller number were conducted in Finnish with the assistance of an interpreter. The first batch of interviews involved the practitioners in the three cases (14 people), including both the entrepreneurs in charge of running the farm or company and some of their staff and community members. These conversations proved extremely valuable to get a thorough understanding of how Green Care practitioners make sense of what, why, and how they do their work. Participants were prompted to talk about their daily activities and interactions, as well as to reflect on the development of both their

practices and their places, tapping into past experiences and future aspirations. Particular importance was given to their perceptions, values, and emotional involvement with humans and non-humans, as well as the resources needed to make the practices happen.

Textbox 3.2 - Participant observation

Participant observation is a qualitative research method typically used in ethnographic research. It is very valuable to gain appreciation of project contexts, observe the interactions of participants and their environments, and look at practices performed in places (Flick 2009). It allows the researcher to gain a close and intimate familiarity with the case studies, through a direct involvement in their practices and their cultural environment (Kaley et al 2019).

I engaged with participants' real-life context throughout the project. For each of the case studies, however, I spent a week dedicated specifically to in-depth participant observation during the summer of 2017.

To gather multiple perspectives on each Green Care case, it was deemed useful to combine practitioners' accounts with additional perspectives from outside collaborators. To this aim, the founders of each enterprise were asked to list a number of 'external stakeholders' with whom they had been in close contact over the previous years. Out of 32 people listed, 22 agreed to be interviewed, including local civil servants, employees in the research and education sector, private enterprises, and social organizations who either provided or used the Green Care services in the three case studies. These external stakeholders were asked a number of preliminary questions related to their own activities/enterprises/institutions and their links to Green Care practices. The remaining (major) part of the interview was dedicated to exploring their connections, perceptions, and experiences with the three case studies. These interviews provided diverse perspective about each case, its practices, and its place of embeddedness, which complemented the information gathered from the main practitioners.

Overall, the people interviewed conformed to two criteria a) an opportunistic principle, based on the participants and resources I was able to access to; b) a principle of theoretical saturation, as sampling proceeded according to the relevance of the information collected and not their representativeness (Dunkley & Smith, 2016; Flick, 2009).

Participatory mapping (during semi-structured interviews)

Participatory mapping is an umbrella term that describes a set of techniques used to appreciate local knowledge and perceptions via drawings and visual representations (Di Gessa, Poole, & Bending, 2008). They are common to participatory planning and PAR approaches to collaborative engagement (Sletto, 2009).

In this PhD project, mapping exercises had several aims. First, they complemented the open-ended questions posed during the semi-structured interviews. Representing information

visually enabled a different modality for reflection by the participants. Secondly, the maps served as 'boundary objects' (Holzer et al., 2018, p. 812) which enabled me to delve deeper into certain aspects of the discussion, using the visual prompts as gateways for cross-themes connections and associations. Finally, they turned into valuable forms of 'presentational knowledge' that were used at later stages of the research (Gearty, Bradbury-Huang, & Reason, 2015, p. 61). The data obtained through the mapping exercises were synthetized into images. These were used during meetings and workshops with the practitioners, to share and discuss findings in an effective way. Moreover, they were shown during presentations I gave at conferences and events.

Three different mapping exercises were designed or adapted for this study. The first two exercises targeted only the primary practitioners and the last one included all of the people who participated in the semi-structured interviews:

1. An 'Eco-social network'. This map was intended to identify collaborators, clients, and institutions directly and indirectly involved in the Green Care practices of each case study, as well as the resources needed for the realization of the practices. Participants were asked to brainstorm about stakeholders and resources, placing them on the map according to their relative relevance to the practices. After that, connections between stakeholders were traced and discussed. This information fed into the 'external stakeholders' sampling process (as explained in the previous section). These types of maps are commonly used in systems thinking–inspired research (e.g. Moser 2016).
2. A 'Chronological timeline'. The primary practitioners were asked to reflect upon the development of their Green Care operations and identify major tipping points signalling change or transformation (Cinderby et al., 2015; Pearson et al., 2018). The timeline was useful as a way to recap key issues that had emerged during the interviews and it gave insights into the practitioners' 'narratives of change' (Wittmayer et al., 2015) – i.e. how they made each sense of change differently.
3. A 'Branding Exercise' was conducted with all of the interviewees. The aim was to brainstorm the key values underlying the various practices. Participants were asked to think of five possible keywords and one motto that could be associated with their specific Green Care places and operations. The data obtained with this exercise was then synthetized in word-clouds. No specific body of literature informed the design of this tool.

FIGURE 3.8 | Examples of participatory mapping: Participant drawing an 'Eco-social network'; Word-cloud created with keywords of 'Branding exercise'.

Co-production methods

Co-production methods included Photo-voice, only carried out in the care farm, and two co-creative workshops: the 'Sharing & Reflecting' workshop which convened all the three case studies together, and the three 'Envisioning the Future' workshops, each dedicated to a specific case study.

Photo-voice and walking interviews

Photo-voice is a qualitative method that privileges photographic images as the main carriers of information and experiences, rather than words or written texts. It is called Photo-voice because people are asked to narrate aspects of their realities through photographs. The camera is entrusted to the participants, who become active agents, voicing their representation of the world (and how they would like to see it changing). It has been often used by PAR scholars to include vulnerable people or marginalized groups who may be left out of more conventional forms of data collection processes (e.g. youth, women in developing countries, etc.) (Masterson, Mahajan, & Tengö, 2018; Wang & Burris, 1997).

In this PhD thesis, Photo-voice was used to engage ten mentally disabled clients working (and some of them also living) at the care farm in October 2017. This group was not included in the other stages of fieldwork because activities were not fit to their capacities. The choice to involve them, however, was informed by ethics of care literature from the field of health care provision which argues that it is important to enable the clients/patients to voice their perspective about their experience of caring practices (Barnes, 2008a; Conradi, 2015). Moreover, during my participant observation visits to the farm, I realized that my understanding of Green Care in that case would be incomplete without the perspective of the primary recipients of the care activities.

In the literature, there is little information about how Photo-voice can be employed with disabled people (an exception is the paper by Kaley, Hatton, and Milligan 2019, which was

published a year after Photo-voice was used in this study). As a consequence, the method was designed together with the staff at the care farm, to make sure its outcomes would be beneficial for those involved as well as for the practitioners themselves. Moreover, the process of co-design ensured that the method would best fit the needs and capacities of the group.

FIGURE 3.9 | Examples of Photo-voice albums

The photo-shooting was carried out over the course of a week, during which I visited the farm every day, accompanied by an interpreter (Finnish-English and vice-versa). Unlike the typical Photo-voice protocol, in this case the photo-shooting process was guided: participants were asked to take the pictures on a tablet I brought, answering five questions which they were asked to brainstorm over a week in advance. The questions aimed at investigating participants' relationship with the place, and with their daily life on the farm: *(1) What is your favourite activity on the farm? (2) What is an activity you don't particularly like? (3) What is your favourite place on the farm? (4) What is your favourite moment during the day? (5) What makes you feel valued here?*

The shooting was combined with a short walking interview, during which participants could explain the meaning of their photographs, aided by one of their supervisors, as well as the interpreter. These conversations were tape-recorded, and relevant excerpts were used to compile an album for each participant, containing both pictures and captions. The albums (in Finnish) were given to the group a week later, during a moment of collective reflection around the fire. All the process was carried out mostly in the open, drawing from the sensory stimuli of the places where the Green Care activities happened and the participants lived (Dunkley & Smith, 2016).

'Sharing & Reflecting' co-creation workshop

Co-creation workshops are used to produce knowledge and experiences together with the case study participants (Hirschnitz-Garbers, 2018). This workshop, held in August 2018, brought together the practitioners of the three cases (9 people) – including the primary entrepreneurs and some of their staff. The objectives were twofold: a) to present and discuss preliminary results and conceptual framework of the research work; b) to provide an opportunity for sharing and reflection, highlighting both commonalities and differences of the various approaches to Green Care.

From a data collection perspective, the workshop contributed to a more in-depth understanding of the empirical material collected since the start of the research, and to validate or confute my interpretation of the data analysed. Participants were also invited to discuss the relevance and robustness of different conceptual tools employed in the PhD project based on their everyday experience.

The workshop lasted 7 hours and was structured loosely following the tenets of Theory U, a facilitation framework often used in the context of organizational management and change. Theory U guides participants through a multistage process, engaging both rational and emotional spheres, and connecting with the inner sources of purpose, thus bringing to light individual and collective values (Scharmer, 2007). The workshop alternated moments of presentation and guided discussions of both empirical findings and conceptual tools, to moments of brainstorming in groups, collective sharing, and playful connection. Different techniques were used, some borrowed from organizational management (e.g. 'SWOT analysis'), other inspired by system thinking (e.g. 'Resources mapping and prioritizing'), others adapted from arts-based research (e.g. 'Creating with the soil') and experiential learning (e.g. 'Circle of objects').

FIGURE 3.10 | Pictures from the 'Sharing & Reflecting' workshop: Participant mapping resources; materials discussed during the workshop.

I personally facilitated the workshop with the assistance of a colleague and a Master student who had been previously involved as interpreter for the semi-structured interviews and who, thus, was familiar with the participants. They both helped with logistical issues, and the student also provided English-Finnish interpretation when needed. In the weeks after the

workshop, I compiled a 'Learning Portfolio' of the issues discussed during the workshop and sent it to the participants so that they could use it as a resource for their practices.

'Envisioning the future' co-creation workshops

Between February and March 2019, each case study was involved in a co-creation workshop entitled 'Envisioning the Future'. The aim was to support practitioners in crystalizing future visions of their Green Care practices, but also with regards to the wider development of their community and place. In the case of the care farm external stakeholders were invited to participate, whereas in the cases of biodynamic farm and nature-tourism company only the main entrepreneurs of the company and their staff took part in the events. In total 16 people were involved in the three workshops.

Although the 'Envisioning the future' workshops only partially contributed to the data collection process, they provided a chance to synthetize all the knowledge gathered during the previous two years and present it to the participants in a comprehensive and interconnected way. The workshops gave participants a systemic overview of their practices and the resources needed to make them happen. This knowledge was then used to structure the discussions: first, about current practices and resources and later, about future possibilities. In between these two discussions, there was a phase of so-called 'dreaming', in which participants were asked to imagine an ideal future image of their places, embracing also non-human and more-than-human perspectives. The goal was to tap into their sustainability mind-sets and embrace a forward-looking orientation to the provision of services from multiple dimensions (human, cultural, ecological, etc.) (Pearson et al., 2018).

These workshops lasted 7 hours in total. They were carefully designed combining facilitation frameworks from Appreciative Inquiry and Theory U. I alternated more analytically-oriented tools (e.g. 'System iceberg of sustainability values') with arts-based approaches to knowledge co-production (e.g. 'Letters from the Future'). The conceptual design of the workshop drew heavily from scholarship of transformative sustainability science that advocates for future-oriented and visioning approaches to the discussion and framing of sustainable pathways of change (Merrie, Keys, Metian, & Österblom, 2018; Tschakert et al., 2016).

FIGURE 3.11 | Pictures from the 'Envisioning' workshops: rationale of the workshop; map of resources.

Given the highly experimental nature of the workshop, in preparation I organized an 'experts' focus group' with invited colleagues from the University of Helsinki and from the Natural Resources Institute Finland - Luke (where I was based during my research). During the focus group I presented the rationale and outline of the workshop and gathered feedback and input to enhance its rigour and effectiveness. I then adapted the workshops' structure and content accordingly. During the workshops, I acted as both researcher and facilitator, and was assisted by a Master student who had already participated in previous phases of the research. She provided logistical support (both in the phase of preparation and implementation of the workshops) as well as English-Finnish interpretation when needed. In the weeks after the workshop, I compiled and shared with the participants a 'Learning Portfolio', which summarized the discussions, issues, and results.

Evaluation methods

The research process was evaluated using survey questionnaires and video-interviews. These methods were not included in my original research design, but towards the end of my fieldwork I recognized the value of a conclusive phase to the collaborative engagement, which could also serve as a way to assess the effectiveness of my methodologies.

Survey questionnaires

Survey questionnaires can be valuable tools to gather systematic information in a standardized way across respondents. They require less effort from the part of participants in comparison to other forms of data collection. They can also guarantee a higher degree of anonymity (Hammarberg et al., 2016).

Between August and December 2019, the main practitioners of the three case studies were asked to respond to a questionnaire to gather systematic feedback regarding the different fieldwork stages, the specific methods utilized, and the collaborative engagement in general. In total 7 people were asked to fill in the survey (with a final turnout of 6 respondents), namely those that had been involved in all the phases of fieldwork, including the design and adaptation of some of the methods. The survey was not meant to gather statistically valuable information. Rather, the goal was to understand and assess the effectiveness of the research project from the perspective of participants. In other words, I wished to understand to which extent the principles that had inspired the design and implementation of the methods (e.g. transparency, empathy, inclusiveness, relevance, etc.) were actually achieved in practice, and with what outcomes.

The vast majority of questions used a rating-scale, combined with close- and open-ended questions. The survey was administered in Finnish to make it easier for participants to respond. It was sent to them both via email in digital form and as hardcopy through the post office.

Video interviews

Videos can be used to convey important messages or needs in an accessible language to a wider audience (Thomsen, 2015). In September 2019, the main practitioners of the three case studies were asked to participate to a video-documentary, aimed at a) giving visibility to their innovative nature-based practices and ways of living; b) portraying the process of collaborative engagement, highlighting both potentials and challenges of participatory action research.

The two farms eventually decided to participate and, as a result, five practitioners were interviewed during the film-making process. Interviews were semi-structured and carried out mostly in the open and in their own houses and caring facilities. Participants were asked to focus on the most important messages for society (and policy-makers in particular) about their practices and their places. They were also asked to reflect on the various stages of the research process, and what benefits and challenges the various methods had yielded. Through their messages for the video, participants highlighted once again the motivations that spurred their practices, and the most important outcomes they sought to achieve through their model of place-based development.

The video was then edited by a professional videographer and myself and published on YouTube[3] (with subtitles in English, Finnish, and Italian) in February 2020.

Data analysis

As described in the previous section, the length and depth of the participatory engagement process, as well as the variety of methods, led to an extremely rich amount of data collected. As to be expected, not all the data analysed answered the research questions in this Thesis. Chapter 4, for example, is primarily conceptual, and therefore does not present any empirical findings. Conversely, chapters 5 and 6 are informed by the knowledge gathered during fieldwork (see Table 3.3. on page 57).

The conversations taped during semi-structured interviews, walking interviews (during Photo-voice), and video interviews, were transcribed manually. Afterwards I inserted them into Atlas.ti, a data analysis software package, which helps to organize data in an effective and transparent way, by supporting the exploration, categorization and interpretation of the textual information (Flick, 2009).

The process of qualitative analysis followed a semi-grounded approach, which guarantees the generation of robust theories and concepts by relying on a dialectical process wherein empirical findings and interpretative schemes are continuously and systematically juxtaposed (Fletcher, 2016). Pre-existing concepts and theories guided the data collection. For the analysis,

3 Saukkonen J. and Moriggi A. 2020. 'Nature as pathway. A participatory action research project'. Available at https://www.youtube.com/watch?v=-2qL_xl8Rfs

the textual information input in Atlas.ti was organized through various stages of thematic coding. The theoretical framework inspired the set of categories taken as a starting point and applied to the text. Categories were formed via a process of thematization, bringing to the surface the recurrent topics and issues of the discussion, and attaching importance to their connections and lines of reasoning (Saldana, 2009). In this way, the data analysis supported, confuted, and provided rich meaning to the theoretical framework, while allowing for the creation of new concepts (Korsgaard et al., 2015).

TABLE 3.3 | Data collected and relevance to specific chapters.

Data collected	Relevance for chapter 5	Relevance for chapter 6	No use for chapters of this thesis
Notes from documentation review	X	X	
Notes from preliminary interviews and field-visits	X	X	
Transcripts of semi-structured interviews & participatory mapping exercises	X	X	
Notes from participant observation	X	X	
Transcripts of walking interviews during Photo-voice	X		
Notes and visual materials produced during 'Sharing and Reflecting' co-creation workshop	X	X	
Notes and visual materials produced during 'Envisioning the future' co-creation workshops	X		
Transcripts from video interviews	X		
Answers to survey questionnaires			X

Notes and visual materials gathered via other, less textual, methods were not inserted into Atlas.ti, but rather organized in Excel spread sheets. These data supported a process of triangulation (Della Porta & Keating, 2008). They allowed greater rigor in interpreting each data set, enhanced the validity of the formulated findings, and provided a wider spectrum of perspectives regarding the themes that gradually emerged from the analysis. The process of triangulation proved crucial for mitigating some of the common risks of participatory action approaches. In interviews, surveys and workshops, for example, a 'deference' and 'social desirability' effect may occur when participants tell the researcher what they want to hear or what makes them look good in front of the group (Galafassi, 2018). In this research, the risk had the potential to be exacerbated by the fact that the main language of discussion was English, and not the mother tongue of either the participants or myself. Additionally, in PAR processes it is important to account for the 'researcher bias', given the conversational nature of the research and the close relationship that often is established among participants and researcher. Researchers face the problem of negotiating proximity and distance in relation

to the object of study, so that their views do not influence participants' answer nor affect the interpretation of the data collected (Flick, 2009).

In addition to triangulation, the constant practice of reflexivity and positionality helped mitigate these biases. In order to reflect upon potentially neglected themes and areas opened up and closed down (Burck, 2005), I critically examined the interactional processes taking place during interviews, workshops, and other engagement techniques. When possible, this examination process was done together with my research assistant, whose mother language is Finnish, and who was thus more aware of how people's narratives may have been informed by their cultural values and assumptions.

It is important to note that the data analysis process often started in the field – not only at my desk after the end of each fieldwork activity (Patton, 2014). Some of the key arguments presented in this thesis were intuited and hypothesized during the participatory process itself. Important insights came while listening to participants trying to come to grips with a particular question or observing the interactions within the groups. These were noted as observations, and revised in the broader context of analysis once back at the desk. In this sense, the iterative reflexivity approach also served as a pre-analytical phase.

Ethical issues

Ethics were foundational to the design and implementation of my collaborative engagement with all three Green Care case studies, as discussed in the first part of this chapter. In particular, the ethics of care literature and feminist approaches to PAR encouraged me to embody transformative science values (Wicks et al., 2008). Accordingly, praxis and ethics are entangled, and, whilst keeping general principles in mind, I practiced 'contextual ethics' – responding to the needs, circumstances, and particulars of a practical situation (Kemmis, 2008).

Thought the research process, I also designed and then followed a set of formal procedures, which allowed me to operationalize some of my core ethical principles in transparent and standardized ways. Prior to the start of fieldwork, the research proposal for this PhD thesis was approved by the Ethical Committee at the Wageningen School of Social Sciences (WASS), which makes sure that research participants are protected from harm. Following Flick (2009), four main ethical principles guided the research work, throughout all stages of the project:

1. *Non-maleficence*, according to which the research should not harm participants;
2. *Beneficence*, referring to the fact that the research should ideally produce some identifiable benefits for the people involved, rather than simply be carried out for its own sake;
3. *Self-determination*, in that research participants' values and decisions should be respected;
4. *Justice*, according to which all people should be treated equal.

I did my best to guarantee a fair distribution of research benefits and burdens and to protect the rights and interests of the study participants.

Research participant were involved on a voluntary basis and the recruitment procedure assured no discriminatory practices or unfair treatment. When approached, participants were informed about the aims of the research and the relevance of their involvement. Methods and goals of the involvement were also explained.

In the case of the semi-structured interviews, at least a week prior to the start of the engagement activity, I sent via email an Informed Consent Form and an Information Sheet. These were drafted in an accessible and jargon-free language, introducing the following:

- The scope of the research, its aims, methods, and implications, including an explanation of how data and research results were to be handled (i.e. measures for data privacy and confidentiality; storage of personal data) and used;
- The nature and rationale of the engagement process, including details about duration of the study, participatory procedures, as well as benefits, risks or discomforts that might arise from participating in the research;
- A statement clarifying that participation was voluntary and that anyone had the right to refuse to participate and to withdraw from the research at any time without any consequences;
- A section with the contact information of the researcher and the supervisors, with an invitation to ask questions and clarification at any point of the research process.

As far as the other methods of data collection were concerned, it was not deemed necessary to have participants sign the Informed Consent Form. The main reason was that the other methods mostly involved the primary practitioners of the three cases, and relied greatly on the relationship of trust and constant communication that was fostered over the course of the collaborative engagement. Photo-voice was adapted for use with the disabled clients of the care farm and the staff at the farm made the decision not to ask the participants signing any written form. They thought it was more appropriate to the capacities and comfort of the participants to seek their consent verbally, after explaining in detail the goal, modalities, and forms of engagement.

These formal procedures allowed for enhanced transparency in the way the research was conducted and they complemented the ethical considerations and 'ways of working' discussed in the first section of this chapter.

Chapter 4

A care-based approach to transformative change: ethically-informed practices, relational response-ability, and emotional awareness

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'Do the best you can until you know better.
Then when you know better, do better.'
Maya Angelou (1928 – 2014)

4

Abstract

Notions of care for humans and more-than-humans appear at the margins of the sustainability transformations debate. This paper explores the merits of an ethics of care approach to sustainability transformations. It argues that more radical, transformative change can be fostered via three mutually reinforcing dimensions: a) ethically-informed practices; b) relational response-ability; and c) emotional awareness. This novel theoretical and methodological lens emphasizes the transformative potential of caring practices and as such extends the reach of the sustainability transformations debate.

Keywords: care ethics; sustainability transformations; place-based practices; relational response-ability; emotional awareness.

Introduction

There is widespread agreement amongst sustainability scientists that our current model of development needs substantial rethinking. For a long time, the dominant preoccupation has been impact reduction and resource optimization. A mere focus on technological advancement as key ingredient of the recipe for change has perpetuated the status quo and validated the liberal capitalist mode of development at the origins of the current socio-ecological crisis (Puig de la Bellacasa, 2011; Scoones, 2016). In recent years, voices of critique have become stronger, and new narratives of more radical, transformative change have taken shape. In this expanding semantic spectrum, a language of care and biosphere interconnection is gradually claiming a space. As yet, however, the scholarship on care ethics is not very well considered in the sustainability transformations debate (Schildberg, 2014; UNRISD, 2016, p. 99).

Recently, we find 'care talk' being more or less overtly employed across disparate traditions and contexts of research and practice. Economic geographers Gibson-Graham propose to fundamentally rethink economic actions so that they can reflect care and responsibility for the ecosystem (Gibson-Graham, 2008). Prospects of a caring economy and a caring society increasingly inform the work of feminist economists, philosophers, and political scientists, who dismiss the neo-liberal understanding of human beings as 'isolated individual utility maximizers', and advocate for practices that regenerate the living basis of society, for current and future generations (Held, 2006; Schildberg, 2014, p.4). A care language also features in the post-capitalist agendas of social movements such as De-growth[4] and in the philosophical design of permaculture and biodynamic practices[5]. Echo of a caring ecology also appears in Pope Francis' Encyclical letter 'Laudato si. Our care for our common home,' where the spiritual leader urges to commit to revolutionary acts for the future (Pope Francis, 2015).

Traditionally, notions of caring for the Earth and human-nature interdependence lie at the core of spiritual and philosophical traditions such as Buddhism and Hinduism, and of indigenous knowledges all around the world (Whyte & Cuomo, 2016). They have long informed various fields, such as ecofeminism, spiritual ecology, environmental ethics, and eco-theology, advocating for alternative ethical perspectives that would attend to relational interdependences between human and non-human communities (Spretnak, 1997; Warren, 2000). Although these are very heterogeneous fields of scholarship and practice, they all have in common a call to change the way we understand ourselves and our interaction with the Earth. The notion of interdependence is integral to established traditions, such as resilience scholarship (Olsson, Galaz, & Boonstra, 2014), deep ecology (Drengson & Devall, 2010) and system thinking (Capra & Luisi, 2014), affirming the need to reconnect with the biosphere, learning to see human and nature as a whole. However, when referring to relations of care,

4 See https://vocabulary.degrowth.org/

5 See https://permacultureprinciples.com/ethics/

maintenance and restoration of natural resources, other terms are usually employed, such as 'ecosystem stewardship' or 'ecological citizenship' (Ack et al., 2001; Chan et al., 2016; Singh, 2015). There is also a tendency to frame moral issues in abstract, economic, and legalistic terms (Whyte & Cuomo, 2016), with only a few authors attempting to reveal their transformative potential[6].

In this paper by way of response our concern is threefold. Firstly, we are concerned with grasping the basic tenets of the ethics of care, and understanding the innovative traits that seemingly makes it a promising approach in terms of 'care for the earth'. Secondly, we wish to explore if and why care matters to the dominant sustainability transformations debate. Thirdly, and most importantly, we seek to understand how care can contribute and enrich such debate, and what further horizons could be investigated to bridge care and transformative change scholarship. In addressing each of these points, we draw heavily from the literature on care ethics. To a lesser extent, we also consult disparate disciplines which have, in recent years, endorsed a rationality of care as a basis for informing our understanding of a multitude of socio-ecological interactions. By considering the overtly debated 'sustainability transformations,' we identify both points of intersection and difference with care-informed understandings of change. Both care and sustainability transformations have an extended body of literature. Our aim is not to provide a complete overview of both, but to explore interconnections to bridge the two and advance the debate.

The paper proceeds as follows: in section two we begin by introducing the meaning and relevance of care, understood as both a set of moral values and a range of tangible practices. Briefly engaging with the sustainability transformations debate, we also highlight possible areas which could be critically informed by a care lens. Section three argues for a care-based approach to transformative change, encompassing three mutually enforcing dimensions: ethically-informed practices, relational response-ability, and emotional awareness. Two major directions for further exploration of a care-based approach are then identified: 1) as an analytical perspective to further our understanding of transformative change; 2) as a lens to invigorate action-oriented approaches in sustainability transformations research. The conclusion briefly highlights avenues for future research.

Care and sustainability transformations: an unexplored connection

Care: ethos and practice

The etymological roots of the word 'care' translate into two fundamental meanings: an active one of attentiveness, regard, consideration, and a passive meaning of worry, concern, and anxiety (Mancuso, 2015). We practice care, both in its active and passive forms on a daily

6 Most notably, we refer to Tschakert and St.Clair (2013) and their attempt to identify conditions of transformative change, looking at responsibility, care and place-making in climate change research.

basis. We are all, at some point in our lives, care-givers and care-receivers (Tronto, 2013; Held 2006). Yet, historically, care has been relegated to the private sphere only, often taken for granted, devalued, and thus invisible (Puig de la Bellacasa, 2011). This is reflected also in the limited attention it has enjoyed in scholarly debate: 'For a long time care figured in academia as a more or less tedious practical necessity, rather than as an intellectually interesting topic. Or worse: care hardly figured at all' (Mol, Moser, & Pols, 2010, p.7). The trend has changed only recently, with care becoming the subject of nursing and medical studies first, and later of sociology, anthropology, geography, philosophy, and ethics debates (Mol, Moser, & Pols, 2010). It is mainly due to feminist speculations that we have come to see a resurgence of care in such fields.

In parallel, we have witnessed an overlapping growth of interest in the ethics of care literature, which has found continuous application in a variety of different contexts (see for example Koggel & Orme, 2010; Faden et al., 2013). Sparked by the publication of ground breaking texts, including notably, 'In a different voice' by psychologist Carol Gilligan (1982), the ethics of care debate has been shaking the foundation of Western liberal tradition ever since. Important contributions came from Virginia Held, Nel Noddings, and Sara Ruddick, amongst others. These scholars opposed the mainstream notion of individuals as isolated and abstract entities. They proposed a new way of viewing the world, where human beings are fundamentally *relational* and *interdependent* members of a network of relationships on whose continuation they all depend (Gilligan, 1982; Held, 2006; Noddings, 2013). This paves the way to a new approach to morality, which calls into question the abstract rules of Western philosophical thinking, based on principles, reasoning, and 'black and white' judgment. Conversely, moral problems are to be approached as close as possible to concrete situations (Noddings, 2013). Thus, in contrast to consequentialist and deontological moral theories, favoring universality, individual rights, consequences, and justice, the ethics of care literature puts at the center the importance of context, interdependence, relationships, and responsibilities (Held, 2006; Koggel & Orme, 2010).

We contend that the message of interdependence and relationality intrinsic to the rationality of care is also extremely valuable when understanding how we come to 'care for the earth.' Nearly 30 years ago, Fischer and Tronto defined care as:

> 'A species activity that includes everything we do to maintain, continue and repair our "world" so that we can live in it as well as possible. That world includes our bodies, ourselves and our environment, all of which we seek to interweave in a complex, life-sustaining web' (Tronto, 2013, 19).

This definition offers an understanding of care clearly relevant for sustainability, framing humans as relational subjects capable of sustaining life in all its different forms. This is manifested in the dual nature of caring, which is both an ethical framework and a series of tangible practices (Held, 2006; Tronto, 2013). By endorsing a rationality of care, one embraces

a new ontology of being in the world, accepting the notion that everything is relational, an approach increasingly dominant in the social sciences (Haraway, 2016; Horlings, 2015). At the level of the everyday, relationality and interdependence are manifested through contextual interactions in particular times and spaces, through which people construct new subjectivities and new ways of relating to both human and non-human worlds (Singh, 2015). Thus, a caring approach has implications with respect to both 'values' and 'practices'. Accordingly, several questions come to mind: how do people come to express their relational dependence with their living environment? What do they actively do? What motivates their desire to act to sustain the 'life-sustaining webs' of the worlds they live in? And how do they learn to care? We explore such dilemmas further below. First, however, we identify three main dimensions from a care lens: practices, responsibility, and emotions. We contend that all three are important points of inquiry; they offer much potential to enrich the current debate, while advancing the set of tools available to push forward a transformative research agenda.

Understanding the sustainability transformations debate from a care lens

A growing number of researchers working in the sustainability field are, nowadays, concerned with issues of *transformation* and radical change (Moser, 2016; Olsson et al., 2014; Westley et al., 2011). For a long time the most popular topic had been sustainability *transition*, meaning gradual long-lasting processes, with a final aim of making the current systems of production and consumption more sustainable (Markard, Raven, & Truffer, 2012). In recent years, the term transformation has rapidly gained potency, triggering an abundance of continuously evolving research work.

The common denominator within the transformations literature is the idea that transformations are fundamental changes, opposed to minor, marginal or incremental ones (Feola, 2015). Approaches have developed in both diagnostic and prognostic directions: on the one hand, the literature offers analytical tools to understand the complex bundles of issues at stake with regards to the socio-ecological crisis; on the other hand, solution-oriented procedures and methods are being designed to successfully guide the changes envisioned in the realities studied (Feola, 2015). Action-research approaches have gained increased acceptance and prominence, with researchers nurturing activist orientations to push forward transformative change (Fazey et al., 2018; Moser, 2016).

Transformations are often approached within the framework of system models, conceptualized as complex and dynamic entities (Bai et al., 2016; Olsson et al., 2014). System thinking is hailed by its advocates as the most comprehensive approach to understand the mechanisms at stake, and to develop a comprehensive perspective on the future. Moreover, scholars seem to be particularly interested in issues of scale, arguing that transformations are multiphase and cross-scale processes (Abson et al., 2017; Olsson et al., 2014), encompassing individual (and his/her deeply held values and beliefs), collectives, and multi-level governance and management regimes (O'Brien & Sygna, 2013; Westley et al., 2011). Transformations are

also described as contextual and diverse, linked to specific ecological, economic, social, and cultural conditions (Abson et al., 2017; Bai et al., 2016). They often depend heavily on change agents, 'key humans' variously referred to as leaders, entrepreneurs, innovators, frontrunners, brokers, intermediates, and net weavers (Bai et al., 2016; Westley et al., 2011). Change agents are believed to develop new agendas for the future, thanks to their ability to mobilize networks, alliances, and coalitions to connect actors from different sectors and levels of the systemic bundle (Scoones, 2016).

Engagement of actors in and for transformations raises questions of power: radical change will not be possible if root causes of inequality and failures to address vulnerability are not exposed (Bai et al., 2016; O'Brien & Sygna, 2013; UNRISD, 2016). To address unequal structures of power and enhance local innovative capacities for change, the sustainability transformations literature increasingly advocates co-production of knowledge (Fazey et al., 2018; Moser, 2016). That is, sustainability scholars are expected to engage stakeholders side-by-side in a process of iterative learning by means of participatory processes. While also being conducive to the gathering of data and information, such engagement is intended to empower participants. This includes, for example, creating the space and conditions to discuss expectations and normative positions concerning the future (Bai et al., 2016; Tschakert et al., 2016) or prompting learning histories and using social memory to connect and restore a sense of coherence (Franklin, 2018).

