



UMEÅ UNIVERSITY

# **ECHOES OF RESILIENCE**

**Individual stories of  
navigating loss and  
detachment midst  
economic crisis.**

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Umeå 2025

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Dissertation for PhD

ISBN: 978-91-8070-640-7 (print)

ISBN: 978-91-8070-641-4 (pdf)

ISSN: 1402-5205

Gerum - Kulturgeografi: 2025:03

Cover photo: Sania Dzalbe

Electronic version available at: <http://umu.diva-portal.org/>

Printed by: Scandinavian Print Group

Umeå, Sweden, 2025

*To my family, Aivars, Marija and Santa. You have always  
been my anchor in time and space.*

*Places are lost – destroyed, vacated, barred – but then there is some new place, and it is not the first, never can be the first. And so, there is an impossibility housed at the site of this new place. What is new, newness itself, is founded upon the loss of original place, and so it is a newness that has within it a sense of belatedness, of coming after, and of being thus fundamentally determined by a past that continues to inform it. And so, this past is not actually past in the sense of “over,” since it continues as an animating absence in the presence, one that makes itself known precisely in and through the survival of anachronism itself.*

(By Judith Butler in *Loss: The Politics of Mourning*, 2002 p. 486)

# Acknowledgements

I have a feeling that this will be the most-read section of my thesis, and that brings me joy. After all, this work would not exist without the many wonderful people who have supported me—and, by extension, this very thesis. So, if you are reading this, consider yourself part of the work. In academic writing, we use references to acknowledge the contributions of others to our work. Yet, the final product never fully captures the invisible support and encouragement that the author has received along the way. My thesis is titled *Echoes of Resilience* to emphasize the often-overlooked practices of support. If there's one thing a PhD journey demands, it is precisely that: resilience. These acknowledgments are my own echoes of resilience.

Dear milk farmers, thank you for sharing your pasts, presents and futures with me. Thank you for trusting me with your stories and experiences. I have learned a great deal!

Dear Rikard Eriksson and Emelie Hane-Weijman, it's no wonder the word "super" is in supervisor—I truly believe you have some superpowers. Rikard, your X-ray vision for ideas, texts, and presentations, as well as your ability to extract key concepts and apply them to real-world situations, often left me amazed. I frequently wondered how I had missed those insights despite engaging with the same material. Emelie, I've never met anyone who befriends complex geographical concepts the way you do. You break them down, challenge their core assumptions, and map out their deeper meanings. You don't just accept theories—you open portals between ideas and bend perspectives. Academia can be many things, and it's easy to feel discouraged at times, but working with you both has far outweighed any of those moments. To me, you have been wonderful supervisors, and I wish every PhD student could have the same experience of having such a caring and inspiring team. You taught me so much—above all, you allowed me to approach research not as a means of production but as a means of creation. Everyone who has read *The Production of Space* by Lefebvre will know the difference! Thank you for all you have done above and beyond your roles as supervisors!

Dear Madeleine Eriksson, while you were not part of the PhD supervisor super team, you were my master's thesis supervisor. You were the first person to take an interest in my research ideas and general thoughts. You are the reason I considered and ultimately joined academia. Thank you for all the kind and inspiring words, for being a source of inspiration to me, and, of course, for the catspionage!

Dear friends—Marcin, Sebastian, Sara, Anna, Sophia, Zoli, Guilherme, Signe, Irma, Jeff, and Felix—thank you for making Umeå a home! I could not have done it without you! For all the memories we have created and more to come. This next part is cheesy, but here it goes anyway—despite the cold and dark winters lasting for 6–8 months, you made this a warm and sunny place! Also, thank you for laughing at my jokes; sometimes it’s hard, but that’s what friendship is about. Sara and Sebastian, thank you for always being my safe space! Marcin, you have become like a brother to me—sometimes the youngest, sometimes the oldest. Thank you for always being here and your kind heart and all the chocolate. Irma and Sophia, thank you for all the love, support and zebra time!

Dear Marjolein, Lucia, and Hjalmar, I can never fully express how much it meant to me to meet you all in February 2023 and share a home with you all. Marjolein, you are such a light—thank you for that and for all the life talk. Lucia and Hjalmar, thank you for all the movies we watched, and the dances and songs that filled our days and of course the insulation.

Dear REC group—Rikard, Emelie, Zoli, Maria, Diana, Gergö, Marcin, Evans, Sarper, and Tilda—it has been great to be part of this research group. I don’t always understand your methods, and we understand different things when it comes to what a “code” is, but we have always shared great discussions.

Dear PhD group, it’s been incredible to be part of such an awesome group of people, all researching so many diverse topics. Thank you all for teaching me so much! Aina Tollefsen and Linda Sandberg, thank you for the care you showed us in your roles as PhD education coordinators at the department. Moa, thank you for being this wonderful, and I am so excited and inspired by the way you think about things! Petrus, I think you have a brilliant mind. Thank you for being the prankster and the red basket. Karolina, even while apart, we certainly shared a sense of space and an Eastern European vibe—along with some pretty similar hairstyles. Maria, thank you for your big heart and boundless kindness. Andreas, I’m grateful for all the music, movies, plants, and great talks. Diana, thank you for your incredible stories and the countless laughs!

Dear Sofia Eriksson, Erik Bäckström, Karin Nilsson, and Fredrik Gärling, thank you for safeguarding us so that we can focus on research. We are so lucky to have you! Sofia, thank you for all the support you provided to the PhD group and for absolutely rocking! Erik, thank you for shielding us from the attacks of Skynet. Karin, you are a superhero of HR—you put the “human” in Human Resources! Fredrik, thank you for keeping track of us

and for the dad jokes—some were better than others, but I always appreciated them. I am sure Roger did too.

Dear Department of Geography, thank you for creating a supportive and fun environment for the PhD students. Dear Emma Lundholm, thank you for always taking the time to listen, for keeping your doors open, and for the care you showed me personally and the PhD group.

I would like to express my heartfelt gratitude to all the internal and external readers of my work who have provided valuable comments over the past four years. I truly believe I had the best team of readers. A special thank you to Aina Tollefsen, my very first reader and also my final seminar reader. Your deep commitment to understanding space has always inspired me, and the way I think about it today is largely shaped by you. Urban Lindgren, I appreciate your keen interest and thoughtful feedback on my work. Although our approaches differ, I have always felt that you welcomed and valued my perspective—thank you! Diana Morales and Andreas Back, thank you for the great feedback on my mid-term seminar. I know you met before and coordinated your approaches—thank you so much for this care and dedication! To my external readers, Danielle Drozdowski from Stockholm University, I appreciate your valuable input and thought-provoking questions during the mid-term seminar—it was precisely what I needed halfway through. Finally, Josephine Reckers from Lund University, the way you summarized my research and engaged with my ideas made me even more excited about my topic. Thank you for the care you put into reading and commenting on my work.

During my PhD, I had the opportunity to participate in international conferences and organize workshops for PhD students in Umeå. I would like to thank Gösta Skoglund, as well as the Forte, Formas, and Kempe Foundations, for their financial support.

Finally, my dear family, *munai gimenei Kombulos*. Mam, pap, y moseŋ pałdis, ka esot bejuši vīneiguo pastuoveiguo līta munā dzeivē iz vysu myužu. Es zynu, ka nav bejs vīgli, ka jiusu meita i muosa ir tuoli. Jius vysod esit bejiši munā sirdi i pruoṭā. Kotru dīnu! Es jūs vysus cīši mīļoju!

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# I. Introduction

Crises and instability are not anomalies but inherent features of capitalist economies, which are continuously reshaping social structures, spaces, and everyday life. Events such as the 2007 financial crisis, the COVID-19 pandemic, and geopolitical conflicts like the Russian invasion of Ukraine and subsequent energy crisis have exposed and deepened existing inequalities across communities and regions. While crises exacerbate vulnerabilities, they also reveal the resilience and agency of individuals and communities as they navigate uncertainty and develop coping strategies within their specific geographical contexts. It is important to study these adaptive processes in order to understand how individuals cope with adversities and how regions reshape their development trajectories in response to crises. At its core, human geography has long been concerned with spatial inequalities and the pursuit of more just and inclusive economies (Massey, 2004). Within this broader field, economic geographers have been particularly concerned about how crises disrupt and transform economic landscapes, examining why some regions recover and adapt while others face prolonged stagnation under the general term regional economic resilience (Martin, 2012).

The regional economic resilience studies focus on how regional economies respond to and recover from economic crises (Bristow and Healy, 2014; Martin and Sunley, 2015; Evenhuis, 2017; Eriksson and Hane-Weijman, 2017; Martin and Sunley, 2020). The majority of studies of regional economic resilience focus on the structural features that support regional economies in absorbing the economic losses (in GDP, employment, economic output, human capital) brought about by economic distress. The number of publications on this topic, particularly concerning European and North American regions, surged after the 2007/2008 financial crisis (Sutton et al., 2023). Over time, the concept of regional economic resilience has expanded, integrating different methodological approaches and theoretical perspectives. This evolution can be traced through four distinct approaches to studying regional economic resilience; namely, the engineering (Martin and Sunley, 2015; Ringwood et al., 2019), ecological (Holling, 1973; Brown and Greenbaum, 2017), evolutionary (Simmie and Martin, 2009; Boschma, 2015), and transformative (Giovannini et al., 2020; Trippel et al., 2024). Broadly speaking, the engineering and ecological perspectives focus on how

regional economies recover to previous levels of economic production. In contrast, the evolutionary and transformative resilience perspectives emphasise the continuous change experienced by regional economies, concentrating on efforts at reorganisation and adaptation (Simmie and Martin, 2009; Boschma, 2015; Evenhuis, 2017).

Over the past twenty years, research into regional economic resilience has advanced our understanding of the macro-level factors influencing regional economic performance amid economic crises. Studies have examined the impact of industrial structures (Martin and Sunley, 2015; Brown and Greenbaum, 2017), human capital (Clark et al., 2010; Di Caro, 2015; Hane-Weijman et al., 2018), entrepreneurship (Williams and Vorley, 2014; Rizzi et al., 2018), and institutional quality (Bailey and Berkeley, 2014). Recently, there has also been increased interest in the role of agency in advancing regional economies post-crises (Bristow and Healy, 2014; David, 2018; Kurikka and Grillitsch, 2020). Although there is no agreement on the definition of regional economic resilience in economic geography among the four distinct approaches, there is an implicit understanding that it reflects the ability of regions to withstand economic crises and also to transform as a result (Bristow and Healy, 2014; Lemke et al., 2023).

Most studies assume that regions are actors, based on the assumption that regional economic growth and enhanced production benefits the entire regional ecosystem. However, it is crucial to distinguish between conducting economic resilience research at a regional scale and treating regions as independent actors. While regional economic resilience has predominantly focused on the scale of regions, the geographer's research toolkit involves different conceptualisations of space and scale. Traditionally, regions have been viewed as administrative units or containers for regional development agendas (Chu and Hassink, 2023), often based on the neo-classical economic assumption that economic growth in one area will benefit everyone through spillover and trickle-down effects (Kuznets, 1955; Campano and Salvatore, 1988). However, this perspective overlooks the diversity of individuals' experiences, coping mechanisms, and needs during times of economic crisis (Lemke et al., 2023). As argued by Davoudi et al. (2012) and MacKinnon and Derickson (2013), addressing the central questions of resilience – such as “resilience for whom or what?” and “from what and to what end?” – requires a focus on regional actors and their diverse experiences.

Moreover, as Rodríguez-Pose et al. (2024) highlight, the issues explored in the regional economic resilience literature – such as a region's ability to

withstand crises, including industrial decline, plant closures, and the loss of human capital – are the very processes that often drive regions into left-behindness. In this thesis, I use the concepts of “left-behindness” and “left-behind” not as fixed traits but as ways to describe both the material conditions of regions and the discourses surrounding them (Pugh and Dubois, 2021; MacKinnon et al., 2024, Eriksson et al., 2025). The term also captures the feelings of abandonment and powerlessness experienced by people in these areas. I recognise the complexities of this concept, because its meaning varies across regions and societies. However, I do not use it to define a rigid category but rather to highlight disparities in resources and opportunities, and particularly how crises create and reinforce these inequalities.

In other words, although not always explicitly stated, research in this field investigates processes that can contribute to both places and people becoming marginalised. However, as I argue throughout this thesis, much of the current understanding of regional economic resilience in economic geography focuses either on the aggregate outcomes of regional economies at the macro-level or, when considering agency, on so-called key regional actors who are assumed to have the power to influence observable outcomes. I focus on the individuals' experiences of coping with economic crises in geographically peripheral areas, which, for them, are first and foremost lived spaces. To fully understand regional economic resilience, we must consider their lived experiences and strategies for navigating economic crises within a geographical context that already poses numerous challenges. Focusing on these micro-level mechanisms enables the development of tailored policies to strengthen regions and address changes in ways that are more closely aligned with individuals' experiences. Geographers are particularly well-suited to untangling the concept of resilience in this regard, because it fundamentally involves considerations of scale.

## Aims and research questions

I aim to highlight individual stories and experiences within broader discussions about regional economic resilience. By focusing on how individuals navigate and cope with economic crises and adversity, particularly in areas outside political and economic cores, I seek to identify the micro-level mechanisms of resilience at an individual scale. These individual perspectives broaden our understanding of how people adapt to economic hardship, and provide valuable insights into the everyday practices that sustain livelihoods during times of crisis.

Furthermore, this focus on individual stories challenges existing interpretations of regional economic resilience, which often treat regions as units of analysis, emphasising macro-scale factors that enhance economic production (Bristow and Healy, 2014; Lemke et al., 2023). By examining resilience through the lens of lived experience, I argue for a conceptualisation of regions as categories of practice (Moore, 2008) and lived spaces. This approach shifts resilience from being solely an attribute of regions to becoming a broader concept encompassing the practices and coping strategies of individuals, making resilience itself a point of inquiry.

I present the following research questions:

1. What are the coping strategies that individuals employ during economic adversity and crises?

I pose this question in order to analyse how individuals adapt their interactions with material and social spaces in response to economic crisis. Specifically, I study the strategies and behaviours that emerge as people navigate and restructure their spatial relationships to cope with the challenges posed by economic crisis. This analysis is detailed in Papers 1 and 3.

2. How is economic crisis experienced from the perspectives of individuals?

This analysis aims to explore the emotional, social, and material impacts of crises on individuals and their relationships with both material and relational spaces. It also examines how personal experiences reveal the various dimensions of economic crisis. These aspects are discussed in detail in Papers 2 and 3.

3. How do individual experiences of crisis contribute to the concept of regional economic resilience?

With this question, I aim to analyse how individual experiences, and coping mechanisms contribute to our understanding of regional economic resilience. These insights are drawn from Papers 1, 2, and 3.

I make two key contributions to the literature on regional economic resilience. Firstly, I provide an empirical contribution by highlighting individual experiences of coping with economic crisis, revealing the

micro-level mechanisms that underpin regional economic resilience. These insights offer a more nuanced understanding of how crises are experienced at the micro-scale, rather than observed as an aggregate outcome at the meso- or macro-scale. Secondly, I expand the concept of resilience in regional economic geography by shifting the focus from regions as mere analytical units to regions as spaces of practice, or, in Moore's words (2008), categories of practice. This highlights how people, not just places, are left behind during economic crises. It also shows that regional economic resilience is not only about providing jobs, but also about planning for regions as places to live where people have the agency to remain and the power to act.

While my work is firmly rooted in the field of regional economic resilience, it also contributes to broader discussions within human geography regarding regional disparities. It demonstrates that our understanding of the economy cannot be limited to economic growth or production alone. Everyday practices, family relationships, social networks, the scale of the home and body, and natural environments all play crucial roles in sustaining regional economies. The work of Gibson-Graham et al (2013) highlights the often-invisible labour that underpins economies, such as care work, informal economies, and community-based activities. This type of labour is frequently undervalued or overlooked in traditional economic frameworks that prioritise measurable outputs, productivity, and the formal sector. Similarly, my research emphasises that regional strengths, particularly those tied to livelihood-sustaining practices, are often disregarded by economic measures at the meso- and macro-scales.

Finally, my contribution also lies in the analytical strategies I have employed. To begin with, I analysed individual stories from the interviews and identified key themes. Connecting these stories and themes to studies that have traditionally focused on the macro-scale is challenging. To address this, I applied different theoretical frameworks to these themes, such as Cox's (1998) spaces of dependence and engagement, and Felski's (2000) and Lefebvre's (2004) rhythmanalysis. This approach helped me to identify micro-level mechanisms of resilience and coping with crises. I then positioned these findings within the broader literature on regional economic resilience, connecting these micro-level mechanisms to broader discussions and knowledge in the field of regional economic resilience.

In this study, I focus on regional economic resilience, understanding it as a multi-scalar process of adaptation within a region. Rather than seeking to define resilience, I align with existing interpretations that emphasise it as concerning the possibilities and limitations of coping with economic

challenges. My approach draws upon adaptive perspectives on resilience – both evolutionary and transformative – to study it as a process of adaptation. However, instead of studying resilience at the regional scale or focusing on so-called key actors with the agency to drive regional change, I examine the experiences of individuals and how they navigate economic crises. In doing so, I complement regional economic resilience studies by shifting the focus to the micro-scale, emphasising the lived realities of individuals over institutional priorities or agendas.