The transformations debate has been fruitful in discussing 'how' research can contribute to transformative change through practical and action-oriented approaches (Fazey et al., 2018). Yet, we also believe it would be further strengthened through greater internal acknowledgement of the relevance of additional perspectives currently only marginally considered. In substantiating this argument, we next present three dimensions for further exploration: firstly, the notion of relationality with both human and non-human worlds, and its everyday expression in caring practices enacted in places; secondly, a forward-looking understanding of responsibility which motivates potentially transformative practices; thirdly, the role of emotional awareness in constructing transformative agency, especially by nurturing the capacity for imagination.

The potential of a care-based approach for sustainability transformations

Enacting ethical creativity in places: the role of caring practices

Through practices, people construct their identity and their relational life in ways that are situated, unique, and embodied - characteristics that are hardly measurable through reductionist forms of sustainable development assessment. As a consequence, some sustainability scholars deem practices unsuitable for generalizations and thus incapable to

prescribe societal processes (Rauschmayer, Bauler, & Schäpke, 2015). Conversely, we argue that by employing a care lens, practices become tangible and salient accounts of *how* transformations can be enacted in various realities. Their situational and contextual nature is thus an added value rather than a flaw.

Indigenous knowledge, revived in ecofeminist literature, has long framed care as the practice of recognizing and learning from one's place, being embedded in a web of diverse relationships (Warren, 2000). Indeed, as the care ethics literature suggests, caring practices can be a *tangible manifestation of interdependence* and nature connectedness through everyday doings in particular places (Puig de la Bellacasa, 2010; Tschakert & St.Clair, 2013). 'Caring expresses ethically significant ways in which we matter to each other, transforming interpersonal relatedness into something beyond ontological necessity or brute survival' (Wells & Gradwell, 2001, p. 111). This is manifested, for example, in several alternative farming practices which place care at the center of their doings. A study of a Community Supported Agriculture (CSA) scheme in Northern Scotland, for example, shows how participants nurture multiple forms of care at the same time: with regards to land and natural resources, by encouraging native species; towards people, by providing healthy food and educational opportunities; to the community, by fostering social connections; towards place, by helping people to reconnect to the land; and towards the future, by modeling a community-based alternative food system (Wells & Gradwell, 2001). From this perspective, practices become sites of 'ethical creativity' (Leys, 2011), making evident the political potential of everyday actions, and the ethical dimension that connects the personal to the collective and drives everyday decisions of how places should be shaped.

Another powerful example, within a food and farming context, is permaculture. Permaculture recognizes interdependency in all forms of life, and is based on attentive observations of the rhythms of nature to design harmonious practices in line with the needs of a place, a land, and a community (Puig de la Bellacasa, 2010). Here, humans become participants in ecosystem's wellbeing, and not just passive recipients of its gifts (Kimmerer, 2014). Through care work and caring practices grounded in places, communities may choose to re-learn to follow nature's patterns and its cyclical evolution and co-evolve with it. Doing so, they refuse the time of techno-scientific efficiency and progress - internalized after decades of intensive farming - and contribute to socio-ecological regeneration, by restoring both social and natural resources (Du Plessis & Brandon, 2015).

A second transformative potential of ethically-informed caring practices is their *experimental and iterative nature*. Care work becomes better when it is based on relations created through intensified involvement and knowledge (Noddings, 2013; Puig de la Bellacasa, 2010). There is no good care once and for all: practices should be based on the accommodation of specific individuals and circumstances, through 'practical tinkering' and 'attentive experimentation' (Mol, Moser, & Pols, 2010). Offering the chance to *do things differently*, to do them better, this creates the conditions for transformative learning. Singh (2017) illustrates this long-

standing learning process through the example of *thengapalli*, a local system used to share forest patrolling labor in Odisha, India. The relationship between communities and forest is constructed over time, through renewed attention and attunement: 'Through the daily patrolling trips for *thengapalli*, villagers come to know the forest intimately and learn to respond affectively to its needs for care' (Singh 2017, p. 756). 'Paying attention' has two ethical connotations here: it is a practical necessity to become responsive to ecosystem health, both in times of plenty and in times of scarcity; it is also a spiritual act of reciprocity and gratitude towards nature (Kimmerer, 2014).

A third point in need of further exploration is the potential of caring practices as *sites of empowerment*. Caring practices can be productively understood as interactivities involving a certain type of attentive communicative contact, located *between* subjects, shaped by both care-givers and care-receivers. The possibility for change lies in this interaction, where people might decide to act differently, to act 'better', or to counteract bad practice (Mol, Moser, & Pols, 2010). To enable learning experiences with a transformative potential, both sides of the spectrum must be given a voice: this requires re-framing relations of power, including through a focus on skills and capabilities, reciprocity and inclusive deliberation, always recognizing the dignity and agency of all those involved (Barnes, 2008b). In the case of non-human beings, mutuality and interdependence can be practiced by exploring with curiosity the needs and rhythm of others, refusing objectification and domination (Puig de la Bellacasa, 2011; Spretnak, 1997). Empirical studies of place-based experiential learning provide notable examples of how individuals engaging in deep and close observation of non-human beings, realized first-hard how natural elements are not static objects, but have agency of their own. Such practicing of relationality provides a sense of groundness and inspiration that allows for a change of paradigm, recognizing nature as sentient and communicative (Goralnik & Nelson, 2017; Harmin et al., 2017).

Restoring relational response-ability: a pro-active commitment towards the future

As elaborated above, contextual, attentive dynamics rooted in caring practices can sharpen our ability to respond, to be responsible. In Kimmerer's words (2014), 'Attention becomes intention, which coalesces itself to action.' According to the ethics of care, relational responsibility is a crucial condition to build transformative capacity. This has highly relevant implications when exploring the inner dimensions of change[7], and the values underlying the motivations to act. From a care lens, responsibility stems from the recognition of humans' foundational vulnerability and interdependence - a radically different view from modern philosophy's dominant understanding of responsibility, dating back to Hobbes and Weber. For centuries we have conceived of responsibility mainly as a legal deed, as the ex-post facto

7 With inner dimension of change we refer to the so called 'change from the inside-out' (O'Brien & Sygna, 2013). The latter refers to the personal repertoire of mindsets, emotions, values, feelings, which are increasingly considered vital determinants of any transformational change to sustainability (Horlings, 2015).

account for what has been done: to be a responsible citizen meant to be accountable and *responsive for* one's own behaviors and its consequences (Pulcini, 2013). As a result, today, we often perceive our relation to nature and the environment in terms of ex-post accountability: when asked to engage in eco-friendly behaviors and practices as a trade-off for decades of exploitative use of resources; when held to account for breaking environmental rules (e.g. environmental liability); when experiencing guilt for the ecological destruction we have created (Haraway, 2016).

Understanding responsibility as ex-post accountability has manifold implications. Most notably: conservation challenges and environmental protection are often framed as a burden, leading to lost opportunities in terms of land-use and thus in need of being offset by financial incentives (Singh, 2015); citizens may perceive everyday civic sustainable actions, such as household waste recycling, as either constraining obligations, or petty actions with insignificant impact on the fate of the planet (or indeed both) (Moore, 2017); nations tend to resort to a narrative of 'common but differentiated responsibilities' as a diplomatic weapon in geo-political global negotiations, with no substantial commitment to temperature rise reduction (Cuomo, 2011). Furthermore, playing on responsibility and guilt may place the entire burden of caring on the individual, dismissing structural questions of power inequality and resource distribution (Tronto, 2013). Climate change mitigation and adaptation efforts provide a striking example of the latter, often contributing to exacerbate existing vulnerabilities to the climate crisis (Moriggi, 2017). Against this background, it is unsurprising if at individual, collective, and supra-national level, the result is a continuation of ineffective action, or inaction all together (K. D. Moore, 2017).

Along with ex-post accountability, another powerful archetype of responsibility is represented by relationships of kin and affection. Here, being capable of responsible care is often understood as a function of love towards intimate others. Historically, women have been disproportionately responsible for care work in the family, with caring coming to have strong gender attributions, almost exclusively limited to the private and feminine dimension, best epitomized in the saying 'tough guys don't care' (Held, 2006; Tronto, 2013)

From an ethics of care perspective, it is ineffective to ground responsibility and care mainly on the aforementioned terms – accountability and love. The literature suggests that a mindset shift is needed, whereby we conceive of responsibility not as a subjective concept, but rather, a relational one that stems from the realization of vulnerability and interdependence (Mancuso, 2015; Puig de la Bellacasa, 2010; Warren, 2000). This has transformative potential in two senses: first, it allows us to nurture an orientation to care for distant and potentially unknown others; not only for those in our family or close circles. Recognizing mutuality with other beings activates the capacity to 'care *about*', an internal state of readiness, a commitment to the *possibility* of caring for strangers or distant others, which precedes the actual practice of caring ('care *for*') (Noddings, 2013). Secondly, a relational approach frames responsibility not in terms

of what has been done, but rather on what *can* be done, as a pro-active commitment towards the future. Following Haraway's (2016) notion of 'response-ability', this involves the capacity to not just *answer for* our actions, but *respond to* something or somebody from the socio-ecological environment in which we are embedded. Such ability for responsiveness is not motivated by legal obligation, nor is rooted in relationships of blood. Rather, it comes from multiple practices of relationality: the more we engage in attentive relationships, the more we feel the need to care *about* and *for* others (Tronto, 2013). Our responsible trajectories are shaped and negotiated over and over, through connection to places and engagement in social relations, as crucial manifestations of both our ethical creativity and our identity. Singh's study of community-based conservation efforts in India (see above), offers an articulated empirical case of the latter. She argues that through the daily practices of caring for the forest, commoners transform both their natural landscapes and their individual and collective subjectivities, in a process of co-becoming (2015, 2017). Thus, acting responsibly can also be an opportunity for deliberation and self-expression, to nurture one sense of self and of community through caring and regenerative practices (Haraway, 2016). Affective and spiritual approaches to the study of ecosystems have long argued that a reciprocal relation to other living beings brings comfort, fulfillment, and strength. Refusing hierarchical, dualistic, and instrumental relationships, when acting responsibly, does not stem from a restraining moral dogma. It is rather a path to live fully, to thrive as humans celebrating our place in the more-than-human world (Kimmerer, 2014).

Enabling transformative agency: nurturing emotional awareness

This section engages with emotional awareness and its role in fueling individual and collective capacity for imagination. The ability of crystalizing a vision, of projecting oneself into the future and imagining possible pathways of action is a crucial trait of change agency. Sustainability transformations literature mainly understands change agents as leaders, capable of inspirational discourses, who create common ground for building trust and cooperation between actors with different interests, mobilizing resources to realize the aims envisioned (Westley et al., 2011). We contend that for agency to be transformative, imagination and moral sentiments should also be actively nurtured. For Amartya Sen and Martha Nussbaum imagination is one of the ten central capabilities for a good life – along with creativity and intuition it allows us to deal with uncertainty and take the future in our hands[8]. As posited by Pulcini: 'Fitting our imagination to our deeds gives rise to a creative process which is set free by a renewed faith in the possibility of newness, of change, of a transformation of the present' (2010, p. 458). In environmental decision-making circles nowadays, imagination is a cognitive-emotional skill hardly engaged with; thus, its creative potential to inform socio-ecological transformations remains untapped (Galafassi, 2018).

8 See for instance https://plato.stanford.edu/entries/capability-approach/

From a care lens, transformative imagination goes hand-in-hand with emotional awareness. Only relatively recently have the humanities and social (sustainability) sciences turned to emotions and affective resources as potential triggers for change agency (Leys, 2011; Moriggi, 2019). Affective resources are not only everyday experiences of feelings such as anger, joy, fear, but also, sentiments such as hope, capable of orienting one's self towards the future. Emotions are paramount to enable cognitive shifts in the way people understand issues at stake (Lakoff & Johnson, 2003). Ethics of care scholars describe emotional awareness as it if were a compass of morality, which helps to interpret and ascertain what is right and wrong (Held, 2006). Moreover, emotions are deeply embedded in our values and thus might provide a strong motivation for action in both the short and long term (Barnes, 2008b). An articulated understanding of emotions however, is still marginal in the recent debate on sustainability transformations. Even when discussed, there is an apparent gap in developing practices that engage emotions in the context of radical change, including sentiments like ambiguity and fear (Galafassi, 2018; Moore, 2017). This is reflective in part of a general trend in contemporary society for perpetuating the long-standing dichotomy between emotion and reason. The latter is perceived as crucial to defining us as functioning humans able to make decisions. In direct contrast, emotions have long been fenced and hidden in our public social relations, propagated by the belief that to be professional requires being emotionally restrained (Held, 2006). Similarly, in the name of intellectual rigor and neutrality, emotions have long been considered alien to much research[9].

As a consequence, our societies are now faced with 'emotional ignorance,' a gap between knowing and feeling (Mancuso, 2015), which has great implications for transformative change. As posited by Pulcini (2013, drawing from Hans Jonas), with advancements in science and technology and phenomena of globalization, today humans can not only transform nature, but also create it, disrupting evolutionary laws and posing immense threats to the ecosystems. Yet, while rational knowledge and productive capacity develop at extreme and frantic levels, the 'emotional founded awareness' about the long-term consequences of such acts, does not mature at the same pace (Pulcini, 2010). The split between knowing and feelings hinders human's ability to perceive the size and destructive potential of impelling risks (Pulcini, 2013).

Focusing only on knowledge-based campaigns and techno-scientific solutions as the main approach to virtuous change has had disappointing effects, most notably with climate change. As noted by Hamilton (2017): 'Most citizens ignore or downplay the warnings; many of our intellectuals indulge in wishful thinking; and some influential voices declare that nothing at all is happening, that the scientists are deceiving us'. On the other hand, the inability to couple

9 Exceptions naturally exist, notably in certain feminist approaches, in arts-based research, and sustainability pedagogy. Yet, for the most part, emotions are not sufficiently integrated in the lab room, and in the research team's co-creation and decision-making processes; similarly, they are only marginally considered in methodological and analytical processes, carrying the risk of producing knowledge labelled as 'subjective', with subjective through this reading being irrational, soft, unscientific and out of control (Hubbard et al., 2001).

rational wisdom and proven facts with 'emotionally-sensed knowledge' (Hubbard et al., 2001) has resulted in emotions being co-opted and instrumentalized by interest groups, that construct compelling narratives that appeal to fear, repulsion, and anxiety. Such narratives are characterized by a willful blindness to evidence and a mistrust in authoritative science (Laybats & Tredinnick, 2016).

For many in the field of sustainability, negative emotions are mere sources of anxiety and powerlessness. An effective leader, for Robison and Cole (2015), is capable of 'inspiring hope *against* fear' (p.137, emphasis added). From a care lens, both 'positive' emotions, such as joy and hope, and 'negative' ones, such as fear and grief, can be conducive to virtuous change (Held, 2006). This is not to say that the future should be cast in terms of alarm and pessimism: fear *of* can indeed lead to paranoia, denial, resistance, inaction. However, fear might activate a totally different set of attitudes and behavior if it is framed in terms of *fear for*, a productive fear that allows humans to connect to the world with empathy, and to feel the urge to protect it and care *for* it in transformative ways (Pulcini, 2013). Similarly, for philosopher Donna Haraway, grief is something we must learn to do, in different ways, but together, to form richer, deeper relationships with our peers, our communities, and the world around us. Her book 'Staying with the trouble' is a testament to new ways of being in combination and collaboration with other species, learning to live and die with each other (Haraway, 2016). Expanding our ways of knowing to include also affective, emotional, and aesthetic dimensions implies the capacity to 'see with fresh eyes', listen with 'respectful years', and, as a consequence, to regain a sense of wonder, appreciating Earth's beauty but also its suffering (Kimmerer, 2014; Moore, 2017). From a care lens, to sense sympathetically is thus a moral virtue and the foundation for a new ethics of the future. Even sentiments like fear and anger, when properly acknowledged and elaborated, can be translated into tangible emancipatory actions from current deadlocks, and turned into compassion and hope for alternative possibilities (Pulcini, 2013).

Practices, responsibility, and emotions seen from a care lens: novelties and interlinkages of a multi-dimensional approach

Drawing from the literature on care ethics, the preceding sections of this paper have discerned and explored three dimensions of care, namely ethically-informed practices, relational response-ability, and emotional awareness. Although the three dimensions explored in the paper can be approached as analytically distinct (including as they have thus far largely been presented here), they are also interlinked. These interlinkages form the focus of the Figure below.

The figure is intentionally represented with the shape of an eye, as a visual metaphor of 'attentiveness', the foundational aspects of caring often mentioned in this paper. At the bottom edge of the eye lies awareness of interdependence, the necessary pre-conditions for caring. The latter is manifested as an ongoing process of change, best represented by a constantly evolving whirl, composed of three mutually reinforcing dimensions. Through

ethically-informed practices, people not only come to express their interdependence with the living environment, but also contribute towards sustaining and possibly regenerating the living webs of the places they inhabit. Such caring practices are ideally motivated by a feeling of relational response-ability, grounded in the awareness of humans' foundational vulnerability, and driven by a pro-active commitment towards the future. Caring practices and relational response-ability at the same time reinforce and are fueled by emotional awareness. Connecting to the inner sources of passion, joy, despair, and other moral sentiments, further enhances the consciousness regarding our condition of interdependence, while nourishing the desire to imagine alternative tomorrows. Thus, interdependence is not just attained through rational awareness, but it is also felt and embodied. Understood holistically, learning to care is the result of manifold dynamics, where the material, cognitive, emotional and moral reconnection of humans and more-than-human all contribute to effective action in the present towards better futures. From a systemic point of view the three components of the spiral can also be seen as points of intervention, that, when triggered, allow change to happen and new spaces of possibilities to emerge.

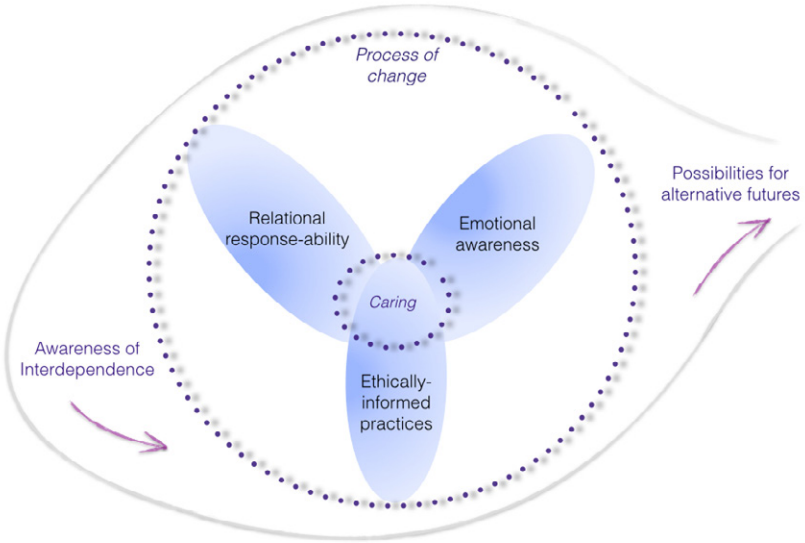

FIGURE 4.1 | A care-based approach to transformative change: ethically-informed practices, relational response-ability, and emotional awareness.

Discussion

Implications of a care approach for transformative research theorizing

Due to its holistic and dynamic character, we elect to emphasize here the power of a care approach at the meta-level, and distill three main teachings that can serve as analytical

perspectives to enrich the current debate on *what points of focus* should be at the heart of sustainability transformations.

Firstly, the ethics of care literature confirms and provides substance to the fundamental importance of values and worldviews in fostering radical change. As system thinker Donella Meadows suggested decades ago, the power to transcend paradigms is the deepest and most effective leverage point where interventions should take place (Abson et al., 2017). From a care perspective, little can be done in this sense through investments in new technologies, ideas, or data production. Rather, 'we need a change in heart' (Kimmerer, 2014, p.22), a deeply personal shift in worldviews that is both material and ethical. Each of the three dimensions explored in this paper, offer novel insights into how the subjective 'work' of sustainability comes into place (Horlings, 2015).

Secondly, the ethics of care reminds us that the way we address sustainability and change as scientists and decision-makers cannot be morally neutral. We need an ethical, 'action-guiding' realignment in both diagnostic and prognostic approaches to transformation. Space and time should be created to bring morality at the core of scientific discussions, to engage in local and global conversations about shared dreams, values, and desires, and how that can be translated into action (Moore, 2017).

Thirdly, such realignment cannot simply rely on the morally loaded concepts that have informed our knowledge construction so far. These, as explored above, are partially responsible for the ecological and social crisis we are facing today (Warren, 2000). Complementary moralities should inform a new understanding of ourselves and our realities, if real transformation is to take place. Founding transformational change on care ethics and practices allows a mindset shift in the way we understand ourselves and our relationship with the earth, moving from an ego- and anthropo-centric to an eco-centric worldview. The latter understands humans as co-evolving with the social-ecological system of which they are part, supporting its wellbeing and enhancing its resources, in line with a regenerative paradigm (Du Plessis & Brandon, 2015).

Our approach may also be viewed as a contribution to the debate on the role of the different dimensions, or 'pillars' of sustainability: ecological, economic, social, and (more recently) cultural. Pillar thinking has dominated the sustainability literature for decades and is still often used as a basic conceptualization, especially in policy realms and among practitioners. For a long time, the pillars have been informed by phenomena that could be observed and measured against criteria and indicators. All too often this has led to partial or total dismissal of less quantifiable dimensions, often related to social and cultural aspects of sustainability (Katriina Soini & Dessein, 2016). In particular, the findings in this paper re-affirm the importance of a fourth, cultural, dimension. A cultural dimension encompasses, but also extends beyond, the role of arts and heritage, to include the role of values, mindsets and beliefs in shaping transformative change.

Implications of a care approach for transformative research practice

Introducing a care lens to transformations scholarship can also inform and reinforce the debate on *how* - the ways in which research can operationally and methodologically be both site and driver of transformation. We take the opportunity here to transpose the elements of novelty explored – through the three components of caring practices, response-ability, and emotions – into relevant applications for transformative research. We reference a number of epistemological and methodological approaches to empirical work where such caring principles are already in place, and yet, often not overtly acknowledged. We refer to participatory approaches to social appraisal, and in particular, Participatory Action Research (PAR), but also to arts-based inquiry, sustainability pedagogy, and contemplative practice. These fields aim at not only advancing scientific understanding, but also contributing in an active manner to change and empowerment for those involved. Transdisciplinary research that aims at transformative knowledge co-production offers a fertile terrain for such empirical applications to be tested.

The first component of a care-based approach to transformative change is ethical informed practices. These are underlined by: (a) attentive engagement to context and its interdependencies; (b) willingness to experiment; (c) tension towards empowerment. With regards to (a), we see a growing orientation for contextually-relevant solution-oriented research emerging amongst scholars and practitioners. This implies moving from the traditional obsession with 'best practices' (in both policy and scholarly realms), to a heuristics of difference rather than dominance, and to an analytical appreciation of the possibilities created *with* and *for* tangible others (Gibson-Graham, 2008). Specific examples can be found in PAR approaches. An example is the use of participatory drama in coastal Southeast Kenya, to explore people's resilience to extreme weather events in the face of climate change. There, through a place-based and context-specific approach, the process of academic inquiry co-evolved along the emergence of themes through the performances enacted (Brown et al, 2017). Attentive engagement to the complexity and interdependencies of a specific context can also be practiced through 'epistemological stretching', integrating the embodied, the spiritual, and the intuitive as alternative ways of knowing (see for example Harmin et al., 2017).

Willingness to experiment (b) is another transformative element of caring practices. Likewise, research that aims to be transformative must somehow come to terms with the need to embrace playful experimentation and iterative learning as essential factors (Fazey et al., 2018). PAR projects like the that of Brown et al (see above) are a good example where process is given priority over outcome, embracing challenges such as uncertainty and failure, and striving to do things 'better' through renewed adjustments and tinkering. Capacity to deal with uncertainty and non-linear change are also found in science-fiction approaches to scenario building (see for example Merrie et al 2018). As far as learning to deal with failure is concerned, contemplative practice (employing techniques such as meditation, yoga, and journaling), can help to elaborate let downs and disappointments implicit in social change work (Kaufman 2017).

Empowerment, the third characteristic of ethical-informed practices, can be best achieved through suitable tools that facilitate communication and deliberation of the participants involved. Storytelling, dismissed for too long on the basis of providing only anecdotal evidence, is now increasingly called upon as powerful communication tool (Moser, 2016; Pearson et al., 2018). Together with other creative approaches, storytelling can widen the spectrum of speeches considered appropriate in deliberation arenas, and thus give a voice to previously marginalized groups, understanding their experiences and not just translating them by speaking on their behalf (Barnes, 2008b). Foster (2016), for example, describes the power of stories in giving voice to previously silenced groups (e.g. indigenous communities), in forming common conceptual repertoires, and in finding sense and order through complexity. Applied to experiential learning, storytelling can support students to reclaim their voices and their affective engagement to nature, while developing their ability to relate critically with the course literature (Goralnik & Nelson, 2017).

The second transformative component of a care-based approach to transformative change is response-ability. In PAR, being *able to respond* to the needs of communities requires designing and adapting methods in line with participants' capabilities and expectations. Integral to doing so, is the employment of creative, interactive and empathic techniques, such as participatory video-making and photo-voice (Franklin, 2018; Moriggi, Soini, & Bock, 2020). The concept of response-ability can also inform the idea of research as a performative act, dismissing detachment and neutrality, in favor of a subjective commitment to change. In embracing performativity, scientists accept that knowledge is never given, but rather is always 'becoming'. Foster (see above) describes the practice of spirituality integrated in arts-based inquiry as a way of 'being present – in the moment – and also open to what is not yet known' (2016, p.129). If transformation is about change from the inside out, researchers are called to intentionality and conviction, embodying the values they preach in profound and significant ways (Horlings et al., 2020). Our own willingness to 'dig in, to develop meaning, make connections, be honest and vulnerable, and seek growth' (Goralnik & Nelson, 2017, p.15) is as important in transformational research as the content of what we investigate.

Finally, the third dimension of our proposed approach to care is emotional awareness and its role in providing the humus to discuss and facilitate alternative visions for distant others. Here transformative research can harness the potential to bridge cognitive, emotional, and moral dimensions, by facilitating spaces of encounter and 'freedom to feel'. Galafassi (2018) describes with empirical evidence the power of arts-based initiatives to address emotions like hopelessness, sadness, loss, grief, and trauma, brought about by climate change (see also Foster 2016). Such 'spaces of feeling' are also needed within research teams and networks, not only to integrate emotionally-sensed knowledge into the research process, but also to enhance individual and collective coping capacities. Indeed, impact-oriented work requires an extensive emotional labor, which often goes unrecognized, and lacks support at institutional levels (Foster, 2016; Hubbard et al., 2001).

Conclusion

In this paper we have argued that a care-based approach to transformative change is inherently complementary to the sustainability transformations debate. However, a care lens is still insufficiently called upon in sustainability sciences. We identified three interlinked and mutually enforcing dimensions that can inform the way we conceive of and push forward sustainability transformations: ethically-informed practices, relational response-ability, and emotional awareness. Each dimension provides valuable insights to grasp relationality and caring for the Earth in radical transformational ways. The framework offers a novel analytical perspective regarding the inner dimension of transformative change. We concluded the discussion by highlighting a set of epistemological and methodological approaches, inspired by care ethics and practices, which can further reinforce participatory work on the ground that aims to shape sustainable futures.

Future studies could critically examine the ways in which care talk and care practice can be a vehicle of transformation. Integral to doing so is the need to bring more in-depth empirical accounts of practices of caring for both human and more-than-human, at the place-based level, but also by critically assessing how universities and research institutes can be *loci* of transformative caring research practice. Moreover, attention should be given to the role of the institutions and the collective in scaling up relational responsibility and endorsing both the burdens and joy of care work. The risk, indeed, when discussing the inner dimension of change, is to place considerable attention on the role of the individual, ignoring in so doing structural issues of justice and conditions of inequality. Finally, the framework presented can also be applied to further explore ways in which care offers a rupture with existing discourses, favoring alternative narratives celebrating a relational view of life on Earth.

Chapter 5

Caring *in*, *for*, and *with* nature: An integrative framework to understand Green Care practices

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'This is really why I made my daughters learn to garden – so they would always have a mother to love them, long after I am gone'
Robin Wall Kimmerer (1953-)

Abstract

Green Care practices have received increasing scholarly attention in the last decade. Yet, most studies are concerned with the aspect of human well-being, with less attention given to other caring dimensions and their relation to sustainability. This paper aims to contribute to an integrative understanding of Green Care, by proposing an analytical framework inspired by the ethics of care literature and, in particular, Tronto's five stages of caring (about, for, with, giving, and receiving). The goal is to use a relational lens to appreciate the diverse caring practices and their potential in three Finnish cases studies - a care farm, a biodynamic farm, and a nature-tourism company. We apply the framework on data gathered during three years through an in-depth participatory action-oriented research. Findings show that: a) Green Care practitioners share sustainability concerns that go beyond human wellbeing, and that translate into practices with benefits for the target users, wider community, and ecosystems; b) caring is a relational achievement attained through iterative processes of learning. Two concluding insights can be inferred: a care lens sheds light on practitioners' moral agency and its sustainability potential; in-depth creative methods are needed for a thorough and grounded investigation of human and non-human caring relations in Green Care practices.

Keywords: Green Care; ethics of care; relational approach; integrative framework; participatory-action research; place-based sustainability; Finland.

Introduction

Green care is an umbrella term used to describe a wide range of activities that contribute to different social needs through the conscious and active contact with green environments. For centuries, nature has been used in Europe to promote health and wellbeing (Barnes, 2008a). Yet, Green Care has emerged as a distinctive and fairly new field of study over the last fifteen years, thanks in particular to EU-(co)funded research, development and networking projects[10]. The concept of 'Green Care' is not used consistently, however, and practices on the ground vary greatly. Examples include social and care farming, therapeutic horticulture, animal-assisted interventions, and nature-based recreation and therapy. Different aspects and priorities are pursued depending on the activity. These include health and wellbeing, social inclusion, and education for the 'personal development' of particular target groups, as well as pedagogical and recreational benefits for people of all generations (Sempik et al., 2010).

Two main perspectives have dominated the scientific scholarship in this field so far, focusing either on users or on providers of Green Care services. In the first instance, studies have been investigating its effectiveness in contributing to well-being and social reintegration for different target groups (Elsey et al., 2014; Rappe, 2005). The second perspective has been studying Green Care as a tool for agricultural innovation and income diversification in rural areas, focusing on the entrepreneurial efforts of practitioners in diverse contexts of action (Joost Dessein, Bock, & De Krom, 2013; Hassink et al., 2013; Moriggi, 2019). Research has frequently focused on the practice of human actors looking after other people, with most attention given to human and material aspects of Green Care. Conversely, questions of cultural appreciation, community regeneration, and ecological conservation, have only marginally been touched upon in Green care literature (García-Llorente et al., 2016; Guirado et al., 2017).

Several scholars have called for additional perspectives and more integrative approaches to the field. Firstly, to check both overly critical and idealistic viewpoints in order to contribute to the scientific credibility of the field (Di Iacovo, Moruzzo, Rossignoli, & Scarpellini, 2016; García-Llorente et al., 2018). Secondly, to assess the benefits of Green Care that are not directly related to health, of e.g. socio-economic and environmental nature (García-Llorente et al., 2018). Thirdly, new perspectives are needed to explore the spill-over effects that Green Care might have in terms of sustainable place-based development (Di Iacovo et al., 2016; Guirado et al., 2017). Notably, a recent study has considered social farming's potential to deliver ecosystem services that sustain the management of rural landscapes (García-Llorente et al., 2016). Other scholars claim that direct exposure to nature and animals might trigger an enhanced care for the environment (Sempik et al., 2010), or that Green Care might promote sustainable lifestyles and encourage a re-appreciation of place-based resources (L. Horlings et al., 2020; Moriggi, 2019).

10 We refer in particular to the European COST Action network 866 'Green Care in Agriculture' ("Green Care in agriculture. Health effects, economics, and policies.," 2007).

This paper aims to contribute to the debate around the sustainability impact of Green Care by unravelling the multiple care practices Green Care offers. Our goal is to elucidate the values and motives that drive Green Care, their expression in concrete practices, and the outcomes they produce. Drawing from feminist ethics of care literature, and place-based approaches to development, we develop a relational approach to caring. This approach provides a lens to understand caring beyond the provision of well-being services, and, rather, as a way for people to express who they are, and who they wish to be, through everyday interactions with both the human and non-human world (Horlings, 2015; Puig de la Bellacasa, 2010; Tronto, 2013; Tschakert & St.Clair, 2013) The underlying assumption is that caring practices are not only directed towards fellow human beings, but also include activities that promote social inclusion, social justice, and sustainability and are, therefore, inherently transformative (Moriggi, Soini, Franklin, et al., 2020; Tschakert & St.Clair, 2013).