Although I use the term “economic crisis”, I acknowledge the difficulty in separating economic crises from other forms of disruption, such as health hazards. The COVID-19 pandemic, for instance, highlighted how a global health crisis can have a significant impact upon economies, public services, jobs, and overall wellbeing. However, I aim to contribute to the regional economic resilience literature; hence, I use “economic crisis” to underscore that in regional economic resilience, the effects of economic crises – the associated losses – and the coping strategies often extend beyond what is traditionally understood as purely economic.

This study has several limitations that I would like to address. Firstly, the focus on farmers (mink farmers in Denmark) operating within specific industrial structures raises questions about the ability to generalise the findings to other economic activities and spaces. The fur-breeding industry is highly contested, and the general trend within the European Union is towards phasing it out. The focus on this farming practice thus offers valuable insights that can also be applied to other traditional industries undergoing similar transformations e.g., carbon intensive industries. Moreover, I have sought to highlight not only the challenges these individuals face in terms of economic production during periods of economic crisis, but also the broader difficulties they encounter due to living in geographically peripheral areas. I have tried to disassociate resilience thinking from the arena of workplace or industry and instead consider it through the lens of what farms represent to farmers. Secondly, although the research aimed to explore the experiences of individuals navigating economic crises, the empirical data predominantly consists of male respondents, with only one female participant. Despite this, I have made efforts to emphasise the significance of the invisible labour performed by family members (often the farmers’ spouses) e.g., childcare during busier seasons at the farms. I have highlighted how their daily practices contribute to economic production and individual and industrial resilience.



## II. Theoretical Background

*This chapter provides an overview of the current state of research on regional economic resilience, integrating perspectives from feminist geographers who have explored individual experiences of overcoming redundancy, oppression, and other forms of adversity. I then present my approach to understanding regional economic resilience through the lens of scale, discussing how different conceptualisations of scale can serve to inform the field. I conclude by arguing that, despite criticisms, resilience remains a valuable framework for understanding the lived realities of people in geographically peripheral areas coping with economic crises.*

### Regional economic resilience

Regional economic resilience joined the conceptual ranks of economic geography with the role and promise of explaining how regional economies fare through moments of economic shock. It received a lot of attention in the aftermath of the financial crisis of 2007–8. The majority of studies on regional economic resilience focus on the structural factors that support regional economies in maintaining stable levels of economic production amidst economic crisis (Simmie and Martin, 2009; Martin, 2012; Cowell, 2013; Bristow and Healy, 2014; Martin and Sunley, 2015; Hu and Hassink, 2015; Evenhuis, 2017; Martin and Sunley, 2020). Crisis, which is closely related to the concept of resilience, often acts as a catalyst for driving or hindering economic growth within regional economies (Christopherson et al., 2010; Sutton et al., 2023). Hence, the concern of economic viability during economic crises is also connected to wider debates in human geography about understanding the uneven nature of development across regions (Martin, 2012).

In recent years, growing disparities between core and non-core regions, worsened by the 2007 financial crisis, have led to the emergence of “left-behind areas” (Fiorentino et al., 2024; MacKinnon et al., 2024; Rodríguez-Pose et al., 2024). These are frequently areas such as old industrial towns or rural regions facing prolonged economic downturns (MacKinnon et al., 2024). As argued by MacKinnon et al. (2024), given these growing regional disparities, the renewed focus on these areas aims to understand the mechanisms driving their social and economic

marginalisation. The regional economic resilience literature highlights how crises expose and amplify regional vulnerabilities, contributing to “left-behindness”. At the regional level, industries may close, while individuals lose their jobs and may relocate. While some regions face gradual decline, economic crises often act as accelerators, deepening stagnation and driving further decline (Rodríguez-Pose et al., 2024).

Researchers interested in regional economic resilience focus on a variety of shocks that can drive regional economies into decline. These shocks can range from global financial crises (Davies, 2011) to the COVID-19 pandemic (Bailey and Berkeley, 2014). The COVID-19 pandemic, in particular, highlighted how health-related hazards can disrupt regional economies and exacerbate inequalities among them (Gong et al., 2020). This research field is evolving and has faced numerous criticisms (which are discussed in the following sections). At its core, however, the field aims to understand how regional economies cope with economic adversity. As the nature of these crises and forms of adversity evolves, the field of regional economic resilience adapts by aligning its research designs to better address and reflect contemporary societal challenges and public discourse.

Today, we can speak of four mainstream approaches to studying regional economic resilience: *engineering*, *ecological*, *evolutionary*, and – the most recent addition – *transformative*. Engineering resilience, as the name and origins indicate, acknowledges a single equilibrium state, emphasising the ability of regional economies to return to their previous levels of economic output after experiencing a disturbance (Martin and Sunley, 2015; Ringwood et al., 2019). This perspective views resilience as the speed and efficiency with which a regional economy can recover and restore its pre-shock levels of GDP, output, and employment (Sutton et al., 2023). Ecological resilience also subscribes to equilibrium thinking but does not restrict itself to a single possible equilibrium state. Instead, it recognises that systems subjected to shocks can reorganise their internal structures, thereby creating new stable states of equilibrium. Drawing from ecological studies of ecosystems (Holling, 1973), this approach highlights the adaptability or elasticity of regional economic systems in response to changing external conditions (Brown and Greenbaum, 2017).

Evolutionary resilience, comprising most studies in economic geography, breaks free from the notion of equilibrium and instead looks at how regional economies bounce forward post-shocks (Simmie and Martin, 2009; Boschma, 2015; Bristow and Healy, 2018a). It starts from the

ontological position that space is never static but always changing and evolving (Massey, 2005). This perspective focuses on how regional economies reorganise their structures, not in order to return to a previous state of equilibrium or achieve a somewhat stable state, but rather to continuously evolve and adapt. It emphasises the reorientation and reorganisation of regional assets in the face of adversity and change, which are considered inevitable within the current capitalist and globalised organisation of the economy (Harvey, 2006). The emphasis here is on dynamic processes of change and the adaptive actions taken by regional actors in response to internal and external pressures. From this perspective, resilience is “*the capacity of a regional economy to adapt to the changing technological, market and competitive pressures and opportunities facing it*” (Bristow and Healy, 2014: 926). Similarly, Evenhuis (2017) differentiates between “resilience” and “adaptation”, where resilience is the *underlying capacity* and adaptation is the *process* through which decisions and actions are applied. Hence, an evolutionary perspective views resilience as a process of adaptation.

Finally, transformative resilience, also rooted in an adaptive approach, extends the concept of evolutionary resilience by emphasising a future-oriented perspective in the context of sustainability. This approach is based on the understanding that regional economic resilience should be studied within a broader context of social and environmental sustainability. Consequently, it focuses on how regional economies and their actors can innovate by creating new, sustainable structures while also dismantling those that are environmentally and/or socially unsustainable (Giovannini et al., 2020; Trippel et al., 2023). From a transformative perspective, such change does not always need to be driven by crisis, it can also result from anticipatory actions or targeted efforts to dismantle practices that no longer align with sustainability goals (Trippel et al., 2024).

Existing research has greatly increased our understanding of regional economic trajectories post-crisis, including the factors influencing economic recovery. Key determinants include industrial composition, where more diverse economies are better able to handle economic crises due to the presence of a variety of industries that can serve as a buffer during downturns (Boschma, 2015; Di Caro, 2015; Martin and Sunley, 2015; Brown and Greenbaum, 2017). Human capital also plays a crucial role; skilled workers have a greater chance of re-entering the labour market, as these skills are more transferable across different sectors and industries. In contrast, lower-skilled workers or those with outdated skillsets often struggle to adapt to redundancy in the face of shifting

labour-market demands (Clark et al., 2010; Di Caro, 2015; Hane-Weijman et al., 2018; Hane-Weijman, 2021; Clark, 2022). Additionally, the presence of entrepreneurs in a region can positively influence the development of new growth paths post-crisis (Williams and Vorley, 2014; Rizzi et al., 2018). Policies and governance are vital, with effective policies being essential for contingency planning (Bailey and Berkeley, 2014; Bristow and Healy, 2014; Clark et al., 2010). Research into governance shows that the quality of institutions is important for guiding communities through economic crises, particularly through efficient resource allocation and strategic planning (Bristow and Healy, 2014; Evenhuis, 2017; Pike et al., 2010). Other determinants of resilience discussed in the literature, albeit to a lesser degree, include social capital (Murua and Ferrero, 2019), the knowledge base (Evenhuis, 2017; Bishop, 2019), and innovation capacity (Clark et al., 2010; Bristow and Healy, 2018b). It is important to note that most studies on regional economic resilience are based on European and North American regions, and other areas might display different trajectories (Sutton et al., 2023).

The four approaches to regional economic resilience tend to lead to different empirical findings and theoretical insights. They can also shape the policy landscape in distinctive ways. For example, following the engineering resilience perspective, which focuses on returning to a previous equilibrium, can guide policymakers towards policies aimed at rapid recovery and stabilisation, prioritising the immediate restoration of economic indicators such as GDP and employment. In contrast, the ecological resilience approach, which recognises multiple potential equilibria, can encourage policies that enhance regional adaptability and flexibility through supporting diverse economic sectors to help regions reorganise and find new stable states. Evolutionary resilience, which emphasises ongoing adaptation and continuous change, may advocate policies that support long-term innovation and technological advancement. Finally, transformative resilience extends this focus by integrating sustainability and future-oriented goals, potentially resulting in policies that aim to proactively redesign regional industries for long-term sustainability. Thus, each approach may steer towards different policy priorities and strategies, influenced by a specific understanding of what regional economic resilience is, which to a large degree depends upon what and how regions as spaces are perceived.

## Why resilience, and how can it be approached?

The regional economic resilience literature has faced several criticisms. For example, Bristow and Healy (2014) highlight the lack of attention paid to the role of agency and the micro-processes shaping regional economic outcomes. Grillitsch and Sotarauta (2020) address this critique through the Trinity of Change Agency framework, emphasising entrepreneurial, institutional, and place-based leadership as driving forces behind regional economic development. MacKinnon and Derickson (2013) argue that resilience as a concept is depoliticised and that, apart from broader regional agendas, it should also consider how regional actors adapt to crises in order to sustain their livelihoods. Central to this critique is the question: “*Resilience for whom?*” In other words, who or what are we referring to when we speak of a region? In relation to this, Lemke et al. (2023) highlight the firm-centric focus of the regional economic resilience literature, which marginalises other regional actors and further depoliticises resilience. This focus also overlooks the impacts on and of natural environments, as noted by Lemke et al. (2023) and Trippel et al. (2023), who argue for transformative resilience beyond “bouncing back”, because returning to “business as usual” is not always feasible given the threat posed by climate change. Davoudi et al. (2012) warn that resilience strategies can shift the burden of crisis management onto individuals and communities, while the state withdraws its support. This is particularly concerning for more peripheral or “left-behind” areas, where state and public services are already limited or in decline.

Another critique is that regional economic resilience studies share significant similarities with other concepts used in economic geography. For instance, the literature on path development can be viewed through the lens of resilience, and vice versa, as both aim to explore regional economic viability and the creation of new economic opportunities (Sutton et al., 2023). This raises the question: why do we (economic geographers) in general, and I in this thesis in particular, continue to use the concept of resilience, when other theoretical frameworks may serve similar purposes for increasing our understanding of regional economic development?

In answer to this, I argue that the concept of resilience is inherently intertwined with crises, instability, and challenges for sustaining economies and livelihoods (Sutton et al., 2023). Rather than viewing these disruptions as anomalies or exceptions, resilience thinking emphasises the underlying systematic challenges, instability, and cyclic upheavals that are fundamental characteristics of capitalist economic systems. In

this sense, resilience thinking acknowledges that economies are not static or perpetually stable entities. Instead, they possess inherent systematic spatial inequalities and a tendency towards periods of destruction, disorder, and eventual transformation. Crisis tends to deepen existing inequalities, both between and within regions, accelerating processes that drive certain areas and populations into “left-behindness” (Fiorentino et al., 2024; MacKinnon et al., 2024; Rodríguez-Pose et al., 2024). The impact of crises on regional economies and their role in accelerating economic decline and marginalisation has largely been approached using a macro-scale lens. When it does address agency, it typically highlights the roles of firms or key political actors. This focus tends to neglect the experiences of ordinary residents during moments of crisis, even though they are central to understanding the processes shaping spatial marginalisation. “Left-behindness” is not only shaped by macro-economic factors but also by the experiences of the people living there. The sense of abandonment felt by residents in these areas is a crucial element in understanding their marginalisation (Hannemann et al., 2024). As Rodríguez-Pose et al. (2023) argue, this feeling of being left behind can give rise to “geographies of discontent”, where the lived experiences of residents are key to understanding the dynamics of regional decline.

Thus, while the regional economic resilience literature provides important insights into the macro-scale factors that drive regional decline, these must be complemented by a profound consideration of the experiences of individuals at the micro-scale. These elements are just as integral to understanding the processes of regional marginalisation and the continued decline of such areas shaped by economic crises. Given the inherent tendency of capitalist economies to experience shocks, it is crucial not only to understand their macro-scale impacts but also to examine the lived experiences of individuals coping with and navigating these upheavals.

Geographers have long studied how individual experiences both shape and are shaped by broader structural inequalities. Feminist geographers, in particular, have highlighted how lived experiences intersect with social, economic, and political transformations (Rose, 1993; Massey, 1994; McDowell, 1999, 2003). McDowell’s (2003) work on redundant masculinities shows how shifting labour markets redefine young men’s identities and social roles, highlighting how economic transformations produce profound individual effects. Similarly, studies of migrant women from Eastern Europe and the Caribbean have revealed how political instability and economic shifts shape migration and individual experiences in navigating precarious labor markets (McDowell, 2016).



Her research emphasises that labour markets are not just economic structures but deeply gendered and racialised spaces, shaping workers' identities, vulnerabilities, and opportunities in ways that can reinforce existing inequalities. Katz (2004) explores how children and young adults in Sudan and New York adapted to industrial decline and shifting labor markets toward service-based jobs in the 1980s and 1990s. While these changes occurred in different geographical contexts, she highlights how children's everyday lives – including education, play, and household responsibilities – were similarly affected by economic restructuring. She then introduces resilience, reworking, and resistance as strategies that individuals engage with to deal with changing circumstances and hardships. Resilience refers to the ways in which people endure hardship without changing the system, reworking seeks to modify structures to create better conditions, and resistance actively challenges and disrupts oppressive systems and challenges the status quo (Katz, 2004). Her work shows that even the most intimate spaces, such as children's playtime, are not passive bystanders in broader socio-economic shifts.

In regional economic resilience research, the approach of bringing individual stories to the forefront is uncommon. While studies on agency do exist, they often reinforce pro-growth narratives rather than challenging them or exploring the lived realities of individuals and their coping strategies. In this thesis, I draw on feminist geography methodologies to foreground individual narratives in discussions of regional resilience. The aim is not merely to acknowledge these stories or fill a research gap but to problematise the normative implications of the concept itself. This understanding has largely been shaped by what Ormerod (2023) terms the “male gaze”, a pro-growth perspective that overlooks the invisible practices essential to the reproduction of everyday life and regional economies.

## Approaching regional economic resilience through scale

Scale is a key concept in both human and physical geography, although it is used and interpreted in distinct ways within these subfields. For physical geographers, scale is a technical matter that is primarily connected to cartography and resolution (Gregory et al., 2009). In contrast, the discussions around scale in human geography are not just technical but also theoretical, touching on questions of power,

representation, and the relationships between different levels of analysis (Herod and Wright, 2002). Broadly speaking, discussions around scale in human geography have focused on two contrasting perspectives, one that considers scale as an ontologically inherent unit, and another that views it as socially constructed (Herod and Wright, 2002; Marston et al., 2008; Moore, 2008). Drawing on Bourdieu, Moore (2008) further refines this distinction by differentiating between scale as a *category of analysis* and a *category of practice*. The *category of analysis* refers to more abstract, experience-distant frameworks, involving hierarchical units of representation. In contrast, the *category of practice* refers to how scale is experienced and utilised in everyday life by social actors, reflecting a socially constructed understanding of scale (Moore, 2008).

The first approach to scale as an ontologically given unit is primarily influenced by spatial sciences and regional geography (Marston et al., 2008). This perspective, often referred to as the “ladder” metaphor (Herod and Wright, 2002), views scale as a series of hierarchical levels that range from the local to the global. Each “step” on this ladder represents a different level of analysis, such as local, regional, national, or global scales. This framework is particularly useful for organising geographical spaces and dividing territories on the basis of specific economic, political, or social characteristics.

In contrast, scale as a social construct or a *category of practice* emerged during the 1990s when social and political geographers began to argue that scale is socially constructed by framing it as networks of interactions infused with power relations (Taylor, 1981; Cox, 1998; Herod and Wright, 2002; Moore, 2008; MacKinnon, 2010). This perspective on scale underscores that it is not given or inherent, but rather produced through political, economic, and also ecological processes (Marston et al., 2008). Viewing scale as a network shifts how social dynamics operate across and beyond traditional boundaries, freeing them from rigid administrative spatial divisions.

Scale shapes how we perceive and analyse social and economic processes within regions. As Herod and Wright argue: “*how we think about scale fundamentally shapes how we understand social life and its attendant spatiality*” (2002: 4). In the context of regional economic resilience, this means that the way in which we think about scale directly influences how we study and interpret what happens within regional economies during economic crises: what/who is affected, what is lost, and the subsequent normative implications. Regional economic resilience can be viewed as an adaptive process (Evenhuis, 2017), starting with the acknowledgment of



losses caused by economic restructuring (Atkins, 2024). This process involves understanding the effects of these losses and identifying the factors that shape a region's and its actors' ability to cope with change, and highlights the importance of how we conceptualise scale.