Tronto (Tronto, 2013), a prominent figure in care ethics, distinguishes five stages and related moral principles in care: *caring about* (attentiveness), *caring for* (responsibility), *care giving* (competence), *care receiving* (responsiveness), and *caring with* (reciprocity). Departing from this framework, we scrutinize the care practices offered in three cases of Green care in Finland: a care farm, a biodynamic farm, and a nature-tourism company. Our study is guided by the following research questions: 1) How can we use Tronto's theoretical approach to develop an analytical framework that offers a more integrative understanding of Green Care practices? 2) What kind of insights does this framework reveal about the different dimensions of caring in Green Care?

With the three case studies, we also provide a deeper understanding of Green Care practices in Finland, which is a sparsely covered context in English-written literature, even though it is well advanced in many respects (García-Llorente et al., 2018; Moriggi, 2019). Findings stem from a process of co-production of knowledge involving research participants in successive rounds of iterative learning over the span of three years, utilizing the application of a variety of action-oriented, participatory methods. The study is part of a broader Ph.D. research project. Inspired by the tenets of place-based, transdisciplinary sustainability literature, the project aimed to engage Green Care practitioners in processes of in-depth reflection and capacity-building, shedding light on their deliberative agency, i.e. what people appreciate, feel responsible for and are willing to commit to in the context of their own place (L. Horlings, 2015; Moriggi, Soini, Franklin, et al., 2020; Tschakert & St.Clair, 2013). The bulk of empirical data was gathered through semi-structured interviews with both Green Care practitioners and their networks of stakeholders. Additional data were collected through co-creation workshops, participatory mapping, participant observation, a Photo-voice project, and a film-making project (see Section 4 for a detailed explanation). Data analysis was carried out through extensive qualitative coding, using a semi-grounded approach.

The next section of the paper first briefly introduces the theoretical foundation of the research, explaining why a relational approach, grounded in the ethics of care literature, can inform the

study of Green Care practices. Following this, we present Tronto's model of caring processes, the analytical framework derived from it and its operationalization into empirical research. The third section highlights the selection of the case studies followed by a detailed explanation of the methods of data collection and analysis. In section four we present the results of the analysis of empirical data. In the discussion, we reflect on what the application of our analytical framework has revealed, and what novel insights into Green Care it provides. We conclude by identifying directions for further research.

Towards an ethics of care-inspired approach to Green Care practices

A relational approach to Green Care practices

To make the investigation on Green Care practices more encompassing and integrative, we propose a relational approach, highlighting the web of connections and processes that enmesh people and their surroundings (Tschakert & St.Clair, 2013). Feminist perspectives on the social and ecological transformations of the economy have long used relational approaches to uncover alternative possibilities (Gibson-Graham, 2006) and bring dismissed or marginalized experiences to the fore (Puig de la Bellacasa, 2010). Their contributions have affirmed the important role that care work and natural resources play in sustaining our life-supporting systems (Schildberg, 2014). Feminist care ethicists have criticized the dominant production-oriented framing of care and nature which assesses (and undervalues) them in utilitarian terms. Instead, they propose to depart from the connection and interdependence between the human, non-human, and more-than-human worlds[11] (Puig de la Bellacasa, 2015; Singh, 2017; Wells & Gradwell, 2001).

At the level of the everyday, relationality and interdependence are manifested through tangible practices enacted in particular times and spaces (Moriggi, Soini, Franklin, et al., 2020). Indeed, care is:

> 'A species activity that includes everything we do to maintain, continue and repair our "world" so that we can live in it as well as possible. That world includes our bodies, ourselves and our environment, all of which we seek to interweave in a complex, life-sustaining web' (Tronto, 2013, p. 19).

From an ethics of care lens, caring subjects are thus responsible humans, capable of committing to maintain and regenerate relations, with a forward-looking orientation to the future: their commitment is expressed in both ethical principles and tangible doings (Puig de la Bellacasa, 2010). Caring is not restricted to human interactions, but includes more-than-human subjects and non-human objects. It also goes beyond the idea of stewardship, where natural resources

11 An in-depth exploration of feminist contributions to care debates (drawing from first and second waves ethics of care literature) and its potential to inform transformative sustainability paradigms goes beyond the scope of this paper but may be found in (Moriggi, Soini, Franklin, et al., 2020).

are something to 'be in charge of' or to 'manage': rather, it understands humans as attentive members of a living web, to which needs they respond to through affective and curious interactions[12] (Kimmerer, 2014; Singh, 2017). Thus care is not an unilateral individualistic activity, but rather an *inter*-activity, located *between* subjects (Conradi, 2015), who shape the caring relation in a constantly ongoing process (Tronto, 2013). In this interaction, possibilities for change arise, for the transformations of how humans relate to each other and to places, and in doing so, construct new subjectivities (Moriggi, Soini, Franklin, et al., 2020). This raises the importance of the inner dimension of sustainability (Horlings, 2015), the role of values, beliefs and mindsets, that determine not only the possibility to *act* differently, but also to *wish* differently.

The need to shed light on human intentionality, and subjects who enact alternative ways of relating, is stressed by feminist care scholars (Gibson-Graham & Roelvink, 2009; Schildberg, 2014) and by scholars investigating place-based development (Moriggi, 2019). The latter sense an urgent need to explore how people's engagement in place-based everyday practices produce and reflect human and non-human interactions and connections (L. Horlings et al., 2020; Tschakert & St.Clair, 2013). An ethics of care lens has already been applied to study place-based sustainability initiatives, such as permaculture (Puig de la Bellacasa, 2010) and Community Supported Agriculture (Wells & Gradwell, 2001), but is rarely applied to Green Care practices. Investigating Green Care practices from an ethic of care perspective will both deepen our understanding of Green Care and advance the relational turn in sustainability sciences.

An ethics of care analytical lens to study Green Care practices

Following the model outlined by Tronto (Tronto, 2013), caring is expressed in two ways: by means of ethical principles, and through embodied practices. She captured this duality in the five stages of the caring process, with each stage represented by a practice that is motivated and activated by a moral principle. A visual representation of the five stages is provided in Figure 1.

The caring process starts with *caring about***,** fueled by the principle of *attentiveness*. Caring involves 'attentive communicative contact' (Conradi, 2015, p. 119) (p.119), the capacity to notice unmet needs around us, suspending self-interest, and adopting the perspective of others. The possibility of caring is not only limited to what is close to us, or to our next of kin, but also to strangers and distant others. Recognizing mutuality can activate this internal state of readiness to care about. The recognition of unmet needs may lead to the second stage in the caring process, *caring for*. Attention may become intention – to act upon those needs - which eventually coalesce into action (Kimmerer, 2014). This stage is triggered by a feeling of

12 For further reading on feminist relational more-than-human thinking, see for example: (Braidotti, 2019; Haraway, 2016).

responsibility. Within the ethics of care, responsibility is not seen as an obligation, or as the ex-post accountability for what has been done. Rather, it is the result of a practice of relationality, and thus can be best framed in terms of *response-ability*: the more we engage in relations, the more we feel both responsible and able to respond to the needs previously noticed (Moriggi, Soini, Franklin, et al., 2020). The third stage involves the actual work of care, *care giving*. Care work is not just a technical exercise, but rather a moral practice requiring *competence*. To make sense of the mutual reciprocal relationship established between the two sides of the caring spectrum, Tronto adds two more stages. *Care receiving* is the fourth one, animated by the value of *responsiveness*, which presupposes that those being cared for are entitled to respond to the care given, commenting on its quality and effectiveness. Through this process, new needs may be acknowledged, after which the care process continues and a new care cycle begins. However, not all care receivers may be able to respond, as the care process can be asymmetrical in nature. Tronto, therefore, includes *caring with* as the fifth stage, encompassing the entire care process.

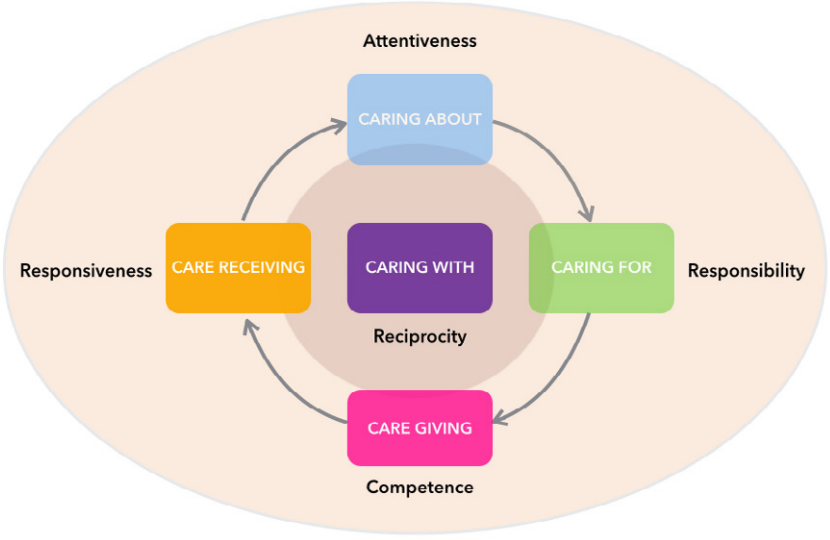

FIGURE 5.1 | Five stages of caring and related moral principles. Inspired by Tronto (2013).

Care practices should be designed and implemented in such a way that recognizes care receivers' dignity and knowledge, and, additionally, creates the necessary conditions for empowerment through processes of learning that may benefit all (Barnes, 2008a; Faden et al., 2013). Several principles align with this stage, including plurality, communication, trust, and respect, which Tronto summarizes with the concept of *solidarity*. Another value underlined in the ethics of care literature is *reciprocity*. This alludes to the mutually beneficial relationship made possible by an attitude of attentiveness, respect, and solidarity, and recognizes care receivers as active agents in the caring process. Moreover, it implies that caring needs and

practices must be consistent with democratic commitments to justice, equality, and freedom for all (Tronto, 2013). Indeed, caring is not a process confined to the walls of a therapeutic space. It is rather a transparent process of learning and empowerment that may trigger virtuous spill-over effects for society at large and benefit other care givers and care receivers over time (Faden et al., 2013).

Two other studies have applied Tronto's framework to Green Care, a theoretical reflection by Barnes (Barnes, 2008a) and a study by Hassink et al. (Hassink, Moriggi, Senni, Hense, & de Moor, 2020) (to which the first author of this paper is a contributor). Yet, neither of the two studies engage with all five stages of caring, or investigates Green Care practices or practitioners' experiences in depth, leaving the analytical potential of Tronto's framework rather unexplored. This study aims to survey this potential more fully by operationalizing Tronto's theoretical approach into an analytical framework for the study of Green Care practices (Research Question no.1). We do so by deriving a set of guiding questions for each stage in the caring process. They are empirical questions that will help us to explore which new insights into the multidimensionality of Green Care this framework generates (Research Question no.2). This, in turn, will allow us to evaluate the usefulness of the conceptual framework. The empirical questions are presented in Table 5.1 and summarized below.

TABLE 5.1 | An ethics of care-inspired analytical framework for Green Care practices.

	Stage in caring process	Moral principle	Empirical question(s)	Analytical focus in the data
1	CARE ABOUT	*Attentiveness*	What are Green Care practitioners attentive to? What are the concerns they care about?	Motivations and concerns, with both personal and societal relevance.
2	CARE FOR	*Response-ability*	How are practitioners able to respond to those concerns? What they do and for whom?	Practices implemented daily for target groups, for larger community and ecosystem.
3	CARE GIVING	*Competence*	How are practices implemented on an everyday basis?	Key ingredients, criteria, and ways of working.
4	CARE RECEIVING	*Responsiveness*	What mechanisms are in place for care receivers to respond to the practices of care?	Elements of design, assessment, and adaptation enabling receivers' responsiveness.
5	CARE WITH	*Reciprocity*	How are principles of reciprocity and mutual learning expressed throughout the process of caring?	Ongoing ways to foster reciprocity and mutual learning.

The stage of *caring about* precedes the actual practice of Green Care, and corresponds to the concerns and reasons, at both societal and personal level, that practitioners express when motivating their desire to engage in Green Care practices. Hence, we ask what Green Care practitioners are attentive to, and what concerns motivate their actions. The stage of *caring for*

relates to the actual Green Care activities, best exemplified in what practitioners do on a daily basis – both for target users and for the larger community and ecosystem – to respond to concerns and motivations identified in the previous stage. The following stage of *care giving* points at the how, namely the specific ways in which practices are carried out, looking at core ingredients, criteria, and ways of working. The fourth stage, of *care receiving*, deals with the concept of responsiveness, and can be addressed by investigating what mechanisms are in place for care receivers to respond to the practices of care. The final stage in Tronto's model, *caring with*, is underpinned by the principle of solidarity or reciprocity. With reference to Green Care, we believe reciprocity best expresses the value and practice of establishing empowering learning processes beneficial for both sides of the caring spectrum and, possibly, for society at large. Thus we ask how principles of reciprocity and mutual learning are expressed throughout the entire process of caring.

Methods of data collection and analysis

Selection of case studies

In Finland, the concept and practice of Green Care has gained rapid popularity since its introduction in mid-2000. Since then, advocacy and capacity building efforts (i.e. training, communication, and networking) have been pursued via roughly 90 regional projects, aimed especially at developing the services, and their classification and quality standards.

With the support of the Green Care Finland Association[13], which has been gathering practitioners and researchers in the field since 2010, attempts have been made to classify the range of existing activities, and to facilitate their institutionalization (Soini, Ilmarinen, Yli-Viikari, & Kirveennummi, 2011). The process has come to favor a rather broad understanding of the concept of Green Care, inclusive of a variety of different nature-based services. Since 2017, practitioners can apply for a process of certification to obtain a quality mark in either one of the two typologies that currently qualify as Green Care practices: 1) *Nature care (Luontohoiva),* referring to a number of services mainly financed by the public sector, provided by health and social care professionals, and targeted at vulnerable groups; 2) *Nature empowerment* (*Luontovoima*), including goal-oriented services in nature-assisted wellbeing, education, and recreation, often purchased by private users (Luke & THL, 2017).

Research in Finland as well as elsewhere is still in its infancy: more studies are needed to explore the ways in which practices are delivered, and to identify the institutional and cultural barriers and carriers that can facilitate its development as a cross-sectoral innovation (Moriggi, 2019; K. Soini et al., 2011).

13 Green Care Finland. Available online: http://www.gcfinland.fi/in-english/ (accessed on 10 April 2020).

This study features three diverse cases of Green Care in Finland, representative of both *Nature Care* and *Nature Empowerment* typologies, which were selected after several visits to different Green Care practices located in Southern and Central Finland. In the end, a care farm, a biodynamic farm, and a nature-tourism company were chosen as cases for this study. The selection of case study sites was informed by our wish to include different sectors – namely, farming and tourism – that comprise very diverse activities. The cases are also at different stages of certification towards obtaining the quality mark. At the same time, all three of the case studies are small ventures, with the core management in the hands of family members, and with the funders engaged in full-time care practices. There were also more pragmatic reasons. The practitioners could communicate fluently in English, were interested to be part of the research project, and their locations were accessible by public transport. Below we provide a brief description of the three cases. More detailed information is presented in the Results section and as Appendix (Table A5.1).

The care farm is located 25 km away from the city of Tampere, and engages a group of around 15 mentally disabled customers in both husbandry and farming practices. It provides health and social care services in partnerships with local municipalities. One of the two founders coordinates all the operations on the farm, which is supported by a highly specialized staff, knowledgeable in nursing and social care, as well as animal husbandry and gardening. The farm has recently obtained the *Nature Care* quality mark.

The biodynamic farm sells organic vegetables to nearby schools and restaurants, at the outskirts of Helsinki metropolitan area. Over the years, it has hosted projects aimed at social inclusion and work reintegration of long-term unemployed people, funded by the local municipality and a non-profit association. It also regularly engages in pedagogical activities. Its practitioners have not applied for any formal certification so far, but are involved in long-term plans to build a care home for elderly people on the farm in the future.

Finally, the nature-tourism company, based in the city of Tampere, has offered a wide range of services to private customers, in nearby lakes and forests, for 25 years. Activities include rental and training services for outdoor sports, team-building and recreational programs, and to a lesser extent, therapeutic activities. The company was one of the first in Finland to obtain the *Nature Empowerment* quality mark. The company's main founder was engaged in advocacy and development work in the early years of the Green Care Finland Association.

Methods of data collection

The empirical work of this study is based on in-depth qualitative research carried out during three years of continuous engagement with the three enterprises, as portrayed in Figure 5.2. The engagement formed part of a Ph.D. research project informed by place-based, transdisciplinary sustainability science, enriched by principles and techniques of Participatory Action-Research (Franklin, 2018; Horlings et al., 2020; Reason & Bradbury, 2008b). In line

with these traditions, the collaboration aimed at not only gathering relevant data, but also at fostering a process of critical reflection and capacity building in collaboration with the people involved, appreciating assets and capacities, rather than focusing on problems and deficiencies (Gibson-Graham & Roelvink, 2009; Reason & Bradbury, 2008b). To achieve these goals, all methods were designed and implemented following principles such as inclusiveness, transparency, reflexivity, and empathy.

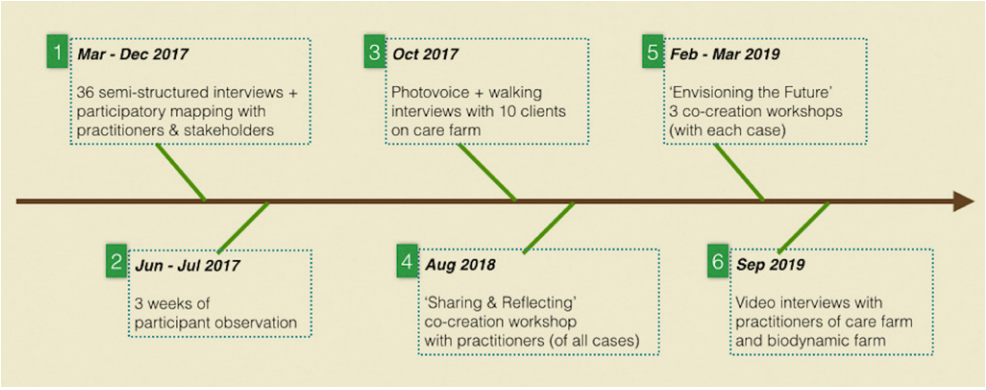

FIGURE 5.2 | Stages of data collection and related methods.

In the first stage of fieldwork, a total of 36 semi-structured interviews were used to gather in-depth information about each case, along with participatory mapping exercises that supported the process of reflection. Interview respondents included the founders and main practitioners of the three cases, and their core staff (14 people). These conversations proved extremely valuable to get a thorough understanding of how Green Care practitioners make sense of what they do. Participants were not directly asked about issues of care. Rather, they were stimulated to talk about their daily activities and interactions, as well as to reflect about the development of both their practices and their places, tapping into past experiences and future aspirations. Particular importance was given to their perceptions, values, and emotional involvement with both humans and non-humans. To gather multiple perspectives on each Green Care case, it was deemed useful to combine such accounts with additional perspectives from 'outside' collaborators. To this aim, the founders of each enterprise were asked to list a number of 'external stakeholders' that they had been in close contact with over the previous years. These included 32 people, among which local civil servants, employees in the research and education sector, private enterprises, and social organizations that either concurred to the provision or use of the Green Care services in question. In the end, 22 people accepted to be interviewed.

Additionally, one entire week per case study was dedicated to participant observation, in order to engage first-hand with participants' real-life context, observing the interactions of people and their environments, and looking at practices performed in places. The same year, a

group of ten men with mental disabilities, working and living on the care farm, were involved through the use of Photo-voice, a method particularly suited to engage vulnerable individuals in explaining their reality using photos as visual aids (Quinn & Vrieze de, 2019). Photos served as prompts to discuss what customers both value and dislike about their daily routine on the farm, in order to give voice to their experiences as care-receivers.

After 18 months of research the main practitioners of the three case studies (nine people) were involved in the first co-creation workshop, called 'Sharing and Reflecting'. In the spirit of iterative mutual learning, the workshop served to present and discuss the preliminary results and conceptual frameworks of the research - including Tronto's five stages of caring. Participants' reflections validated and enriched the researchers' interpretations of the data. During the workshop, visual materials were used to facilitate the discussions and arts-based techniques helped to foster inclusive team-building and invite lateral thinking around the issues at stake (Franklin, 2018; Reason & Bradbury, 2008b).

In the Spring of 2019, three more co-creation workshops, called 'Envisioning the future,' were organized to support practitioners in elaborating long-term visions about the development of their practices and places. During the workshops, a variety of analytical techniques and visual materials - inspired by system thinking and design thinking - were employed to map both present realities and future possibilities. Moreover, visioning arts-based techniques were used to invite participants to tap into their sustainability mindsets, embracing perspectives of both human, non-humans, and more-than-humans, when imagining the future of their places (Pearson et al., 2018).

Finally, additional data was gathered during a film-making project that involved only two of the three farms for dissemination purposes. Five practitioners were interviewed again during the process, and asked to focus on the societal value of their practices and places, and to reflect on benefits and challenges of being part of participatory research.

Figure 5.3 provides a visual documentation of some of the methods described above.

FIGURE 5.3 | Methods of data collection. From left to right: Semi-structured interview and participatory mapping; 'Sharing & Reflecting' workshop; Participant observation; 'Envisioning the future' workshop.

Methods of data analysis

Transcriptions of the data were analyzed with the help of Atlas.ti, while departing from a semi-grounded theory approach. In the first round of analysis, only the semi-structured interviews were considered. The transcriptions were coded using three overarching frames: diagnostic, prognostic, and motivational frames. Although somehow complementary and overlapping with Tronto's model of caring, they were considered useful to unpack the interviewee's cognitive process of individual sense-making, while maintaining a more neutral approach to the data (less influenced by the theoretical framework). Diagnostic frames were used to trace the causality of the problem, in this case they were the societal issues that participants would refer to when motivating their involvement with Green Care practices. Prognostic frames revealed what actions were done to solve the problems identified. Motivational frames highlighted the rhetorical schemas and inspirational discourses that people would use to explain the value and rationale of their practices.

Following this, the literature was reviewed once again, and the analytical framework was revised and refined based on the insights gained during the first round of coding. In the second round of analysis, all text (both from the interviews, and from the other phases of

data collection), was inserted into Atlas.ti. In this phase of coding we used the five analytical questions derived from Tronto's model. This allowed a more articulated and detailed picture of the various dimensions of caring.

Results: Towards a comprehensive understanding of Green Care practices

This section presents the findings from our analysis applying Tronto´s five stages of caring (see Figure 5.4). The findings are organized for semantic coherence, using the analytical framework as guidance, and are presented accordingly with the observed patterns that emerged from the data analysis. We make ample use of quotations to give a vivid account of the everyday experiences and their significance. These quotations are placed within brackets, indicating the source[14] and method[15] used. The full list of research participants, divided per case study, is provided as Appendix in Table A5.2[16].

Care about: What are Green Care practitioners attentive to? What are the concerns they care about?

The initial stage of the caring process is when unmet needs around us are noticed, suspending self-interest and adopting the perspective of others. Our sample of Green Care practitioners is attentive to a variety of societal and personal issues, concerning four main areas: *social inclusion, human-nature disconnection, urban-rural disconnection,* and *aspirations and passions.*

Social inclusion is a common concern across all practitioners. In the care farm, the commonly-accepted portrayal of disabled people as a monolithic group is of particular concern, as it fails to appreciate the individual's diverse needs, capacities, and aspirations (Int. P11). This resonates with the biodynamic farm practitioners' assertion that a variety of audiences should be included: 'It's somewhere in our principles to welcome everyone, regardless the background or abilities' (V-Int. P19). Attention to vulnerable groups is also key to the work of the nature-tourism company, but is framed as guaranteeing 'everyman's right to nature' regardless of age, physical conditions, or other factors (Int. P1, P3). In fact, this right is institutionalized in the Finnish law, which enables everyone to access and enjoy outdoors pursuits with few restrictions (Ministry of the Environment, 2016).

14 With 'P' standing for practitioner, 'S' for external stakeholder, and 'C' for the disabled customers involved in the Photovoice project.

15 'Int.' stands for semi-structured interview; 'V-Int.' for video interview; 'Sha-workshop' for 'Sharing and Reflecting' co-creation workshop; 'Fut-workshop' for the 'Envisioning the Future' co-creation workshops; 'Photo' for 'Photovoice'.

16 All subjects gave their informed consent for inclusion before they participated in the study. The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of the Wageningen School of Social Sciences.

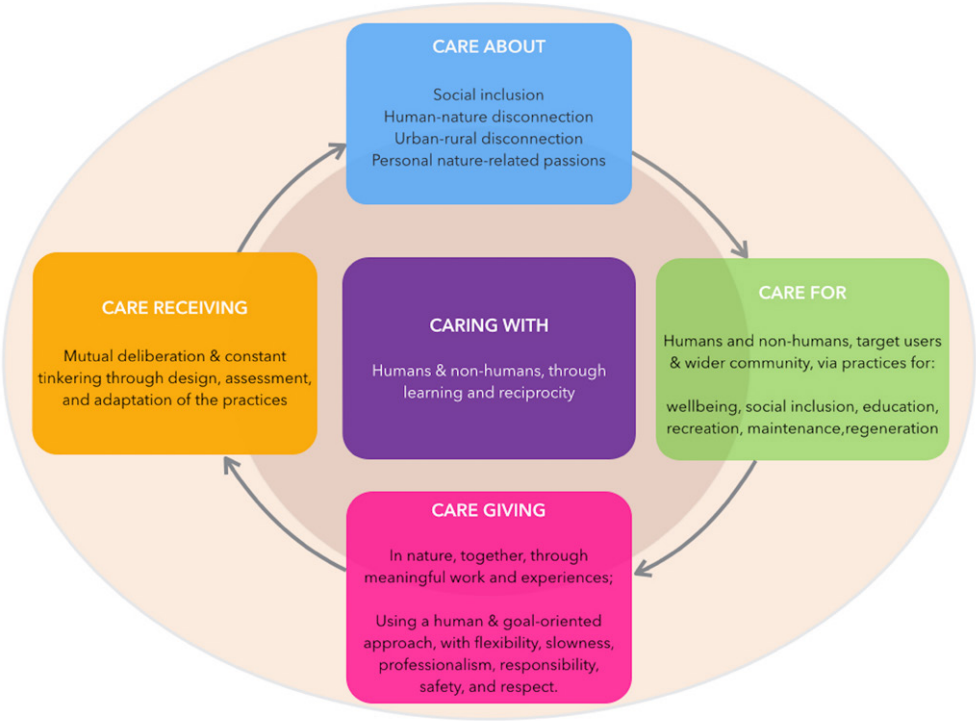

FIGURE 5.4 | Empirical findings: Green Care practices across five stages of caring.

Secondly, most practitioners express deep preoccupation with the *human-nature disconnection* that results, in their view, from an increasingly urbanized model of socio-economic development (Int. P1, P13, P19). In particular, they fear that future generations may lack the ability to 'know' and 'understand' natural ecosystems and the possibilities they offer (Int. P1, P3, P11). They also refer to the detrimental effect on human wellbeing that such disconnection yields (Int. P18): 'If you don't understand the nature, and if you don't want to protect it, and if you only want to consume, for yourself, we, mankind, won't exist very long' (Int. P1).

For the practitioners of the two farms, these concerns are closely related to their worry about *urban-rural disconnection* and the consequences that emerge from it, such as food illiteracy and loss of traditional rural landscapes. 'I would like people to notice the difference in how you can farm, how it affects the quality, and how important the social aspect is, that people have a connection with the surroundings and the goods they consume', stated one practitioner (V-Int. P18). Providers often point at society's inability to recognize the mutual relationship of urban and rural areas, and the cultural loss this causes (Int. P11; V-Int. P17): 'We are trying to nourish the landscape and keep this surroundings inhabited so that it's also some kind of cultural landscape, like a rural landscape, and you lose that if you don't have grazing animals. And if you don't care about the nature, it will disappear' (V-Int. P11).

As far as the personal sphere is concerned, the professional pathways of all practitioners are geared towards the realization of *personal nature-related aspirations* and *passions*. The founders of the care farm said that they were able to realize their long-standing dream of living on a farm by way of the Green Care practices as they gave enough financial stability to maintain the place (Int. P10, P11). As one of them confessed, 'This is not a 9-5 type of work. It's actually not a work, it's a way of life' (V-Int. P11). Love for animals, for countryside environments, and for community building, is shared by the whole staff at the care farm (Int. P12, P13, P14). In the biodynamic farm, the practice of Green Care provides an avenue to express anthroposophical principles valued by practitioners, as well as their efforts to 'save the farm' from urban development projects (Int. P17) within the Helsinki metropolitan area, which could transform the area it into a residential neighborhood. Finally, in the case of the nature-tourism company, both main practitioners and their staff are passionate about outdoors and nature sports, and longed for challenging, versatile and meaningful jobs (Int. P1, P2, P3, P4).

Care for: How are practitioners able to respond to those needs & concerns? What they do and for whom?

In Tronto's model, attentiveness translates into action in the phase of *caring for*. Ideally, people are now ready to respond to needs of care through tangible practices. Data collected show how practitioners act upon their concerns through a variety of practices.

Social inclusion is pursued in different ways. The care farm fulfills this need via the main Green Care services it provides: structured therapeutic and well-being interventions offered to a group of mentally disabled people. These include on-farm working tasks and an assisted living unit that permanently hosts two-thirds of their customers. Moreover, the farm has launched a special project called 'mobile unit', which allows some participants to be involved in simple voluntary chores in the neighboring villages. This project has two goals: to better meet the needs of clients who cannot sustain a regular daily routine, and to connect the farm with the wider community, while also breaking down preconceptions about disabled people (Int. P11). In the biodynamic farm, social inclusion is fostered by welcoming people from all walks of life, including marginalized individuals, to live and work temporarily on the farm. This is done via both the WWOOF program and informal connections (Fut-workshop). Past ad-hoc Green Care projects were aimed at including vulnerable groups (e.g. long-term unemployed), with professional care takers hired to look after the participants. Furthermore, children with special needs have been visiting the farm for annual pedagogical activities. In the case of the nature-tourism company, attention to social inclusion is expressed in their commitment to design outdoor sports equipment for disabled customers, in collaboration with a local NGO (Int. S6, S7). Moreover, their service package includes guided tours for severely disabled people - in partnership with a local transportation company specialized in this field - as well as visits to elderly care homes (Int. S11, S12).

To respond to concerns for *human-nature disconnection*, all of the three cases engage in pedagogical and recreational activities. This is mostly evident in the nature-tourism company, as the leisure and learning components of all activities take place in natural environments. In addition, the company is regularly hired to provide trainings, mostly for university students and firms' employees, so that they 'can find their own way into nature' (Int. P1, P3). The underlying idea is that by experiencing joy and self-efficacy in forests and lakes, the desire to access and care for those places will flourish (Int. P1, P5). Moreover, there is a strong commitment among the owners and the staff of the company to increase safety awareness among amateurs practicing outdoors sport, by providing accurate information about the conditions of ice, water, wind, etc. through their social media channels on a daily basis. This helps to attract potential customers and at the same time is perceived by practitioners as integral to their ethical commitment to defy 'fake news' and to guarantee wide access to nature all year long (Fut-workshop). Both farms are also very active in pedagogical activities and participate in the training of students, teaching of school children, and organizing recreational events for wider audiences. Moreover, the biodynamic farm, through the WOOF program, offers several groups of volunteers the opportunity to learn farm work, while being part of a community and a safe inclusive space: 'The thing that I like the most is the reconnection of people, they have a direct contact with the surroundings and they find that they can make a difference, […] they can build their own world, and be a part of it' (Int. P18). With regards to future plans, practitioners would like to strengthen and enlarge all the activities concerned with human wellbeing, recreation, and learning. Moreover, they hope to nurture ecosystem wellbeing and the flourishing of multispecies. In fact, especially for the farms, the two things are often envisioned as complementary and equally necessary (Fut-workshop).

This leads to the concern about *rural-urban disconnection*, which is addressed in the daily activities on both farms. At the moment, food production guarantees most of the income for the biodynamic farm, via gardening and animal husbandry (used for manure only). Vegetables are sold to local restaurants and schools, and at a self-service on-farm shop. Moreover, for several years, the farm owner has been negotiating with the local municipality to preserve the land from urban development. The hope is to maintain the core farming activities while expanding caring, recreational, pedagogical, and residential opportunities (Fut-workshop). In the case of the care farm, gardening is mostly done for self-consumption and to ensure healthy diets for the farm inhabitants. Sheep are mostly raised for grazing and, to a lesser extent, for local lamb production: when meat is sold, buyers are invited to come to the farm to see where and how it is produced (Int. P13, S16). Moreover, practitioners periodically visit local schools, to talk about rural livelihoods, particularly sheep shearing and wool-making practices (Int. P11). Finally, both farms are engaged in landscape maintenance and preservation - with special attention to traditional Finnish customs and aesthetics - as well as to biodiversity conservation and regeneration. As stated by one practitioner: 'We have put a lot of effort and work to create this place as it is now, so that's why there is this special relationship with this

place' (Int. P10). The manual and affective work of place-shaping is constant, and makes both farms unique beautiful environments for both insiders and outsiders (Int. P11, P18, S2, S16).

All the above mentioned activities speak to the *personal nature-related aspirations and passions* of practitioners. Indeed, services are designed and provided according not only to the values and concerns listed above, along with an attention to market demands. Personal interests and the skills of the staff are also crucial in shaping the provision of services in all three cases (Int. P3; P4; P6; P12; P18).

External stakeholders are often unaware of the variety of activities practitioners engage with. Moreover, they mostly value the well-being aspects of the services offered in the three enterprises, and give less importance to other caring dimensions, such as the pedagogical and environmental ones (Int. S5, S11, S21, S15).

Care giving: How are practices implemented on an everyday basis?

This question is concerned with the specific ways in which practices are implemented, along with what Tronto refers to as *competence,* encompassing both technical skills, and the moral behavior underlying the work of caring (Tronto, 2013). Two patterns emerge from our data in this respect: a) a core set of basic ingredients needed to provide good quality Green Care services; b) a shared list of criteria and ways of working.

Key ingredients

Data reveals that the most important ingredient in Green Care is to be fully *present in nature*. 'Experiencing nature', 'feeling nature', 'connecting to nature', and 'caring about the environment' are recurrent mottos employed by practitioners and stakeholders across all cases. Natural elements are not only seen as triggering positive sensorial and neurological experiences, but also generating sentiments of worthiness and empowerment. Caring for the animals is a core dimension of this process, a phenomenon that was highlighted by the customers working in the care farm (Photo. C2, C4, C6, C7, C10). Engaging with wilderness is deemed equally important: 'Nature, the forest, it accepts you as you are', said one practitioner at the biodynamic farm (V-Int. P19). The latter element emerged even more clearly in the case of the nature-tourism company, whose core mission is to ensure access to nature. 'Bringing people close to nature', by practicing outdoor sports in peri-urban natural spaces and protected areas – is often mentioned by the respondents (Int. P1, S12). In all three cases, the environments where caring activities take place reflect Finnish culture and traditions. Both of the farms are small scale, yet they are intrinsically diverse and well cared for, with a particular attention given to maintaining traditional buildings and small infrastructures. The salience of this aesthetic element features strongly in the data: beauty and harmony are recurrent themes in both practitioners' and stakeholders' accounts (Int. P10, P12, P18, P19, S2). For the nature-tourism company, the uniqueness of Finnish forests and lakes is a source of identity and pride, and something to share with others 'with joy' (Int. P1, P3, S4).

A second core ingredient emerging from the data is *togetherness,* fostered through team-building and collaboration (Int. P1, P3, P10, P13). In the care farm, inclusiveness and a sense of belonging are attained by making sure that 'everyone has their own meaningful role in it, and can get a feeling of worth[iness] and of being a purposeful part of this community' (V-Int. P10). Similarly, for many the biodynamic farm represents a home, a safe place of belonging (Int. P17, P19, S22): 'People have come from quite different backgrounds and they meet each other here and are like a family, eating and working together' (V-Int. P17). External stakeholders share the same feeling about both places (Int. S2, S16, S20, S21, S23). In the case of the nature-tourism company, togetherness is pursued by mixing up conventional roles, and creating an atmosphere of equality. This allows group bonding while appreciating different capabilities (Int. P1, P2).

A third crucial ingredient is to engage in *meaningful work and experiences*. For the farms, this means carrying out tangible tasks that are useful for the farms and/or the surrounding communities (Int. P10, P11, P18, P19, S13, S16, S21). This 'real' work is valued by many among the mentally disabled customers in the care farm, both because it allows them to grasp the usefulness of their work, and because it enables them to employ and strengthen competences gained through previous education (Photo. C1, C5, C7, C9, C10). In the case of the nature-tourism company, a meaningful experience implies physical exercise, as no equipment powered by motors is used. To be deemed meaningful, experiences must be 'unique' and 'memorable' (Int. P5, P6, S3, S8, S9), and they should enliven the senses and generate feelings of joy, fun, and peace (Int. P1, P3, P5, P18, S4, S10).

Criteria and ways of working

Care practices are never accomplished once and for all, as care work needs to be constantly attuned to the needs and capacities of those involved (Mol, Moser, & Pols, 2010). All of the case studies demonstrate a *human-oriented approach*, which goes beyond a customer-oriented one, as it is driven by a desire to enable customers' capabilities and to do more than just satisfying their demands (Fut-workshops). *Flexibility* is inherent in this way of working–something that both care farm and nature-tourism company are well-known for (Int. P1; P12; S5; S16). As stated by one practitioner, 'We want to provide the best possible care and working methods, to suit each and every individual' (V-Int. P11). The biodynamic farm also offers a variety of activities to ensure that 'everyone can find something they are able to do' (Int. P19). A human-oriented approach goes hand in hand with the idea of *slowness.* Indeed, care-giving often implies that priority is given to a deep engagement with both humans and non-humans rather than efficiency: 'When trying to be very efficient, someone is paying for it, with too high a price, maybe the environment, or the people' (V-Int. P19).

While valuing flexibility, practitioners design and implement interventions with a conscious rationale and method, namely a *goal-oriented approach* (Int. P10, P18). This is enabled by the high-level expertise of practitioners and their staff, most evident in the care farm and nature-

tourism company (Int. P1, P2, P4, S4, S10, S14): 'We have a workforce that varies in profession and in background and everybody brings in their know-how, and that's how the common capabilities and resources are formed' (V-Int. S10). According to interviewees, a vast array of skillsets is also found on the biodynamic farm, but more professional figures might be needed, if the site scales up its Green Care service provision (Int. S19, S20, S22, S23). *Professionalism* is often coupled with passion and 'working with the heart', something deeply valued by stakeholders and an identity trait of all practitioners (Int. P11, S5; Sha-workshop).

All the above is complemented by a deep sense of *responsibility* towards those involved. Practitioners are aware of the importance of guaranteeing participants' wellbeing and *safety* at all times (Int. P4, P5, P13, P17, P19, S13). This includes avoiding contact with poisonous plants, and using animals that are of mild temperament and of reasonable size. Apart from human safety, *respect* for nature ecosystems and for the wellbeing of plants and animals is very evident in practitioners' narratives. In the case of the farms, this is guaranteed by adhering to organic and biodynamic values and standards (Int. P13, P17, P19), including reducing animals' stress and suffering, and practicing gratitude, as evidenced by the following quote: 'We should appreciate their offer, and, if we have to take the life from the sheep, that is our responsibility to utilize the maximum amount of it' (Int. P11).

For the nature-tourism company, respect for nature includes learning how to be in contact with the elements, understanding one's own limits, and enhancing one's own resourcefulness. Finally, practitioners explain the importance of contemplation and relationality, for instance by inviting customers to pause and listen to the sounds of the forest during a guided visit (Int. P3, P4).

Care receiving: What mechanisms are in place for care receivers to respond to the practices of care?

Tronto's model endorses the idea that the practice of caring is not a matter of giving something to others who may passively receive it. On the contrary, a lot of care work is actually done by care receivers (Mol, Moser, & Pols, 2010). Based on this premise, guaranteeing participants' responsiveness is key for practitioners to ensure that needs are identified and acknowledged throughout the care cycle (Tronto, 2013). In our data, the role of responsiveness emerged along three main patterns: *design, assessment,* and *adaptation*[17].

As far as *design* is concerned, care farms choose and prioritize tasks based on the daily needs of the farm (Int. P10, P13). This is organized with an appreciation for each participant's skills and capabilities, and leaves room for deliberation, negotiation, and tinkering (Int. P13, P14). Other aspects of daily life are also discussed, such as weekly diets, hobbies, and social activities. In the biodynamic farm, where participants are not engaged in the long-term operations of the farm, there is less opportunity for the co-evolution and co-creation of roles and skills.

17 These aspects are foundational of iterative learning processes (Ramalingam, Wild, & Buffardi, 2019).

Yet, practitioners are equally attentive to individuals' capabilities and wishes (Int. P18, S21). As far as the nature-tourism company is concerned, services are proposed to customers and are adapted as per the requirement of the demand. During the activities, special attention is given to each person's capability, based on informal conversation and observation (Int. P2, S4).

In terms of *assessment*, the care farm has a variety of mechanisms in place to gather feedback on the quality and effectiveness of the care given. Practitioners patiently observe participants, getting constant feedback from them. Moreover, every day before lunch, a short 'daily talk' takes place, during which participants are free to share feelings, preferences, and thoughts with their supervisors (Int. P11, P13). Further feedback is provided by the network of stakeholders, in particular by customers' families, who often comment on the progress of their dear ones (Int. P11). Social workers responsible for these individuals at municipality level are engaged in the weekly communications, to monitor each person's wellbeing. Finally, formal evaluations on the progress of each participant are carried out yearly, and compiled in reports filed by the social workers (Int. P10). The biodynamic farm relies on more informal channels to gather feedback, including attentive observation, and exchanges of views during lunch time (Int. P17, P19). When ad-hoc programs with vulnerable groups were implemented, the funding agencies administered final surveys to the participants (Int. S2). The staff at the nature-tourism company, for example, seeks feedback through the observation of participants during the activities. Questionnaires have been administered in some cases, in collaboration with local health institutes, to gather data on the wellbeing effects of nature-based interventions. Moreover, customers give feedback on social media applications such as Trip Advisor and the like (Int. P1, P4).

Finally, practitioners explained that constant assessment is useful for *adaptation*. Through the feedback gathered, they can adapt and modify the design of the practices. This aspect features particularly strongly in the case of the care farm, perhaps as a result of a more structured goal-oriented approach to caregiving, and of the specific needs of its customers (Int. P1, P11, P18).

Caring with: How are principles of reciprocity and mutual learning expressed through the process of caring?

An approach to reciprocity, as explained in the theoretical part, entails that both sides of the caring spectrum are considered dignified agents in the caring process. It includes processes of learning that are beneficial for the caring relation itself as well as society at large (Faden et al., 2013).

Upon examining the three cases, it is easily observed that the idea of *learning* is deeply engrained in practitioners' mindsets and methods. Learning is described as something essential from various points of view. Firstly, it is crucial in the empowerment and capacity-building process of care receivers. One practitioner said: 'I always try to give a good experience to customers, making them learn in a good mood, and making them enjoy the nature so

much that they would come back to it' (Int. P3). Learning is crucial in customers' personal development: it encompasses acquiring new skills, understanding the purpose behind daily operations (Int. P13, P14), and gaining a sense of worth for the work done: 'The need to feel that we are important and that we are doing something with meaning is mandatory to all of us' (Int. P10).

Secondly, learning is essential for practitioners' own pathway of progress and improvement as care providers: 'We are learning on the way, and all the time gaining more trust among the clients' (Int. P10); 'We have learnt a lot. We have not become rich economically, but in experiences' (Int. P1). It is also useful as it triggers the processes of innovation needed to sustain the enterprise in the long term: 'The world around you is constantly changing, and if you are not able to follow the change, you found some day that you are obsolete' (Int. P11).

For practitioners, learning and *reciprocity* are deeply intertwined: 'You want to give a lot to the people who participate, so the people give to the farm, and it becomes this give and take relationship' (Int. P19); 'We really benefited from these exchanges of ideas. Meeting different people and talking with them, it's been really essential for the farm' (Int. P17). Learning and reciprocity are often practiced beyond day-to-day operations, through educational activities open to the wider community, and more or less spontaneous ways of knowledge sharing: welcoming visitors and prospective Green Care entrepreneurs on the farm; or engaging in advocacy and networking activities with other practitioners in the field. Motivation for this project was also taken from the desire of practitioners to advance the field of Green Care in Finland in ways that could be beneficial for society at large (Int. P1, P10, P17).

Another element worth noting is that reciprocity permeates relations with non-human beings. Indeed, care flows from practitioners to human participants, but at the same time, both practitioners and participants care *for* animals, and for the soil and forest resources etc. Equally, such nature elements indirectly care for and *with* both participants and practitioners, as expressed in these quotes: 'Actually I don't have to do much, because the nature is some kind of caretaker itself' (Int. P2). In both farms, non-human elements are recognized as sentient, and are cared for respecting their natural cycles. Despite lack of verbal communication, reciprocity in the caring relation is expressed in other ways: 'That's one of the biggest things, people appreciating their surroundings, and the fruits of their work. And that's where it all starts, you get an immediate feedback from the surroundings' (V-Int. P18); 'It's always nice to see the interaction between our customers and the animals, this kind of communication without words. You can see there is something that I cannot explain' (Int. P11).

Interpreting the data, we found that reciprocity is also expressed in practitioners' recognition of the *interdependence of human & ecosystem wellbeing*. One of the founders of the care farm stated: 'We try to see this not just as a farm, not just as a place where we take care of people. It's a combination, where everything is related to each other' (V-Int. P11). A different perspective on interdependence is given by the founder of the nature-tourism company: 'I want to bring nature

close to people, so I do it by telling stories. I tell about how people moved to Finland, how they were dependent from nature, and somehow I want to make people understand that we are still dependent from that' (Int. P1). This aspect distinguishes practitioners and stakeholders' accounts. The latter recognize the importance of respecting ecosystems, but still see non-human living beings and natural environments as much less central in Green Care in comparison to human beings, sometimes naming them as 'partners' in the caring process (Int. S23, S11), and other times naming them merely as 'resources' instrumental to a goal (Int. S5, S22).

Discussion: Towards an integrative framework to understand Green Care practices

In this section, we respond to the research questions, and present some general conclusions and reflections, with regards to our contribution to the study of Green Care practices and its sustainability potential, and to the scientific debates around the ethics of care and place-based development.

As summarized in Figure 5.4, our analytical investigation across Tronto's five stages of caring has revealed the following findings: (1) Practitioners are attentive to several issues, which go beyond human health and wellbeing. They care about social inclusion, not only as the empowerment of vulnerable groups, but also as societal access to green environments. They are concerned about human-nature disconnection and in particular, the two farms fear urban-rural disconnection. Finally, they are all passionate about working in a green environment and protecting nature. (2) Their attentiveness to such concerns and needs manifests itself in the daily practices they engage in and which go beyond the services they are most known for by their networks of stakeholders. They actually include a wealth of 'invisible' activities (Fut-workshops), such as community building & outreach, awareness-raising, education and training, biodiversity regeneration, and appreciation of local traditions and livelihoods. Such activities are not exclusively directed to their target users; rather, they are rooted in context-dependent collective interests, tied to the needs of the places in which they are embedded, and thus benefit both the wider community and ecosystem. (3) Practitioners' commitment to heal, empower, and regenerate people through practices of caring is not only expressed in *what* they do, but also *how* they do it. Core ingredients of high quality Green Care services appear to be nature, togetherness, and meaningful work and experiences. Human- and goal-oriented approaches characterize the ways of working, following criteria of flexibility, slowness, professionalism, responsibility, safety, and respect. (4) Both providers and customers of care activities are considered and respected as active agents. Practices are characterized by deliberation and tinkering. This is possible by designing services in a way that fits the capacities and aspirations of participants, implementing formal and informal mechanisms of assessment of the practices, and being open to constant adaptation. (5) The data reveals that learning is an essential element in all three cases. Green Care practitioners value learning

deeply, for themselves as persons and professionals, and for those they engage with. In the spirit of reciprocity, processes of learning also include the wider community beyond the target users. Reciprocity is a trait of human and non-human relations in these Green Care practices. Practitioners value the interdependence of human and ecosystems' wellbeing, and recognize non-human beings as sentient participants in the caring process.

Our findings align with recent literature pointing at the wider potential of Green Care practices, not only for the provision of well-being services, but also as engagement for sustainability oriented towards the conservation and regeneration of the living basis of socio-ecological systems (Di Iacovo et al., 2016; García-Llorente et al., 2016). Yet, such potential seems to go mostly undetected by the wider networks of stakeholders, who, depending on the specific relation and interests that connect them to one or other Green Care practice, are unaware of and/or unconcerned about the 'bigger picture'. The 'Envisioning the future' workshops revealed how the practitioners themselves may even underestimate the full spectrum of care dimensions they engage with daily. The workshops were crucial to unveil the variety of practices, both 'visible' and 'invisible', raising awareness of the value and scope of their work for both people and ecosystems. Based on the findings of this study, our understanding is that wider awareness of the reality and potential of Green Care practices in Finland needs to be fostered at all levels: on the ground, working with providers to gain a deeper and broader outlook on what they do and how; in the way associations and research centers frame their advocacy, development and assessment efforts; and at policy levels, for decision-makers to be able to regulate the field of Green Care in ways that valorize and maximize this hidden potential.

The value of Tronto's model lies in the new insights its application have generated. Firstly, looking into the first two phases of *caring about* and *caring for* allowed us to shed light on the interaction between practitioners' caring concerns and the practices enacted to meet them. This provides further evidence of humans willingness to engage with the betterment of the world, as proposed by both the feminist ethics of care literature and place-based development scholarship (Horlings, 2015; Tronto, 2013; Tschakert & St.Clair, 2013). Indeed, the practitioners in our cases are not just service providers but moral agents who, through curious attention to the needs of others, express their sense of self and community through the responsibilities they discover and claim as theirs. What they *wish* and what they *do* reflects a plurality of care(s) that is directed both to human and non-human worlds, and that shape their identities and subjectivities. The entire framework, and especially the phase of *care giving*, allowed us to see that moral values are an integral part of how practitioners implement their practices. In line with feminist literature on caring, ethics function as a compass that guide people's choices of who to be, what to think, and how to bring principles into action through embodied practices (Gibson-Graham & Roelvink, 2009; Singh, 2017).

Secondly, applying Tronto's framework on the field of Green Care practices confirmed that caring is not merely about a succession of health interventions, to be monitored and

evaluated quantitatively (Elsey et al., 2014). Interventions go hand in hand, and are sustained by, the relational work, that often goes unnoticed, as care scholars have suggested in the past (Mol, Moser, & Pols, 2010; Puig de la Bellacasa, 2015). Caring itself is a relational achievement, involving all sides of the caring spectrum: practitioners, human participants, and more-than-human elements. From an analytical point of view, the stages of *care receiving* and *caring with* are particularly crucial in this sense, as they force us to go beyond care giving as a unilateral doing. Rather, they stress the need to see caring as a process, based on reciprocity, mutual deliberation, and learning (Faden et al., 2013).

Thirdly, Tronto's framework invites us to see caring as a cycle. Its iterative, interconnected nature is itself conducive to constant learning and improvement, ideally enabling virtuous changes to happen. Transformations happen not only in the 'here and now' of the caring process; rather, they extend to long-term temporalities and wider scopes of impact. One example is given by the work of caring for the soil in the biodynamic farm: the experience can lead to instant feelings of well-being and self-efficacy for the participants involved. In the long run, such slow and attentive work of caring is also beneficial to regenerate the soil and its living beings, which in turn gives healthy and nutritious fruits to the wider community purchasing the food. The transformative value of learning through caring practices is a perspective still very marginal in studies of place-based practices such as Green Care, which deserves further investigation.

Yet, Tronto's framework has analytical limitations. The five stages of caring, when applied to Green Care practices, may lead to anthropocentric considerations. Indeed, the role of non-human agency was harder to detect when interrogating the data. Further application of this framework could benefit from the integration of other bodies of knowledge, both theoretical and applied, that have looked at the role of non-human and more-than-human agency in various fields, expanding epistemological assumptions to include new ways of knowing. We refer in particular to more-than-human anthropology and ethnography (Tsing L., Swanson, Gan, & Bubandt, 2017), post-human environmental ethics (Braidotti, 2019; Haraway, 2016), and action-oriented approaches to more-than-human research (Bastian, Jones, Moore, & Roe, 2016; Harmin et al., 2017; Jönsson, 2015). To take account of more-than-human agency requires the development of new methods, as conventional methodological approaches are biased towards a human-centered outlook. This is especially true when non-human and more-than-human elements are not the main focus of the research, as in the case presented here. Indeed, the importance of the methods emerged over the course of the investigation. During the 'Envisioning the Future' co-creation workshop the researcher-facilitator used arts-based techniques to evoke regenerative ecological mindsets (see for instance (Pearson et al., 2018)) to sensitize the participants to more than human and non-human components. Scholarship on Green Care, which still mostly relies on interviews and surveys (García-Llorente et al., 2018) could greatly benefit from the integration of arts-based and creative methodological tools.

Conclusions

Narrow understandings of Green Care practices hinder the possibility to recognize their full potential for place-based sustainability. This study has attempted to develop an integrative framework to study Green Care practices, employing a relational approach inspired by the feminist ethics of care literature, and Tronto's five stages of caring. The framework was applied on three diverse cases of Green Care in Finland. It revealed that practitioners share a plurality of care concerns which are strongly connected to sustainability, and which translate into tangible practices that go beyond human health and well-being. These practices benefit the target users, wider community, and ecosystems. Our findings point to the importance of not just observing, but also appreciating Green Care practitioners' sense of moral agency, and to further investigating the potential it yields for developing just, inclusive, and regenerative societies.

Our study highlights the value of multi-case and multi-method approaches for the study of Green Care. By involving practitioners, target users, and wider networks of stakeholders, we obtained a diversity of views and identified the mismatches in how practices are framed. In turn, this shows the need to provide in-depth, systemic outlooks of Green Care practices to advocates, developers, and policy-makers in the field.

The analytical framework proposed in this paper should not be viewed as having hard, definitive boundaries. Additional interpretations are needed, to fully explore and test its relevance in other contexts of Green Care. Moreover, the use of creative techniques proved effective in highlighting the role of more-than-humans in the caring process, but further methodological perspectives are needed to fully comprehend how practices are done *in, for*, and *with* nature.

Appendix

TABLE A5.1 | Full list of activities offered by the case studies

CARE FARM	BIODYNAMIC FARM	NATURE-TOURISM COMPANY
WELLBEING & SOCIAL INCLUSION • All-year round health and social care interventions + rehabilitative work for disabled people; • Assisted Living Unit on farm.	*WELLBEING & SOCIAL INCLUSION* • Ad-hoc temporary projects of rehabilitative work for long-time unemployed groups.	*WELLBEING & SOCIAL INCLUSION* • Recreation & wellbeing activities for various groups (children; tourists; people with disabilities; elderly in care homes).
PEDAGOGY & RECREATION • Traineeships for students; • Trainings for prospective care farmers; • Educational activities in local schools about rural livelihoods; • Recreational activities for larger audiences (open days; festivals, etc.)	*PEDAGOGY & RECREATION* • Hosting of different individuals through WOOF program; • Engagement of pupils of local Steiner and Waldorf schools and kindergartens; • Traineeships for students through BINGn network & through local collaborations; • Recreational activities for larger audiences (open days; festivals, etc.)	*PEDAGOGY & RECREATION* • Traineeships for universities' students; • Outdoors team-building activities for companies' employees; • Outdoors sports trainings for various groups; • Rental services of outdoors sports' equipment.
OUTREACH • Community services with 'mobile unit'; • Ongoing reception of people interested in care farming.	*OUTREACH* • Grassroots advocacy to build a future community on the farm; • Affordable living spaces on farm for long or temporary stays.	*OUTREACH* • Daily accurate information provision about weather conditions (e.g. ice thickness) available to wide audience through social media.
AGRICULTURE & ECOSYSTEM • Sheep husbandry (and organic meat purchase to local networks); • Animal care (pigs, dogs; horses; chickens; rabbits; cats); • Organic gardening for self-consumption; • Rural landscape preservation and maintenance; • Biodiversity conservation and regeneration.	*AGRICULTURE & ECOSYSTEM* • Cow husbandry (for biodynamic farming); • Animal care (chickens; cats); • Organic vegetables production for local purchase (restaurants, markets, schools in Helsinki area + on-farm shop); • Rural landscape preservation and maintenance; • Biodiversity conservation and regeneration.	*ADDITIONAL SERVICES* • Product design and manufacturing (including special equipment for disabled people); • Catering and logistics for other companies; • Snacks and drinks purchase at company's premises.

TABLE A5.2 | Full list of research participants

List of practitioners						
Case	**Reference code**	**Practitioners' role**	**Interview (date)**	**Sharing workshop**	**Future workshop**	**Video interview**
Nature-tourism company	P1	founder of company, retired	05.03.2017	x	x	
	P2	owner of company, manager	04.06.2017		x	
	P3	staff, also involved in management	01.04.2017	x	x	
	P4	staff, also involved in management	01.04.2017			
	P5	staff	11.07.2017			
	P6	staff	11.07.2017			
	P7	staff			x	
	P8	staff			x	
	P9	staff			x	
Care farm	P10	owner and manager of farm	08.06.2017	x	x	x
	P11	owner and manager of farm	06.06.2017		x	x
	P12	staff	06.07.2017			
	P13	staff	07.07.2017	x		
	P14	staff	20.10.2017	x		
	P15	staff		x	x	
	P16	staff			x	
Biodynamic farm	P17	farm owner	07.03.2017	x	x	x
	P18	farm manager	30.03.2017	x	x	x
	P19	farm community member	31.03.2017	x	x	x

List of external stakeholders				
Case	**Reference Code**	**Field of activity**	**Interview (date)**	**Future Workshop**
Nature-tourism company	S1	Education & Research	18.09.2017	
	S2	NGO	22.09.2017	
	S3	Education & Research	12.10.2017	
	S4	Private business	13.10.2017	
	S5	Education	13.10.2017	
	S6	NGO	13.10.2017	
	S7	NGO	13.10.2017	
	S8	Private business	25.10.2017	
	S9	Private business	25.10.2017	
	S10	Local government	25.10.2017	
	S11	Private business	13.12.2017	
	S12	Private business	13.12.2017	
Care farm	S13	Education &Research	14.09.2017	
	S15	Local government	18.10.2017	
	S16	Local government	19.10.2017	
	S17	Health and social care sector		x
	S18	Education sector		x

List of external stakeholders				
Case	**Reference Code**	**Field of activity**	**Interview (date)**	**Future Workshop**
Biodynamic farm	S19	Education	08.09.2017	
	S20	Local government	10.10.2017	
	S21	NGO	11.10.2017	
	S22	Local government	03.11.2017	
	S23	Local government	10.11.2017	
	S24	NGO	14.11.2017	
	S25	Self-sufficient farmer	16.11.2017	

List of customers involved in the Photovoice project		
Case	**Reference Code**	**Photovoice & walking interview (date)**
Care farm	C1	16.10.2017
	C2	16.10.2017
	C3	16.10.2017
	C4	16.10.2017
	C5	17.10.2017
	C6	17.10.2017
	C7	17.10.2017
	C8	19.10.2017
	C9	19.10.2017
	C10	19.10.2017

Chapter 6

Exploring enabling resources for place-based social entrepreneurship: A participatory study of Green Care practices in Finland

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'It is not half so important to know as to feel'
Rachel Carson (1907 – 1964)

Abstract

Enabling resources are the array of tangible and intangible assets that social entrepreneurs mobilize or create to bring forward novel place-based initiatives, to respond to unmet sustainability challenges and ideally contribute to virtuous processes of socio-economic transformation. Understanding the role of resources in constraining or enabling the development of social enterprises holds important implications not merely for the initiatives, but also for the places where they are embedded. Existing studies fail to provide a comprehensive, empirically grounded account of resources for place-based social entrepreneurship. This paper aims to fill this gap, by exploring the array of resources that enable and constrain the development of Green Care practice, i.e., nature-based activities with a social innovation purpose. Three communities of Finnish practitioners – a nature-tourism company, a care farm, and a biodynamic farm – were involved over the span of three years in research activities conducted with an in-depth qualitative approach. Participants were engaged in several stages of iterative learning combining conventional and action-research methods: semi-structured interviews, participatory mapping, and a co-creation workshop. Results show that entrepreneurs resort to a great variety of enabling resources, inclusive of both tangible and intangible assets, that are only marginally considered by relevant literature. Based on these findings, the paper proposes a novel set of enabling resources, comprehensive of nine clusters: infrastructural, institutional, material, place-specific, organizational culture-related, social, ethical, affective, and competence-related resources. Two concluding insights can be inferred: understanding resources is paramount to grasp possibilities and challenges of place-based entrepreneurship; in-depth participatory processes are needed for a thorough and grounded investigation of enabling resources in places.

Keywords: place; enabling resources; Green Care practices; Finland; social entrepreneurship.

Introduction

The study of social entrepreneurship has received increasing scholarly attention over the last couple of decades. It refers to the entrepreneurial skillfulness of lead individuals who combine resources in new ways, to the aim of meeting social needs (Dacin et al., 2011; Mair & Marti', 2006). Social entrepreneurs aim to generate both social and economic value in areas ineffectively addressed by existing institutions, and thus are seen as key assets in filling institutional gaps, possibly bringing about transformational change (Schaefer et al., 2015). However, like all forms of change agency geared towards social innovation[18], desired outcomes – specifically in terms of effectiveness and sustainability of the entrepreneurial process – are not always met in reality (Alvord, Brown, & Letty, 2004).

Against this background, novel approaches are called for, to critically reflect upon the processes that shape decisions and actions of social entrepreneurs, by taking into account also the ecosystem boundaries in which they operate (Schaefer et al., 2015). To contribute to this aim, this paper explores the role of resources in enabling and constraining place-based social entrepreneurship. Enabling resources refers to the wide array of assets, both tangible and intangible, social entrepreneurs mobilize and co-create, to launch and bring forward novel initiatives in their places. The assets, skills, affordances, capitals, needed by change agents to foster transformations are conceptualized in various ways (Korsgaard et al., 2015; Mair & Marti', 2006; F. R. Westley et al., 2013). However, a comprehensive understanding and mapping of resources related to place-based social entrepreneurship is not yet available. This paper aims to provide such an in-depth account based on an iterative, participatory research process.

To do so, the emerging field of Green Care in Finland is taken as a case study. Green Care refers to nature-based practices that provide therapeutic, social inclusion, educational, and recreational benefits to different target groups (Sempik et al., 2010). In Europe, practices often develop via innovative grassroots processes driven by place-based entrepreneurship: multiple actors create radically new concepts for existing products and services in both urban and rural areas, through novel cross-sectoral partnerships, and drawing from resources available in places (Hassink et al., 2013). This paper focuses on three specific empirical cases, namely a nature-tourism company, a biodynamic farm, and an ecological sheep and care farm, are taken as case studies.

This study aims to: 1) provide a state of the art of what scholars consider enabling resources conducive to entrepreneurship in place-based processes; 2) investigate and map the different kinds of resources mobilized by Green Care entrepreneurs in their everyday practices; 3) explore if these resources are regarded as enabling or constraining by the entrepreneurs and other stakeholders; 4) provide a comprehensive, empirically based overview of enabling resources for place-based social entrepreneurship.

18 Social innovation is here understood as 'community action that constructs new rules and social relations to meet societal needs and leads to social change and empowerment' (Ulug & Horlings, 2018, p. 1).

Findings stem from a process of co-production of knowledge involving research participants in successive rounds of iterative reflexive learning. Methods are inspired by participatory action research principles, and included semi-structured interviews–coupled with participatory mapping exercises, and a co-creation workshop. The process combines a deductive and an inductive approach, since it is both theoretically informed by relevant scholarship and provides an empirical grounded analysis of Green Care entrepreneurial practices.

The next section of the paper reviews the concept of place-based social entrepreneurship as understood by key scholars. Following, I explore how resources are being referred to and articulated by relevant literature on entrepreneurship and place-making. In the third section, first the overall methodological approach is explained, then the three cases of Green Care are presented, and finally, the iterative, participatory process of data collection and analysis is laid out in detail. In the findings section, a comprehensive overview of enabling resources for Green Care place-based social entrepreneurship is presented. Nine sets of enabling resources are proposed, informed by literature review and grounded in three successive rounds of data collection and analysis. In the discussion, I touch upon the theoretical implications of such findings vis-à-vis our current knowledge of enabling resources. I conclude by identifying future directions for further research on the matter.

Place-based social entrepreneurship and enabling resources: state of the art

Contextualizing and defining place-based social entrepreneurship

Social entrepreneurship, for a long time considered a vague and poorly defined category of change agency, has in recent years gained relevance in both theoretical and empirical scholarly accounts (Mair & Marti', 2006). Like all forms of change agency, in sociological terms social entrepreneurs can be seen as individuals that 'make things happen' (Westley et al., 2013, p.27), actors who imagine alternatives and transform themselves, their relationships and their social contexts (Emirbayer & Mische, 1998). Relationships and contexts are crucial to successes and failures of entrepreneurial activity. Indeed, entrepreneurship is not to be seen as an individual achievement, but rather as a collaborative social process (McKeever et al., 2015). In literal terms, social enterprises are business ventures that 'create innovative initiatives, build new social arrangements, and mobilize resources in response to […] problems rather than market criteria' (Alvord et al., 2004, p. 262).