Traditionally, research on regional economic resilience has treated regions as fixed units of analysis, focusing on macro-scale factors that affect economic production and, primarily, the performance of firms within specific regional administrative boundaries (Lemke et al., 2023). This approach views scale as fixed, typically aligning with established levels such as local, regional, or national. In contrast, the social construction approach to scale encourages us to rethink how we understand the impact of crises on regional development. Rather than being limited to fixed scalar dimensions, this approach emphasises the role of social networks in transferring and disseminating knowledge, information, and power during economic crises, across and within regional boundaries. Cross-scalar relations have long been recognised as amplifying the voices of marginalised communities, including labour unions (Herod, 2001), advocating for local need in natural-resource management (Hoogesteger, 2013) and improved access to information (Leibert and Golinski, 2016). These studies highlight that cross-scalar relations enable access to resources and actors from different places.

In what follows, I discuss two key interventions that demonstrate how the idea of scales as socially constructed can enhance our understanding of the micro-scale processes underlying regional economic resilience. The first intervention highlights the significance of social networks for individuals during moments of crisis. The second addresses how the scales of personal space, such as the body and home, are affected by economic crises.

## Scale as networks

While the social constructionist perspective on scale might discourage reliance on fixed scales, it is nevertheless challenging to entirely disregard them. This is especially true because discussions on regional economic resilience often involve normative aspects and policies targeted at specific regions as administrative units. My goal here is not to completely disregard fixed scales, but rather to adopt a hybrid approach (Cox, 1998; Mackinnon, 2010; Massey, 2005; Smith, 1996) which draws attention to the contributions that can be made to the field of regional economic

resilience by approaching scale differently. Thus, my aim here is not to determine which conceptualisation of scale is superior, but to recognise that these perspectives coexist and serve as valuable tools for understanding regional economic resilience and spatial marginalisation in the midst of a crisis. For example, while Cox (1998) subscribes to the idea that scales are socially constructed, he simultaneously discusses localised matters. However, here the local is defined in relation to specific actors and their context, rather than it being a hierarchical unit. Cox introduces *spaces of dependence* and *spaces of engagement* connected via *networks of associations*. Spaces of dependence refer to localised areas within which individuals or communities rely upon close-knit networks, relationships, and family ties to meet their immediate needs. These are the essential, everyday interactions and support structures that sustain daily life. Spaces of engagement, on the other hand, encompass broader, more extensive networks. Spaces of engagement provide access to resources, information, and forms of agency that are not available within the immediate, localised context (spaces of dependence) or, as Cox puts, it when actors “*experiencing a problematic relation to a space of dependence, construct through a network of associations a space of engagement through which to achieve some mitigation*” (1998: 3–4).

I find the concepts of *spaces of dependence* and *spaces of engagement* particularly compelling because they emphasise the tangible connections and materiality of networks, contrasting with more abstract notions of networks as mere spaces of flows (Castells, 2020). This framework highlights that both spaces of dependence and spaces of engagement possess distinct material and relational properties. It further emphasises how individuals, or other actors, navigate challenges within their localised contexts while simultaneously navigating broader networks of association to access the resources they need. In other words, it draws attention to relations that transcend regional administrative boundaries and to those everyday connections that often go unnoticed at the regional level yet can contribute to sustaining livelihoods. This framework also highlights that resources are not only accessed, but also applied and used, within spaces of dependence. To me, Cox’s framework offers a sophisticated lens for understanding networks as iterative processes, emphasising the reciprocal nature of networks of association, rather than being unidirectional or embedded in hierarchy.

Similarly, MacKinnon (2010) explores cross-scalar politics using the labels local, regional, national, and global, but does not describe the hierarchical relationships between these scales. Rather MacKinnon’s and Cox’s studies emphasise that networks constitute the intricate

connections between actors, institutions, and resources that transcend spatial boundaries, linking local, regional, national, and global scales. These networks are not static but constantly evolving as resources, information, and power flow through them. Massey (2005) also does not dismiss the importance of using the labels local, regional, and global, yet she focuses on the networks that connect these scales, emphasising that it is the relationships and interactions within these networks that give meaning to scale.

While cross-scalar politics often focuses on social, technical, and human-centred factors, it can also incorporate broader frameworks that include environmental and non-human elements. Swyngedouw (2004) argues that nature and society are deeply interconnected and should not be separated when analysing cross-scalar dynamics and power relations. This idea aligns with Lefebvre's (2004) concept of *rhythmanalysis*, which explores how rhythms in the social, bodily, and natural spheres influence one another. For example, capitalist production cycles affect both human routines and the natural environment, impacting upon animal lifecycles and ecosystems. Both Lefebvre and Swyngedouw emphasise that nature is not a passive element in these relations. In the context of regional economic resilience, particularly when considering transformative or evolutionary resilience, it is crucial to include nature in discussions of crisis and recovery, recognising it as an active component of regional dynamics.

Based on the cross-scalar perspective, it can be seen that regional economic resilience is not just about its internal capacity but also about the position of its actors within broader networks that include external influences and connections. This is particularly important for regions with limited industrial and institutional structures that cannot act as a buffer against the negative effects of economic crises. Viewing scale as a network also highlights how individuals in peripheral or marginalised areas navigate economic crises. These areas may lack certain resources or institutional support, but individuals are often part of broader social networks that provide access to the necessary resources, information, and support (MacKinnon, 2010; Hoogesteger and Verzijl, 2015). The relevance of networks is recognised in peripheralisation processes. For instance, Leibert and Golinski (2016) argue that one of the key mechanisms leading to peripheralisation is the loss of and disconnection from knowledge networks, often driven by decisions made in political and economic centres. Crises can exacerbate this process, further isolating regions by disrupting connections and limiting access to crucial information and resources. This underscores that peripheralisation, or

“left-behindness”, is not an inherent trait but a relational position, shaped by broader economic and social dynamics, including economic crises (Glückler et al., 2023).

## Scale of the body and home

Another issue that I wish to discuss regarding scale and its application to understanding the microprocesses of regional economic resilience is the significance of the body and home as integral scales within the regional context. Smith (1996), argued that we should not overlook the scales of the body and home – alongside traditional scales such as local, regional, national, and global – which are also integral to the networks and power dynamics that unfold across different spaces. Feminist geographers, in particular, have focused on how capitalist and patriarchal systems influence these intimate scales, highlighting the broader implications of economic and social dynamics for everyday life (Rose, 1993; McDowell, 1999; Katz, 2004). As Massey (2005) argues, while home and everyday life may appear isolated from broader global changes, these very spaces often reveal the impacts of such changes through everyday interactions. She compares this perception to the gender-related discussion of femininity and masculinity, noting that, like the home, femininity has historically been viewed as immune to broader societal changes and their impacts. Both have been seen as untouched by the forces shaping larger scales, even though they are deeply influenced by and contribute to these dynamics. For example, Hall (2016) studies the coping strategies employed by families to navigate and manage financial crises in their daily lives. These strategies are shaped not only by strategic economic decisions but also by more intimate and relational factors, including intergenerational family experiences, future aspirations, and gendered responsibilities. Her work emphasises that, while the effects of economic hardship are deeply felt in everyday life, these lived experiences are often overlooked when it comes to designing policy responses or understanding how such crises shape regional spaces and economic development.

Everyday life is a complex concept that it is difficult to fully operationalise, because it encompasses interactions between people, the spaces they traverse, the ideas they engage with, the decisions they make, and the material objects that shape their experiences. To address this complexity, Felski (2000) introduced a framework for everyday life, consisting of time, space, and modality. Drawing inspiration from Lefebvre, one of the most influential voices in human geography on the significance of

everyday life, Felski emphasises the role of repetition. According to Lefebvre (2004), daily life is composed of repeated actions, tasks, encounters, and interactions. Felski encapsulates this idea through the notion of time, arguing that these repetitive practices reflect investment and stability. In times of crisis, disruptions to these rhythms highlight the profound impact of such undoing. Understanding which aspects of everyday life are disrupted – whether routines, social interactions, or material conditions – provides a more nuanced perspective on how crises affect both individuals and communities. In other words, within regional economies, crises are not only observable phenomena but are also directly experienced. This can also be related to Katz (2004) in the sense that, beyond macro perspectives, smaller-scale coping strategies exist but remain largely absent from regional resilience literature. This absence reflects the general tendency in regional economic resilience studies to treat regional spaces as abstract entities, as though economic crises can only be addressed through large-scale policies and observations. However, it is crucial to include the scale of the body and everyday life if we seek to understand how actors within regional spaces develop coping mechanisms while also accounting for the uneven spatial power relations between core and periphery.

Recent research has highlighted that left-behindness incorporates not only economic conditions but also a profound sense of disconnection and abandonment. This sense of detachment, manifesting as isolation, powerlessness, and a loss of hope, intensifies during economic crises (Hannemann et al., 2024). The everyday disruption of livelihoods, relationships, and the social fabric transform these macroeconomic trends into an embodied and felt experience for individuals.

In my research, I conceptualise scale as a dynamic and multifaceted framework that integrates fixed scales – such as the regional, national, and global – into the intimate, everyday scales of the body and home. This approach highlights how economic crises permeate and transform everyday life, spaces often overlooked in traditional macro-scale analyses. I also approach scale as socially constructed, emerging from networks of interaction that are shaped by power dynamics and social processes. Focusing on networks during crises highlights the processes by which individuals and regions become disconnected. For example, economic disruptions might sever ties to industries, supply chains, or markets, while social and political marginalisation can cut off access to decision-making spaces.

### III. Methodology

*In this chapter, I outline my methodological approach, beginning with reflections upon the philosophy of science and spatial ontology. I then introduce the study design, focusing on my mink-farming case study in Denmark and the broader context of the mink-farming industry in Europe. Next, I discuss the methods employed, detailing how interviews were conducted and analysed, along with the analytical strategies used for interpreting the data. As this is a compilation thesis, I also provide a brief overview of the individual papers included and explain how each contributes to the broader research question. Finally, I reflect upon the ethical considerations and limitations of the thesis.*

Every research project reflects a combination of theoretical concepts, epistemological and ontological perspectives, and the values, experiences, and knowledge of the researcher. My thesis, too, is a symphony of choices and the knowledge I have gained through readings, lectures, conversations, and my life experiences. Below, I provide a more detailed picture of the building blocks of this thesis. To begin with, the philosophy of science (PoS) provides the foundations upon which researchers' choices between theories, methods, and modes of analysis are explicitly or implicitly informed by their ontological (theory of being) and epistemological (theory of knowledge) positions (Johnston, 1986; Buch-Hansen, 2023). I draw from Buch-Hansen's (2023) flexible typology to elaborate upon the use of PoS in my research. Buch-Hansen (2023) describes the moderated versions of positivism, constructivism, and realism. These moderated versions are less extreme in their assumptions about values, truth, knowledge production, and the importance of the material world than their respective extreme positions.

My thesis, rooted in moderate constructivism (Buch-Hansen, 2023), studies how individual experiences of navigating economic crises contribute to our understanding of regional economic resilience and what this means in the context of left-behindness. Social constructivism acknowledges that knowledge is not merely discovered but socially constructed through social interactions and processes. This perspective is particularly relevant when considering the concept of regional economic resilience, because the key questions – resilience of what or whom, to what end, and by what means – suggest that understandings of resilience are contingent upon the subjects or objects of research. Incorporating the



concept of scale into this analysis further contributes to the understanding of regional economic resilience. As discussed above, scale is not just a fixed or given entity but can also be socially constructed, shaping how we perceive and analyse social and economic processes. By focusing on a community of farmers who live and work in geographically peripheral areas, I aim to highlight their everyday practices at the micro-scale, as opposed to the dominant economic narratives that emphasise firms, industries, institutions, and economic output at the regional scale.

## Reflections upon spatial ontology

I study how individuals cope with adversity and crises within their geographical context, which in this case consists of geographically peripheral areas. The research questions posed in this thesis emerged from a review of the literature on regional economic resilience; thus, my aim is also to contribute to this field. One question immediately emerges: Why are individual stories and experiences relevant to regions, especially in the context of regional economic resilience studies, where the region is the central object of research? The answer lies in how we perceive regions as spaces. Like scale, which is one of the cornerstones of my theoretical framework, space too can be understood in various ways, such as *absolute*, *relative*, and *relational* (Harvey, 2006). Lefebvre (1992) similarly distinguished between *material space*, *representations of space*, and *spaces of representation*. Just like the conceptualisation of scale, in most studies exploring regional economic resilience, regional space is defined by its administrative borders, reflecting an ontology of absolute space (Harvey, 2006) or conceived/representations of space (Lefebvre, 1992). Representations of space serve as an abstraction used by policymakers and spatial planners, often appearing in maps or statistical analyses of regional economies and industrial structures. The findings of such studies then serve as a medium through which policymakers can assess regional economic viability and shape development strategies. However, this approach tends to overlook the everyday practices enacted by individuals within their *lived spaces* (Lefebvre, 1992).

Furthermore, given its emphasis on the relations and networks among people, this thesis adopts a relational perspective (Massey, 2005) in order to conceptualise regions and space in general. People are part of broad spatial networks, and their experiences transcend regional administrative boundaries or regions as absolute spaces. Expanding upon Massey's

(2005) concept, space is always evolving and changing. These changes are observable at the regional level, but also in everyday life through shifting identities and activities. From this viewpoint, regions are also about the networks and people's experiences. Spatial ontologies (absolute, relative, or relational) are not mutually exclusive, rather, they coexist. They serve as tools for geographers to understand social phenomena. This, to me, defines geographical research, setting it apart from other disciplines. So far, regional economic resilience has been primarily understood through the lens of absolute space. Yet, this perspective tells us little about the experiences of people living in these regions, who cope with economic crisis in their daily life.

## Study design

To study how people adapt to economic crises, I draw upon the experiences of mink farmers in Denmark who lost their farms in 2020. Due to COVID-19 infections noticed at several mink farms, the Danish government ordered a nationwide culling of the entire farmed mink population (Mortensen and Moesgard, 2020). Europe is the world's largest producer of mink pelts, supplying about 60% of the global market (Hansen, 2016). The mink-fur industry operates through a structured value chain: animals are bred and raised on farms, and their pelts move through auction houses, wholesale brokers, processing facilities, and manufacturers before reaching retail markets. This sector also supports industries including research, fashion, and feed production. Unlike other agricultural sectors, mink farming in Europe falls outside the Common Agricultural Policy (CAP), thus, it lacks price regulation through market stabilisation mechanisms. As a result, the industry is subject to significant price fluctuations and market volatility (Hansen, 2016). Key European producers include Poland, Finland, and the Baltic states. Denmark was once the largest producer of mink pelts, but after the mass culling of the entire farmed mink population during the 2020 COVID-19 outbreak, Poland has become Europe's leading producer (FIFUR, 2022).

The fur-breeding industry faces increasing ethical concerns over animal confinement, and many EU countries have introduced phase-out policies. Countries like Sweden, Finland, Poland, and Bulgaria are still in discussions about the future of fur farming, while Romania, Latvia, Lithuania, and Estonia have set dates to be fur-free by the late 2020s. In many western and southern EU member states the ban is already in place

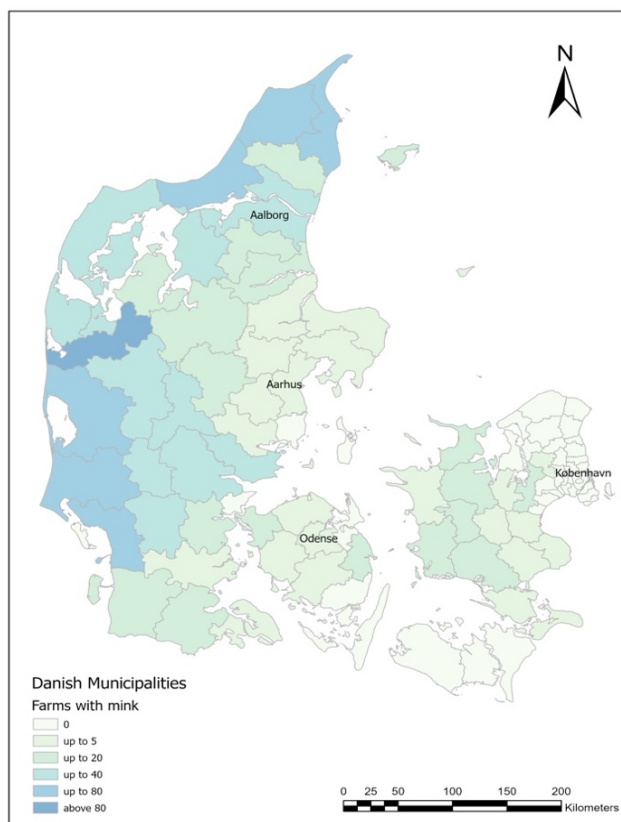


(see Fur Free Alliance, no date). Denmark presents a unique case, as it was once the leading country in mink pelt production, accounting for around 36% of all mink pelts produced globally (Hansen, 2017). However, rather than a phased-out approach, the industry was abruptly shut down, escalating it into a political issue, with many considering the government's decision unconstitutional (Kevany et al., 2022). This also left Danish mink farmers in shock, as their livelihoods were suddenly taken away without any time to prepare for the future.

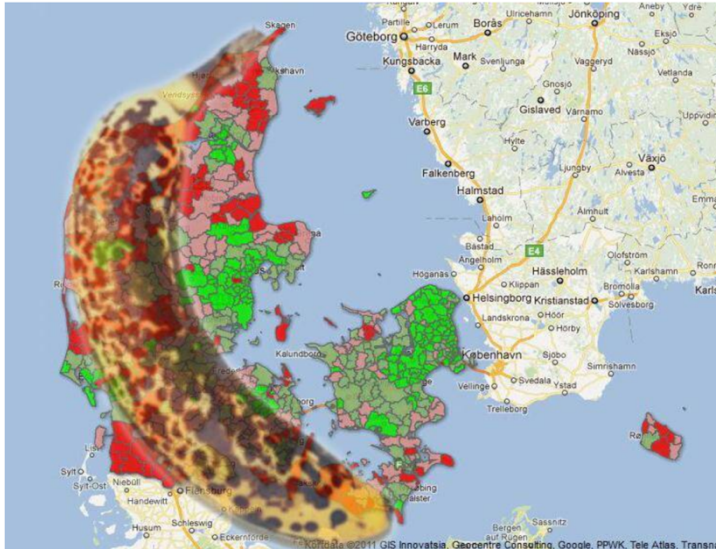
Mink farming in Denmark was a longstanding industry, dating back to the 1930s. It was passed down through the generations and had a strong culture of knowledge-sharing. The Danish mink-breeding industry operated as a cooperative. Much of this cooperative structure can be attributed to the National Danish Fur Breeders' Association (DFBA), established during the 1930s, which played an important role in the industry's development. As more people entered the industry, local and regional breeders' associations emerged, with the DFBA remaining as an umbrella organisation. These associations formed an extensive network that not only facilitated knowledge-sharing among mink farmers but also provided a collective voice and resources to push back against the growing societal and political momentum towards banning fur breeding in the EU. In this sense, these networks can be seen as a form of resistance in Katz's (2004) framework, as they enabled farmers to actively contest and challenge the pressures towards industry closure.

Danish-produced mink pelts gained a reputation for their high quality, a legacy built up over years of selective breeding aimed at developing a premium genetic pool of mink. Danish mink farmers also owned Copenhagen Fur, which was the world's leading fur auction house, administering around 40% of all fur pelt sales (Gethmann et al., 2003). Mink pelt exports from Denmark ranked as the third-largest animal export (in DKK) after products from pigs and cattle (Hohnen, 2020). In 2020, Danish mink farms employed approximately 1,800 full-time workers. Additionally, there were 1,326 self-employed individuals and 483 employed spouses (Kjær, 2020). During the pelt preparation period, the most labour-intensive time of the year, an additional 1,200 seasonal workers were brought in. Of this seasonal workforce, 75% were from abroad, primarily from Eastern Europe, including countries like Latvia, Poland, Ukraine, and Lithuania (Kjær, 2020).

By early 2020, Denmark had approximately 800 mink farms primarily located on the west coast of Jutland, stretching from the north to the south (see Figure 1a). This area is often referred to as the “rotten banana” (see Figure 1b) in media and public discourse. This negative label stems from the shape of the west coast of Jutland, which resembles a banana, and also from socio-economic factors such as the lack of economic opportunities and outmigration of the younger population to larger city areas (Winther and Svendsen, 2012; Brown and Greenbaum, 2017). However, beyond the structural challenges, this negative label also highlights the broader negative discourse surrounding rural areas and contributes to a larger process that re/produces peripheries (Winther and Svendsen, 2012; Eriksson, 2017).



*Figure 1a Mink farm distribution in Danish Municipalities*



*Figure 1b Rotten banana area is Denmark. Source: Danish Broadcasting Company*

The nationwide culling of all farmed mink marked a crisis point for the industry. The loss of breeding stock containing the superior genetic material, essential for producing high-quality fur, dealt a significant blow to farmers. The subsequent ban on mink breeding, initially set for one year and later extended, further complicated matters (Friis, 2021). In response to their pleas, the Danish government introduced a compensation package, offering farmers the options to exit the industry or to resume breeding after the ban was over (Danish Ministry of Finance, 2021). The vast majority chose to exit, with only 13 deciding to continue (Byskov Svendsen and Dam, 2022), influenced by the difficulties of rebuilding the industry from scratch and the uncertain future of fur farming in Europe.

In regional economic resilience studies, researchers often focus on large industries and major employers in their efforts to understand how regional economies stand up to economic hardship (Lemke et al., 2023). In other words, the story of regional economic resilience is often told through the lens of key players – companies, industry leaders, government agencies – those who are assumed to have the power to shape economic landscapes. However, not all regions have a robust industrial core, especially peripheral regions, where economies may rely upon smaller-scale, resource-based industries or specialised agriculture. In

these areas, economic activity is often more fragmented, with fewer major employers or institutions capable of steering regional stability. This makes it harder to understand economic resilience using conventional measures.

The case of mink farming looks beyond standard measures of economic strength and focuses instead on the lives and experiences of people, for who these regions are homes and whose voices are rarely heard as we seek to understand regional economies. For these farmers, the struggle is not about steering the region's economy, nor is it about representing a powerful sector. These farmers do not necessarily have the direct agency or power to act for the broader region, nor is that their goal. Their focus is narrower, it is about protecting their livelihoods. Their challenges reveal the deeper structural issues – limited resources, economic stagnation, and isolation – faced by those who remain, emphasising the inequalities that perpetuate these regional divides. In focusing on their experiences in responses to crisis, this case study shifts the perspective away from dominant approaches to resilience. It highlights resilience not as the strength of industries but as the quiet persistence of those who live on the margins, who adapt and endure.

However, this case also resembles similar cases of other plant closures (Hinde, 1994; MacKenzie et al., 2006; Pini et al., 2010; Bowring, 2021). It reflects a broader pattern of traditional industries with deep historical roots that ultimately did not withstand the test of time and evolving societal values, particularly in relation to discussions on sustainability transitions. Today, we see many similar cases where individuals find themselves in industries undergoing significant transformations. For example, the closure of the TATA Steel blast furnace in Port Talbot, Wales, driven by the company's vision of restructuring and transitioning to electric furnaces in order to reduce emissions, will result in the loss of 2,500 jobs (Atkins, 2024). Similarly, the agricultural sector is also undergoing changes, as Friedrich et al. (2023) show in their examination of how livestock farmers in Rotenburg, Germany, are adapting their practices to align with the government's sustainability agenda. My concern in this thesis is to understand such changes from the perspective of those directly involved, people whose livelihoods depend upon industries that are now seen as needing to change. While it is one thing to say that an industry is becoming obsolete, it is quite another to recognise that this also renders the livelihoods of those connected with it uncertain or even obsolete. In my thesis, I aim to show how such change unfolds at the individual level.

## Data collection

This thesis is a qualitative study based on interviews and farm visits with Danish mink farmers who lost their livelihoods in 2020 due to COVID-19. Seeking to understand how people face adversity, the study includes three articles, each offering different perspectives on coping with economic crisis (see Table 1). Returning to the relevance of scale to my thesis, the experiences of Danish mink farmers offer valuable insights into how different conceptualisations of scale can serve to help us understand the micro-mechanisms of regional economic resilience. Danish mink breeders were organised across multiple fixed geographical scales: local, regional, and national. At each scale there was a mink breeders' association, which served the needs of farmers within their respective geographical areas. However, there was also significant cross-scalar collaboration among the farmers that transcended the geographical confines of their respective associations. These networks reveal the micro-mechanisms of managing adversity as well as the dynamics of power as it move through the networks from core to periphery, from the national breeders' association during times of crisis to the everyday lives of farmers.

There is limited qualitative research on the Danish mink industry. Most available sources, such as statistical reports, focus on production or macroeconomic perspectives (Hansen, 2016; Hohnen, 2020; Kjær, 2020). To address this gap and refine my interview guide, I contacted a board member of the National Fur Breeders' Association, who acted as a gatekeeper (Denzin and Lincoln, 2018) to help me access the community. I also conducted an expert interview with a researcher who, together with their team, was developing an animal welfare package for the fur industry. While these interviews are not part of my data analysis, they provided "thick descriptions" (Luhmann, 2015) that enriched my understanding of the Danish mink-farming sector.

In total, 13 farmers from nine different municipalities in Jutland were interviewed. Seven of these interviews included farm tours, while the rest had to be conducted online due to the rising number of COVID-19 cases. All of the nine municipalities were located on the west coast in the area often referred to as the "rotten banana", or outlying Denmark (*Udkantsdanmark*) (Winther and Svendsen, 2012).

## Sampling

In my thesis, I have focused on the experiences of people navigating crises in geographically peripheral areas. The existing literature on regional economic resilience suggests that areas lacking a robust industrial core or close proximity to major industrial centres tend to have less capacity to withstand the adverse impacts of economic crises (Boschma, 2015; Di Caro, 2015; Brown and Greenbaum, 2017). My aim was to study how people who are not only part of the industry of mink farming, but also residents of these geographically peripheral areas deal with economic crises and adversity. I set several selection criteria. Firstly, respondents needed to have at least two years of experience as mink breeders, with mink farming as their primary source of income. Being a mink breeder was defined as owning a farm, although many had been involved in the industry for longer through growing up in a mink-breeding family or working on others' mink farms. Secondly, respondents had to be directly involved in the daily work on their farms, rather than simply owning farms and hiring others to manage them. Together, these criteria emphasised respondents' embeddedness in and commitment to the mink-farming industry as well as its central role in their everyday lives.

To find research participants, I initiated contact with the chairperson of the Danish Mink Breeders' Association. I introduced myself and outlined the details of my research project, including the research plan, data-processing procedures, and the expected role of the research participants. The chairperson then presented this information to the board for approval. Once approved, the association posted the call on its Facebook page, asking for mink breeders in Denmark. We agreed that this approach would be the most effective, as the association's endorsement would build greater trust among potential participants. I also resorted to my personal network to find further participants. After the first three interviews, I also employed the snowball sampling technique (Denzin and Lincoln, 2018; Parker et al., 2019), and in this way I was introduced to other farmers.

While there are known challenges associated with the snowball sampling technique, particularly in terms of sampling bias, Danish mink farmers were exceptionally well-connected, largely due to the cooperative structure of the industry. This networked nature of the industry allowed me to ask participants to refer me to specific individuals, ensuring a more targeted approach (for example in terms of age, gender, or experience). The strong ties between mink farmers facilitated access to a broad range of potential participants, helping to mitigate some of the typical limitations of snowball sampling, such as overrepresentation of similar



viewpoints. However, it is important to note that this sampling method may have led to data that is limited to a particular subset of mink farmers, potentially skewing the findings towards the experiences of those most embedded in the network. Nevertheless, the respondents' experiences highlight the unique challenges faced by those living in peripheral regions. Thus, while the sample may reflect a particular subset of mink farmers, it still offers valuable insights into the broader impact of economic crisis on communities that are often overlooked by traditional regional economic resilience studies. Moreover, all mink farmers in Denmark were embedded within the same cooperative and industrial structures. This shared framework suggests that, at least regarding the industrial aspects of farm closures, their experiences were relatively similar, although not identical.

## Interviews

The primary method of data collection for this thesis consists of semi-structured in-depth interviews (Kvale and Brinkmann, 2014). The semi-structured interview is the most widely used interview method (Brinkmann, 2017) because it enables researchers to ask follow-up questions and create a dynamic interaction between the researcher and interviewees. This shapes the data-collection process and the information gathered. Given my focus on macro-scale readings of regional economic resilience, it was important for the interview guide to allow participants to share their perspectives, providing insights into how crises are experienced at the individual scale. My thesis seeks to understand the personal experiences of people navigating economic adversity; hence, I used an interpretive approach, drawing from constructivism and phenomenology. This method aims to contextualise and understand how individuals interpret and make sense of everyday interactions and events (Edwards and Holland, 2013: 13; Smith et al., 2021).

The respondents' ages ranged from 25 to 63, with only one woman among them. Table 1 provides an overview of the respondents' demographic details. During one interview, the female mink breeder's husband joined us after returning from work. Although unexpected at first, it became clear that both were heavily involved in farming. The husband worked in construction but had flexible hours so he could help on the farm. It was evident from all of the interviews that farming was a family effort, with many respondents noting their partners' involvement during busy periods and in household duties and childcare.

The interview guide was inspired by Emirbayer and Mische (1998), who argue that human agency and behaviours must be looked upon within an extended temporal setting. This means that people's actions will be influenced by their past experiences and future projections in the context of present emergencies. Similarly, to understand how farmers' lives are renegotiated during a crisis, it was also important to understand their past experiences and future plans after the farm closure. Thus, the interview guide consisted of three major parts: the past, the present, and the future. During the first part of the interview, the respondents reflected upon how they became mink farmers and how that had shaped their lives. The second part dealt with the COVID-19 infections spreading across farms and their experiences and reflections upon the nationwide culling of mink in November 2020. Finally, in the last part, respondents reflected upon their plans and thoughts about the future post-farm closure, whether they would like to return to it, and what alternatives they had for earning a livelihood. This broad temporal framework of the interview guide helped with the analysis of cross-scalar networks, not only during moments of crisis but also in everyday contexts. It highlighted the dynamic nature of crises and their impact on the scale of daily life. Additionally, it illustrated how crises disrupt the intricate relationships that individuals build with their families, nature, and others in the industry.

Within an interpretative methodological framework (Smith et al., 2021), the setting of the interview holds significant importance. My intention was to conduct all the interviews in person, specifically at the respondents' farms. This choice was deliberate, because the physical environment can serve as a catalyst for storytelling and reflection. Objects present in the interview setting prompt respondents to recall and recount their experiences. The familiarity and symbolism associated with these objects can lead to reflections upon their experiences and trigger memories (Edwards and Holland, 2013). Unfortunately, due to COVID-19, only seven interviews were conducted face to face on the farm premises or inside their homes, the remaining six had to take place over Zoom. Most interviews were carried out in English, except for one that was conducted in Danish, and one where I spoke English, and the respondent replied in Danish. I stopped conducting the interviews when data reached saturation (Francis et al., 2010), meaning that no new insights or themes were emerging from the conversations. This was a deliberate decision, because I recognised that, while I could have continued interviewing additional participants, the data I had already collected was rich and diverse. I had



gathered enough nuanced perspectives and ideas that addressed my research questions.

Table 1 Interview respondents

| #  | Age | Full time<br>mink farmer | Gender | Time and place | Place  |
|----|-----|--------------------------|--------|----------------|--------|
| 1  | 59  | 1998                     | Man    | October 2021   | Onsite |
| 2  | 62  | 1983                     | Man    | October 2021   | Onsite |
| 3  | 59  | 1982                     | Man    | October 2021   | Onsite |
| 4  | 31  | 2011                     | Man    | November 2021  | Onsite |
| 5  | 55  | 1997                     | Man    | November 2021  | Onsite |
| 6  | 40  | 2006                     | Man    | November 2021  | Onsite |
| 7  | 55  | 2006                     | Woman  | December 2021  | Onsite |
| 8  | 42  | 2005                     | Man    | December 2021  | Online |
| 9  | 45  | 1982                     | Man    | December 2021  | Online |
| 10 | 25  | 2019                     | Man    | December 2021  | Online |
| 11 | 36  | 2017                     | Man    | December 2021  | Online |
| 12 | 26  | 2016                     | Man    | December 2021  | Online |
| 13 | 27  | 2016                     | Man    | December 2021  | Online |

## Farm tours

Seven interviews were conducted in combination with farm tours, which took place prior to the interviews. Before each interview, I asked the

respondents to show me around their farms. This served several purposes. Firstly, although interviews have become a standardised method of data collection in the social sciences, they can sometimes be uncomfortable, as they involve a stranger entering someone's private space and asking personal questions about their life. The farm tour helped alleviate this discomfort by creating a more relaxed environment and developing familiarity for both the respondent and me. Additionally, the farmers led the tour while I followed, which helped to address the power dynamics between me as a researcher and the participants (Kvale and Brinkmann, 2014).

During these tours, as we walked through the farms, respondents shared numerous stories, memories, and extensive knowledge about mink farming and the reasoning behind the unique farm structures, which had been developed for breeding purposes. They explained the equipment, and the various rooms on their farms, such as the pelting rooms, sorting rooms, preparation rooms, and resting rooms.

Additionally, I took photographs during the visits. These highlighted the farm structures and their design, which maximised natural daylight, a significant aspect discussed in the third article. Ultimately, these images captured the material spaces where farmers worked, providing a deeper understanding of their environment. During the tours, there was a pervasive feeling of lingering abandonment in the empty and silent spaces. Farmers often recounted their past experiences with a clear belief that those times were behind them and would not return.

## Analytical strategies and approaches

All the interviews were manually transcribed into a Word document (I also translated one interview recording from Danish into English), and later put into MAXQDA for coding and analysis. To gain a better sense of the data, I carried out the initial or open coding (Saldana, 2021). This initial coding is a useful way to not only gain a better understanding of the data, but also to categorise and group emerging overall themes, indicating areas of focus and tension for the analysis. This was particularly useful for my research, because my reading in economic geography on regional economic resilience had led me to make assumptions about post-crisis recovery and reorganisation based on macro-level studies. However, the interviews revealed the significant role of everyday micro-practices and relationships in people's ability to cope with adversity and economic

crisis. For example, while one person officially owns the farm, the entire family actively contributes to its daily operations and management, either directly or indirectly.