Historically, social entrepreneurs have committed to a variety of causes, such as poverty alleviation, nature conservation, health and sanitation, microfinancing and education (Martin & Osberg, 2007). The common trait is that both ethical and business intentions concur to the entrepreneurial activity. Surpluses are mostly used to ensure the durability of the initiative

and its financial self-sufficiency, or to re-invest in the venture's social objectives, rather than to maximize profits for shareholders and owners (Dacin et al., 2011; Schaefer et al., 2015). The scope of the practices varies: some are specifically geared towards meeting the needs of marginalized and disadvantaged groups (Alvord et al., 2004), others are concerned with the wellbeing of both humans and ecosystems (Schaefer et al., 2015).

While societal and environmental challenges become increasingly daunting, traditional welfare systems have in many contexts withdrawn from their responsibilities. Social enterprises may contribute to filling such gaps, building local capacities, strengthening cross-sectoral ties, and fostering continuous learning and innovation (Alvord et al., 2004). The potential here is not merely to provide services and products, but also to contribute to altering systems of knowing and acting upon specific challenges, contributing to processes of local socio-economic transformation (Elkington & Hartigan, 2008; Mair & Marti', 2006). Notably, as globalization tears apart the fabric of rural areas, entrepreneurship has been seen by many as a key asset in fostering regional development (Korsgaard et al., 2015; McKeever et al., 2015). With specific reference to the field of Green Care, studies highlight the role of practices in re-thinking traditional health-care provision, in re-establishing virtuous connections across the urban and the rural–including marginalized areas–and in re-framing values around conventional food production, disability, and disempowerment (Sempik et al., 2010).

Scholars have devoted a great deal of attention to understand the process of 'making things happen'. Change agents were long portrayed as heroes, 'jack-of-all-trades' capable of overtly rational and strategic choice, yet atomized from their reality (Antadze & McGowan, 2017; Schaefer et al., 2015). Recent studies have demonstrated that actors are embedded in structural contexts of action, which are both temporal and relational fields (Emirbayer & Mische, 1998; Ruef & Lounsbury, 2007). A relational approach highlights the intricate web of connections and processes that enmesh people and places, actors and their context: entities do not exist on their own, but are co-constructed and co-evolving. Space itself is a product of these entanglement, whereby practices are embedded in a location, but also stretched beyond geographical boundaries (Duff, 2011; Massey, 2004). It follows that change agency, and thus entrepreneurship, is no innate disposition or ontological characteristic of any special individual or group. Rather, it is a process, constantly in becoming as a result of its embedded and situated nature (Battilana et al., 2009; Pyysiäinen, 2011).

Embeddedness allows entrepreneurs to access a whole set of resources in their places, while also leveraging non-local assets conducive to the realizations of their aims (Korsgaard et al., 2015). Embeddedness may also motivate the desire to respond to specific contextual needs, triggered by an intimate knowledge and concern for one's own place and its community (McKeever et al., 2015). Such line of reasoning goes hand by hand with much literature on place-making and place-shaping, suggesting that place is the privileged *locus* of many emergent collaborative partnerships (Massey, 2004).

Against this background, this study aims to contribute to identifying enabling resources in place-based entrepreneurial action. In doing so, I endorse the idea of entrepreneurship as a socialized and relational process, whereby resources both influence and are influenced by social entrepreneurship.

Green Care practices in Finland as case of place-based entrepreneurship

The emerging field of Green Care practices offers a valuable perspective to analyze the role of enabling resources in place-based entrepreneurship. Green Care is used in Finland as an umbrella term[19] to refer to a wide array of nature-based activities, ranging from care farming and therapeutic horticulture, to wilderness and animal-assisted therapy (Soini et al., 2011). As in most cases in Europe, practices are mainly initiated at the grassroots level, via the entrepreneurship of multiple actors, who develop new concepts for products and services through novel cross-sectoral partnerships. Initiatives span over different domains, leading to alliances amongst stakeholders across disparate fields, including agriculture, health and social care, tourism, and pedagogy (Hassink, Grin and Hulsink, 2013). Entrepreneurs rely heavily on resources available in places – ranging from the ecological and cultural value of the landscape, to the capacity building support of local research centers[20]– and mobilize a whole set of skills, more or less enabled by contextual institutional settings. Essential skills certainly include networking and coalition-building capacities, needed to build bridges among very diverse stakeholders' interests (Di Iacovo et al., 2016; Hassink et al., 2013).

In Finland, Green Care has gained rapid popularity since its introduction in mid-2000, due to its potential to: a) complement traditional health and social welfare services; b) expand possibilities for multifunctional agriculture and other rural livelihoods, contributing to regional socioeconomic development; c) advance the sustainable use of natural resources and d) the preservation of cultural heritage and landscape (Soini et al., 2011).

Evidence-based studies prove that Green Care practices contribute to the therapeutic rehabilitation and social inclusion of vulnerable groups (e.g. long-term unemployed, disabled, refugees etc.), but may also foster sustainability education for children and adults at large (Sempik et al., 2010). Moreover, many practices are driven by a strong ecological ethics, and may carry beneficial effects also for the ecosystem. This role is reflected in the organic features of most social and care farming initiatives, and by their efforts for biodiversity conservation (Sempik et al., 2010).

19 Terminologies and approaches vary across Europe: not all countries conceptualize rehabilitative activities in nature as 'Green Care'. Moreover, certain kind of practices – such as care farming - are more subject to study than others (Sempik et al., 2010).

20 See for example the project 'Hoivafarmi' at http://www.mamk.fi/read/2015/artikkeli/hoivafarmi-erityisryhmille-kuntoutusmahdollisuuksia-maaseudulla/

Enabling resources: an overview

Enabling resources are understood here as the array of assets, both tangible and intangible, that social entrepreneurs mobilize or create to bring forward novel initiatives in their places. To situate this research in the wider scholarly debate, I carried out a review using a snowballing technique. The starting point of the review was literature on entrepreneurship that considers embeddedness as an important factor, either to place, community, or to context more in general. Amongst this scholarship, a special attention was given to studies of social and sustainability entrepreneurship. These references give account of the embedded, contextualized, and place-based nature of entrepreneurial practices such as Green Care. In the course of the snowballing, it was deemed useful to consider also complementary sources relevant to transformative agency, especially regarding institutional change and/or rural innovation. In this respect, I also included two studies specifically concerned with care and social farming.

The review does not aim to provide a broad survey of recent literature on the topic of enabling resources for social entrepreneurship. Rather, it is an attempt to consult a variety of sources to gain an overview of the diversity of discourses considered.

TABLE 6.1 | Overview of enabling.

	Author	Type of article	Objective(s) of the study	Main resources mentioned
1	McKeever et al. (2015)	Empirical	Analyze ways in which entrepreneurs engage with place and community, and how that affects entrepreneurial practices and outcomes.	Place embeddedness (including both place and sense of place); social capital/community resources (including values); material resources; entrepreneurial skills (including social skills, commitment, and confidence).
2	Johnstone and Lionais (2006)	Empirical	Illustrate case-based examples of community business entrepreneurship in depleted communities, especially drawing attention to place attachment.	Resources (including financial, human, professional, social); attachment and commitment to place and to community; trust.
3	Franklin and Dunkley (2017)	Theoretical/ Literature review	Explore the relationship between 'green' identity entrepreneurship and community environmental practice.	Place characteristics (social, economic, environmental); knowledge and attachment to place and community; green identity; skills; inner morality.
4	Battilana et al. (2009)	Theoretical/ Literature review	Provide a literature review of the notion of institutional entrepreneurship and propose e a model of the process of institutional entrepreneurship, with a special focus on context embeddedness.	Field-level conditions (especially degree of institutionalization VS fragmentation); institutional, social, historical, and cultural contexts; social capital; sense making & inspirational skills.

	Author	Type of article	Objective(s) of the study	Main resources mentioned
5	Cinderby et al. (2015)	Empirical	Illustrate an example of action-oriented research to enhance community resilience towards sustainability.	Resources, including human capital (e.g. skills and education); social capital (e.g. social networks); built capital (e.g. access to amenities); natural capital (e.g. access to green space) and economic capital (e.g. income, savings, or government grants).
6	Duff (2011)	Theoretical	Introduce a conceptual logic of enabling places grounded in the analysis of enabling resources, focusing on the therapeutic features of places.	Place-based enabling resources/ affordances including affective, relational, material.
7	Korsgaard et al. (2015)	Empirical	Analyze the spatial context of rural entrepreneurs and explore how the rural context impacts on the opportunity creation process.	Institutional context; place embeddedness (including access to information, knowledge, marketing); local resources (including physical, cultural, historical landscapes); capital (including financial, human, infrastructural); craftsmanship skills.
8	Pyysiäinen (2011)	Theoretical and Empirical	Analyze entrepreneurship discourse in the farm context through the lenses of social psychology.	Opportunity context (situational resources: material, social/relational, habitual); entrepreneurial skills; values; cultural knowledge; rhetorical resources.
9	Mair and Marti' (2006)	Theoretical	Develop a view of social entrepreneurship as a process that catalyzes social change and addresses important social needs.	Capital including structural (e.g. access to resources), relational (including values), cognitive (e.g. shared norms); embeddedness; ethical motives and moral responsibility.
10	Schaefer et al. (2015)	Literature review	Review the literature on three types of entrepreneurship said to transform society by creating value beyond profit: social, environmental and sustainable entrepreneurship.	Social capital; moral responsibility; socio-ecological beliefs and values.
11	Antadze and McGowan (2017)	Empirical	Explore the mechanisms by which moral entrepreneurs contribute to transformative change drawing from sustainability transitions studies and from organization and management studies.	Cultural, social and political skills; morality; discursive quiver.

	Author	Type of article	Objective(s) of the study	Main resources mentioned
12	Westley et al. (2013)	Theoretical/ Literature review	Develop a new theory of transformative agency in linked social-ecological systems, drawing from institutional entrepreneurship.	Material resources; windows of opportunities; institutional context; social capital; various skills (including networking, knowledge-brokering, visioning etc.)
13	Emirbayer and Mische (1998)	Theoretical/ Conceptual	Understand analytically the concept of change agency.	Emergent events; agency's characteristics including projective, practical-evaluative, iterational and communicative skills; cultural competencies.
14	Kessler and Frank (2009)	Empirical	Examine the factors that are crucial to start an entrepreneurial activity.	Financial resources; human capital (including personal experience and commitment); social contacts.
15	Hassink et al. (2013)	Empirical	Analyze care farming from the lens of multi-level transition science, and drawing from literature on institutional entrepreneurship.	Opportunity context; financial resources; entrepreneurial competences; skills (including cognitive/cultural, political, procedural, interactional, leadership); commitment; legitimacy.
16	Di Iacovo et al. (2016)	Empirical	Explore the collaborative relationships between researchers, entrepreneurs, and other stakeholders in the case of a social farming project.	Relational and interpersonal skills; social, management, leadership skills.

Table 6.1 gives an account of the vitality of the debate on enabling resources for entrepreneurship. A variety of terms are used, including resources, assets, capitals, skills, and opportunities; these concepts are not interpreted in unitary ways, and are made up by different sub-concepts, which make it challenging to draw comparisons or generalizations. For the purpose of the empirical investigation, I distilled two broad sets of enabling resources that could serve as theoretical lenses during the data collection and analysis.

The first cluster of resources is broadly concerned with the personal features of the entrepreneurs. Here three main attributes can be identified: skills, morality, and affectivity. Skills (and competences) are definitely predominant in the studies considered, and social skills in particular. Among the latter, crucial to the entrepreneurial process seem to be rhetorical skills, such as sense making and inspirational discourse – the capacity to build a desired collective scenario based on a common vision (Antadze & McGowan, 2017; Battilana et al., 2009; Emirbayer & Mische, 1998; Pyysiäinen, 2011). Political and interactional skills, such as incentivizing, bargaining, and networking are emphasized as well (Di Iacovo et al., 2016; Hassink et al., 2013; Westley et al., 2013). Social skills are also identified with social capital. In its narrow interpretation, social capital refers to the individual' social relations and connections, and his/her sense of trust

and safety in the community (Cinderby et al., 2015; Duff, 2011; Schaefer et al., 2015). However, for some, social capital broadly includes also structural conditions, such as actors' access to information and services, as well as cognitive resources shared among different actors (Battilana et al., 2009; Mair & Marti', 2006). Apart from social skills, few scholars mention also management and business skills (Di Iacovo et al., 2016; Hassink et al., 2013; Pyysiäinen, 2011), and cultural competences (Antadze & McGowan, 2017; Emirbayer & Mische, 1998). Scholarship on moral, social, community, and sustainability entrepreneurship often include morality and values as important dimensions of the entrepreneurial process (Antadze & McGowan, 2017; Mair & Marti', 2006; McKeever et al., 2015; Schaefer et al., 2015). Finally, albeit only marginally considered, is the realm of affective resources, referring to emotions and sentiments attached to both places and practices (Duff, 2011; Johnstone & Lionais, 2006; McKeever et al., 2015). Notably, neither reference to ethical or emotional dimensions of entrepreneurship is made in the articles on care farming considered in this review (Di Iacovo et al., 2016; Hassink et al., 2013).

The second cluster of enabling resources surfacing from the review focuses on the structural context where entrepreneurship unfolds. Here three main sub-sets of resources stand out: institutional, cognitive, and material. Identifiable as institutional resources are what scholars refer to as field-level conditions (Battilana et al., 2009), and institutional context (Korsgaard et al., 2015). Within the institutional context, entrepreneurs are said to exploit 'windows of opportunities' to advance their claims (Westley et al., 2013), such as disruptive events (e.g. social upheaval, environmental disasters or regulatory changes), and higher or lower degree of institutionalization, offering the uncertainty needed to propose innovative solutions (Battilana et al., 2009; Emirbayer & Mische, 1998).

Certain literature includes also a cognitive element as part of the structural context, namely shared meanings, values, and norms that may affect initiatives' success or failure (Mair & Marti', 2006; F. R. Westley et al., 2013). Papers dealing with context embeddedness also stress the importance of material resources, mostly financial and built capitals, that entrepreneurs leverage in their structural context of action (Cinderby et al., 2015; Johnstone & Lionais, 2006; Kessler & Frank, 2009). Spatial elements, for a long time dismissed in studies of institutional entrepreneurship (Korsgaard et al., 2015), are also considered, including the topographical, geographical and infrastructural characteristics of the place in which entrepreneurs operate (McKeever et al., 2015; Schaefer et al., 2015).

Based on this review, in the empirical phase the following sets of resources were broadly taken into account as analytical lenses: a) personal attributes, comprehensive of various skills (social, cultural, political, management), ethical resources, and affective resources; b) structural conditions, including institutional, cognitive, and material resources.

Methodology

This study employs an in-depth qualitative approach, to take into full account the multiple levels of analysis concurring to the comprehension of place-based social entrepreneurship. The author closely engaged with participants' real-life context, to appreciate the complexity of meanings and qualities entrepreneurs attach to both their practices and places (Leach et al., 2007). Data collection and analysis were designed with two main objectives: firstly, to trigger a process of mutual and iterative learning, identifying entrepreneurs' actual needs and expectations. Indeed, mapping resources and assessing their importance was meant to not only address relevant research questions, but also to trigger critical reflection and capacity building in the people involved (Blackstock et al., 2007). To this extent, I employed methods informed by participatory action-research (PAR), privileging an interactive and empathic approach, and fostering inclusiveness, transparency, and reflexivity (Kindon, Pain, & Kesby, 2008). Secondly, the collaborative process was purposely aimed at co-production of knowledge, for both normative and substantial reasons; namely, to enable the acknowledgment and deliberation of multiple values and visions, and to strengthen the validity and relevance of the data collected and of the analysis developed (Leach et al., 2007).

Case selection

A multiple case study strategy was deployed, capable of reflecting an articulated picture of resources needed in different contexts of Green Care entrepreneurship, namely a nature-tourism company, a care farm, and a biodynamic farm. The cases selected offer valuable examples of both types of services currently subject to formal certification in Finland, i.e. *Nature Empowerment* (*Luontovoima*) and *Nature Care* (*Luontohoiva*)[21]. Selection was also based on the following criteria: practices are based in locations easily accessible by public transportation; participants could easily communicate in English and were open and enthusiastic to be part of the research. All the cases are relatively small ventures and the core management is primarily in the hands of family members.

The nature-tourism company is based in the city of Tampere and provides sports, educational, recreational and, to a lesser extent, therapeutic activities to private customers in natural environments. The company has recently obtained the *Nature Empowerment* quality mark. The care farm, located 25 km away from Tampere, involves a group of mentally disabled people in raising organic sheep and in farming practices for rehabilitation and social inclusion reasons. The farm is in the process of obtaining the *Nature Care* quality mark. The last case is

21 The Green Care Finland Association, established in 2010 to gather practitioners committed to the field, recognizes two main typologies of activities that may qualify as Green Care practices: Luontohoiva (Nature Care) – services financed by the public sector, provided by health and social care professionals, and targeted at vulnerable groups; and Luontovoima (Nature Empowerment) – goal-oriented services in nature-assisted wellbeing, education and recreation, often purchased by private users (Luke & THL, 2017).

a biodynamic farm, located at the outskirts of Helsinki metropolitan area. The farm engages different target groups in farming practices for social inclusion and pedagogical purposes. Its activities are diverse and thus may fall under both *Nature Care* and/or Nature *Empowerment,* although practitioners operating there have not applied for any formal certification so far.

FIGURE 6.1 | Geographical locations of the cases.

Methods of data collection and analysis

Data collection and analysis was designed to respond to research questions no.2, 3 and 4. The aim was to map resources in Green Care entrepreneurship, and explore both their enabling and constraining character. At the same time, I sought to provide a framework for enabling resources for place-based entrepreneurship, which could be both theoretically and analytically consistent and relevant. To this extent, several rounds of data collection and analysis were carried out.

Stage 1: The main bulk of data relevant to this study resulted from 36 initial semi-structured interviews, coupled by participatory mapping and participant observation. Interviews were administered during a period of 10 months (March-December 2017) first to the main practitioners of the three cases (14 people), and later to their networks of stakeholders (22 people), accounting for tot. 50 hours of transcribed conversations. The list of people interviewed is provided as Appendix. By practitioners I refer to both the main entrepreneurs running the farm or company, and their staff. Conversely, the network of stakeholders

is external to the enterprise. It includes local civil servants, employees in the research and education sector, private enterprises and social organizations that indirectly concur to the provision and use of the Green Care services in question. Stakeholder identification was carried out in a bottom-up fashion, via participatory mapping exercises[22] that involved the main practitioners of each of the three cases. Specifically, they were asked to sketch an 'Eco-social network', identifying collaborators, clients, institutions directly and indirectly involved in the practices, as well as the resources needed for the realization of the practices. Involving both the main entrepreneurs and the external stakeholders in this first round of data collection granted a diversity of views with regards to the cases object of the research and relevant practices and places. Finally, participant observation concurred to gain appreciation of project contexts, observing the interactions of people and their environments, and looking at practices performed in places (Leach et al., 2007).

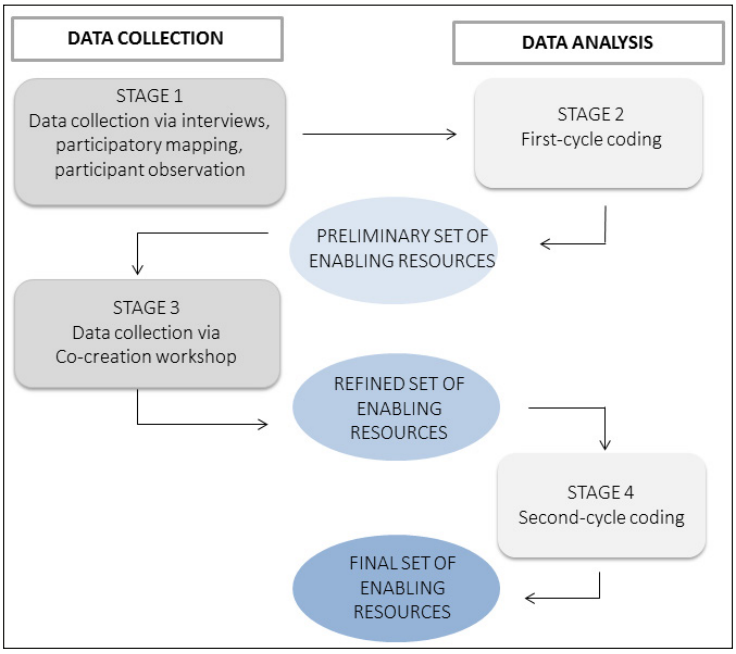


FIGURE 6.2 | Iterative successive stages of data collection and data analysis.

Stage 2: The data collected in Stage 1 was here analyzed. Transcriptions were input into the software package Atlas.ti, and coded[23] combining a deductive approach–using the set of broad categories found in the literature review as supporting analytical lens–with an inductive one, refining themes and relations found in the data (Fletcher, 2016).

22 Participatory mapping is an umbrella term that describes a set of techniques used to appreciate local knowledge and perceptions via drawings and visual representations (Di Gessa et al., 2008).

23 Coding implies that categories are formed via a process of 'thematization', which brings to the surface the recurrent topics and issues of the discussion, and attaches importance to their connections and their lines of reasoning (Fletcher, 2016).

Stage 3: During a six-hour workshop held in August 2018, the main practitioners of the three Green Care cases (9 people) were invited to discuss the set of resources obtained from the first analysis of the data, commenting on the relevance, appropriateness and accuracy of resources, based on their first-hand experience.

FIGURE 6.3 | Methods of data collection. From top left corner: participatory mapping, participant observation and co-creation workshop.

Stage 4: The co-creation workshop contributed to a more in-depth understanding of the empirical material collected since the start of the research. Following, I carried out a second round of coding and analysis of the data collected in Stage 1. In parallel, consistent with principles of reflexivity, and being aware of the researchers' own bias when analyzing the data, the literature was consulted once more, to further refine the interpretation of the data, in line with relevant discussions in recent scholarship. Stage 4 lead to the final list of nine enabling resources for place-based social entrepreneurship.

Results: an empirically grounded set of enabling resources for place-based social entrepreneurship

In this section the results of the analysis are presented. Figure 6.4 shows how the different sets of resources evolved following the stages of data collection and analysis explained in the Methods section above.

Most of the resources originally found in the literature were confirmed through the iterative analysis of the data, although the terms evolved through the successive stages. Moreover, the co-creation workshop with Green Care practitioners proved particularly valuable to identify nuances within each set of resources, to highlight their enabling or constraining nature, as well as the interrelations between resources. Practitioners were also asked to propose additional resources, which were consequently included in the final list. The result is a comprehensive account of enabling resources directly informed by Green Care entrepreneurship but not limited to that. Table 6.2 below reports in detail the nine sets obtained and related sub-sets. In order to present the findings in the most useful way for further generalizations, it was deemed appropriate to place resources under different levels, namely structural, organizational, eco-social community, and personal level (the latter including both inter-personal and intra-personal resources).

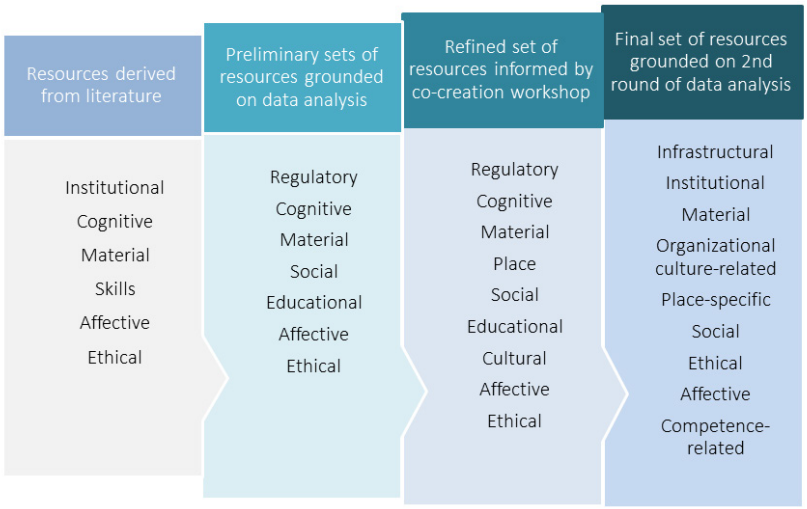


FIGURE 6.4 | Evolution of sets of resources through successive rounds of data collection and analysis.

The different levels are loosely inspired by the so-called Socio-Ecological Model (SEM), an established framework used especially in health and social care to understand the dynamic interrelations among various elements in the system (National Health Care for the Homeless Council, 2016). In the section below, each set of resources (and related sub-sets)

is described in detail, complemented by raw accounts from the interviews, indicating the data source in brackets ('P' if practitioner; 'S' if external stakeholder). The full list of research participants, including both practitioners and external stakeholders divided per case study, is provided as Annex to this manuscript.

TABLE 6.2 | Final sets of enabling resources for Green Care place-based social entrepreneurship.

	Resources sets	Resources sub-sets			
Structural level	INFRASTRUCTURAL RESOURCES	PHYSICAL INFRASTRUCTURES		WELFARE SYSTEM & MARKET	
	INSTITUTIONAL RESOURCES	RULES: Laws & Regulations	NORMS: Codes of conduct; standard practices	COGNITIVE BELIEFS: Shared collective understanding, support & advocacy of nature-based activities	
Organizational level	MATERIAL RESOURCES	NON-LIVING ASSETS: Equipment; Facilities, etc.	FINANCIAL CAPITAL	TIME	
	ORGANIZATIONAL CULTURE-RELATED RESOURCES	SHARED NORMS & ATTITUDES embedded in the ORGANIZATIONAL CULTURE of the entrepreneurial activity			
Eco-social community level	PLACE- SPECIFIC RESOURCES	LIVING ECOSYSTEMS: Natural Resources; Non-human living assets		SENSE OF PLACE: Physical and mental attributes conducive to shared cognitive resonance regarding a place	
	SOCIAL RESOURCES	HUMAN BEINGS crucial to the daily operations of the activities		CONTACTS: Networks; Relations; Social ties	
Personal level	ETHICAL RESOURCES	INDIVIDUAL VALUES towards humans and the ecosystem driving entrepreneurial agency		SHARED VALUES nurturing social ties	
	AFFECTIVE RESOURCES	EMOTIONS & SENTIMENTS: Joy, hope, passion, fear, etc. attached to places, practices & people			
	COMPETENCE-RELATED RESOURCES	ABILITIES & SKILLS gained through EDUCATION, PROFESSIONAL and LIVED EXPERIENCE:			
		Entrepreneurship & Management skills	Technical abilities & competences	Social skills	Cultural competences

Structural level

Infrastructural resources

Infrastructural resources refer to two sub-sets of structural conditions: physical infrastructures such as roads, electricity grid, sewage systems etc., (P2; P4), and non-physical infrastructures, namely the presence of a welfare system and the free market. According to the data, the Finnish welfare is indirectly beneficial for all the three cases, as it guarantees basic social security rights to all its citizens. Notably, the current national system still has a strong focus on caring services for the disabled and, to a lesser extent, for the marginalized. Although to a limited degree, this grants funds availability at the municipality level to purchase rehabilitative services from the care farm (S15), and grants stronger purchasing power to private customers who buy rehabilitative activities in wild environments from the nature-tourism company (P1). Conversely, market demand for 'employee wellbeing services' decreased considerably following the global economic crisis, directly affecting the nature-tourism company (P4).

Institutional resources

Institutional resources are here clustered to include 'rules' (laws and regulations), 'norms' (standard procedures and practices), and 'beliefs' (cognitive attitudes, collective meanings and values), in line with relevant scholarship on institutional change (Battilana et al., 2009; F. R. Westley et al., 2013). With regards to this study, laws and regulations ('rules') are perceived as essential for the realization of the practices, and yet in most cases carriers of uncertainty and not sufficiently supportive of entrepreneurs' needs. Indeed, high-level regulatory processes seem to be out of practitioners' scope of influence (S2; P1; P10). One notable example is the national SOTE (social and healthcare) reform, for years under discussion, with fuzzy implications for the development of Green Care (P15). Lengthy and cumbersome bureaucratic procedures also affect entrepreneurs' work, as lamented by this practitioner: 'The decision-makers, and politicians, and some authorities, they have meetings, and they need to discuss, and to get the solutions you need time, and it takes hours and hours' (P1). Stakeholders seem to confirm that institutions do not always play an enabling role for Green Care entrepreneurs. A civil servant confessed that 'cooperation with any municipality isn't easy' (S15), pushing providers to seek contracts with several municipalities at once. Habituated ways of conduct ('norms') also prevent people in institutions to play a stronger role in Green Care development. Two informants from the civil sector explained that local administrations often take a reactive rather than proactive stance, waiting for entrepreneurs to propose innovative initiatives, and only occasionally offering capacity building and knowledge support to prospective Green Care practitioners (S16; S18).

As far as cognitive resources ('beliefs') are concerned, changing shared meanings and views positively influence the way Green Care practices are perceived. Most respondents, including both practitioners and external stakeholders, are unanimous in pointing at the positive outlook increasingly surrounding nature-based activities. As stated by this practitioner:

> 'There is lots of interest regarding this "Green Care", and people are getting more information about it. For example the visitors here, they are farm workers, they come to see how this is done, and they are interested to do it themselves. So I think this is growing, and also from the customer side, because the word "Green Care" is spreading, and positive experiences and positive spirit are also spreading' (P10).

Media's growing attention to the therapeutic effects of nature-based activities plays an important role in shaping this positive perception, as confirmed by external stakeholders (S8; S23). Additionally, a model of community-based care is slowly gaining recognition over the traditional hospital-based one worldwide, with positive repercussions also in Finland (P11; S2).

The advocacy and capacity building work carried out by the Green Care Finland Association has also enabled the development of the concept at national level. For both practitioners and stakeholders interviewed, the work of the Association–such as trainings, certification procedures, labs and information sessions, net-weaving actions etc.–has concurred to build the cognitive 'infrastructure' needed for entrepreneurs to develop Green Care services in a 'focused' manner (P1; S1; S2), and to market them to both public and private buyers (P15; S8; S21).

Organizational level

Material resources

Material resources refer to assets that are crucial to the daily operations of most companies or farms. Non-living assets include for instance equipment and facilities (P7), and private transportation services (P1; P8). Finally, investments in financial capital and in time are also considered here as material resources. Both are mentioned to a considerable lesser extent than the previous two sub-sets, and yet are crucial to the realization of Green Care practices, and often referred to as constraining rather than enabling resources by most practitioners unanimously (P13; P14; P2). Notably, material resources are rarely mentioned by external stakeholders.

Organizational culture-related resources

This category of resources was included in the final set, based on closer interpretation of data gathered during both interviews and co-creation workshop. They refer to the norms and attitudes which reflect a specific organizational culture, a certain way to interact and operate in an organized setting - be it a company, a farm, or a community. Notably, the extent to which members identify with the organization's principles can be an important enabling factor, according to practitioners (P3; P10). Conversely, resistance to change habituated behaviors and mindsets can act in constraining ways, as often times observed by external stakeholders (S22; S23; P5). Indeed, in the Green Care sector practices are primarily designed in a customer-oriented way, and thus require flexibility: 'We are like a versatile and adaptive company, we can adapt to different needs of different customers. And this has been a positive

factor that explains why our company is still alive' (P2). A certain organizational culture also affects the capacity and openness to take risks and venture into novel arrangements, which is essential to build the partnerships needed to offer Green Care services (S2).

Eco-social community level

Place-specific resources

This category includes the living ecosystems that characterize a place, as well as 'sense of place'. Nature is as important as people in Green Care, and together, nature and people shape the eco-social community in which practices are embedded. Water, snow, ice, trees etc. are the irreplaceable resources needed by the nature-tourism company (P3; P4; P5). Likewise, animals to care for, and fields and woods to tend to, are as necessary in both sheep and biodynamic farms (P7; P13).

However, for the nature-tourism company, one specific place–characterized by unique physical and mental attributes–is not always as important in the realization of Green Care practices (P2; P4) as for the farms. "Nature is everywhere" (P2), and activities can be designed to fit any environment. On the other hand, many practices are offered in the proximity of the city, so as to increase people's accessibility and recreational use of urban forests and lakes (P1; S4). When both practitioners and stakeholders refer to the care farm and the biodynamic farm, place becomes a crucial enabling resource:

> 'It is just the whole atmosphere of the place, it's meant for people to be here.[…] Well, it's a beautiful place. The fields are small, it's not like endless plain, in a small area there is a very rich variety of different elements, yes, it's a very traditional kind of landscape.' (P14).

Aesthetic qualities of the landscape and cultural character of the place make the farms in this study a unique setting for Green Care practices. Such attributes are also the result of cognitive processes that shape a specific 'sense of place' (P13). The latter refers to the array of features, sensations, qualities that people attribute to a locality (inclusive of its landscape, animals and people). Notably, a certain sense of place surfaces from the responses of external stakeholders, even when not immediately familiar with the specific Green Care practices offered in the case study considered (S23; S19).