Through open coding, I consistently identified loss as a central theme in individuals' experiences of economic crisis. During the farm visits, this loss manifested not only in economic terms but also in an overwhelming sense of emptiness, both physical and emotional. Loss, I argue, is deeply interconnected with economic resilience, which is not merely about recovery but also about endurance and continuity. My aim was not simply to confine the loss to farms as workplaces; instead, aligning with the broader aim of the thesis, I sought to dissociate resilience and loss from a mere workplace or industry perspective and focus instead on the farms as objects that shaped the lives of farmers. Three major themes emerged as the foundations for the analysis and the three papers in this thesis: cross-scalar networks, everyday familiarity, and socio-natural rhythms.

All three articles employed thematic analysis Guest et al (2012) to capture the lived experiences of individuals during times of crisis. I chose this method because I was interested in identifying which aspects of everyday life are disrupted during economic crises. Rather than analysing how individuals construct narratives or make sense of their experiences retrospectively – although this was present in the interviews – I focused on what is lost or reshaped in the moment of crisis. While the regional economic resilience literature offers insights into macro-level adaptation, it lacks theoretical tools to examine individual experiences of crisis.

The interview data in each article was coded using an abductive, theory-driven approach (Saldana, 2021; Vila-Henninger et al., 2022). In my first article, I applied Cox's (1998) concepts of spaces of dependence and spaces of engagement to examine the importance of cross-scalar networks for farmers in navigating economic adversity and crises. Rather than mapping out the spatial networks of which people are a part, I studied these networks in relation to their loss and the sense of detachment this loss creates, something that can be especially challenging for individuals in peripheral areas. In the second article, I used Felski's (2000) everyday life framework to explore how economic crises disrupt everyday familiarity, highlighting how such familiarity is constructed through the time, relationships, and resources that have been invested. In the third article, I drew on Lefebvre's (2004) concept of socio-natural rhythms to analyse how the disruption of industries moves through natural environments. This article highlights how many of the skills and practices

within farming communities are deeply tied to natural environments and the lifecycles of animals.

Throughout my PhD thesis, I argue that individual stories are essential for understanding the effects of economic crises on regional spaces, because people are integral to these spaces. However, the current theorisation of regional economic resilience does not offer enough conceptual room to fully incorporate these individual experiences. My analytical approach to integrating these individual stories was as follows. In each article, I applied thematic coding to the interviews to identify key themes that addressed the research question. Rather than discussing these themes in relation to existing literature on regional economic resilience, I first placed them within the theoretical frameworks explored in the previous chapter. By doing this, I identified broader, more abstract topics – such as networks, socio-natural rhythms, everyday familiarity – and used these concepts to frame my findings within the context of the regional economic resilience literature.

Table 2 Article Overview

| Article Title   | Authors   | Data                        | Focus  | Scale Approach  | Status   | Research Question  |
|---|---|-----------------------------|--|---|--|--|
| <b>Jumping Scales and Producing Peripheries. Farmers’ adaptation strategies in crisis</b>           | Sania Dzalbe, Rikard H. Eriksson, Emelie Hane-Weijman | Interviews                  | Resilience to what end and by which means                                | Cross-scalar networks   | Published in <i>Geoforum</i>                       | What are the social infrastructures that individuals aim to preserve, and how do they achieve it?    |
| <b>Disrupted Spaces: The impact of Economic Crisis on Everyday Life</b>                             | Sania Dzalbe  | Interviews, farm tour notes | The disturbance of everyday life   | Stranded communities, everyday scale (body/home)                            | Under review in <i>Emotions, Space and Society</i> | How does crisis affect everyday life of mink farmers?  |
| <b>Understanding regional economic resilience and individual loss through socio-natural rhythms</b> | Sania Dzalbe, Jonathan Friedrich                      | Interviews, farm tours      | Rhythms as a medium through which people mediate socio-spatial relations | Undoing of industries, everyday scale + integration of natural environments | Finished manuscript                                | What are the rhythms of mink farming, and how can their discontinuation inform adaptation practices? |

## Ethical considerations

In research, there are both procedural ethics and ethics in practice (Guillemin and Gillam, 2004). This PhD research was submitted to and approved by the Swedish Ethical Review Authority. All respondents received an information slip in English and Danish before the interviews, detailing the project, their role, and how the data would be processed. On the interview day, I reviewed this information with each respondent to ensure they were fully informed. Verbal consent was obtained for recording and processing the interview data, which was anonymised, with identifiable information removed and each respondent assigned a unique code.

The Swedish Research Council's guidelines emphasise that research should not harm participants. The sudden closure of mink farms was an emotionally distressing event for the respondents, and some interview questions touched upon this sensitive topic. I ensured that respondents felt comfortable discussing the events of November 2020, periodically reminding them that they could skip a question if it became too challenging to reflect upon. Although some farmers became emotional, they chose to continue, feeling it was important to share their stories. The mink-breeding industry is highly controversial and during initial discussions with the National Fur Breeders' Association, I learned that farmers had previously had negative experiences with journalists and researchers. This made discussing topics like animal welfare more challenging, with some respondents willingly addressing the issue, while others drew back when I raised the subject.

## Positionality and engaging with the controversial

Research requires careful reflection upon how our personal views influence our work (Denzin and Lincoln, 2018; Morrow, 2005). This is especially true when using phenomenological interpretive interviews, where data interpretation is shaped by the researcher's perspective. Throughout my PhD, I often felt the need to justify my focus on the mink-farming industry, a controversial sector known for confining animals in order to produce luxury goods. Additionally, positioning my research within the regional economic resilience literature could imply that my aim is to strengthen such industries, which is not the case. Instead, I approach resilience as a concept related to preservation and loss. While preserving

the mink-farming industry might conflict with societal debates on ethics and sustainability, I am concerned with the preservation of livelihoods in geographically peripheral areas.

Growing up in the post-Soviet era in Latvia I witnessed widespread unemployment, particularly in rural areas where agriculture-related industries collapsed without the structures of a planned economy. My family, like many others, relied upon small-scale farming. Farming shaped not only our daily routines but also our social relationships. These practices, such as sharing equipment and helping neighbours during harvest, were crucial for sustaining rural communities, but not easily quantifiable. When I consider mink farmers, I see them not just as participants in an ethically controversial industry but also as individuals fulfilling various roles – parents, friends, children, and also residents of areas with few second chances – who are deeply engaged in the social fabric of farming life. To me, farming was more than just cultivating crops or raising animals, it was about forging relationships across generations. In my interviews with these mink farmers, I found their stories echoing those from my own upbringing: a deep connection with nature and animals, feelings of being misunderstood by urban populations, and frustration with government regulations. There was also a strong theme of loss: loss of population, youth, industries, and the vibrancy that once characterised their communities.

Throughout my research, I have navigated between these narratives. On the one hand, I view mink farmers as individuals with diverse roles while, on the other hand, grappling with the ethical issues surrounding mink farming. The complexities of this case have been invaluable in my research, allowing me to situate resilience within broader social and political contexts. In this sense, resilience becomes a tool for studying the underlying structures, of relationships and habits, that communities seek to preserve, which transcend industrial or workplace affiliations.

## Limitations

This study has some limitations. It seeks to explore the experiences of individuals navigating economic crises, but my participants were predominantly men. While I sought to acknowledge the interconnected roles of spouses, children, and other family members in farming practices, and the ways in which economic crises ripple across the entire household,

the narratives presented here largely reflect the perspectives of men. Given the collective nature of farming as a family practice, these perspectives are deeply entwined with broader family dynamics that remain partially untold in my work. Initially, I intended to conduct two rounds of interviews. The first round, conducted one year after the farm closure, focused on the experiences of mink farmers who had lost their farms. The second round, planned for about two years later, would aim to capture how these farmers – assuming they had received compensation by then – were rebuilding their lives. The follow-up interviews would explore how their experiences of loss had translated into rebuilding their livelihoods. However, in the end, I only conducted one round of interviews and there are two reasons for this. Firstly, the existing data was already rich and I wanted to focus on the nuanced experiences of farmers navigating this life-changing event and the associated losses. Secondly, the government's compensation process was delayed. Assessing each farmer's assets and determining compensation proved more time consuming than anticipated. Additionally, initial funds were insufficient, causing further delays and escalating the issue into a political controversy (Kevany et al., 2022; Byskov Svendsen et al., 2024).

## IV. Rescaling Regional Economic Resilience

*This chapter summarises the key findings from the three articles included in this thesis. All three articles are based on interviews and farm visits with mink farmers. However, each has been analysed using different theoretical frameworks and provides a unique perspective on how the crisis unfolded at the micro-scale. I used Cox's concepts of spaces of dependence and spaces of engagement to study cross-scalar networks as a coping strategy in the first article; Felski's (2000) everyday life frameworks in the second article to study the impacts of crisis on the scale of home and body; and finally, Lefebvre's (2004) socio-natural rhythms in article three to study the undoing of industries at the micro-level and how crisis-triggered losses ripple through natural environments. I conclude this chapter with an epilogue, which includes a follow-up interview with one mink farmer to provide an update on the current state of the mink-farming industry in Denmark, four years after its closure.*

While these three theoretical frameworks are not directly tied to the regional economic resilience literature, nor do they engage with commonly discussed topics such as path dependencies, lock-ins, or direct economic diversification, they do provide a context for analysing how individuals navigate economic crises. Unlike studies focusing on macro- or meso-level scales, these frameworks centre upon the lived experiences of individuals. Moreover, they reveal the structures that people have historically relied upon to sustain their everyday lives in rural contexts, structures that are now being dismantled in times of crisis. Hence, rather than attempting to fit the initial themes and codes from the interviews into the existing regional economic resilience literature, I have sought to use these theoretical insights to highlight alternative concepts – such as networks, everyday familiarity, and socio-natural rhythms – that are particularly relevant to people in peripheral contexts experiencing crises. These insights can then contribute to a broader understanding of regional economic resilience. In doing so, these insights can later be abstracted and cross-fertilised with macro-level studies to enrich our understanding of regional economic resilience.



## Networks of Agency: Cross-Scalar Networks as a Resource for People in “Left-Behind” Areas

Typically, discussions of regional economic resilience and responses to economic crises have emphasised strategies centred upon the assets located within a region’s administrative boundaries (Bristow and Healy, 2014; Evenhuis, 2017; Lemke et al., 2023; Sutton et al., 2023). This approach focuses on how the resources and capacities within these defined spaces contribute to overcoming economic adversity (Sutton et al., 2023). This is useful for understanding broad economic trends, but it does not always reveal how the people living in these areas experience crises or what their adaptation strategies are. In other words, understanding the broader economic factors that support regional performance at a fixed regional scale will not necessarily be a direct reflection of how individuals cope with crises or of the coping strategies they employ. Their lived experiences within these regions are not confined to the administrative boundaries of the region. Instead, they are part of broader networks, maintaining relationships and connections with people and institutions in other places.

Hence, in the first paper, “*Jumping scales and producing peripheries: Farmers’ adaptation strategies in crises*”, my co-authors and I aimed to challenge this conventional approach in two ways. Firstly, we shifted the focus to the individual scale. By investigating how individuals build networks both within and beyond their immediate environments, we looked at how social reproduction – daily practices and relationships (Katz, 2004) – contributes to sustaining livelihoods. Secondly, we approached scale as socially constructed through these networks. We then studied how spatially extended cross-scalar networks influenced individual coping strategies during smaller-scale episodes of adversity and sudden crises.

Our aim in this first paper was to study how individuals adapt to sudden crises and smaller-scale adversity through engaging in cross-scalar networks and to address the central questions in resilience studies: “resilience to what end?” and “resilience by what means?” To conceptualise scale as a set of networks, we drew upon Cox’s (1998) framework of *spaces of dependence* and *spaces of engagement*. Spaces of dependence encompass the immediate, localised social relations that are important for meeting material and social needs. By focusing on everyday

practices and the broader social structures that support them, essentially what constitutes “home”, we addressed the question “resilience to what end?” In regard to “resilience by what means?”, we adopted Cox’s notion of spaces of engagement. These spaces emerge as individuals navigate and construct networks to deal with challenges within their spaces of dependence. To maintain and reproduce these spaces of dependence, they need to interact with actors and contexts at other geographical scales that have more resources with which to address adversity (Cox, 1998).

In answer to the question, “resilience to what end?”, our findings reveal that the farm serves as a medium for farmers to preserve and reproduce their daily routines, traditions, and family life, as well as their ability to remain in the area. This demonstrates that, at an individual level, resilience extends beyond economic production to include the reproduction of everyday practices. The preservation of farms was not solely about maintaining mink breeding, it was also about sustaining a way of life and preserving established family traditions. Furthermore, our findings highlight how daily practices and family life contributed to sustaining economic production. For example, during busier periods on the farm, spouses often took on a more active role in managing household duties. Passing on farming knowledge to children was a way to ensure the continuation of both the family legacy and the survival of an industry that is both fading and located in areas facing depopulation. Even when the children did not actively choose to pursue mink farming, this transfer of skills and knowledge served to keep the expertise alive, providing the opportunity for the next generation to return to the business if they wished. In this way, resilience is both a preservation of current practices and a preparation for future opportunities.

In answer to the question “resilience by what means?”, our findings indicate that individual adaptation strategies are deeply embedded in cross-scalar networks. We identified both informal and institutionalised networks. The informal networks consisted of mink farmers connected through social media groups and localised relationships. In contrast, the institutionalised networks linked individual mink farmers to the Danish National Fur Breeders’ Association based in Copenhagen. For instance, farmers sought information and support from informal networks extending beyond their regional administrative boundaries, aligning with the arguments of Greene et al. (2022) and Hoogesteger and Verzijl (2015) on the importance of cross-scalar networks for managing smaller-scale adversity. However, during sudden crises (such as the closure of their farms), mink farmers experienced confusion and a lack of control, and this is when they benefitted from centralised advocacy at the national level.

The networks within the mink-breeding industry effectively addressed smaller-scale adversity and maintained social structures but were less successful in preventing crises. One reason for this is that, during smaller-scale episodes of adversity, only a few farmers might face challenges, enabling them to rely on others in the network for support. However, the complete shutdown of mink farms affected all farmers simultaneously. When these networks were disrupted by a crisis, spaces of engagement and dependence also changed, isolating farmers from their usual networks of support. Focusing on scale as a set of networks of association (Cox, 1998) highlights the importance of networks for individuals who may lack resources within their immediate environment, spaces of dependence. Being part of cross-scalar networks allowed them to access resources and receive help from other areas and actors.

Farmers engaged in networks not only during moments of sudden crisis, but also during smaller-scale periods of adversity, to protect their farms and by extension their livelihoods. This, in turn, preserved their ability to stay in the area, maintain family life, and safeguard not only their present livelihood but also their past legacy and future within the industry in regions where people move away, and opportunities are scarce.

During sudden economic crises, these networks may become disrupted or broken. In the case of mink farmers, for example, the crisis has fundamentally erased the structures that gave rise to these networks in the first place. We can think of these networks as channels of agency, through which information and resources flow between core and peripheral areas. For example, as one farmer mentioned:

*you know, the farmers at the other end of the country are perhaps bigger and it's really good to speak with them to see how they do it, because here locally we nearly all do the same [things]. [i5]*

Through their shared involvement in mink farming, farmers were not only able to access valuable information but also overcame the constraints of both locally available knowledge and geographical distance. As argued by Leibert and Golinski (2016), one of the ways in which peripheries are created is through detachment from knowledge networks. This detachment often results from decisions made in political centres, where the concerns of peripheral areas are frequently overlooked. For those

living in “left-behind” regions, maintaining cross-scalar networks is crucial because it provides a way to remain connected. These networks allow people in peripheral areas to remain connected and resist increased peripheralisation – whether geographical, political, or economic.

## Stranded futures and lost pasts

In the first article, I studied how people in left-behind areas navigate economic crises, focusing on the role of cross-scalar networks. I aimed to move beyond viewing the farm as merely an economic space, instead considering how it shapes daily routines, family dynamics, and the way of life for those living in these areas. Regional economic resilience is not just about production, it is also about the everyday practices that sustain economic activities. While the first article highlighted the importance of these practices, it also focused on how they connect to both local and more distant networks that help to manage crises and smaller-scale adversity. Building on this, I wanted to look beyond crises as an observable phenomenon at the fixed regional scale and focus instead on how they are lived and embodied in people’s everyday lives.

Much like the focus on adaptation strategies, the impact of crises in the regional economic resilience literature has primarily been understood at the regional scale (Pike et al., 2010; Martin, 2012; Boschma, 2015; Martin and Sunley, 2015). This approach emphasises the measurement of key indicators such as job losses, economic output, and GDP at the scale of regions (Lemke et al., 2023; Sutton et al., 2023), where the scale matches fixed administrative regional boundaries. One of the concerns driving the regional economic resilience field is the need to understand how crises cause regional economies to become locked-in (Hassink, 2010; Crespo et al., 2013) or fall into development traps (Diemer et al., 2022; Rodriguez-Pose et al., 2023; Roessler, 2024), leading to economic and social stagnation. This stagnation often results in geographies of discontent (Rodriguez-Pose et al., 2023), where economic activity slows down, and people become increasingly dissatisfied with their living standards. While there is a growing understanding of how regions - as units of analysis - can become economically trapped, less is known about how individuals within those regions experience post-crisis economic struggles on an individual level and feel similarly stranded in their everyday lives.