Social resources

Social resources are both tangible and intangible aspects that nurture social relations at various levels. Central to any Green Care activities are human beings. People – staff, clients and external stakeholders – are the necessary fabric of any social enterprise, crucial to its everyday operations (P13; S2). Like in many social enterprises, part of the work is also done on a volunteering basis, creating a community of people who contribute to a common cause. Networks and relations of various sorts are also considered as sub-resource in this category. Notably, when

asked: 'What makes Green Care happen?' respondents often answered 'personal networks' and 'connections' (P15). Indeed, cross-sectoral collaborations are crucial for the realization of the practices, and you need to '…find the right people to make it happen, and also the right contact' (P8). Not surprisingly, all the main practitioners belong to different associations that gather entrepreneurs and/or farmers focusing on similar products (P1; P8; P13).

Personal level

Ethical resources

Moral values and ethical motives starkly surface from the data analysis. At the level of the individuals, desire for social inclusion and ecological justice often motivate Green Care practitioners' work: 'Values are really important in this work. I can do the work that is doing something good to the environment and also to the people' (P9). Practitioners express care for both humans and the ecosystem, which shapes substantially the way practices are carried out (P8; S22).

At relational level, values enable the constant exercise of net-weaving needed to maintain and nurture social ties. Trust is often explicitly named in the interviews, both by practitioners (P3), as well as from stakeholders: 'It's easy to work with them, I can always trust that they take care of the whole event.' (S4). Solidarity and reciprocity also tie connections together. Notably, one stakeholder motivated her decision to purchase food products and occasional services from the biodynamic farm with the explicit desire to '…support that kind of farming' (S17), being aware of the financial difficulties implicit in doing biodynamic work, and based on a commonality of worldviews: *'I think they are doing something more for the earth, than for themselves. I appreciate that very very much'* (S17).

Affective resources

Affective resources deserve a set of their own, as they are extremely recurrent in both practitioners and stakeholders' accounts, and most often enable the realization of the practices. Fear for the future of a place motivates the need to create novel arrangements to save it from unwanted developments (P13); love for one's family fuels the desire to continue business operations following certain values (P3); hope for future generations motivates the desire to teach clients to respect the ecosystem, thus offering nature-based activities (P1). Very often, when recounting everyday experiences of Green Care practices, practitioners also share feelings of joy, happiness and satisfaction:

> 'Why I do this? Every time you see a customer, they are like happy, they are smiling, so the service that we provide is something positive for them. And of course this positive feeling spreads around, so I get positive feeling out of the people that enjoy our services' (P4).

Moreover, when asked about the most crucial factor concurring to the success of Green Care practices, external stakeholders most often refer to practitioners' passionate attitude:

> 'When they came they were really excited and really passionate about this, and they were changing their lives, and I was like "Wow" – living on the farm, farming and taking care of the people, it was really something new and very exciting' (S16).

Competence-related resources

Here are clustered the vast array of skills and abilities that practitioners mobilize, create and develop to offer Green Care services. Such skills are often the combination of life experience, training & education, and professional experience (P4). When asked how they became Green Care entrepreneurs, practitioners would often recall childhood or teenage memories of time spent in farms and forests (P1; P7; P8). Ad-hoc trainings needed in wilderness-tourism, social work or organic farming (depending on the type of Green Care practice) are extremely relevant as well, especially from the perspective of external stakeholders who purchase the services, who attach a great importance to practitioners' experience and expertise (S15; S7). Data confirms that entrepreneurial and managerial skills play a strong role in the launch and durability of novel initiatives, concurring strongly to its success or failure (P4; S4). Among the most named set of competences by both practitioners and external stakeholders are social skills, such as friendliness, attentiveness to others, and pleasure in being with people (P1; P15; S19). These often motivate practitioners' desire to start the practices, as well as clients' willingness to purchase them (S2). Finally, individual attributes conventionally associated with entrepreneurial fortitude are here categorized as cultural qualities. Notable examples are personality traits such as perseverance, determination, and willfulness, which can be epitomized by the Finnish word 'Sisu'. At the question 'What was a crucial factor in the realization of your Green Care practices?' one practitioner affirmed: 'To work hard and believing in what we are doing, to think all the time how it is at the moment, so we are all the time growing larger and developing compared to two years ago' (P7). Strength and determination are crucial enabling factors for the realization of the practices also from the perspective of external stakeholders (S22).

Towards a comprehensive understanding of enabling resources for place-based entrepreneurship

There is no doubt that Green Care entrepreneurs are *resourceful* individuals and active resource-assembling. Resources are crucial to 'make things happen' and to guarantee the success of the initiatives in the long run, as clearly demonstrated by the findings above. The case of Green Care practices in Finland confirms recent literature assumptions regarding the relational nature of entrepreneurship: practitioners are not heroic or atomistic individuals

solving problems and furthering progress; rather, their initiatives are relational achievements (Duff, 2011), that depend on a complex interplay of tangible and intangible elements. Moreover, entrepreneurs not only 'draw', 'mobilize' or 'leverage' existing resources (Battilana et al., 2009; Pyysiäinen, 2011), but also create new ones, in line with the so-called 'creation view' proposed by Korsgaard et al (2015). Notable examples are intangible social values, such as trust and reciprocity, which guarantee the continuity of cross-sectoral partnership, as well as individual cultural qualities, such as perseverance and determination in the entrepreneurial process.

Context embeddedness plays an important role in this sense, providing the anchor for social connections and network-building opportunities. Findings demonstrate the centrality of place-based resources, long disregarded by studies on change agency in favor of a narrow focus on institutional and social dynamics (Korsgaard et al., 2015). Place can shape, sustain, and in some instances, motivate the practices, thus it does not only constitute a resource in itself, but has the potential to be a fulcrum of mutually reinforcing enabling resources. Caring for places and its community can spur entrepreneurial action at the emotional level, while allowing for untapped potentials to be recognized, and to be cherished through the activities of the farm/company. Emotions and sentiments have been long ignored by scholarship on entrepreneurship (Antadze & McGowan, 2017). The accounts retrieved in this study suggest that practitioners' personal resources–here including competence-related, affective, and ethical assets–are extremely recurrent success factors in all the cases considered. Being the three enterprises small-scale and family-owned, it is no surprise that the main practitioners' personality and legitimacy, their social skills, values, and visions, play a very important role in defining the nature of enterprise, and of their practices. Although this is in line with studies of Green Care, such literature does not frame either sentiments or morals as resources (Di Iacovo et al., 2016; Hassink et al., 2013). Conversely, based on our findings, personal resources should receive stronger attention and become subjects of entrepreneurs' capacity building and empowerment trainings. Moreover, this dimension should be given stronger credit also when investigating changes at institutional level, where practitioners do not only act as knowledge-brokers and net-weavers, but also as catalyzers and carriers of sentiments and morals across stakeholders with different interests. This has positive repercussions on the collective understanding and support of nature-based activities, which in turn, facilitates the creation of relationships of trust across sectors.

This study not only demonstrates that resources can be mutually enabling; it also suggests that practices enable resources. Indeed, practitioners never refer to their competences as given, but rather resulting from learning processes enacted and provided to users via everyday practices of Green Care.

According to the empirical analysis proposed here, resources available at structural and organizational level are perceived as less enabling in comparison to others. In particular, financial resources are hard to mobilize, and only in the case of the care farm, do public funds play a substantial role in the provision of the services. This is not only to be ascribed to a welfare system partially withdrawing its support in both healthcare and social services provision (P15). It is also the result of the inability to assess to what extent Green Care practices affect change at different sustainability dimensions (P13). For practitioners impact is often non quantifiable, multi-causal, and spread out in time. For external stakeholders not all dimensions are given sufficient attention when referring to the practices, depending on their respective area of interest (S15; S9). Indeed, often Green Care is understood as the mere provision of a service (S20). The suggestion that can be inferred from this study is that a narrow sectoral focus should leave way to a forward-looking and holistic understanding of the multiple roles Green Care entrepreneurship can play to contribute to a more sustainable, culturally aware, and socially sensitive form of place-based development. This could hand by hand with a critical investigation of how enabling resources can enhance the potential of Green Care to contribute to desired processes of socio-economic transformation.

Reflecting on the methodological approach, it is argued that participatory co-creation methods can lead to an improved understanding of the process of 'making things happen' and its intervening variables. Indeed, the articulated picture of enabling resources offered in this paper was the outcome of an in-depth participatory process that involved not only Green Care practitioners but also their external networks of stakeholders. This granted a level of understanding of the phenomenon at hand rarely achieved in studies of place-based social entrepreneurship. Through successive rounds of data collection and analysis, I was able to explore the richness and quality of the data while maintaining a reflexive stance, recognizing the diversity of equally valid epistemic and normative perspectives aired by the research participants. The co-creation workshop in particular proved extremely valuable to ensure a balanced tradeoff between scientific reliability and social legitimacy of the findings obtained.

This study also has a number of limitations. Firstly, the extent to which the findings apply to other cases of social entrepreneurship depends on the extent to which the cases vary and naturally may be the subject of subsequent testing using other methods. Green Care initiatives are distinct types of practices, and the importance and effects of certain enabling resources over others are likely to be different in other types of practices. Moreover, the cases analyzed in this paper are mostly family-owned enterprises; therefore certain elements may be exaggerated in these cases compared to other types of ventures. Finally, this research does not engage with the critical backdrop of resourcefulness, namely the wider socio-economic dynamics that force social enterprises to continuously mobilize new assets, notable examples being the evolving role of the welfare system and the increasing expectations placed on social innovation initiatives.

Conclusion

Despite rich theorization of resources enabling different kinds of entrepreneurial action, existing literature has yet to provide an in-depth comprehensive mapping of enabling resources for place-based social entrepreneurship. This study has attempted to bridge this gap, focusing on the case of Green Care practices in Finland. The result is an empirically-grounded picture of nine interrelated sets of enabling resources that influence practitioners' initiatives on a daily basis. Findings show that a great variety of tangible and intangible assets are crucial to the entrepreneurial process, some of which has been underestimated in the past scholarship. Understanding enabling resources in Green Care requires a richly nuanced, multilevel perspective on entrepreneurship, one that takes into account place embeddedness, and that considers also the ethical and emotional dimensions of the resource mobilization process. Bridging literature on social entrepreneurship with place-making research has proved particularly useful in this paper.

As a follow-up to this study, the data considered here could be subject to further analysis in the future, to deeply investigate the importance of certain resources over others with a case-based comparative perspective.

Moreover, the sets of enabling resources proposed in this paper should not be viewed as having hard, definitive boundaries. Rather they represent a dynamic and interrelated 'eco-system'. Testing its relevance in other contexts of place-based social entrepreneurship is one of the exciting avenues for future comparative research. Further research is also needed to investigate the role of enabling resources in facilitating processes of change, and place-based transformation in particular.

It is hoped that this paper can serve as a platform to invigorate an open and more reflexive exploration of processes of place-based social entrepreneurship.

Appendix

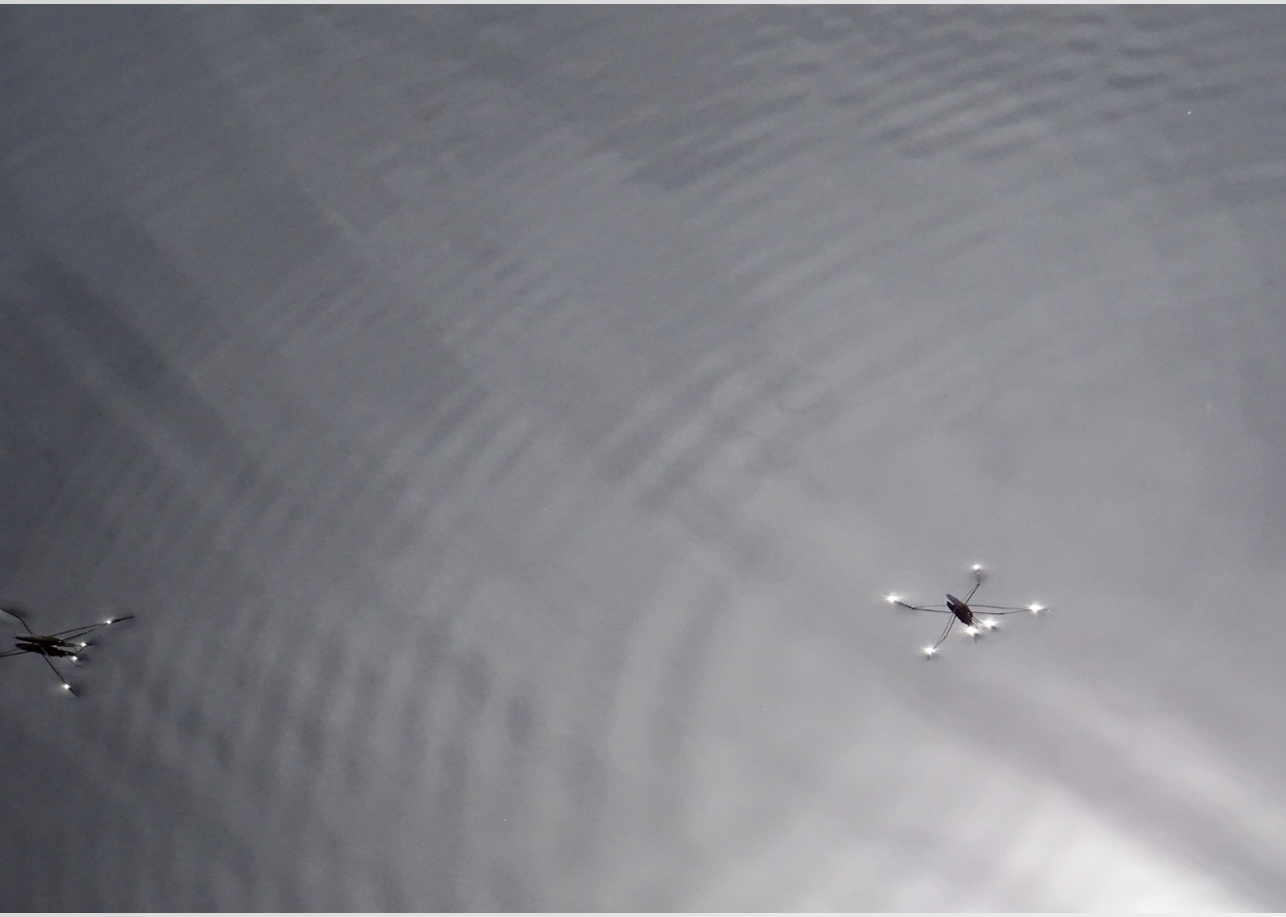
TABLE A6.1 | List of research participants

List of practitioners				
Case	**Reference code**	**Practitioners' role**	**Interviewed in**	**Participated to the co-creation workshop**
Nature-tourism company	P1	owner of the company, manager	March 2017	x
	P2	owner of the company, manager	June 2017	
	P3	staff, also involved in management	April 2017	x
	P4	staff, also involved in management	April 2017	
	P5	staff	July 2017	
	P6	staff	July 2017	
Care farm	P7	owner and manager of the farm	June 2017	x
	P8	owner and manager of the farm	June 2017	
	P9	staff	July 2017	
	P10	staff	July 2017	x
	P11	staff	October 2017	x
	P12	staff	not interviewed	x
Biodynamic farm	P13	farm owner	March 2017	x
	P14	farm manager	March 2017	x
	P15	farm community member	March 2017	x

List of external stakeholders			
Case	**Reference Code**	**Field of activity**	**Interviewed in**
Nature-tourism company	S1	Education & Research	September 2017
	S2	NGO	September 2017
	S3	Education & Research	October 2017
	S4	Private business	October 2017
	S5	Education	October 2017
	S6	NGO	October 2017
	S7	NGO	October 2017
	S8	Private business	October 2017
	S9	Private business	October 2017
	S10	Local government	October 2017
	S11	Private business	December 2017
	S12	Private business	December 2017
Care farm	S13	Education & Research	September 2017
	S15	Local government	October 2017
	S16	Local government	October 2017
Biodynamic farm	S17	Education	September 2017
	S18	Local government	October 2017
	S19	NGO	October 2017
	S20	Local government	November 2017
	S21	Local government	November 2017
	S22	NGO	November 2017
	S23	Self-sufficient farmer	November 2017

Chapter 7

Discussion and conclusions



'You think that because you understand "one" that you must therefore understand "two" because one and one make two. But you forget that you must also understand "and"'
Donella Meadows (1941 – 2001)

7

Abstract

This chapter reviews the research project as a whole and presents final reflections and conclusions. I start by addressing each of the sub-questions that form my problem statement. Next, I share key insights about the methodological and theoretical choices made in this PhD thesis, as well as the limitations of the study and suggestions for further research. Finally, I conclude with thoughts about how this research contributes to the field of sustainability transformations.

Summary of key findings

How does caring matter for sustainability transformations?

This sub-question served as a starting point to explore the meaning and practice of care at a meta-level. It was not linked to a particular stage of empirical investigation, but rather aimed at understanding, from a conceptual perspective, the extent and ways in which caring and transformative change are connected to each other. To address this question, I consulted the literature on care ethics and, to a lesser extent, ecofeminism, spiritual ecology, and environmental ethics, and I identified three dimensions that can contribute to and enrich the debate on sustainability transformations.

The main finding is that caring is an essential component of sustainability transformations (Moriggi, Soini, Franklin, et al., 2020). From an ethics of care perspective, we are all part of an interconnected web of socio-ecological relations that enmesh both humans and non-humans. We are also fundamentally interdependent and vulnerable beings. This view stands in contrast to the hegemonic notion that individuals are isolated and autonomous beings, which currently dominates Western philosophical thinking and our capitalist mode of development. Therefore, the ethics of care compels us to change the way we conceive of our place in the world as humans, shifting from an ego- and anthropo-centric to an eco-centric worldview. Embracing a caring perspective leads to a significant shift in the way we conceive of relationships, responsibilities, practices, and ethics. Morality does not lie in abstract dogmas; rather, ethics must be understood in the context in which they matter, connected to the fabric of relationships (Noddings, 2013).

My exploration of the literature on caring and transformations pointed to three dimensions of caring specifically relevant to the field of sustainability transformations: *ethically-informed practices*, *response-ability*, and *emotional awareness*. The first dimension is comprised of *ethically-informed practices*, which are tangible and salient accounts of how transformations can be enacted in various realities. In particular, caring practices such as permaculture or community-based agriculture reveal and honour the interdependence of humans and the ecological systems; communities who engage in these practices, choose to re-learn how to follow (and co-evolve with) nature's patterns and cyclical evolution (Singh, 2017). When informed by an ethical commitment to contribute to everyone's wellbeing and flourishing, practices are necessarily experimental and iterative in nature. An experimental orientation also has the potential to be transformative, as it suggests that relationships should be renewed over and over, through attention to the needs of those involved and through ongoing tinkering. Such attentive interaction can also lead to processes of empowerment for both sides of the caring spectrum – caregivers and care receivers. In this context, care receivers become active part of a relationship, as opposed to passive recipients of a caring intervention. Care receivers include both humans and non-humans. From a care perspective, non-humans are sentient beings, from whom we can learn in non-verbal ways (Kimmerer, 2014).

The second dimension is *response-ability*. In Western philosophical thinking, responsibility in relation to sustainability is often seen as ex-post accountability; our relationships and actions towards the environment are framed in terms of burdens, guilt, and trade-offs (Pulcini, 2013). In contrast, from an ethics of care perspective, responsibility has a forward-looking connotation: it is framed as response-ability, i.e. the ability to respond to the needs we see around us. The more we are engaged in relationships, the more we feel the need to care and act upon those caring needs. The environment is not something abstract that we pollute and then feel guilty about, it is something tangible that we are in relationship with, regardless of proximity. Choosing to care for our surroundings – by changing our consumer choices or by engaging in community regenerative practices, for example – is not an obligation, but rather an act of freedom. Response-ability represents our ability to deliberate and express who we are and our capacity to live more fully in alignment with our values, as citizens, community members, and human beings (Haraway, 2016). Thus, framing responsibility as response-ability has transformative potential, as it prompts us to embrace a forward-looking orientation and a proactive stance towards the needs we see around us.

The third dimension is *emotional awareness*. A clearly articulated understanding of emotions is still marginal in the field of sustainability transformations. On the practice level , emotions are seldom included in sustainability-oriented collaborative processes (Galafassi, 2018). A care lens highlights that emotions are important as they allow us to nurture our capacity for imagination, and consequently, to take the future in our hands by building alternative visions and possibilities. Scientific knowledge is often detached from emotional awareness in discussions about the climate crisis or environmental destruction. As a consequence, rational knowledge and awareness about the climate crisis (or other urgent issues affecting our societies) do not translate into action. Information derived from exclusively positivist perspectives may lead to apathic or dismissive attitudes, and a perpetuation of business-as-usual solutions. A growing number of scholars, however, suggest that taking into account the affective and ethical dimensions of how we know and learn can inspire a commitment for transformative change towards alternative futures (Held, 2006).

Taken together, these three dimensions can be used by scientists and decision-makers as points of focus to re-think our approach to sustainability transformations – not only conceptually, but also practically. In fact, in the realm of transdisciplinary processes of knowledge co-production and participatory action research, several key studies have shown that a growing number of researchers are working to put caring principles into practice. Many researchers engage in attentive interactions with communities, adapting epistemological and methodological approaches to the context (and its interdependencies) (Brown et al., 2017). Many are also open to experimentation and failure, and are committed to empower participants and build their capacities (Foster, 2016). More and more, researchers are attempting to embody the caring principles of response-ability as they respond to the needs of those involved in their work – and not just to the demands of their research (Franklin, 2018). Finally, researchers in

this field are now exploring emotions through their practices, trying to integrate emotionally-sensed knowledge and different ways of knowing into the research process (Pearson et al., 2018). On a personal level, as described in chapter 3, these caring features also informed my own methodological approach.

In conclusion, there is strong evidence that both the practices and conceptualizations of caring have important implications for sustainability transformations. Developing a robust understanding of the meaning and multiple manifestations of caring can re-orient our work as sustainability scientists, specifically in terms of understanding *what* transformations are and *how* to bring them forward.

What are the multiple dimensions of caring in Green Care? How do they relate to place-based sustainability?

A substantial part of this research has been to unravel the meaning and the practice of caring with particular focus on the empirical phenomenon of Green Care (Moriggi et al., 2020). The literature on Green Care mostly focuses on the human dimension of caring and on the way caring practices contribute to people's health, wellbeing, and social inclusion (Elsey et al., 2014). The empirical findings in this PhD thesis confirm the centrality of human wellbeing in Green Care and also offer new perspectives about other dimensions of caring that often remain less visible. I will briefly summarize these findings below.

To understand caring as a multidimensional phenomenon, I drew from Tronto's conceptualization of the five stages of caring: *care about, care for, care giving, care receiving,* and *caring with*. As a point of departure, I explored what Green Care practitioners *care about*, and how this relates and fuels their willingness to engage in Green Care practices. The data analysed suggests that practitioners' caring concerns revolve around four main domains: social inclusion, human-nature disconnection, urban-rural disconnection, and nature-related personal passions and interests. The practitioners' concerns reflect some of the urgent issues affecting our societies, which serve as motivation to create alternative visions and directions (Smith et al., 2017).

The practitioners' concerns inform and shape the activities that they offer and perform on the farms and in the nature-tourism company – namely what they *care for* through tangible everyday doings. Activities go beyond the provision of health and social care and beyond therapeutic and rehabilitation pathways for their different target groups. Activities include recreational and educational practices and practices that build bridges and connections with the wider community and places in which the Green Care practitioners operate. In the case of the two farms, much of the caring work is also directed towards the sustainable management and stewardship of non-human entities (animals, plants, the soil, etc.) and the maintenance and preservation of traditional rural landscapes.

As a third step, I explored the *care giving* dimension – the ways in which care is performed on an everyday basis. To do so, I looked at (a) the core ingredients of high quality Green Care services and (b) at the ways in which practitioners interact with the non-humans and humans around them, including the recipients of their services and members of their communities and, to a lesser extent, their external collaborators. Findings reveal that the key elements of high quality Green Care services are nature, togetherness, meaningful work, and meaningful experiences. Additionally, human- and goal-oriented approaches characterize high quality ways of working, following the criteria of flexibility, slowness, professionalism, responsibility, safety, and respect.

To explore the fourth dimension of caring – *care receiving*, I analysed the role of care receivers who are seen by practitioners as active agents who substantially contribute to the care work. In particular, I looked at the extent to which the needs, attitudes, and capacities of care receivers are taken into account in the design and adaptation of the practices. The data collected reveal that for these needs and capacities to be adequately addressed, it is important to constantly monitor and assess the effectiveness of the practices. In this way, care receivers are provided a chance to respond actively to the care given.

A final important dimension of the caring process is *caring with*, which, according to the literature, points to the potential empowering outcome of caring practices. Data show that a crucial precondition for empowerment is learning. When caring is seen as a learning cycle, there is space for constant improvement and innovation of the practices. In the three cases considered in this PhD thesis, learning lies at the foundation of caring processes. Learning is an important component for the personal development of practitioners and is one of the motives that drive their entrepreneurial efforts. At the same time, learning is a result of the caring process: through the relations enacted in Green Care, all sides involved contribute to mutual learning and empowerment.

On a more general level, findings suggest that caring practices are not a series of intervention, but rather the results of relational efforts and relational work (Mol, Moser, Piras, et al., 2010). Green Care practitioners experiment with and implement alternative ways of relating to people with disabilities, to elderly folks, to marginalized groups, etc., based on principles of mutual learning and reciprocity. They also foster non-instrumental relations with the non-human world, practicing respect and gratitude and engaging with animals, and even trees and plants, as sentient beings who provide important contributions to Green Care activities. Additionally, practitioners nurture multiple cross-sectoral relationships and open new windows of opportunities beneficial for their businesses and community models. These relations shape places in ways that can affect their sustainable development (Horlings, 2015). Yet sustainable trajectories are not bound to a set or fixed direction, but are rather processes that evolve and change over time.

To gain these insights, I believe it was useful to work with the three enterprises over the span of three years and to understand the evolution of their activities looking at past, present, and future visions. Because Green Care enterprises are often small-scale and family-managed, the choices made and the ways things are done are dependent on the main people involved. Over time, these individuals may become more or less engaged in the daily operations or may go through important stages in their own personal development. As a result, the sustainability character and intent of practices may be influenced in positive or negative ways. The type of enterprise also affects sustainable choices and the extent to which the care practices physically and mentally shape a particular place. Unlike the nature-tourism company, the farms are bound to a specific geographical location. The landscape there changes considerably over time as a result of the use, management, and partial regeneration of natural resources and as a result of different types of social relations. In parallel, sense of place is also affected.

Complementing existing knowledge about social and care farming, the empirical findings from my research highlight the potential of Green Care practices beyond the provision of health and social services. A handful of studies have proven that social farming can contribute to the conservation of socio-ecological systems at local level (García-Llorente et al., 2016) as well as the creation of forms of solidarity and civic economy. These new economic configurations are based on principles of reciprocity, gift, subsidiarity, and co-production and can have multiple added values for the territories in which they are embedded (Di Iacovo, 2020). This study confirms these assumptions, not only in the case of the biodynamic farm, which is the closest to a social farming model, but also in the case of the care farm and, to a lesser extent, the nature-tourism company. Green Care practitioners engage in a variety of activities that are rooted in context-dependent collective interests and tied to the needs of the places in which they are embedded, which leads to benefits for the target users, the wider community and, in the case of the farms, the ecosystem as well. For practitioners, Green Care represents both a professional path and a way of living – a way to express who they are and who they wish to be through socially innovative and ecologically-conscious practices embedded in specific places. In this perspective, Green Care practices go hand in hand with pathways of place-based sustainability.

It is worth noting that the multi-dimensional nature of Green Care practices is not obvious to many of the external collaborators of the three enterprises. Many 'external stakeholders' (e.g. civil servants, providers, advocates, etc.) ignored or downplayed the importance of the ecological, cultural, and community components of Green Care. Even when they were aware of these additional components, the social and wellbeing factors still played a much more important role in their choice to engage in Green Care practices. This finding is important for the future development of the field of Green Care in Finland, because it points to a need to develop a wider awareness of the reality and potential of Green Care in processes of sustainable local development. To fully understand the multiple benefits of the practices,

researchers, practitioners, and policy-makers need to embrace more holistic understandings of Green Care, and incorporate it into how they frame their advocacy, training, and assessment procedures.

Which place-based resources do practitioners use to make Green Care happen? How do these resources enable practitioners' change agency?

To respond to these sub-questions, I investigated the entrepreneurial processes that makes Green Care practices possible (Moriggi, 2019). I put the resource mobilization efforts of Green Care practitioners at the centre and analysed how these resources enable or constrain the realization of specific activities. When looking at the processes of resource mobilization and creation, I took into account the importance of context and place embeddedness.

The results of the empirical investigation revealed that Green Care entrepreneurs use a great variety of resources which I then categorized into four different levels: personal, community, organizational, and structural. In total, nine sets of resources were identified: infrastructural, institutional, material, organizational culture-related, place-specific, social, ethical, affective, and competence-related. These categories are not static and can be subject to different interpretations. This multi-level categorization allows us to shed light on specific resources that have thus far received scant attention in the relevant literature such as ethical, affective, and place-based resources. Place-based resources have rarely been taken into account in studies on change agency. There has been a tendency to focus on institutional and social dynamics without properly considering the geographical, ecological, and cultural context (Marquis & Battilana, 2009). My findings align with more recent literature that considers context and place-embeddedness as important elements in change agency because they provide the anchor for social connections and network-building opportunities (Korsgaard et al., 2015). In the three case studies considered in this PhD project, context embeddedness includes material relations to place (through the use and maintenance of certain natural resources), and particularly for the two farms, emotional-psychological relations, manifested through sense of place and place attachment. In sum, the practitioners' relations to their context influence and sustain their entrepreneurial efforts in crucial ways and thus, such relations deserve more rigorous attention in studies about change agency.

Thus far, the ethical and affective dimensions of the resource mobilization process have only been marginally considered in literature on moral, social, and community-based entrepreneurship (Antadze & McGowan, 2017; Schaefer et al., 2015). The findings in this PhD thesis reveal that values and emotions play an important role in triggering action and sustaining it in the long term. Affective and ethical assets, together with competence-related assets, are recurrent success factors in all three cases. One motivating factor may be that Green Care enterprises are small scale and mostly rely on the personality and vision of few individuals within the company/community. Literature on different kinds of entrepreneurships also suggests that abilities and skills (gained through educational, professional, and lived

experience) play a strong role in the entrepreneurial process (Hassink et al., 2013; Westley et al., 2013). The findings in this PhD thesis confirm the crucial role of competence-related resources while highlighting how competences are not prerogative of any special individual or group. Rather, competences are the result of learning processes that mostly take place through everyday Green Care practices.

Some resources, on the other hand, appear to constrain the change agency of practitioners; some are hard to mobilize, others are inadequate or insufficient, and still others hinder the smooth development of the operations. In particular, resources at the organizational and structural levels of my categorization may constrain the entrepreneurial process. The process of obtaining material resources such as financial capital via bank loans, for example, requires significant bureaucratic efforts that are tiring and often unsuccessful. The resource of organizational values (i.e. attitudes and norms within the company or community) may not be shared amongst the members of the organization, especially in times of transition or uncertainty about the future of a place or company (e.g. intra-generational change). When organizational values become divisive they can act as disenabling factors for progress and change. In terms of structural resources (physical, institutional, and regulatory), Finland guarantees the necessary physical and institutional infrastructures to carry out Green Care practices (e.g. functioning welfare system), but the regulatory framework for Green Care is still not sufficiently developed to facilitate entrepreneurial efforts. Finland is currently undergoing the largest social and healthcare reform in history (the SOTE reform), which creates uncertainties and a general sense of caution on the part of local administrators in terms of allocating funds for nascent Green Care projects. Similarly, competitions for public bids to offer social and well-being services favour institutionalized forms of health rehabilitation because they do not recognize the peculiarities and added values offered by Green Care services. This puts Green Care entrepreneurs at a disadvantage because they are forced to compete with multinational corporations that have more leverage and resources.

The kind of multifaceted perspective on resources for place-based Green Care entrepreneurship presented above leads to practical and generative questions such as: how can policy-makers sustain and facilitate the work of individuals who are committed to innovating for the common good?

Methodological Reflections: Contributions and challenges of a participatory action-oriented approach

As discussed at length in Chapter 3, the methodology of this PhD thesis was informed by the principles and practices of Participatory Action Research (PAR) and Transdisciplinary Research (TDR). Looking back at the development and application of my methodological framework, I can say that it was a very intense journey; in fact, the importance and centrality

of my methodological considerations grew exponentially over the course of the research. As my proximity to the transformative sustainability science community grew – especially via readings and participation in conferences and workshops – so did my capacity for reflexivity around the methodological choices I pursued. As a consequence, I felt the need to nurture my growing understanding about both *why* and *how* I was applying specific techniques. Below I briefly summarize some relevant reflections.

Using PAR to inform my methodology was appropriate in a study concerned with both change and caring. PAR principles align with key tenants of the sustainability transformations debate and with the ethics of care literature, and as a consequence, the conceptual approaches resonated with the methods applied. An example of this resonance can be observed in the way I dealt with topic of resource appreciation and resourcefulness. While I was investigating the role of enabling resources for Green Care entrepreneurship at more theoretical level (chapter 6), I structured my collaborative engagement with the three enterprises in a way that could allow them to identify and appreciate the broad spectrum of resources they mobilize in their work. I designed this activity as a way to gather relevant data, but also as way to support practitioners to recognize and value their own resourcefulness (see in particular the 'Envisioning the Future' co-creation workshop, chapter 3).

A second example of resonance between my theoretical and methodological approaches showed up in the dual application of Tronto's five stages of caring: as an analytical tool and as way to incorporate more reflexivity into my role as a researcher. I used the five stages analytically (in chapter 5) to interrogate the dimensions of caring in Green Care, but also found Tronto's framework to be a useful conceptual tool for my empirical investigation and as a reflexivity tool for my own PAR approach. In the process of shaping my role as 'caring researcher', I tried to embody the moral principles suggested by Tronto – *attentiveness, response-ability, competence, responsiveness,* and *solidarity* (see chapter 3 for more details). My attempt also reflects a very recent trend in sustainability science to discuss the meaning and practice of 'care-ful research' and how it can lead to meaningful and effective societal engagement (Corbera, Anguelovski, Honey-Rosés, & Ruiz-Mallén, 2020).

A third example of resonance was the emphasis on interdependence, which is one of the foundational elements for a care-based approach to transformative change. In this PhD I tried to understand how Green Care practices are moved by a desire to reconnect humans and nature and regenerate place-based socio-ecological relations; at the same time, I highlighted the interdependence of non-human beings and place-specific elements using creative methods in co-creation workshops. I invited participants to (a) tap into ecological mind-sets and embrace an eco-centric worldview when thinking of the development of their practices and (b) voice their attachment to place. In doing so, I was able to produce useful research data, while putting into practice the 'ethos of appreciation' toward all beings – as advocated in Appreciative Inquiry (chapter 3).

Overall, the convergence between theory and practice enriched my research journey and enhanced the effectiveness of the participatory engagement (as confirmed via the results of the assessment survey carried out at the end of the study – chapter 3).

Doing participatory and action-oriented work also posed many challenges. First, PAR demands equal attention to both process and outcomes. In order to structure the engagement process in meaningful ways, the researcher must invest substantial in time, energy, and creativity. As a consequence, I had to slow down both data analysis efforts and the writing of scientific papers. Second, PAR requires the researcher to wear many 'hats' throughout the engagement process (see chapter 3 on the role(s) of researchers). At times, my role resembled that of a consultant rather than a researcher which created a sense of confusion regarding my tasks and the expected outcomes. Finally, both PAR and TDR researchers must struggle with a number of competing demands – the 'transdisciplinary triple jump' in the words of Cockburn (2018). Researchers must pay attention to (a) scientific rigor and excellence, (b) societal relevance and engagement, and (c), and self-respect and care. The latter point proved particularly important in my PhD journey. I often felt vulnerable due to the constant imperative to experiment, to be creative, and to foster reflexive and critical thinking. As a coping mechanism, I tried to cultivate emotional awareness and self-care – through counselling and therapeutic journaling, yoga, meditation, and the support of like-minded and like-hearted researchers in my community. In my experience, embodying transformative research principles demanded an effort of personal transformation and growth.

To conclude, the methodological journey in this PhD project enhanced my awareness about the urgency to transform institutionalized mechanisms of knowledge production – like academia – in ways that are more inclusive and relevant for society (Fazey et al., 2020), but also in ways more sustainable for researchers (Corbera et al., 2020). To do so, academic institutions must change dominant mind-sets and norms and embrace a paradigm that recognizes the 'generative' nature of research approaches: 'receptive to complexity and ambiguity, aware of researchers' participation in the phenomena they describe, and committed to ethical, deliberative participation in practice' (West, Haider, Stålhammar, & Woroniecki, 2020, p. 304). For PAR and TDR work to be meaningful, academic institutions should reward and support researchers and follow novel values and priorities. There is an urgent need to move away from a system that rewards competition and individualism over collaboration, and that disproportionately evaluates impact factors and scientific publications, relegating many of the outputs with societal impacts to the goodwill and 'ethical creativity' of committed researchers. The recent events related to the COVID-19 pandemic have exacerbated some of the extractive practices in academia, triggering discussions about the possibility to re-orient our profession in more respectful and sustainable ways. The ethics of care has been proposed as a way to inform a novel researchers' work ethos for the future (Corbera et al., 2020).

Theoretical insights: a relational lens on change agency and place-based practices

At the start of this PhD project, a review of the caring and sustainably transformations literature revealed several theoretical gaps which deserved further exploration. Such gaps were described in detail in chapter one and are briefly summarized below.

With the intent to contribute to the collective understanding of sustainability transformations, which has been notoriously plagued by fuzzy and vague definitions (Blythe et al., 2018), this research set out to explore the drivers of change in the empirical phenomenon of Green Care practices, with specific attention to the relational and inner dimension of transformation. To do so, I used a relational lens to interrogate two themes that are frequently used to explicate change processes: (1) change agency (and social entrepreneurship in particular); and, (2) place-based practices. In the arena of change agency, the relational lens shed light on the dimension of values, emotions, and worldviews; in place-based practices, it highlighted the dynamics that enmesh people, place, and practices, as well as the role of place-based resources in the process of change. While investigating these themes at a meta-level, my secondary aim was to enrich the theoretical understanding of Green Care, which is a growing research field in need of additional perspectives and critical points of inquiry. Below I summarize the ways in which I explored the various subject areas conceptually, highlighting insights and connections amongst different fields and possible theoretical contributions.

Change agency is an established concept in the sociological field, and is one of the main points of focus for literature on sustainability transformations (Fazey et al., 2018). In this thesis, I operationalized change agency in three main ways.

First, I focused on the deliberative nature of agency which is expressed in the intentional choices of individuals and groups who responsibly choose and shape sustainable pathways through everyday actions (Horlings, 2015; Tschakert & St.Clair, 2013). Second, I chose to explore the entrepreneurial process: how practitioners initiate Green Care activities, and what resources make the activities happen and sustain it in the long term. Third, I used a relational lens to investigate the transformative potential of caring agency. To explore these different aspects of agency I tried to understand Green Care practitioners' experiences by exploring both their mental representations and narratives of the material world and their embodied engagement and responsiveness to needs of humans and non-humans in their places of embeddedness (West et al., 2020). Additionally, I gathered insights about their change agency from the wider network of stakeholders, gaining outsiders' perspectives. Because the participatory collaboration covered the span of three years, and was structured along different fieldwork stages and levels of engagement, I was able to see practitioners' agency evolving in a continually unfolding dynamic of processes and relations. Looking back, I can confirm that in order to obtain an articulated and dynamic understanding of change agency, it is important

to explore not just *what* people do, but also *why,* and *how*. Moreover, the research will benefit from applying a variety of methodological approaches over the course of several years as a way to access a diversity of stakeholders' perspectives.

In my focus on *why* practitioners engage in Green Care practices, I paid considerable attention to practitioners' motivations, values, and emotional drives, which, I believe, has contributed to the debate on the inner dimension of change (Ives et al., 2020; O'Brien & Sygna, 2013). The inner dimension of change proved to be extremely important in my empirical findings, both in the resource mobilization process that Green Care practitioners engage in to start and sustain their activities (chapter 6), as well as in shaping modes and ways of working that underlie their practices (chapter 5). My findings confirmed theoretical assumptions about the centrality of values and mind-sets as a deep leverage point in sustainability transformations (Abson et al., 2017). They also pointed to the importance of further appreciating change agents' sense of moral agency and further investigating the potential of moral agency to support the development of just, inclusive, and regenerative societies. The inner dimension of change was also explored at a meta-level, with no specific reference to Green Care. In chapter 4, ethics and emotions are placed at the centre, drawing heavily from care ethics scholarship (Pulcini, 2013) and from feminist accounts of place-based sustainability (Cox et al., 2013). Combining these bodies of scholarship revealed that a caring approach to change ideally calls for regenerative actions, capable of integrating socio-economic wellbeing and prosperity with the restoration and rebuilding of ecological systems (Mang et al., 2017). A caring philosophy recognizes the potential for humans to engage in forward-looking actions, build alternative futures, and increase the resilience and vibrancy of the environment, following principles of reciprocity, mutual learning, and attentiveness. There is growing need to appreciate and nurture business and community models that put these principles at the centre, especially in a time of increased ecological fatigue and despair (Haraway, 2016), climate denialism (Hamilton, 2017) and apathy and inaction (Moore, 2017).

To explore *what* change agents do, I focused on the everyday practices performed by practitioners. Practices have been studied extensively in the social sciences but, in recent years, there has been a growing interest in the 'transformative potential' of place-based practices. Scholars suggest that people can shape places in more sustainable ways, re-embedding daily lived practices in social-ecological systems in ways that regenerate relations between people and their environment (Horlings, Roep, Mathijs, & Marsden, 2020). In chapter 4, I identified three features that make caring and ethically-informed practices potentially transformative. First, practices can be transformative if they express people's desire to engage attentively with context and its interdependencies, caring for both human and non-human relations. Second, practices can be transformative when done in an experimental and iterative way, responsive to the needs of those involved. Third, practices can be transformative if they offer a chance for empowerment for those involved, for example, by reframing relations of power and allowing people to fully express their capacities and skills. In chapter 4, these features are

put in relation to sustainability initiatives like permaculture, community supported agriculture, and commoning practices. These are examples of place-based practices, not only because of their situational and contextual nature, but also because they entail deep relations with one's own place and the capacity to understand and appreciate its socio-ecological features in novel ways. While other scholars have previously discussed issues of interdependence, experimentation, and empowerment in relation to practices, to my knowledge these three dimensions have not been considered together. There is potential to use this three-fold lens as an analytical tool to further explore the transformative features of place-based practices. Place-based practices include research practices, especially when ethically-informed and action-oriented (as mentioned in the discussion section of chapter 4).

In chapter 5, place-based practices are investigated in the context of Green Care. Tronto's five stages of caring were adapted to develop an analytical framework for exploring multiple dimensions of Green Care. This model sheds light on well-known practices – aimed at health and social inclusion – as well as on practices that often remain in the shadows, such as activities oriented towards education, community engagement, and ecological conservation and regeneration. Applying Tronto's framework also yielded other valuable results: it showed the correspondence or mismatch between tangible doings and the values underlying them; it highlighted the relational nature of Green Care practices, based on reciprocity, deliberation, and learning; it demonstrated that caring is a process, rather than a succession of isolated interventions. This framework could potentially be applied in contexts other than Green Care, for instance, it could be used to investigate practices of transformative learning and pedagogy.

Finally, in this research I have tried to understand *how* practitioners 'make things happen', specifically how they mobilize different kinds of resources at place-based level. Scholars interested in change agency have studied resources extensively, framing them in terms of assets, capitals, conditions, opportunities, skills etc. (Mair & Marti', 2006; Westley et al., 2013). My goal was to make sense of all these different categorizations and propose a comprehensive conceptualization of resources that would take into account place embeddedness and the dynamic interplay between agency and its context. Drawing from Korsgaard et al. (2015) and McKeever et al. (2015), I considered place embeddedness as a vantage point in processes of entrepreneurial agency. Place embeddedness highlights both local and non-local assets and it points to the ways that intimate knowledge and concern for one's own place and community may trigger a desire to respond to specific contextual needs. Such lines of reasoning resonate with literature on place-shaping, according to which place is the privileged locus of many emergent collaborative partnerships (Massey, 2004). Bridging literature on social, community, and moral entrepreneurship with place-shaping research proved particularly useful for identifying a comprehensive list of resources, comprising the most commonly known – such as social relations, social capital, and political skills – as well as others so far marginalized in existing literature. I refer in particular to ethical, affective, and place-based resources (see response to sub-research question 3 for further details).

It is worth mentioning why I decided to use the word 'resources' to frame the assets, capitals, conditions, opportunities, skills, etc. mobilized in social entrepreneurship. The use of 'resources' was inspired both by relevant literature and by my empirical observations. Over the course of the PhD project, I came to recognize that practitioners are extremely *resource-ful* and *resource-assembling* individuals. The term made sense to them as well, and proved valuable during different stages of the collaborative engagement, especially during the last co-creation workshops. Moreover, focusing on resourcefulness (drawing from Franklin, 2018) and on enabling resources (drawing from Duff, 2011) worked in concert with the Appreciative Inquiry approach that informed my methodological framework (Fry, 2011). Instead of concentrating on what was lacking, I chose to look at 'what was already there'. This did not prevent me from detecting resources that are constraining or dis-enabling for the entrepreneurial process, such as financial capital or organizational values (see response to sub- question 3 for further details). The categorization of enabling resources proposed in chapter 6 could be relevant and complementary to studies that focus on social capital and social innovation. Recent publications in that field continue to underestimate the importance of place embeddedness and ethical and affective resources in processes of change (see for instance Dalla Torre et al., 2020). Additionally, the categorization of enabling resources could be used as a capacity-building tool for community engagement in terms of facilitating resourceful dialogue and action.

Green Care and place-based sustainability transformations: limitations of this study

In this section I discuss some of this research's choices including (a) the limitations of a care approach to study socio-ecological systems, (d) my choice to privilege the social component of change, (c) the lack of attention on the impacts of transformations, and (d) the role of place embeddedness. I go on to suggest possibilities for future research to address pending questions and knowledge gaps.

A first aspect worth mentioning regards the merits and limits of a care approach. Employing care ethics helped me to demonstrate the importance of interdependence and relationality between humans and non-humans and to reveal unexplored dimensions of Green Care. Nevertheless, for the sake of analytical clarity during data collection and analysis, I frequently framed social and ecological components as separate clusters. Critics could argue that this separation replicates the much criticized nature-human dichotomy and goes against the use of a relational lens (West et al., 2020). Similarly, as I discussed in chapter 5, the five stages of caring proposed by Tronto is mostly concerned with the role of human agency and can therefore lead to anthropocentric interpretations and findings. However, these were conscious choices. Since the empirical component of my study focused on practices performed by humans caring for other humans through nature-based activities, it made sense to centre human

agency. Moreover, framing social and ecological components as separate was instrumental to smooth communication with the participants of the study. Although terms such as more-than-human 'assemblages' or 'entanglements' (Haraway, 2016) or 'coupled systems' (West et al., 2020) follow the norms of scientific writing, this language is perceived as fuzzy jargon by laypeople and does not enable fruitful exchange during meetings or workshops. For non-human and more-than human agency to be appropriately taken into account, other theoretical insights, for instance from more-than-human anthropology, should be integrated (see the discussion section in chapter 5 for more details).

Privileging the social/relational aspect of change influenced the way I approached sustainability transformations. I did not look at transformations as the trajectory of a socio-ecological system moving from an unsustainable state to a more sustainable one (Olsson et al., 2014); rather, my attention was on the process of transform-*ing,* as embraced by practitioners at individual and relational level. This process resembles an individual and collective learning journey towards more caring connections between humans and between humans and nature. The focus is thus mainly on the human agency and does not account for all the dynamics affecting the socio-ecological environment. Future research could identify stronger links between human- and care-centred approaches as a way to change wider socio-ecological systems dynamics. For instance, one could study the ways in which caring concerns for nature are translated into practices of flora and fauna regeneration and analyse their specific characteristics and effects. Additional research on Green Care could investigate to what extent human well-being objectives can be tied to goals for conservation and the regeneration of socio-ecological systems, so that the two can be linked more consciously and strategically.

Another research decision that involved trade-offs was about the impact of transformations. Green Care practices can be seen as ways to transform relations in places in ways that reflect practitioners' sustainability values, such as desire for social inclusion and for human-nature connection. I did not, however, research the extent to which such relations lead to transformations at a territorial or regional scale. Additionally, I did not measure the impacts of Green Care practices on different dimensions of sustainability in the places considered, but rather focused on identifying their potential for sustainable pathways. Additionally, due to my disciplinary background and specific competences, I tended to focus mostly on the social dimension of change, thus paying less attention to economic, ecological, and cultural elements. Possible future studies employing sustainability impact assessment tools, for instance, could draw from the insights in this research and significantly advance the understanding of how Green Care practices impact different sustainability dimensions. By identifying criteria that are sensitive to regenerative forms of development, future studies could redefine the way sustainability is assessed.

Finally, this PhD thesis is primarily concerned with initiatives happening at the local level. There is a tendency in both research and policy to prioritize scaling up innovations and to choose

a one-size-fits-all, top-down solution approach to development (Korsgaad, 2011; Smith & Seyfang, 2013). The findings in this study suggest that the embeddedness in a particular place can be an added value for Green Care practitioners, especially in the case of the two farms. On these farms, place is expressed as a physical space with clear boundaries as well as an emotional and spiritual landscape. Practitioners spend considerable time and effort shaping their places via managing natural resources and altering physical landscapes, as well as by engaging in caring relations with both humans and non-humans. In the case of the nature-tourism company this aspect of place-shaping was less evident; the company operates in multiple geographical locations and the practitioners do not consciously express a specific sense of place towards those locations. Further research on Green Care could explore other forms of nature-tourism that put stronger emphasis on place peculiarities, also with a conscious effort to boost 'proximity tourism' and other forms of 'nearby' leisure and recreation.

At a general level, the findings of this study have implications for policy-related research and action. It underscores that policy-makers and local administrators have the opportunity to regulate and manage the field of Green Care in ways that valorise and maximize place-based sustainable development. One promising avenue for future research could be to explore how policy-makers and institutions can support Green Care local entrepreneurs by appreciating the diversity and peculiarities of their practices in ways that can benefit regional resilience. To do so, entrepreneurs should not be seen only as service-providers, but rather as 'sustainable place-shapers'. It is important to understand how their relationship with a place can go hand in hand with more sustainable, culturally aware, and socially sensitive forms of local development (McKeever et al., 2015). Future research following a transdisciplinary approach could also support the design and implementation of differentiated policy strategies and solutions in order to better address local needs from the ground up and in conjunction with communities and their local innovators.

Conclusions

This thesis has been guided by my fundamental research question:

> What is the significance of Green Care practices for processes of place-based sustainability transformations?

Based on my empirical findings, I summarize that Green Care practices (a) are ways in which people transform relations in places inspired by sustainable visions and mind-sets and (b) foster sustainable pathways to place-based development in multiple dimensions. First, Green Care practitioners choose business models and economic relations that put people and social value creation (as opposed to profit accumulation) at the centre of their goals and activities. The social orientation of Green Care not only benefits service-users and participants, but also the surrounding communities and local networks and institutions. Second, Green Care

practices are informed by deep ecological values which run counter to economic models that over-exploit natural resources. In the case of the two farms, practices are oriented towards conserving and regenerating natural resources. In the case of the nature-tourism company, practitioners combine impact minimization with an attempt to reconnect people to nature, via contemplative learning experiences. Third, practices are rooted in cultural beliefs and traditions that contribute to re-embedding relations in particular places, celebrating their peculiarities, in both material (via conservation of traditional architecture and landscapes) and immaterial (via oral traditions) ways. In bringing to light the multi-dimensional nature of caring practices, this work has demonstrated the importance of appreciating Green Care from a more holistic perspective – one that considers multiple beneficial components, besides the well-being and economic ones. Further studies are needed to capture other empirical accounts of these multiple dimensions, and to assess the impacts they yield on their territories.

In answering the main question posed above, this PhD thesis has articulated frames, developed concepts, and tested new methodologies, with the goal of contributing to sustainability science and to the sustainability transformations debate in particular. Although it is difficult to demonstrate that Green Care practices directly lead to transformations, especially in large territorial socio-ecological systems, they certainly carry the seeds of transformation in other ways. They are highly innovative and experimental activities – designed, initiated, and implemented with the goal of meeting social needs in novel, nature-based ways. Because of this pioneering attitude, adaptation and innovation are a constant. Moreover, practices are moved by strong caring concerns based on an awareness of the interdependence of human and non-human well-being and expressed in an ethical and emotional commitment to appreciate both social and ecological resources. Finally, practices are transformative in the sense that they are powered by human agency and deliberation. In other words, charismatic and entrepreneurial individuals and groups, in the attempt to translate their visions and values into tangible doings, embark in processes of change – of their personal selves, of patterns of collective thinking, and of relations around them. At the beginning of this PhD project, relationality, care, and the inner dimension of sustainability were considered marginal within the sustainability transformations debate. As this PhD journey comes to an end, however, a growing number of scholars are advocating for relationality and care to take a stronger role in the dominant discussion (Ives et al., 2020; West et al., 2020). My professional hope is that this PhD thesis can contribute and enrich the debate.

Additionally, this PhD thesis has emphasized *how* transformative change can be fostered through participatory action-oriented modes of engagement. Since the initiation of this research project in 2016, there has been a flourishing of transformative practices, including experimental, inclusive, and impactful forms of knowledge production (Pereira et al., 2020; Schäpke et al., 2018). Using inter- and trans-disciplinary approaches proved extremely valuable. Combining established methodologies, such as semi-structured interviews and participant observation, with more creative and experimental methodologies, like co-creation

workshops and Photo-voice, resulted in a rich and diverse data set and enabled a more fruitful engagement process with the three cases involved. For example, participants expressed that the research helped them to gain confidence in the value of their work and in their capacities and resources, and that it gave them a stronger sense of purpose towards future goals. This PhD project has also exposed the challenges of participatory work which requires a delicate balance between multiple roles (as researcher, facilitator, knowledge-broker etc.) and between the competing demands of producing outcomes with both scientific and societal relevance. Despite the challenges, my personal and professional experience has led me to believe that combining scientific rigor with socially-robust knowledge and societal impact is not only possible, but can be incredibly rewarding. The task of transforming knowledge systems cannot, however, be undertaken exclusively by individuals, it must be fostered at institutional levels as well.

In conclusion, this PhD thesis is one of many motivated by the desire to explore the passion and ethical creativity of visionary and charismatic individuals and groups. Human agency has always been a source of fascination in the social sciences and probably always will be. My modest personal aspiration for this research is that, by documenting caring human actions, we can feel more hope and inspiration to imagine alternative futures respectful of regenerative human and non-humans relations on Earth.

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Summary
Tiivistelmä
Sinossi

Summary

This thesis provides insight into the field of place-based practices and their contribution to processes of transformative change. It does so by exploring three in-depth case studies under the umbrella of Green Care in Finland. Each case featured communities of Green Care practitioners who offer well-being, social inclusion, recreation, and pedagogical activities in contact with nature.

The research process was framed by broader discussions around sustainability transformations which are understood as radical changes in development trajectories (at all scales) away from 'business as usual' and towards sustainability. In both my research design and my fieldwork, I applied a relational lens to interrogate two concepts that are frequently used to explicate change processes: (1) change agency (and social entrepreneurship in particular); and, (2) place-based practices. In the arena of change agency, the relational lens shed light on the dimension of values, emotions, and worldviews; in place-based practices, it highlighted the dynamics that enmesh people, place, and practices, as well as the role of place-based resources in the process of change.

Green Care can be seen as an alternative to traditional health care models and as way to promote rural development and agricultural innovation. The literature has widely investigated the benefits of Green Care in terms of well-being and social reintegration for different target groups, including people with mental and physical disabilities, vulnerable children, demented elderly, recovering addicts, long-term unemployed, offenders serving community orders, and refugees. Several scholars also consider Green Care, and in particular care and social farming, as promising examples of multifunctional agriculture with potential to contribute to the transition of European rural areas from an agriculture-based to a service-based economy. Research shows that care and social farming initiatives may support the re-organization of local economies around principles of solidarity, reciprocity, and inclusiveness.

Against this background, the initial exploratory phase of this research project revealed two major gaps inviting further investigation. First, the 'inner dimension of sustainability' of Green Care practitioners was conspicuously missing, specifically in terms of the ethical and emotional motives fuelling their change agency and their commitment to care for both humans and non-humans. Second, there was little information about the role of place embeddedness and how it can enable or constrain the development of Green Care practices in different contexts, and in turn, how it can contribute to the process of envisioning different pathways of place-based sustainability.

This thesis addresses these gaps by employing an in-depth qualitative approach which engaged three Finnish case studies: a care farm, a biodynamic farm, and a nature-tourism company. The primary research question is: *What is the significance of Green Care practices for processes of place-based sustainability transformations?*

This question is answered by looking into the following sub-questions:

1. *How does caring matter for sustainability transformations?*
2. *What are the multiple dimensions of caring in Green Care? How do they relate to place-based sustainability?*
3. *Which place-based resources do practitioners use to make Green Care happen? How do these resources enable practitioners' change agency?*

The theoretical framework is grounded in the care ethics literature and in relational approaches to sustainability, such as place-oriented scholarship. A care lens highlights people's commitment to maintain and regenerate relations with both humans and non-humans, which stems from both ethical principles and tangible doings situated in specific contexts (Puig de la Bellacasa, 2015). It has been applied to place-based practices such as community-supported agriculture and permaculture, but not to Green Care initiatives. Additionally, proponents of a care ethics stress the importance of interdependence and relationality, offering a novel perspective on socio-ecological relations that has thus far been given little consideration in the debate on sustainability transformations.

The research has also been influenced by the concept of place, both as a web of relations and in terms of localness. On the one hand, it is important to investigate place-based pathways to development, and adapt solutions to specific ecological, economic, social and cultural conditions. On the other, places are not simply geographical locations, but also the ever-changing outcomes of practices. Practices have the potential to shape places because they influence processes of change in line with the needs, ideas, and values of the people who enact the practices

Finally, theories of change agency, and social entrepreneurship in particular, are key to this PhD. Social entrepreneurship emphasises the process in which actors combine resources in new ways to meet social needs, often outside of cohesive institutional structures or crossing between multiple institutions. A comprehensive overview of place-based resources needed for Green Care entrepreneurship was missing. This thesis addresses this gap by looking at resources at different levels – structural, organizational, community, and personal – and by paying specific attention to resources which have thus far been dismissed by relevant literature, e.g. ethical and affective resources.

The methodological framework is inspired by tenets and practices of participatory action research (PAR) and transdisciplinary research (TDR). The goal is twofold: to gather robust data needed for the research and to enable a process of reflection and capacity building for the participants involved.

The framework is in line with a transformative approach to sustainability science, which is committed to design and implement innovative and empowering methodologies and approaches that can support societal stakeholders in pushing the changes envisioned.

The fieldwork consisted of three main data collection phases: *exploration, co-production*, and *evaluation*, and it involved a total of 75 people. During the *exploration* phase, I conducted 22 preliminary interviews with different Green Care stakeholders (experts and practitioners), followed by 36 semi-structured interviews involving the participants of my case studies. These interviews were coupled with participatory mapping exercises intended to foster interactive dialogue and deep reflection. In parallel, I carried out participant observation at the three case studies' sites and I conducted in-depth desk documentation. During the *co-production* phase, I relied on experimental forms of data collection, which simultaneously attempted to empower and build novel capacities in the participants involved. I used the technique of Photo-voice (coupled with walking interviews) to engage ten mentally disabled clients of the care farm. Later, I organized four co-creative workshops with the primary practitioners of the three cases and selected collaborators. The workshops were thoroughly structured along the facilitation frameworks of Theory U and Appreciative Inquiry, and included methods adapted from experiential learning, design thinking, systems thinking, and arts-based research. Finally, during the *evaluation* phase, I used questionnaire surveys and video interviews to gather feedback from the main practitioners of the three cases about the effectiveness of the participatory engagement process.

The sub-research questions are answered in chapters 4, 5, and 6 of the thesis.

Chapter 4 discusses the theoretical foundations of the ethics of care and investigates the contribution of care theory to the field of sustainability transformations. It specifically elaborates on three dimensions of change: ethically-informed practices, relational response-ability, and emotional awareness. Chapter 5 offers an analytical framework to unpack the different dimensions of caring that characterize Green Care practices. It provides an in-depth empirical analysis of why and how practices are performed in the three Finnish case studies. Chapter 6 builds a comprehensive map of resources for place-based entrepreneurship, grounded in a process of co-production involving the care farm, the biodynamic farm, and the nature-tourism company. It also discusses the enabling and constraining character of the different resources.

The results of this study suggest that Green Care practices (a) are ways in which people transform relations in places inspired by sustainable visions and mind-sets and (b) foster sustainable pathways to place-based development in multiple dimensions. First, Green Care practitioners choose business models and economic relations that put people and social value creation (as opposed to profit accumulation) at the centre of their goals and activities. The social orientation of Green Care not only benefits service-users and participants, but also the surrounding communities and local networks and institutions. Second, Green Care practices are informed by deep ecological values which run counter to economic models that over-exploit natural resources. At each of the two farms, practices are oriented towards conserving and regenerating natural resources. In the case of the nature-tourism company,

practitioners combine impact minimization with an attempt to reconnect people to nature via contemplative learning experiences. Third, practices are rooted in Finnish cultural beliefs and traditions that contribute to re-embedding relations in particular places, celebrating their peculiarities in both material (via conservation of traditional architecture and landscapes) and immaterial (via oral traditions) ways.

Overall, this research gives a detailed account of three different cases of Green Care entrepreneurship in Finland, bringing to light the multi-dimensional nature of caring practices and considering benefits beyond the spheres of well-being and the economy. It makes several theoretical and methodological contributions. Most important in terms of theory, it enriches the literature on sustainability transformations with insights about the inner dimension of change, particularly the role of ethics and emotions to foster radical action; and, it offers new perspectives into the study of social entrepreneurship, shedding light on the process of 'making things happen' by way of a comprehensive conceptualization of resources.

Methodologically, it contributes to the field of transformative sustainability science, enriching the turn towards more experimental, inclusive, and impactful forms of knowledge production. The combination of diverse methods proved extremely useful and effective. It also demonstrates that combining scientific rigor with socially-robust knowledge and societal impact can be possible. In conclusion, this PhD advocates for more action-oriented forms of knowledge production and for relational approaches to the study of sustainable change.

Tiivistelmä

Tämä väitöskirja tutkii paikkaperustaisia toimintatapoja ja sitä, miten ne edistävät kestävyysmurrosta. Tutkimuksen kohteena on Green Care -toiminta, joka tarkoittaa luonnon tietoista, tavoitteellista ja ammatillista käyttöä ihmisten hyvinvointia ja sosiaalista osallisuutta edistävässä toiminnassa, kasvatuksessa ja vapaa-ajan toiminnassa. Tutkimuksen laajana viitekehyksenä on laajempi yhteiskunnallinen keskustelu kestävyysmurroksesta, jolla tarkoitetaan ”business as usual” -ajattelutavasta poiketen radikaalia, järjestelmätason muutosta kohti kestävää kehitystä. Tutkimuksen keskeisiä käsitteitä ovat: (1) muutostoimijuus ja erityisesti sosiaalinen yrittäjyys; (2) paikkaperustaiset toimintatavat. Käsitteitä yhdistää relationaalisuus. Muutostoimijuuteen liittyen relationaalinen näkökulma selkeyttää arvojen, tunteiden ja maailmankuvien ulottuvuutta. Paikkaperustaisten toimintatapojen osalta relationaalisuus korostaa ihmisten, paikan ja toimintatapojen muodostamaa dynamiikkaa, sekä paikkaperustaisten resurssien merkitystä muutosprosessissa.

Green Care -toiminta voidaan nähdä vaihtoehtona perinteisille terveydenhoidon ja sosiaalityön malleille ja tapana tukea maaseudun kehitystä ja maatalouden uudistumista. Aiemmassa kirjallisuudessa on selvitetty Green Care -toiminnan hyötyjä, kuten hyvinvointia ja yhteiskunnallista osallisuutta eri kohderyhmien näkökulmasta mukaan lukien haavoittuvassa asemassa olevat lapset, muistisairaat, riippuvuudesta toipuvat, pitkäaikaistyöttömät, maahanmuuttajat, yhdyskuntapalvelua suorittavat henkilöt ja henkilöt, joilla on erilaisia psyykkisiä tai fyysisiä rajoitteita. Useat tutkijat pitävät Green Care -toimintaa ja erityisesti niin kutsutta hoivamaataloutta (social farming) lupaavana esimerkkinä monivaikutteisesta maataloudesta, joka voisi edistää Euroopan maaseutualueiden siirtymistä kohti palveluihin perustuvaa maataloutta. Tutkimukset näyttävät hoivamaatalouden aloitteiden voivan tukea paikallistalouksien uudelleen järjestäytymistä solidaarisuuden, vastavuoroisuuden ja osallisuuden periaatteiden ympärille.