Atkins (2024) introduced the concept of “stranded communities”, referring to groups of people who are part of industries undergoing significant changes, often driven by sustainability transitions. These individuals are struggling to adapt or utilise their skills and expertise, leaving them “stranded” within a shifting economic landscape. As a result, they find themselves stuck, unable to move forward or repurpose their assets and skills (MacKenzie et al., 2006; Gardiner et al., 2009). This issue is often overlooked when the regional scale is used as the primary unit of analysis (Moore, 2008), because it tends to focus on economic trends and broad structural changes rather than the everyday realities of the people living within those regions. This perspective neglects the fact that scale is not a fixed, hierarchical level, but a socially and spatially dynamic concept (Herod and Wright, 2002; Marston et al., 2008). If scale is understood as a 'unit of practice' (Moore, 2008) - something that is lived and felt on the ground - then being stranded in the aftermath of a crisis is also an embodied and deeply personal practice.

In the second article, entitled “*Disrupted spaces: The impact of economic crises on everyday life,*” my aim was to study how economic crises affect individuals at the scale of their everyday lives. The concept of resilience is fundamentally about creating opportunities for communities in the face of crises. A key aspect of this process is recognising and understanding what is lost during times of crisis and identifying the factors that make it difficult for people to move forward. To study the impact of crises on everyday life, I utilised Felski’s (2000) framework, which focuses on three key dimensions that constitute everyday life: time, space, and modality. This framework approaches scale as a unit of practice, one that is lived and experienced (Moore, 2008). Time is characterised by repetition and long-term investment in both relational and material spaces. Space is often symbolised by the concepts of home, comfort, and familiarity. Modality refers to the ingrained habits and attitudes that shape how individuals engage with their surroundings.

From the interviews, I identified three themes: loss of control, loss of routines, and loss of social ties, all pointing to a profound disconnection from the familiarity and safety of everyday life. The farmers experienced a lack of control and an inability to participate in the decision-making process concerning their livelihoods both before and during the culling. This pervasive feeling of powerlessness also remained after the culling, as they were unable to use their land or farm infrastructure due to delayed expropriation. Decisions regarding their livelihoods were made far beyond their influence, originating from Copenhagen, while the farmers themselves lived in rural areas. These dynamics highlight the power

imbalance between the core (urban centres) and the periphery (rural areas) during times of crisis. Feminist geographers have long argued that structural inequalities and power relations are often visible at the scale of everyday life and embodied experiences (Rose, 1993; Massey, 1994). In this case, the core–periphery divide reveals how decision-making in political and economic centres ripples through the most intimate spaces of people’s lives, reshaping their connections to place and self. The loss of routines, which were once integral to the farmers’ identities and their connection to the land, left their farms quiet and still. Ultimately, much like the first article, which highlighted the breakdown of networks during crises, this second article shows how social ties also disintegrated. However, unlike the networks discussed in the first article that facilitate the knowledge and information flows. Social ties serve as gateways to different communities and roles, including local employers, industry connections, and intergenerational family relationships. Similar to Katz’s (2004) work on how economic restructuring affects the most personal spaces of children’s playtime, this article shows how the familiar and established foundations of everyday life – both material and social – are suddenly disintegrated.

The effects of economic crises extend far beyond financial impacts. They carry profound emotional consequences and embodied experiences that shape daily life. The concept of “stranded” communities (Atkins, 2024) often highlights skills tied to specific industries that become obsolete as labour markets shift, and economic landscapes evolve. This leaves both individuals and communities feeling stuck, unable to adapt to the new reality. For farmers, their habits, social ties, and control over their spaces are micro-level mechanisms through which they have historically created and sustained their livelihoods. When these mechanisms are disrupted, it leads to the loss of the time, energy, and resources they have invested in shaping their way of life. The prolonged expropriation process amplifies this sense of being “stranded”, as they remain unable to reinvest their capital. However, this feeling is not just economic, it is deeply emotional. For example, the farms act as anchors filled with memories, tying individuals to a time and place that no longer exists. Above all, there is a profound sense of defeat and resignation. It is not only the process on expropriation that they have come to accept but also the limitations on their ability to rebuild their lives.

*Now we don't know what tomorrow will bring or how long a time we have to wait for the government make a decision. First, we had anger. Murder in the eyes, but you can't do anything. You can only lean back and sit and wait and you*



*have to accept that. Because they're coming when they're coming, you can't do anything. [i7]*

Although the physical location remains the same, the sense of place undergoes changes. As Hannemann et al. (2024) argue, “left-behind” places are not merely shaped by macroeconomic decline or the loss of key players, but they are also deeply rooted in people’s lived experiences. These experiences are reflected in the loss of everyday familiarity and feelings of being stranded between the past and the future.

## Unmaking of an industry and socio-natural rhythms

In the first two articles, I focused on the role of cross-scalar networks during episodes of economic adversity and the ways in which economic crises impact upon daily life. The focus in these papers was heavily anthropocentric, grounded in the social. However, the empirical basis of this thesis is built upon interviews with farmers. This means that, in addition to their involvement in social-industrial structures, it is important to acknowledge that their work is also deeply embedded within and shaped by natural rhythms, animal lifecycles, and seasonal changes – elements that were central to their daily practices and decision-making. When disruptions occur, such as the nationwide culling of mink in Denmark, they not only cause the collapse of an industry at the regional and national scales, but also force farmers to change their relationships with the land, animals, and broader ecological cycles that have historically shaped their lives. Beyond sudden shocks, however, the agricultural sector is increasingly navigating gradual, yet profound, changes initiated by sustainability transformations (Crane et al., 2011; Friedrich et al., 2023). These changes require farmers to rethink their longstanding, institutionalised practices. In other words, understanding sustainability transformations involves not only looking at how industries adapt to meet sustainability goals but also studying how they are dismantled and restructured across different scales. Swyngedouw (2004) highlights that nature is not a passive backdrop but is actively shaped by cross-scalar power dynamics, intertwining with socio-political and economic processes. Natural environments, influenced by these dynamics, affect and are affected by socio-economic changes. Recognising nature as both a product and participant in these processes provides a comprehensive framework for managing losses and rebuilding livelihoods.

Hence, in the third article, entitled “*Understanding regional economic resilience and individual loss through socio-natural rhythms*”, my co-author and I looked at the unmaking of industries at the micro-level by also considering the natural interdependencies that shaped farmers’ lives. Recently, there has been an increased emphasis on studying the dismantling or “undoing” of industries as a crucial aspect of the transformative resilience perspective, employing concepts like “exnovation” (David, 2018; Tripp et al., 2023). The concept of “exnovation” highlights the need to understand how unsustainable practices are dismantled, identifying aspects of production that can be changed, altered, or phased out, and determining what can be preserved, all essential steps in building sustainable futures and production models. In this paper, we explore how the unmaking of industries unfolds through everyday practices, focusing on farmers who are deeply embedded in both socio-technical systems and natural dependencies, such as animal lifecycles, seasonal variations, and weather conditions.

We draw upon Lefebvre’s (2004) rhythmanalysis to integrate natural environments and the individual scale, a concept we refer to as socio-natural rhythms. While Lefebvre (2004) does not refer to scalar relationships, his framework does provide a context to study how different sets of rhythms interact at different scales. Lefebvre explores the interactions and conflicts between natural, social, and bodily rhythms. Natural rhythms encompass seasonal changes and lifecycles, while bodily rhythms relate to human biological needs. Social rhythms, driven by economic and political activities, intersect – often in an impositional manner – with both natural and bodily rhythms. Furthermore, Lefebvre differentiates between linear rhythms, like musical beats – in other words rhythms that are measurable and quantifiable – and cyclical rhythms that are experienced and felt. In a similar manner to scale as a *unit of practice* or *unit of analysis* (Moore, 2008), he argues that change should be seen as a lived experience rather than a linear progression. This perspective shifts the focus from viewing change as a series of distinct, forward-moving steps towards understanding it as a dynamic process that unfolds through lived interactions and experiences at the scale of the everyday.

We identified the socio-natural rhythms that were integral to mink farming in Denmark before the nationwide cull. These include the four major rhythms related to the annual mink-farming cycle: selection, pairing, rearing, and pelting. Apart from these four primary farming rhythms, there are additional rhythms related to them: auctions, exhibitions, feeding, and periodic price and demand imbalances. These rhythms highlight how farmers managed their lives through the



interconnected cycles of the mink lifecycle, economic production processes, family responsibilities, and seasonal weather changes.

The rhythms within mink farming illustrate complex cross-scalar dynamics in which natural environments, economic practices, and animal lifecycles intersect and influence each other. For example, global market demands shape auction rhythms, which subsequently dictate the culling of mink, a clear instance of how macro-scale economic conditions influence micro-scale farming practices and the lifecycle of mink. Farmers must adjust their production to meet these market demands, often disrupting the natural lifecycle of the mink. Seasonal changes that influence the cyclical rhythms of mink reproduction must be aligned with the linear rhythms of production, such as feeding and pelting, to optimise fur quality and meet market expectations. This synchronisation highlights how natural environments, including seasonal changes and the animals' lifecycles, interact with economic rhythms at different scales. Unlike other farmed animals, mink only breed once a year, which influences the fur market sales. At the individual level, farmers' adaptations to market fluctuations and crises reflect how local practices are shaped by broader economic forces, while also responding to the natural environment. Our research shows that the disruption of these socio-natural rhythms results in a form of loss that extends beyond social, institutional, or technical dimensions. Furthermore, recognising nature as an active participant in cross-scalar relations underscores its critical role in coping strategies. Finally, the relationships and skills that farmers have developed while working with the animals are deeply ingrained in their bodies. As one farmer reflected:

So, every time I check my phone and it's a minus temperature, the first thing I think is "I have to order 20 grams more food per mink". No, you don't have to! So, it's so deep inside our brain. [i10]

This quote illustrates how deeply these practices have become a part of the farmers' routines and decision-making processes. It is not just a matter of knowledge, it is a physical, almost instinctive reaction, shaped by years of experience.

## Epilogue: What is the situation now for mink farmers in Denmark?

Initially, I planned a second round of interviews to examine how mink farmers had adapted and rebuilt their lives after the farm closures. However, this did not take place. Even two years after the first round of interviews, most farmers were still awaiting compensation due to prolonged expropriation processes. The situation was further complicated by the mink case becoming a highly controversial and political issue. Mink farmers argued that the decision was unconstitutional, leading to the government being investigated (Kevany et al., 2022). Additionally, the existing data that I had gathered was already rich, so I chose to focus on the losses farmers had experienced during moments of economic crisis. However, I did conduct one follow-up interview with a mink breeder who had acted as a community gatekeeper and introduced me to other breeders. He, along with many others, was still waiting for compensation. According to him, only a handful of 50 farmers had received their compensation. He noted that public sentiment was initially supportive of the mink farmers in 2020. The Danish government initially allocated €2.1 billion for compensation, but this has proven insufficient, requiring additional funds. Several farmers who spoke out or appeared in the media to comment on the issues subsequently received hate mail. The Danish National Fur Breeders' Association is currently negotiating with the government for more funds and has hired lawyers. The continuing involvement of the Fur Breeders' Association further highlights the importance of centrally located advocacy groups for actors located in geographically peripheral areas.

The farmer I interviewed has now been employed to manage a cattle farm in a different municipality, so he leaves home during the week and comes back at weekends. He wanted to buy a cattle farm and land in his own municipality but has been unable to do so due to the ongoing delay in receiving compensation. This is where the issue is becoming complicated and reflects the broader issues of rural development and agricultural futures in Europe. The respondent raised several key issues. Firstly, he discussed his financial constraints. He wanted to purchase more land, but he lacks the funds necessary to buy the minimum of 80 hectares that he considers essential to make a living from farming. Another concern he highlighted is related to the 2030 EU Biodiversity Strategy (European Environment Agency, n.d.), which states that at least 30% of EU land area should either be free from economic activity or managed in a way that supports biodiversity. Linked to this, the farmer mentioned that, in

Denmark, there has been a trend whereby renewable energy companies are purchasing land from farmers to install wind turbines and, to a lesser extent, solar panels. The respondent noted that, while he might consider buying more land in the future when he finally receives his compensation, he cannot compete with the prices offered by renewable energy companies. He also mentioned his repeated attempts to get a loan from the bank. Despite all his efforts, banks have rejected his request and frequently suggested that he abandon farming and sell his land.

The case of mink farmers in Denmark illustrates that issues can be examined at different scales. At a national level, it has become a highly political matter, attracting increasing public discontent. At an individual level, many farmers have sought alternative employment, either working on other farms within their municipalities or finding jobs outside their local areas. However, there is also growing frustration among farmers because the government initially closed the mink-farming industry with a promise of compensation for lost revenue, but the process has been slower than expected. While my observations are based on just one interview, it seems that the mink-farming case highlights the increasing complexity of decision-making for farmers. The transition towards greener production methods and renewable energy in Europe has arguably intensified competition for land, making it more challenging for farmers to navigate their options.

Most mink farmers in Denmark have chosen to leave the industry and accept compensation. While there are various reasons behind this decision, as outlined in my first article, one of the most significant factors is the uncertainty surrounding the industry's future in Europe. With more EU countries moving towards banning mink farming, many Danish farmers believe that it is only a matter of time before Denmark follows. Several European countries, including Austria, Belgium, Luxembourg, Slovenia, Croatia, the Czech Republic, Slovakia, and the United Kingdom, have already banned fur breeding, while Latvia, Lithuania, and Estonia are in the process of phasing it out. The Netherlands, once a leading fur producer, initially planned a gradual phase-out with a full ban set for 2025 and no compensation (Fur Free Alliance, no date). However, due to COVID-19 outbreaks, the ban was accelerated, and the industry was shut down entirely in 2021. Many Danish farmers feared that they would face a similar fate. Although Denmark has not yet imposed a ban, farmers anticipate such a move, similar to what happened in the Netherlands (Maron, 2020). The future of fur farming in Europe remains uncertain but is undeniably shifting towards decline. While many countries have already banned or are phasing out the industry, others, like Poland, Sweden, and

Finland, continue production and political discussions. Poland, in particular, has now overtaken Denmark as the leading fur producer (FIFUR, 2022), highlighting the fragmented approach within the EU.

## V. Discussion

*In this section, I first revisit my aim before I first discuss my research questions followed by a broader implication of my work to the field of economic geography.*

### Dealing with economic crisis from the margins

I have sought to contribute to the literature on regional economic resilience by studying people's experiences as they navigate economic crises. Much of the current literature focuses on aggregate outcomes of economic production at the regional scale amidst economic crises (Davies, 2011; Di Pietro et al., 2020; Sutton et al., 2023). When it does address regional actors, the focus is often on those with the perceived agency to influence regional development agendas, such as key industry players, place-based leaders, or public institutions (Bristow and Healy, 2014, 2018b; Sutton and Arku, 2022; Lemke et al., 2023). Instead, my aim was to focus on the lived experiences of ordinary people, those without direct influence over regional policies or development trajectories but for whom these regions are home. This thesis is situated within human geography, and so I have discussed different ways of conceptualising space (Harvey, 2006). A key perspective was to understand regional spaces as lived, experienced (Lefebvre, 1992), and relational (Massey, 2005), rather than as purely administrative spaces to be managed. Thus, the concept of scale has been central to my research. I approached it as socially constructed (Marston, 2000; Herod and Wright, 2002; Marston et al., 2008) and emphasised the importance of cross-scale networks in shaping how people navigate economic challenges (MacKinnon, 2010; Hoogesteger and Verzijl, 2015). Additionally, I looked at the impacts of crises at the scale of everyday life – scale as a unit of practice (Marston, 2000) – including the embodied and emotional experiences of individuals coping with economic difficulties (Smith, 1992). Building on my empirical findings, I aimed to broaden the understanding of resilience in the literature on regional economic resilience. Instead of critiquing the common approaches in economic geography that analyse regional economic resilience by focusing on the scale of regions and drawing

conclusions about overall regional economic performance, I have focused on understanding people's individual experiences.

In geographically peripheral areas, people's ability to cope with structural inequalities and economic crises depends upon their capacity to navigate and sustain networks that extend beyond their immediate surroundings. These networks are not just economic lifelines but also social and spatial connectors that help individuals to maintain a sense of continuity amidst uncertainty. When these networks are disrupted, the resulting detachment and isolation intensify peripheralisation. This disconnection does not merely lead to a loss of economic opportunities, it represents a broader erosion of agency and inclusion, as individuals and communities become excluded from the flows of information and support that help to maintain their livelihoods. These networks are significant in maintaining the social and spatial continuity of everyday life in geographical peripheries. They serve as channels of agency, allowing people to access information and resources not present within their immediate geographical area (Cox, 1998). Resilience, often studied in the context of large-scale crises (Martin, 2012), takes on a broader meaning in these contexts, where people face ongoing, systemic challenges that threaten their ability to maintain their livelihoods. Here, resilience is not only about responding to crises but also about preserving the micro-structures that sustain everyday practices beyond moments of economic turmoil.

People who have spent years in traditional industry often develop a deep sense of belonging to it (MacKenzie et al., 2006; Gardiner et al., 2009; Pini et al., 2010). However, this may also be a result of the structural conditions of geographical peripherality and not just the industry itself. Living in remote areas can already feel isolating. For individuals already positioned at the geographical margins, industries are not just a source of livelihood or professional identity – they serve as a bridge to larger, more expansive networks of connection. When these industries decline, people are not only made redundant in the workforce but also displaced from a wider sense of spatial integration.

Economic crises disrupt both economic stability and emotional continuity. Individuals can feel stranded in the aftermath of a crisis, primarily due to enduring emotional and affective ties linking them to their past. A key factor in this feeling of being stranded is the loss of agency or the inability to make independent decisions, as seen in cases where structural constraints inhibit economic restructuring. Spatial power asymmetries often leave people in peripheral contexts with limited capacity to rebuild their lives, as core political and economic centers

continue to hold significant power in shaping the conditions for re/building livelihoods.

Even after farms lose their economic function, they continue to shape personal histories and identities, reinforcing a deep sense of connection to the past. At the macro-level, spaces such as farms are often viewed solely as economic units. When industries disappear, statistical datasets may indicate their absence; yet, on the ground, these spaces persist as lived realities with ongoing emotional significance. The economic resilience literature discusses “lock-ins”, situations where regions struggle to diversify or adapt due to historical and/or structural constraints (Crespo et al., 2013). A similar dynamic occurs at the individual scale, as people remain locked into their pasts, unable to fully transition due to emotional and material attachments. The concept of “left-behind” places reveals a paradox: while these regions are often described as neglected in some cases they might be held back. Politically and economically dominant regions continue to shape what happens in these peripheral areas, reinforcing structural dependencies that limit agency. Rather than being completely forgotten, these regions are constrained by external forces that dictate the possibilities for their future, amplifying a sense of powerlessness and inhibiting local action.

The relationship between economic crises and lived experience is also shaped by the embeddedness of work within natural environments. Many livelihoods in peripheral areas are intimately tied to the rhythms of nature, and economic disruptions can sever these connections, further intensifying feelings of disorientation and loss. Farmers, for example, develop knowledge and skills that extend beyond industry-specific expertise, they cultivate an ability to read and respond to natural cycles, relationships, and environmental changes. This form of knowledge, often overlooked in discussions of economic adaptation and restructuring, is deeply embodied and shaped by everyday labour (Folke et al., 2005; Vermunt et al., 2020; Schlaile et al., 2024). When industries are disrupted, the loss extends beyond employment to affect the fundamental ways in which individuals relate to their environments, skills, and identities. This perspective underscores the importance of considering both the material and relational aspects of economic crises. While much of the resilience discourse focuses on policy interventions or structural reforms, it is equally critical to understand the lived experiences of individuals navigating these transformations. Economic crises do not simply cause financial hardship, they reshape the spatial, social, and emotional landscapes of people’s lives. The challenge, therefore, is not only to mitigate economic loss but also to address the deeper



consequences of disconnection, exclusion, and the struggle to maintain a sense of continuity in places marked by structural vulnerability. In this context, the “invisible hand” of resilience – often unobserved and uncaptured by macro-level studies – operates at the level of everyday practices, providing a subtle yet powerful force that helps communities to navigate crises and deal with geographical peripheralisation, even when traditional economic indicators fail to capture their influence.

## Regional economic resilience: ways forward

In my research, I have highlighted how the micro-scale mechanisms that sustain livelihoods in peripheral regions are often overlooked, yet play a critical role both in times of crisis and in everyday life. These practices, ranging from everyday familiarity and relationships with the environment to cross-scalar networks, are essential to building resilience. They are not just reactive responses to economic challenges, but an ongoing foundation for life in geographically peripheral areas. These “invisible” practices also help to shape regional spaces and create opportunities for local people, yet remain largely absent from discussions of regional economic resilience. Many of these practices go unnoticed because they are not formalised or compensated, often involving unpaid labour and informal networks. The iceberg metaphor used by Gibson-Graham (2013), whereby much of the economy operates below the surface, aligns closely with my findings. Reflecting upon these practices, I see that the neglect of micro-level resilience stems from how we typically conceptualise regions, reducing them to mere administrative units. This view overlooks the lived experiences of communities, where economic survival is not solely tied to large industries or external investments. To understand regional economic resilience, we need to move beyond macro-level frameworks and recognise how these everyday, often invisible, practices are key to sustaining livelihoods, and, by extension, the economy (Gibson-Graham et al., 2013).

At the heart of regional economic resilience lies the often-overlooked importance of social reproduction, which is just as vital as economic production. Mainstream regional development agendas tends to focus heavily on industrial growth, investment, and economic production, but this narrow view fails to achieve a full understanding of people’s needs. Ormerod’s (2023) critique of the “male gaze” in regional development highlights a significant flaw in this approach: it assumes that economic



growth alone will be enough to revitalise regions, while ignoring the reality that many peripheral areas are struggling with a lack of basic services such as healthcare, education, and social welfare.

There is also a need to maintain and improve the social infrastructure that people rely on, such as healthcare, schools, and social services. In other words, regions must be places where people want to live, not just where they have the opportunity to work. Resilience is not just about macro-economic recovery - it is also about recognizing that people are more than just resources within an economic system. Their lives and contributions are shaped by much more than what they produce or consume. Understanding how everyday social relations, particularly intergenerational connections, shape people's lives and livelihoods is essential. Decisions about moving or staying in a region are often not made by a single strategic decision-maker aiming to maximize profits but by entire families, whose priorities may include school systems, work-life balance, healthcare facilities, and access to housing (Hall, 2016). These social structures play a crucial role in supporting daily life, especially in geographically peripheral regions, yet they remain underexplored. Neglecting these intimate dimensions of social life, and viewing people only in terms of their economic function, not only deepens inequalities within and between regions but also misinforms policies aimed at mitigating them.

To understand regional economic resilience, we must broaden our view of what the economy entails. As I have argued throughout this thesis, resilience is not just about bouncing back economically but also involves creating and sustaining opportunities for people to remain in place, even amidst the inevitable economic crises and upheavals that arise within the global capitalist system. Traditionally, however, the economy has been viewed through a narrow lens, focused solely on economic production while neglecting the vital role of social production. My research shows that the loss of a job affects not only the individual worker but entire households and communities. People are embedded in regions not just as workers but as residents, parents, and partners. Their children go to local schools, their families rely on regional services, and their wellbeing depends on far more than just employment opportunities. Yet, dominant economic frameworks often isolate the economy from these broader social contexts, limiting our understanding of micro-mechanisms which also sustain regional resilience. If we fail to address these foundational aspects of the social infrastructure, discussions about resilience run the risk of reinforcing existing systemic inequalities and overlooking the needs of marginalised communities.

As I reflect upon regional economic resilience, I cannot help but wonder if the neglect of the invisible, everyday practices that sustain livelihoods in geographically peripheral areas is tied to the ways in which we approach knowledge production in economic geography. Specifically, in rural areas with shrinking populations, relying on macro-level studies to understand the lived experiences of residents becomes increasingly problematic. At the same time, I realise that much of what I am discussing here has already been brought to light by feminist scholars. For instance, Rose (1993) critiques the masculine bias in knowledge production within economic geography, pointing out that it often overlooks unpaid labour, much of which is carried out by women. Most studies on regional economic resilience, as I mentioned in the second chapter, are based on a macro-scale perspective, yet these studies often come with certain assumptions, such as the belief that investment in industry or attracting capital will automatically address other needs and challenges.

This is not to suggest that I am downplaying the importance of industry for regional economies. What I am questioning is how we define the needs and challenges of residents in these peripheral areas. One key issue, as I have noted, is the bounded agency of people in these regions. This does not mean that residents should be free to act without any limitations, but there does seem to be a certain accountability embedded in their decisions and priorities, one that is connected to the core political and economic centres. There is also a sense of mistrust towards rural residents stemming from policymakers, who often disregard their local knowledge and how they navigate their environments, suggesting that it needs to be monitored or controlled in some way. I cannot help but feel that there is a similar tendency in the regional economic resilience literature in economic geography, where the reliance upon macro-scale approaches tends to overlook people's agency. In doing so, we fail to take into account the needs that arise from these assumptions, leaving out the very ways in which people adapt, cope and make decisions based on their local contexts.

Left-behindness, then, is not merely about exclusion from economic growth, it also reflects a deeper erosion of the capacity to act within the frameworks of power and opportunity. It is about the ways in which individuals and communities find themselves constrained, not only economically but also socially and politically, in their ability to shape their own lives and futures, not only in terms of their economic activities but also in accessing resources to sustain social wellbeing. Thus, regional economic resilience cannot solely focus on preserving economic production alone. It is also about the preservation of social relations, and

the everyday practices that support life in a region. This is particularly important because it is these everyday routines and relation to nature, these networks that maintain and support people's lives in peripheral regions, not only during moments of crisis but also in maintaining long-term livelihoods.

## VI. Concluding remarks and future research

*In this section, I present the conclusions drawn from my thesis, highlighting the key findings and their implications. I also discuss potential directions for future research that could further explore the themes and issues raised in this study.*

I have entitled my thesis *Echoes of Resilience*, to reflect the often-invisible practices that sustain livelihoods in geographically peripheral areas. Like echoes, these practices are not always seen, but they are present. Similar to the way in which an echo may carry sound without revealing its source, the mechanisms of resilience in these peripheral areas remain hidden from broader view. Yet, they play a crucial role in shaping the opportunities available to the people living there. In my work, I have looked at these echoes. Our understanding of regional economic resilience is often too narrow, failing to capture the full scope of the micro-mechanisms that create opportunities to remain and build a life in geographically peripheral areas. From the beginning of my PhD journey, I have understood economic resilience as being primarily about people, about creating opportunities for individuals to remain in their regions. I have always believed that regions are not merely spaces of work. Yet, when engaging with the regional economic resilience literature, I often found it to be detached: the regions themselves seemed to be treated as the primary actors, with the main focus placed on industrial and economic growth. This perspective assumes that, by nurturing industry, the “invisible hand” of the market will naturally address all the other aspects necessary for people’s wellbeing. This is where echoes come in for me. They represent my effort to bring the human experience back into the discussion, emphasising that the lived realities of individuals are just as crucial for understanding resilience as the macro-economic factors.

In my thesis, I have argued that it is essential to understand what is lost during economic crises, because these losses reveals the foundations upon which adaptation practices must be built post-crisis (Atkins, 2024). Reflecting upon future research directions, I am reminded of the quote from Judith Butler, which opens my thesis:

*Places are lost – destroyed, vacated, barred – but then there is some new place, and it is not the first, never can be the first. And so, there is an impossibility housed at the site of this new place. What is new, newness itself, is founded upon the loss of original place, and so it is a newness that has within it a sense of belatedness, of coming after, and of being thus fundamentally determined by a past that continues to inform it. And so, this past is not actually past in the sense of “over,” since it continues as an animating absence in the presence, one that makes itself known precisely in and through the survival of anachronism itself. (Butler, 2002: p. 486)*

This quote resonates deeply with the concepts of economic geography, but it also conveys a deeply personal, embodied experience. It encapsulates the dynamic process of losing, rebuilding, and restoring what has been lost, mirroring the concepts of path dependencies in economic geography at the macro-scale. However, Butler’s perspective offers a more intimate lens, one that reflects the personal experiences of those living through these changes.

Much of my work has focused on the aspects of their lives that people lose during economic crises. I have argued that it is crucial to understand these losses, because they represent the micro-scale structures that underpin how people rebuild and reshape their lives. Firstly, I have emphasised the importance of cross-scalar networks, which act as coping mechanisms for individuals during crises and smaller-scale episodes of adversity, by maintaining and sustaining everyday life in geographical peripheries. These networks provide essential information resources that may not be available locally. Additionally, my research indicates that the impact of an economic crisis extends far beyond the quantifiable economic losses observed at the regional level. Economic crises profoundly disrupt daily life by unsettling the familiar material and relational spaces upon which people rely. This disruption impacts upon not only the physical environment but also the social and emotional aspects of life. My research further highlights that daily practices and family dynamics are deeply intertwined with economic production. These micro-level activities and relationships are not merely background elements but are essential in sustaining economic production and navigating the challenges faced by ordinary people. Finally, my study shows that socio-natural rhythms are also significant aspects of the losses that people endure when their daily

routines are disrupted. This is especially relevant for agricultural communities, where there is a close connection with the lifecycles of livestock and crops.

Conceptually, the main findings and discussions presented in the three articles question how we conceptualise the spatial economy within the regional economic resilience literature. The concept of regional economic resilience is closely associated with economic crises. Most research focuses on how economic crises affect regional economic production, specifically examining the factors that strengthen regional economy at the macro-scale. My research demonstrates that the economy encompasses far more than merely formal-sector production. It also includes everyday practices, social reproduction, and the dynamic interaction between social and natural rhythms. Regional economic resilience extends beyond merely recovering from financial setbacks, it also involves sustaining and adapting the intricate web of daily routines and social relationships that are essential for economic stability. Additionally, local people's familiarity with both material and relational spaces supports economic production in subtle ways that may not always be visible at the regional scale, yet these factors strengthen individual economic activities and hence carry implications for the overall regional economy. By incorporating these elements, my research highlights that regional economic resilience must account for the multifaceted ways in which daily life and environmental factors support and sustain economic systems.

An evolutionary perspective on regional economic resilience conceptualises resilience as a process of adaptation (Evenhuis, 2017), and my research highlights losses that are often overlooked but are crucial to consider in these processes. For example, the loss of familiarity with a place during economic crises is a significant and disruptive experience in daily life, yet it is rarely included in how we theorise or discuss post-crisis adaptation processes. Despite the emphasis on sustainability and green transitions, as well as the need to protect nature amidst various threats, natural environments are frequently excluded from adaptation processes and their health is often treated merely as a desirable goal. While our focus is on protecting nature by adapting economic practices in ways that are both environmentally and socially sustainable, we tend to overlook the intimate relationships that humans have with their natural environments. These relationships should not only be viewed as goals but also incorporated into the adaptation process itself, serving as integral aspects of achieving environmental and social sustainability.

In the context of my research, the losses experienced during economic crises do not simply vanish, but persist in memory, becoming embedded in the social and spatial fabric of individuals' lives. As Butler suggests, these losses not only pave the way for new spaces but carry with them memories of the past, shaping how new livelihoods and communities are rebuilt. This persistence of the past into the new underscores the complexity of adaptation. It is not merely about overcoming or erasing what has been lost but also about understanding how these remnants inform and shape the recovery process. Future research could examine how these losses influence and translate into adaptation, particularly by focusing on the micro-level mechanisms through which individuals and communities rebuild. In this sense, resilience is not just about bouncing back from a crisis but involves a continuous process of negotiating with the past. The cross-scalar networks, place-based familiarity, and socio-natural rhythms are not just passive remnants of what was lost, but rather indicate the underlying structures shaping how people relate to both their immediate vicinity and more distant locations.

As argued throughout this thesis, while change occurs at every scale, it is often at the everyday scale where it must be transformed into tangible realities. The closure of mink farms illustrates this dynamic. The decision to close these farms was made at the national scale and influenced by the global COVID-19 pandemic. However, it is at the everyday scale of the mink farmers themselves where this decision must be not only implemented, but also experienced. Cross-scalar perspectives reveal how crises or significant changes move through, and are interpreted and applied differently at, various scales. Decisions are made at the global level, but it is at the everyday scale of individuals where these changes must be actualised. This approach highlights the ways in which large-scale decisions are translated and take on different forms as they travel iteratively through the scales. There is good reason to believe that the adaptive practices which emerge after crises are shaped by these small-scale, everyday interactions and networks that, while lost or weakened, still provide guidance for rebuilding lives.

For people living in areas that offer few other opportunities, a factory closure or economic downturn is not just a statistic – it means the loss of a job, a future, and a sense of security. These crises deepen feelings of being forgotten or excluded, making it even more difficult for communities to break free from cycles of decline. Ultimately, understanding regional resilience requires us to focus not only on places but also on the people who call them home, understanding as well the struggles taking place outside the scope of economic crisis.

Finally, all my respondents expressed a desire to remain in their current areas due to a sense of familiarity with the place or family obligations. While I have not directly addressed the issue of relocation for job opportunities, moving to a different location for employment has often become an accepted strategy for dealing with redundancy. However, in regions already experiencing depopulation, this approach is not sustainable. Moreover, as I show in the second article, this pro-move narrative neglects the significant time and resources that have been invested in building a space. While job opportunities may indeed exist elsewhere, these “other places” remain just that – other places. The personal costs of relocation are rarely taken into account, because labour is increasingly expected to be flexible. To enable people to stay in areas already experiencing depopulation, it is important to understand their lived experiences. One critique of resilience that is particularly applicable to the context of left-behindness is the tendency to place responsibility on individuals to compensate for the withdrawal of public-sector support. In my thesis, I illustrate several micro-scale mechanisms that sustain livelihoods in such contexts. Many of these mechanisms, particularly the networks, arise from geographical peripherality and serve as a way to counteract spatial power asymmetries. However, this is not to suggest that self-reliance should be normalised or viewed as a definitive solution. Instead, future research should focus on strengthening these strategies and mechanisms, rather than relying solely on attracting new industries to an area as a solution to the challenges faced by these communities and places. When discussing regional economic resilience, future research should incorporate social reproduction because they are mutually constitutive. Particularly in the context of geographically peripheral areas, this means thinking of regional resilience in terms of resilient public services, healthcare, education, and elderly care. Many depopulating regions in Europe are experiencing increased difficulties in finding people who could fill these roles. This approach would acknowledge the structural issues at play and support a more experience-sensitive approach to regional resilience.