Tätä taustaa vasten tutkimuksen alkuvaiheessa havaittiin kaksi merkittävää tutkimustarvetta: 1) miten kestävyyden sisäiset ulottuvuudet, erityisesti eettiset ja tunneperäiset tekijät vaikuttavat muutostoimijuuteen sekä välittämiseen ja huolenpitoon toisista ihmisistä ja muista lajeista; (2) miten paikkaan juurtuneisuus (embeddedness) voi mahdollistaa tai rajoittaa Green Care -toimintatapojen kehittämistä eri yhteyksissä ja kuinka siitä voi olla apua erilaisten paikkaperustaisten kestävyyspolkujen hahmottamisessa.

Näitä kysymyksiä käsitellään laadullisella tutkimuksella, jonka kohteena on kolme suomalaista tapaustutkimusta: hoivamaatila, biodynaaminen maatila ja luontomatkailuyritys. Ensisijainen tutkimuskysymys on: *Mikä on Green Care -toimintatapojen merkitys paikkaperusteisessa kestävyysmurroksessa?* Tähän kysymykseen vastataan seuraavien alakysymysten avulla:

1. *Mitä merkitystä huolenpidolla eli välittämisellä on kestäville muutoksille?*
2. *Mitkä ovat huolenpidon eri ulottuvuudet Green Care -toiminnassa? Millainen niiden suhde on*

paikkakeskeiseen kestävään kehitykseen?

3. *Mitä paikkaperustaisia resursseja toimijat hyödyntävät toteuttaakseen Green Care -toimintaa? Kuinka nämä resurssit mahdollistavat toimijoiden muutostoimijuutta?*

Teoreettinen viitekehys perustuu huolenpidon eli välittämisen etiikkaan (care ethics) ja relationaaliseen lähestymistapaan paikkaperustaisessa kestävyystutkimuksessa. Huolenpidon etiikka korostaa ihmisen sitoutuneisuutta ylläpitää ja uudistaa suhteitaan sekä toisiin ihmisiin että muihin lajeihin, mikä kumpuaa yhtä lailla eettisistä periaatteista kuin konkreettisesta tekemisestä. Huolenpidon etiikkaa on aiemmin sovellettu paikkaperustaisiin toimintatapoihin kuten kumppanuusmaatalouteen ja permakulttuuriin, mutta ei Green Care -aloitteisiin. Lisäksi, huolenpidon etiikan puolestapuhujat painottavat keskinäisriippuvuuden ja relationaalisuuden tärkeyttä tarjoten uuden tavan tarkastella sosioekologisia suhteita kestävyysmurroksessa.

Tutkimus on saanut vaikutteita paikkakäsitteestä ja -tutkimuksesta. Paikka ymmärretään sekä erilaisten suhteiden muodostamana verkostona että paikallisuutena. Kestävyysmurroksen näkökulmasta on tärkeää selvittää paikkaperustaisia polkuja kehitykseen ja etsiä ratkaisuja tiettyihin ekologisiin, taloudellisiin, sosiaalisiin ja kulttuurisiin olosuhteisiin. Paikat eivät ole vain maantieteellisiä sijainteja, vaan myös ihmisen toiminnan alati muuttuvia tuloksia. Ihmistoiminta muovaa paikkoja ihmisten tarpeiden, ajatusten ja arvojen suuntaisesti. Siksi on tärkeää ymmärtää ihmisen sisäisiä ulottuvuuksia, eettisiä näkökohtia ja tunteita.

Paikan lisäksi muutostoimijuuden teoria ja sosiaalisen yrittäjyyden käsite olivat tutkimuksen keskeisiä teoreettisia käsitteitä. Sosiaalinen yrittäjyys korostaa sitä prosessia, jossa toimijat yhdistävät resursseja uusilla tavoilla toimiessaan institutionaalisten rakenteiden ulkopuolella tai liikkuessaan useiden eri instituutioiden välillä. Väitöskirjassa tutkittiin erilaisia resursseja, rakenteellisia, organisaationaalisia, yhteisöllisiä ja henkilökohtaisia, ja kiinnitettiin huomiota erityisesti eettisiin ja tunneperäisiin resursseihin, joita aiemmassa kirjallisuudessa ei ole huomioitu.

Metodologinen viitekehys on saanut innoituksensa ja vaikutteita osallistavan toimintatutkimuksen (participatory action research, PAR) perinteestä sekä transdisiplinäärisen tutkimuksen (transdisciplinary, TDR) periaatteista ja käytännöistä. Valitun metodologian tavoite oli kerätä luotettavaa tietoa tutkimusta varten, mutta myös luoda mahdollisuuksia ja tukea osallistujien omaa pohdintaa ja valmiuksien kehittämistä. Metodologinen viitekehys noudattelee kestävyystutkimuksen transformatiivista lähestymistapaa. Tutkimusta varten suunnitellut innovatiiviset ja voimaannuttavat menetelmät ja lähestymistavat voivat tukea eri toimijoita kestävyysmuutoksen edistämisessä.

Kenttätutkimus rakentui kolmesta aineistonkeruun vaiheesta: *tilannekartoitus, tiedon yhteistuotanto* ja *arviointi*. Tutkimukseen osallistui kaiken kaikkiaan 75 henkilöä. *Tilannetta kartoittavassa* vaiheessa tehtiin 22 alustavaa haastattelua eri Green Care -sidosryhmien (asiantuntijoiden ja toimijoiden) kanssa ja sen jälkeen 36 puolistrukturoitua haastattelua tapaustutkimuksiin osallistuvien tahojen kanssa. Näihin haastatteluihin yhdistettiin erilaisia

osallistavia harjoituksia, joissa kartoitettiin osallistujien käytäntöjä ja ajatuksia eri aiheista. Tarkoituksena oli edistää vuoropuhelua ja syvällistä pohdintaa. Osallistuva havainnointi ja dokumentointi (valokuvin ja muistiinpanoin) oli keskeinen osa aineiston keruuta. *Tiedon yhteistuotanto* oli lähinnä kokeellista tiedonkeruuta, jonka tavoitteena oli sekä voimaannuttaa että tukea osallistujien suorituskykyä. Kymmenen hoivamaatilan kehitysvammaista asukasta osallistui projektiin, jossa käytettiin menetelminä voimaannuttavaa valokuvaa (Photovoice) ja haastatteluja. Kolmen tapaustutkimuksen ensisijaisille toimijoille ja valituille yhteistyökumppaneille järjestettiin neljä yhteisluontityöpajaa. Työpajoissa hyödynnettiin U-teoriaa (Theory U) ja arvostavaa haastattelua (Appreciative Inquiry) sekä elementtejä kokemuksellisesta oppimisesta, design - ajattelusta (design thinking), systeemiajattelusta ja taidelähtöisestä tutkimuksesta. *Arviointivaiheessa* kerättiin palautetta tutkimusprosessin vaikuttavuudesta tapaustutkimusten ensisijaisilta toimijoilta kyselyllä ja videoiduilla haastatteluilla.

Tutkimuksen alakysymyksiin vastataan väitöskirjan luvuissa 4, 5 ja 6. Luvussa 4 käsitellään välittämisen etiikan teoreettista perustaa ja selvitetään sitä, mitä välittämisen teorialla on annettavaa kestävän muutoksen tutkimukselle. Erityisesti käsitellään muutoksen kolmea ulottuvuutta: eettisesti tietoiset toimintatavat, relationaalinen vastuullisuus ja tunnetietoisuus. Luku 5 tarjoaa viitekehyksen, jonka avulla voidaan analysoida Green Care -toiminnalle tyypillisiä välittämisen eri ulottuvuuksia. Tätä viitekehystä hyödyntäen tutkimus selvittää empiirisesti, miksi ja millaisia toimintatapoja on käytössä näissä kolmessa suomalaisessa tapaustutkimuksessa. Luvussa 6 rakennetaan paikkaperustaisen yrittäjyyden resursseista kattava yhteenveto, joka on tuotettu yhdessä hoivamaatilan, biodynaamisen maatilan ja luontomatkailuyrityksen kanssa. Luvussa pohditaan myös eri toimijoiden näkökulmasta, miten eri resurssit mahdollistavat ja rajoittavat Green Care -toiminnan harjoittamista.

Tämän tutkimuksen tulokset viittaavat siihen, että Green Care -toiminta tarjoaa keinoja, joilla ihmiset (a) muuttavat paikkasuhteitaan kestävien näkemysten ja ajattelutapojen innoittamina ja (b) vaalivat monipuolisesti kestäviä ratkaisuja paikkaperustaisessa kehityksessä moniulotteisesti. Käytännössä Green Care -toimijat hakevat sellaisia (liike) toimintamalleja, taloudellisia ratkaisuja ja kumppanuuksia, joiden keskiössä ovat ihmiset ja sosiaalisen arvon luominen vastakohtana liikevoiton kartuttamiselle. Green Care -toiminnan sosiaalinen ulottuvuus ei hyödytä vain palvelun käyttäjiä ja osallistujia, vaan myös ympäröiviä yhteisöjä ja paikallista verkostoa sekä instituutioita. Green Care -toimintatavat rakentuvat syvästi ekologisille arvoille, jotka ovat vastakkaisia luonnonvaroja ylikuluttaville taloudellisille malleille. Kummallakin maatilalla toimintatavat suuntautuvat luonnonvarojen suojelemiseen ja uudistamiseen. Luontomatkailuyrityksessä yrittäjät pyrkivät vähentämään ympäristövaikutuksia tuomalla ja yhdistämällä ihmisiä uudelleen luontoon tarjoamalla pohdiskelemiseen ohjaavia oppimiskokemuksia. Yritysten toimintatapojen juuret ovat syvällä suomalaisessa kulttuurissa, sen uskomuksissa ja perinteissä, jotka auttavat luomaan uudelleen suhteita paikkoihin, tuomalla esiin niiden erityisyyksiä niin aineellisilla (säilyttämällä perinteistä

arkkitehtuuria ja perinnemaisemia) kuin aineettomillakin (säilyttämällä suullista perinnetietoa) tavoilla.

Kaiken kaikkiaan tämä tutkimus antaa yksityiskohtaisen kuvan kolmesta erilaisesta Green Care -yrityksestä Suomessa nostaen esiin välittämiselle rakentuvien toimintatapojen moniulotteisuuden ja pohtien niiden hyötyjä, jotka ulottuvat yli tavanomaisen hyvinvoinnin ja talouden määrittelyn. Tutkimuksella on myös tärkeitä tieteellisiä arvoja. Teoreettisesti tutkimus lisää ymmärrystä kestävyysmuutoksen sisäisestä ulottuvuudesta, erityisesti etiikan ja tunteiden roolista radikaalin muutoksen edistämisessä. Tutkimus tarjoaa myös uusia näkökulmia sosiaalisen yrittäjyyden tutkimukseen, erityisesti sen suhteen mikä on resurssien merkitys sosiaalisen muutoksen aikaansaamisessa. Metodologisesti tutkimus rikastuttaa transformatiivisen kestävyystieteen suuntautumista kokeellisempaan, osallistavampaan ja vaikuttavampaan tapaan tuottaa tietoa. Useiden erilaisten menetelmien yhdistelmä osoittautui äärimmäisen hyödylliseksi ja tehokkaaksi. Se myös näytti, että on mahdollista yhdistää tieteellinen tarkkuus, sosiaalisesti luotettava tieto ja yhteiskunnallinen vaikuttavuus. Tämä väitöskirja puhuu toiminnallisempien tiedontuottamisen tapojen ja relationaalisen lähestymistavan puolesta kestävyystutkimuksessa.

Sinossi

Questa tesi contribuisce alla conoscenza delle pratiche *place-based* – intese come pratiche locali basate sui bisogni e le potenzialita' endogene dei luoghi – e del loro contributo al cambiamento trasformativo per la sostenibilita'. Lo fa esplorando tre casi di studio di Green Care in Finlandia. Ognuno rappresenta una distinta comunita' di professionisti che offrono attivita' a contatto con la natura mirate a benessere, inclusione sociale, ricreazione e apprendimento.

La ricerca si colloca nel piu' ampio dibattito sui cambiamenti trasformativi, intesi come cambiamenti sistemici per la sostenibilita', lontano da pratiche 'business as usual'. Sia nell'ideazione del progetto di ricerca che nel lavoro sul campo, e' stata applicata una lente relazionale per indagare due fenomeni che vengono spesso affiancati allo studio dei processi di cambiamento: (1) gli agenti del cambiamento (e gli imprenditori sociali in particolare) e (2) le pratiche *place-based*. La lente relazionale e' stata impiegata per far luce sulla dimensione dei valori, delle emozioni, e delle visioni del mondo che animano le scelte degli agenti del cambiamento. Per quanto riguarda l'analisi delle pratiche *place-based*, la lente relazionale e' servita a mettere in evidenza le dinamiche che coinvolgono persone, luoghi e pratiche, nonche' il ruolo che giocano le risorse locali nei processi di cambiamento.

Il Green Care puo' essere considerato un'alternativa a modelli sanitari tradizionali, oltre che un modo per promuovere lo sviluppo e l'innovazione rurale. La letteratura ha ampiamente studiato i benefici del Green Care in termini di benessere e reinserimento sociale per diversi gruppi di persone, tra cui persone con disabilita' mentali e fisiche, bambini vulnerabili, anziani affetti da demenza, tossicodipendenti in recupero, disoccupati di lungo corso, detenuti in riabilitazione, e rifugiati. Molti esperti considerano il Green Care, e in particolare le attivita' di agricoltura sociale, come esempi promettenti di agricultura multifunzionale, che possono contribuire alla transizione delle aree rurali europee da un' economia solo incentrata sulla coltivazione e l'allevamento, a un' economia che offra servizi diversificati a ospiti, consumatori, visitatori, e comunita' locali. La ricerca svolta sin'ora ha dimostrato che l'agricoltura sociale e di cura possono andare di pari passo con la riorganizzazione delle economie locali attorno a principi di solidarieta', reciprocita' e inclusivita'.

Cio' detto, la fase esplorativa iniziale di questo progetto di ricerca ha rivelato due lacune conoscitive. La prima riguarda la 'dimensione interiore della sostenibilita' dei professionisti di Green Care, soprattutto rispetto alle motivazioni etiche ed emotive che li spingono ad agire, e che alimentano il loro impegno di cura nei confronti sia di umani che di non-umani. In secondo luogo, si e' riscontrata una mancanza di informazioni riguardanti l'importanza dell'attaccamento ai luoghi, e il ruolo del contesto nel facilitare o limitare lo sviluppo delle pratiche di Green Care. Inoltre, erano scarse le informazioni rispetto al ruolo del contesto nell'influenzare la costruzione di percorsi alternativi di sviluppo sostenibile locale.

Questa tesi ha cercato di colmare queste lacune attraverso un approccio qualitativo approfondito, che ha coinvolto tre casi di studio finlandesi: una fattoria sociale e di cura, una fattoria biodinamica, e un'azienda di turismo nella natura. La domanda di ricerca principale e': *Qual e' la rilevanza delle pratiche di Green Care nei processi di trasformazione sostenibile place-based?*

A questa domanda la tesi risponde attraverso le seguenti sotto-domande:

1. *In che modo la cura (come concetto e pratica) e' legata alla trasformazione sostenibile?*
2. *Quali sono le dimensioni della cura nel Green Care? E in che modo hanno a che fare con la sostenibilita' place-based?*
3. *A quali risorse place-based fanno ricorso i professionisti di Green Care per realizzare le loro attivita'? E come possono queste risorse facilitare i processi di cambiamento che i professionisti vogliono mettere in atto?*

Il quadro teorico si fonda sulla letteratura dell'etica della cura e sugli approcci relazionali alla sostenibilita', compresi quelli orientati allo studio dei luoghi. La lente della cura fa luce sull'impegno delle persone nel mantenere e rigenerare relazioni tra umani e tra umani e non-umani, che hanno origine e trovano espressione sia in principi etici che in pratiche tangibili. In passato, l'etica della cura e' stata applicata ad altre pratiche *place-based*, come l'agricoltura supportata dalla comunita' e la permacoltura, ma mai alle pratiche di Green Care. Studiosi/e dell'etica della cura sottolineano l'importanza dell'interdependenza e della relazione, offrendo una prospettiva nuova sulle relazioni socio-ecologiche che fin'ora ha ricevuto poca attenzione anche nel dibattito sulla trasformazione sostenibile.

La ricerca e' stata anche influenzata dal concetto di luogo (*place*), concepito nella sua duplice accezione di rete di relazioni e di contesto locale. Da un lato, cio' deriva dall'importanza di esplorare percorsi di sviluppo locale e *place-based* e adattare possibili soluzioni alle condizioni ecologiche, economiche, sociali e culturali che caratterizzano il luogo di riferimento. Dall'altro, i luoghi non sono localita' geografiche statiche, ma cambiano in funzione delle pratiche che li attraversano. Le pratiche hanno il potenziale di modificare i luoghi, perche' innescano processi di cambiamento che rispecchiano i bisogni, le idee e i valori delle persone che portano avanti quelle pratiche in un dato contesto.

Infine, le teorie sugli agenti del cambiamento, e sulla imprenditoria sociale in particolare, sono al cuore di questo progetto di dottorato. L'imprenditoria sociale e' il processo attraverso il quale gli attori mobilizzano risorse di vario tipo in modi nuovi per rispondere a bisogni sociali, spesso fuori da strutture istituzionali coese o attraverso nuovi assetti collaborativi tra istituzioni diverse. Mancava, all'inizio di questo studio, una panoramica completa delle risorse *place-based* che vengono utilizzate da imprenditori di Green Care. Questa tesi risponde a questa lacuna, esplorando risorse a vari livelli – strutturale, organizzativo, di comunita' e personale – e

ponendo l'attenzione soprattutto alle risorse fin'ora non considerate dalla letteratura, vale a dire quelle etiche e affettive.

Il quadro metodologico si ispira a principi e pratiche della ricerca-azione partecipativa (RAP) e della ricerca transdisciplinare. L'obiettivo e' duplice: raccogliere dati validi per rispondere alle domande di ricerca, e allo stesso tempo facilitare un processo di riflessione e sviluppo delle capacita' dei partecipanti coinvolti nello studio. Il quadro metodologico e' in linea con l'approccio trasformativo della 'scienza per la sostenibilita', che si propone di ideare e applicare metodologie e approcci innovativi ed *empowering,* che possano sostenere gli attori sociali coinvolti nel realizzare i cambiamenti desiderati.

Il lavoro sul campo si e' composto di tre fasi di raccolta dati: *esplorazione, co-produzione*, e *valutazione* e ha coinvolto in tutto 75 persone. Durante la fase di *esplorazione*, ho svolto 22 interviste preliminari con vari portatori di interesse (esperti e professionisti di Green Care), seguite da 36 interviste semi-strutturate con i partecipanti dei casi di studio. A queste interviste ho affiancato esercizi di mappatura partecipativa (*participatory mapping*), per favorire il dialogo interattivo e la riflessione profonda. In parallelo, ho svolto dei periodi di osservazione partecipante nei luoghi di attivita' delle due fattorie e dell'azienda di turismo della natura. Durante la fase di *co-produzione*, sono ricorsa a forme sperimentali di raccolta dati, con il duplice obiettivo di creare e rafforzare capacita' nuove nei partecipanti coinvolti. Ho usato la tecnica del *Photo-voice* (insieme a 'interviste in cammino' – *walking interviews*) allo scopo di coinvolgere nella ricerca dieci clienti con disabilita' mentali che lavorano e vivono nella fattoria di cura. In seguito, ho organizzato quattro workshop co-creativi con i principali professionisti dei tre casi di studio e con un numero selezionato di loro collaboratori. I workshop sono stati strutturati con l'aiuto di tecniche di facilitazione ispirate alla Teoria U (*Theory U*) e all' 'indagine elogiativa' (*Appreciative Inquiry*), e utilizzando metodi mutuati dall'apprendimento esperienziale, dal design thinking, dal pensiero sistemico, e dalla ricerca ispirata alle arti. Infine, durante la fase di *valutazione*, ho usato questionari e video-interviste per raccogliere le impressioni dei principali partecipanti dei tre casi di studio riguardo l'efficacia del processo di coinvolgimento partecipativo.

Le tre sotto-domande di ricerca trovano risposta nei capitoli 4, 5, e 6 della tesi.

Il capitolo 4 discute le basi teoriche dell'etica della cura ed esplora il contributo della teoria della cura al dibattito sulla trasformazione sostenibile. Si sofferma in particolare su tre dimensioni del cambiamento: le pratiche (con forte ispirazione etica), la responsabilita' relazionale (*response-ability*), e la consapevolezza emotiva. Il capitolo 5 offre un quadro analitico per gettare luce sulle varie dimensioni della cura che caratterizzano le pratiche di Green Care. Fornisce un'analisi empirica approfondita sul perche' e sul come le pratiche vengano svolte nei tre casi finlandesi. Il capitolo 6 presenta una mappatura comprensiva delle risorse per l'imprenditoria *place-based*, ottenuta attraverso un processo di co-produzione che ha coinvolto la fattoria sociale e di cura, la fattoria biodinamica e l'azienda di turismo nella natura. Inoltre, discute il

carattere delle diverse risorse nel processo di ideazione e realizzazione delle pratiche di Green Care.

I risultati di questo studio di dottorato suggeriscono che le pratiche di Green Care sono: (a) modi in cui le persone trasformano le relazioni nei luoghi traendo ispirazione dalle loro visioni sulla sostenibilita' e (b) favoriscono percorsi sostenibili di sviluppo dei luoghi in vari modi. Inanzitutto, gli imprenditori di Green Care scelgono modelli di business e relazioni economiche che mettono le persone e la creazione di valore sociale (al contrario dell'accumulazione di profitto) al centro dei loro obiettivi e attivita'. L'orientamento sociale delle pratiche di Green Care non solo beneficia gli utenti dei vari servizi, ma anche le comunita' circostanti e le reti e istituzioni locali. In secondo luogo, le pratiche di Green Care sono ispirate da valori ecologici profondi, contrari a modelli economici di sfruttamento eccessivo delle risorse naturali. Nelle due fattorie, le pratiche sono mirate a conservare e rigenerare le risorse naturali. Nel caso dell'azienda di turismo della natura, i professionisti combinano la riduzione degli impatti con un approccio che mira a ri-connettere le persone con la natura attraverso pratiche contemplative e di apprendimento esperienziale. Infine, le attivita' sono radicate in valori e tradizioni della cultura finlandese, e in tal modo contribuiscono a rivalutare le relazioni nei luoghi in cui si svolgono e a celebrarne le peculiarita' in modalita' sia materiali (per esempio attraverso la conservazione di edifici e paesaggi tradizionali) e immateriali (per esempio attraverso il racconto orale).

Nel complesso, questa ricerca ha fornito un resoconto dettagliato di tre casi di imprenditoria Green Care in Finlandia, portando alla luce la natura multi-dimensionale delle pratiche di cura e considerando benefici che vanno al di la' delle sfere della salute e dell'economia. Inoltre, lo studio e' rilevante per i seguenti contributi teorici e metodologici. Dal punto di vista teorico, arricchisce la latteratura sulla trasformazione sostenibile gettando luce sulla dimensione interiore del cambiamento, in particulare sul ruolo dell'etica e delle emozioni nel nutrire il cambiamento radicale; offre anche nuove prospettive per lo studio dell'imprenditoria sociale, sottolineando il processo di realizzazione delle attivita' con una concettualizzazione comprensiva delle risorse mobilizzate dagli imprenditori di Green Care.

Dal punto di vista metodologico, contribuisce all'ambito della scienza per la sostenibilita', e in particolare all'approccio trasformativo sviluppatosi in seno ad essa, fornendo nuovi spunti riguardo forme di produzione della conoscenza sperimentali, inclusive e mirate all'impatto sociale. La combinazione di metodi diversi si e' rivelata particolarmente efficace ed utile per questa ricerca. Ha anche dimostrato che si possono unire rigore scientifico e una conoscenza 'socialmente rilevante', che abbia un impatto sulle comunita' coinvolte nel processo partecipativo.

In conclusione, questa tesi di dottorato invita a forme di produzione della conoscenza orientate all'azione e ad approcci relazionali per lo studio del cambiamento sostenibile.

About the author

Relevant publications

Training and Supervision Plan

Funding and Credits

About the author

Angela Moriggi was born on September 3rd, 1985, in a small town south of Verona (Italy). As a nerdy and shy child, she spent lots of time talking and singing to her cats in a rundown corner of her home's courtyard. After graduating high school, she escaped her provincial town to study at the Faculty of Humanities of Bologna University, where she obtained a BA in 'Oriental History, Cultures, and Civilizations' in 2008. Soon after, she left for a one-year study program in Chinese language and culture at Zhejiang University, Hangzhou (China). Upon her return to Italy, she started the MA program 'International Sciences and Diplomacy' at Bologna University (Faculty 'R. Ruffilli', Forlì') and spent three semesters abroad, first at the Chinese Academy of Social Sciences in Beijing, and then at the Korbel School of International Studies of Denver University (USA). She graduated in 2012 with a Master's thesis on environmental activism and governance in China.

Angela continued to follow China's environmental and civil society issues first at the Delegation of the European Union to China and Mongolia in Beijing and then at the think tank gLAWcal in Liverpool (UK). She spent the next three years (2013-2016) working as a researcher and project manager for EU Marie Curie IRSES-funded projects involving Italy and China, mostly dividing herself between Ca' Foscari University of Venice, Beijing Normal University, and the Chinese Research Academy of Environmental Sciences. Thanks to this experience, she fully understood her passion for sustainability and for participatory research, and decided to pursue a PhD through an EU Marie Curie ITN fellowship within the project SUSPLACE. While primarily based in Helsinki at the Natural Resources Institute Finland, she became an external PhD candidate at the Rural Sociology Group, Wageningen University (Netherlands).

Next to her PhD, together with her SUSPLACE pals, she co-created two exciting projects: *Once Upon the Future*, an anthology of children stories inspired by sustainability practices, and *Re.imaginary*, a collection of arts-based methods aimed at cultivating regenerative mindsets. Over the years, she has also been involved in teaching, design, and facilitation of different learning processes and programs. Moreover, she has been committed to science dissemination, communicating her research to lots of different people, including via the video-documentary *Nature as Pathway*.

Currently, Angela works at the University of Padova (Dept. of Land, Environment, Agriculture and Forestry), where she will undertake a Marie Curie Individual Fellowship to study transformative social innovation in rural areas, and to develop innovative tools for co-creating visioning processes, with her project VERVE (2022-2024).

These days she lives in Belluno (Italy) with her partner Daniele, her dog Pepper (her new singing pal), and will soon give birth to a baby girl called Leda Marie. Her dream is to one day create a transformative learning center at the foot of the Veneto Dolomites, and invite there friends and colleagues from all over the world to imagine different futures together.

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Relevant publications additional to the thesis

Moriggi A. "An ethos and practice of appreciation for transformative research: Appreciative Inquiry, care ethics, and creative methods" in Franklin A. (Eds.) *Co-creativity, transdisciplinary methods and engaged scholarship: Nurturing transformative research within the sustainability sciences.* London: Palgrave Macmillan. [Forthcoming, 2021].

Moriggi A., Soini K., Vehmasto E., Roep D., Secco L., Uosukainen M. *Caring for people and nature. A summary report on Green care practices and local sustainability in Finland.* Helsinki: Natural Resources Institute Finland - Luke. [Forthcoming, 2021].

Hassink J., Moriggi A., Senni S., Hense E., de Moor D. 2020. "Caring agricultural and food practices" in Duncan J., Carolan M., Wiskerke H. (Eds.) *Handbook of Sustainable and Regenerative Food Systems*. London and New York: Routledge, pp. 126-141. ISBN: 9781138608047.

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Pearson K. R., Backman M., Grenni S., Moriggi A., Pisters S., Vrieze A. de. 2018. *Arts-based methods for transformative engagement: A toolkit*. Wageningen: SUSPLACE. ISBN: 9789463432641 - 91.

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For a complete list of the authors' publications: https://www.researchgate.net/profile/Angela-Moriggi/research

Angela Moriggi

Completed Training and Supervision Plan

Name of the learning activity	Department/Institute	Year	ECTS*
A) Project related competences			
SUSPLACE Introduction Course	Wageningen University – SUSPLACE	2016	0,5
Spatial Thinking in the Social Sciences	WASS – SUSPLACE	2016	4
Facilitation of Place-based Development	Royal Haskoning DHV	2016	1,5
Sustainable Place-shaping	Catholic University Leuven – SUSPLACE	2017	2
Shaping Places, Crossing Disciplinary Boundaries	University of Aveiro – SUSPLACE	2017	2
Agency and Social Psychology	University of Helsinki	2017	5
Transforming Working Life, Gender, and Care	University of Helsinki	2017	5
Citizen Science	University of Helsinki	2017	3
Spatial Development in Science, Policy and Society	Cardiff University – SUSPLACE	2018	1
Sustainability Science and Place Shaping	Cardiff University, Welsh Government, Visionary Analytics	2018	1

B) General research related competences			
Writing Techniques	Wageningen University – SUSPLACE	2016	1
Research Skills	Catholic University Leuven – SUSPLACE	2016	1
Symbiosis in Development	Except Integrated Sustainability	2016	1,5
Project Management and Leadership	University of Helsinki	2017	1,5
Communication and Dissemination	Catholic University Leuven – SUSPLACE	2017	1
Valorization of Research	Catholic University Leuven – SUSPLACE	2017	1
Leadership in Creative Organization	University of Helsinki	2018	2
Reading Group 'Transformations to Sustainability'	University of Helsinki & LUKE	2016-2018	1,5

C) Career related competences/personal development			
Assistance for course 'Sustainability Science concepts'	University of Helsinki	2017	1
Guest lecturer	Ca' Foscari University of Venice	2017	0,5
SUSPLACE Dissemination Videos	SUSPLACE	2017	1
Guest lecturer	Ca' Foscari University of Venice	2018	0,5
Personal Leadership	Latvia University – SUSPLACE	2018	1,5
Secondment (on the job training)	Except Integrated Sustainability	2018	1
Secondment (on the job training)	Rural Sociology Group, Wageningen University	2018	1
SUSPLACE Final Event (participation)	LUKE – SUSPLACE	2019	2
SUSPLACE Final Event (design & organization)	LUKE – SUSPLACE	2019	4
Co-supervision of three MA students	Ca' Foscari University of Venice	2016-2019	1
Blogging Activity and Dissemination on Social Media	SUSPLACE	2016-2019	3
SUSPLACE Action Hub & Toolkit Project	SUSPLACE	2017-2018	3
SUSPLACE Children Book Project (creative writing & storytelling)	SUSPLACE	2018-2019	4
Tailor-made Career Development	SUSPLACE	every six month	2
Participation to Conferences	---	2016-2019	1
Dissemination through Presentations and Workshops	----	2016-2019	1
Total			**63**

*One credit according to ECTS is on average equivalent to 28 hours of study load

Acknowledgements

On a cool evening of Spring 2013, I was sitting in an apartment in Liverpool, watching the Eurovision song context with two navigated academics. In between commenting on tacky outfits and over-the-top exhibitions, they asked me whether I wanted to undertake a PhD at some point. I had just started doing research, and had no rush to go into a scientific career. Both of them looked at me with a serious expression and warned me about the fact that a PhD is no common job; it can be a life-changing journey, one that may help you grow in profound and unexpected ways.

How little I knew at that time, and how right they were.

Eight years later, I am about to defend my PhD, and since I strongly doubt I'll do another one during my lifetime, I'll take some proper space to thank all the humans and non-humans that have contributed to make it a profound and memorable journey.

I'd like to start thanking the people who have witnessed this journey from the very beginning. To my daily supervisor Katriina I owe a deep debt of gratitude for being a supportive, caring, honest, and dedicated mentor. Your precious comments often helped to make order in my overly complicated structures, and your insightful thoughts about sustainability issues always added something meaningful to the work at hand. I am especially thankful for your support during the emotional downsides of fieldwork, for your appreciative and constructive attitude, and for facilitating learning and networking opportunities at the University of Helsinki and elsewhere. To my co-supervisor Dirk I am especially thankful for being a reliable and responsive mentor. I always knew I could count on your swift and elaborated answers and on a friendly chat whenever I needed it – especially during my time at the RSO group in Wageningen, which you also contributed to make a pleasant and fruitful one. Your knowledge about many of the sociological aspects that featured in my thesis helped me to keep on the right track when things got confusing. As often supervisors do, you often warned me against the risks of doing too many things at the same time – I'm not sure you succeeded, but thanks for trying anyways! The journey got richer when Bettina, my promotor, came into the picture. Your sharp, precise, and insightful comments and your rigorous dedication to the PhD process have certainly brought the standard of the thesis to the next level. Though meeting that standard has been challenging for me, it has been a great privilege to enjoy your time and expertise in these last two years.

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A special mention goes to all the SUSPLACE-related crew, both senior and junior researchers and practitioners, who have made the training periods enriching and who have warmly welcomed us in various parts of Europe. Being part of an Innovative Training Network has been a resource many PhD students don't get to enjoy, I always felt privileged to access the expertise and time of so many professionals. Among the latter, special thanks go to Tom and his team for opening the doors of Except during my secondment in the Netherlands.

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