## VII. Svensk sammanfattning

Denna avhandling fokuserar på begreppet regional resiliens<sup>1</sup> (eller motståndskraft). Det innebär i korthet hur olika områden (lokalsamhällen, regioner, nationer) reagerar på ekonomiska chocker, antingen genom att återhämta sig, anpassa sig eller genomgå en djupare omvandling. Begreppet, som har en lång tvärvetenskaplig tradition, fick en framträdande roll efter finanskrisen 2007-2008, som visade på stora skillnader i hur regionala ekonomier påverkades. Att förstå vad som gör att vissa regioner kan navigera i osäkerhet och till och med komma ut starkare, medan andra successivt försvagas, har därefter varit en central fråga inom denna forskning. Det är tydligt att även senare kriser (som exempelvis COVID-pandemin och den pågående energi- och inflationskrisen) tydliggör regionala skillnader och till och med har förvärrat existerande ojämlikheter. Detta är särskilt påtagligt i regioner som redan står inför ekonomiska utmaningar, så som gamla industricentra eller landsbygdsområden. Dessa platser har ofta svårare under lågkonjunkturer och kristider, eftersom ekonomiska chocker kan påskynda utfasningen av verksamheter. Motståndskraft handlar därför inte bara om regionalekonomiska faktorer, utan också om att hantera ojämn utveckling och de bredare krafter som formar regionernas framtid.

Det finns flera sätt att förstå och studera regional resiliens. En så kallad "ingenjörsmässig resiliens", är ett perspektiv som definierar resiliens som en regions förmåga att återgå till sitt tidigare tillstånd efter en chock. Detta synsätt betonar snabb återhämtning och syftar till att regioner ska kunna återgå till tidigare nivåer av produktivitet och sysselsättning. En annan ansats, är en "ekologisk resiliens", som syftar till regioners kapacitet att anpassa sig, omorganiseras och hitta ett nytt stabilt tillstånd, snarare än att bara återgå till status quo. Med inspiration från hur ekosystem anpassar sig till förändringar betonar detta perspektiv att regioner kan utvecklas och hitta en ny ekonomisk jämvikt som svar på externa chocker. Ett tredje perspektiv, "evolutionär resiliens", går längre än tanken på att helt och hållet återgå till ett tidigare tillstånd. Enligt detta perspektiv bör regionala ekonomier inte bara återhämta sig utan kontinuerligt anpassa sig till förändrade marknadsvillkor, tekniska framsteg och global konkurrens. Här ligger fokus på pågående omvandling och belyser hur

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<sup>1</sup>Med regional resiliens menas i denna svenska sammanfattning i huvudsak den ekonomiska aspekten (jämför engelskans 'regional economic resilience'),

regioner omorganiserar sina ekonomiska aktiviteter som svar på diverse interna och externa omvandlingstryck. Slutligen betonar ”transformativ resiliens” innovation och hållbarhet med målet att omforma regionala ekonomier till att bli mer socialt och miljömässigt ansvarstagande.

En viktig kritik mot litteraturen om regional resiliens är dess tendens att fokusera på den regionala nivån och därmed bortse från de individer som lever och verkar i regioner, vilket riskerar att tillskriva regionen någon form av agens. En stor del av litteraturen fokuserar på makronivån genom att analysera aggregerade ekonomiska resultat (produktivitet, sysselsättning etc.) på regional nivå. Därmed misslyckas denna litteratur ofta med att fånga hur olika grupper i samhället hanterar ekonomiska kriser och motgångar. Detta förbiseende innebär att den mänskliga delen av den regionala motståndskraften osynliggörs. Det vill säga, de sätt på olika individer anpassar sig till chocker och hanterar vardagliga utmaningar. Avhandlingen syftar därför till att lyfta fram individuella berättelser och erfarenheter inom ramen för de bredare diskussionerna om regional resiliens. Genom att fokusera på hur individer hanterar ekonomiska kriser, särskilt i perifera regioner, försöker jag identifiera mekanismer för regional resiliens på mikronivå. Dessa individuella perspektiv berikar vår förståelse för hur människor anpassar sig till ekonomiska svårigheter och ger värdefulla insikter i de vardagliga metoder som kan upprätthålla försörjningen under ekonomiska kriser. Dessutom utmanar detta fokus på personliga berättelser konventionella tolkningar av regional resiliens, som vanligtvis behandlar regionen som huvudsaklig analysenhet.

Även om jag använder termen "ekonomisk kris" erkänner jag svårigheten att separera ekonomiska kriser från andra former av störningar, såsom hälsorisker. COVID-19-pandemin visade, till exempel, hur en global hälsokris kan ha en betydande inverkan på ekonomier, offentliga tjänster, arbetstillfällena och det övergripande välbefinnandet. Jag strävar dock efter att bidra till litteraturen om regional resiliens; därför använder jag begreppet "ekonomisk kris" för att betona att effekterna av sådana kriser – inklusive de associerade förlusterna – samt de strategier som används som ofta går bortom det som traditionellt förstås som enbart ekonomiskt.

För att analysera individuella erfarenheter av ekonomiska kriser utgår jag från caset med danska minkuppfödare vars gårdar stängdes ner 2020 på grund av COVID-19-utbrottet. Danmark var tidigare världens största producent av minkpälisar och stod för omkring 36% av den globala produktionen. Minkuppfödningens historia går tillbaka till 1930-talet och fungerade genom en kooperativ struktur ledd av National Danish Fur

Breeders' Association. Sektorn stödde relaterade industrier, såsom mode, foderproduktion och forskning. Danska minkpälsar var kända för sin höga kvalitet, och Copenhagen Fur, som ägdes av danska bönder, var världens ledande pälsauktionshus och hanterade 40% av den globala pälsförsäljningen. I början av 2020 fanns det cirka 800 gårdar i Danmark, varav de flesta låg på Jyllands västkust. I juni 2020 rapporterade flera minkuppfödare om COVID-19-utbrott på sina gårdar. Medan myndigheterna initialt försökte begränsa spridningen, beordrade regeringen i november att alla minkar i landet skulle avlivas – både infekterade och friska – och införde ett totalt tvåårigt förbud mot avel. Den landsomfattande avlivningen av Danmarks minkpopulation stängde ned industrin och lämnade minkuppfödare i en form av vakuum gällande framtiden. Som svar på det drastiska beslutet att stänga ner en hel industri introducerade regeringen ett kompensationspaket. Minkuppfödare kunde antingen lämna industrin och få kompensation eller återuppta aveln när förbudet lyftes. Endast 13 minkuppfödare valde att fortsätta på grund av både svårigheterna att återuppbygga verksamheten och givet den generellt osäkra framtiden för pälsuppfödning i Europa.

Även om det här fallet är specifikt för ett land och en viss bransch, återspeglar det ett bredare mönster bland industrier som inte längre stämmer överens med nya samhällsvärderingar kring både hållbarhet och etik. Nedgången för branscher som pälsdjursuppfödning, torvbrytning i Finland, kolbrytning i Polen och vissa jordbrukssektorer, illustrerar de bredare utmaningar som regioner står inför när de är beroende av dessa typer av industrier som står under ett kraftigt omvandlingstryck. Istället för att argumentera för att bevara föråldrade industrier är det viktigt att erkänna de djupgående effekterna av dessa övergångar för individer som länge har förlitat sig på dem, och den oundvikliga inverkan detta har på de berörda aktörernas försörjningsmöjligheter. Detta är en fråga om skala, eftersom förändringar sker på flera nivåer - från personliga upplevelser och dynamik i lokalsamhället till nationell politik och globala ekonomiska förändringar. Dessa utmaningar är särskilt akuta i mer geografiskt perifera regioner, där det redan kan vara svårt att upprätthålla försörjningen på grund av djupt rotade strukturella och systemiska ojämlikheter.

För att analysera detta utgår jag i avhandlingen från semi-strukturerade djupintervjuer med tretton minkuppfödare i Danmark för att undersöka hur de hanterar de ekonomiska konsekvenserna av industrins nedstängning 2020. Sju av intervjuerna genomfördes på plats, medan övriga genomfördes online på grund av pandemirestriktioner. Respondenterna, som är mellan 25 och 63 år, valdes ut baserat på två

kriterier: Minst två års erfarenhet av minkuppfödning och att de skulle vara direkt involverade i den dagliga verksamheten. Deltagarna rekryterades via Dansk Minkavlerforening, som stödde forskningen och delade inbjudningar på sin Facebook-sida. Dessutom användes ett personligt nätverk för att hitta deltagare, vilket ledde till ett snöbollsurval för att säkerställa en mångsidig och förankrad deltagarbas.

Tematisk analys användes för att analysera intervjuerna och identifiera hur minkuppfödarna hanterade den ekonomiska krisen. Alla intervjuer transkriberades manuellt och kodades med en abduktiv, teori-driven metod. Varje artikel i studien använde olika teoretiska ramverk för att analysera de identifierade koderna. Den första artikeln tillämpade Coxs (1998) ramverk för att undersöka hur uppfödarnas nätverk hjälpte dem att navigera genom krisen. Den andra artikeln använde Felskis (2000) begrepp om vardagsliv för att utforska hur kriser störde rutiner och investeringar i jordbruket. Den tredje artikeln byggde på Lefebvres (2004) idé om socio-naturliga rytmer för att analysera hur kollapsen av industrin påverkade både mänskliga praktiker och miljöer.

I den första artikeln, "Jumping Scales and Producing Peripheries: Farmers' Adaptation Strategies in Crises" utmanar jag och mina medförfattare det traditionella ramverket för regional resiliens, som vanligtvis fokuserar på tillgångar inom en region. Vi undersöker istället hur minkuppfödare i tider av små och stora kriser, använder nätverk som sträcker sig mellan olika skalor och bortom deras omedelbara närmiljö. Vi konceptualiserar skala som socialt konstruerad, och använder oss av Cox's (1998) rum-begrepp, 'beroende' och 'engagemang'<sup>2</sup>, i relation till olika skalor. 'Beroende-rummet' består av lokaliserade sociala relationer som är viktiga för att upprätthålla försörjningen, medan 'engagemangsrummet' består av ett bredare och utom-regionalt nätverk som kan erbjuda resurser i kristider. I vår studie undersöker vi hur dessa relationer kan hjälpa uppfödarna att upprätthålla inte bara den ekonomiska produktionen utan också dagliga rutiner, familjetraditioner och en känsla av platstillhörighet. Detta väcker viktiga frågor i relation till begreppet regional resiliens och hur det har använts i litteraturen. Vi måste fråga oss, "Resiliens i vilket syfte?" och "Resiliens, på vilket sätt?" Uppfödarna förlitar sig på både informella och institutionaliserade nätverk för att hålla liv i sin gård och försörjning. Informella nätverk - som grupper på sociala medier och lokala kontakter - underlättar kunskapsutbyte och kamrattstöd. Som en uppfödare sa: "*Lantbrukare från andra sidan landet är kanske större, och det är verkligen bra att prata med dem för att se*

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<sup>2</sup> I original: Spaces of Dependence and Engagement

*hur de gör, för lokalt gör vi alla samma sak.*” Dessa informella relationer gör det möjligt för uppfödarna att få tillgång till alternativa perspektiv och lösningar utanför den närmaste omgivningen. Samtidigt tillhandahåller institutionaliserade nätverk, som Danmarks nationella pälsdjursuppfödareförening, centraliserad opinionsbildning och resurser. Tillsammans fungerar dessa nätverk som viktiga kanaler som hjälper uppfödarna att anpassa sig till olika utmaningar genom att koppla samman dem med varandra, och bilda ett bredare stödsystem. När minkuppfödningsskiktet kollapsade så kollapsade också dessa nätverk, vilket ledde till att uppfödarna blev isolerade. Detta visar på hur ekonomiska kriser inte bara påverkar själva produktionen utan också undergräver viktiga relationer och nätverk som möjliggör strategier för anpassning och omställning. I slutändan är nätverk som löper mellan skalor och geografier avgörande för att uppfödare i mer perifera områden ska kunna undvika marginalisering och lyckas skapa strategier i osäkra tider. När dessa nätverk försvinner blottläggs de strukturella sårbarheterna i dessa regioner, där resiliens inte bara handlar om individuell anpassning utan är beroende av det bredare stödsystemet.

I den andra artikeln, ”Disrupted Spaces: The Impact of Economic Crises on Everyday Life” fokuserar jag på hur ekonomiska kriser påverkar individens vardag. Med hjälp av Felskis (2000) ramverk, undersöker jag tre viktiga dimensioner - tid, rum och modalitet - för att bättre förstå krisernas effekter på individen. Jag identifierar tre huvudteman: förlust av kontroll, förlust av rutiner och förlust av sociala band. Det blev väldigt tydligt att dessa minkuppfödare upplevde en djup känsla av maktlöshet, eftersom beslut om deras ekonomiska verksamheter fattades långt från deras lokala närmiljö, samtidigt som de vart helt frånkopplade från sina rutiner och det nätverk som hade byggts upp under lång tid. I studien betonar jag den känslomässiga aspekten av kriser och förkroppsligade<sup>3</sup> effekter, vilka ofta förbises till förmån för aggregerade ekonomiska indikatorer. De minkuppfödare jag intervjuade kände sig strandsatta, oförmögna att gå vidare eftersom de varken kunde komma åt sin mark eller den infrastruktur de hade byggt upp på grund av den försenade expropriationsprocessen. Detta ledde till känslomässig förskjutning, som en minkuppfödare sa: *”Nu vet vi inte vad som händer i morgon eller hur länge vi måste vänta på att regeringen ska fatta ett beslut. Först kände vi ilska. Mord i ögonen, men du kan inte göra någonting. Man kan bara luta sig tillbaka och vänta och acceptera det.”* Dessa perspektiv utmanar de mer traditionella analyserna av regional resiliens, genom att betona individernas personliga erfarenheter och känslor av att vara ”strandsatta”

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<sup>3</sup> Embodied

- inte bara av ekonomiska orsaker eller kompetensbrist, utan av de djupa känslomässiga band som binder dem till deras bransch, etablerade rutiner och sociala relationer som länge präglat detta sätt att leva.

I den tredje artikeln, "Understanding Regional Economic Resilience and Individual Loss through Socio-Natural Rhythms", undersökte jag och min medförfattare hur industrier förändras på mikronivå, särskilt i samband med minkuppfödning. Vi undersöker hur uppfödarnas liv inte bara formas av socioindustriella strukturer utan också av så-kallade 'naturliga rytmer' - som djurens livscyklar, säsongsförändringar och vädermönster - som var en integrerad del av deras dagliga verksamhet. När störningar, som den landsomfattande avlivningen inträffade, tvingades uppfödarna att omvärdera sina relationer med marken, djuren och de cykler som historiskt hade format deras sätt att leva. Vi använde Lefebvres (2004) rytmanalys för att integrera naturliga miljöer och individuella upplevelser, och kallade detta för socionaturliga rytmer. Vi identifierade viktiga rytmer i minkuppfödningens cykel - urval, parning, uppfödning och pässlslagning - tillsammans med produktionsrytmer relaterade till auktioner, utställningar och ekonomiska fluktuationer. Dessa rytmer visade hur uppfödarnas liv var sammanflätade med naturliga cykler och marknadens krav. Ett viktigt resultat var hur globala marknadskrav formade auktionsrytmerna, vilket påverkade avlivningen av minkarna. Detta illustrerar dynamiken mellan olika skalor där makroekonomiska förhållanden påverkar beslut på mikronivå. Störningen av dessa socionaturliga rytmer bidrog till förluster som gick utöver det sociala och ekonomiska. Det vill säga, förluster som är relaterade till materiella relationer med de naturliga miljöerna.

På ett bredare plan betonar min avhandling att resiliens i geografiskt perifera regioner är mer än bara ekonomisk återhämtning. Det är förmågan att upprätthålla försörjningsmöjligheter, sociala kontakter och rumslig kontinuitet trots pågående strukturella ojämlikheter och ekonomiska kriser. I slutändan handlar resiliens i dessa regioner inte bara om att stabilisera den regionala aggregerade ekonomin eller främja nya tillväxtbanor. Det handlar om att upprätthålla de vardagliga strukturer som gör livet möjligt.

Avslutningsvis betonar min avhandling att resiliens i geografiskt perifera regioner handlar om mer än bara ekonomisk återhämtning. Det handlar om förmågan att upprätthålla försörjningsmöjligheter, sociala kopplingar och rumslig kontinuitet i mötet med pågående strukturella ojämlikheter och ekonomiska kriser. I slutändan handlar resiliens i dessa regioner inte bara om att stabilisera regional makroekonomi eller främja

marknadstillväxt; det handlar om att upprätthålla de vardagliga strukturer som gör livet möjligt. Studier av regional resiliens bör rikta om sitt fokus bortom ekonomisk produktion för att också tydliggöra den kritiska rollen av social reproduktion och offentliga tjänster. Det dominerande neoklassiska synsättet på resiliens reducerar ofta ekonomin till marknadsresultat, med betoning på konkurrenskraft, produktivitet och effektivitet. Detta perspektiv bortser dock från det grundläggande faktum att ekonomier är inbäddade i sociala och materiella relationer som sträcker sig långt bortom marknaden. Förmågan hos en region att stå emot kriser och anpassa sig är inte bara en fråga om finansiella investeringar eller flexibilitet på arbetsmarknaden—den beror också på styrkan hos sjukvårdssystem, utbildning, bostäder och platsspecifika sociala relationer. Dessa infrastrukturer stödjer både individer och samhällen, vilket gör det möjligt för dem att navigera genom störningar och upprätthålla en känsla av stabilitet och tillhörighet. Regional resiliens måste därför förstås bortom det strikt ekonomiska då det också handlar om att säkerställa att människor har möjlighet att inte bara arbeta utan också bygga relationer, ta hand om andra och skapa meningsfulla liv. Om man inte erkänner vikten av social reproduktion—det obetalda och ofta osynliga arbete som får samhällen att fungera—riskerar studier av resiliens att förstärka en abstrakt, avpersonifierad vision av regional utveckling som också ignorerar de människor som utgör en regional ekonomi.



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