

**M A S A R Y K
U N I V E R S I T Y**

FACULTY OF SOCIAL STUDIES

**Ageing, Change and
Belonging: How older people
interpret social, cultural and
environmental change in the
context of post-socialist
transformation**

COMMENTARY TO HABILITATION THESIS

LUCIE GALČANOVÁ BATISTA

Brno 2026

MUNI
FSS

Abstract

This habilitation thesis provides an overview of six qualitative empirical studies that focus on the intersection of ageing and changing contexts, published between 2015 and 2025. Based on a constructivist theoretical and epistemological approach, the thesis examines how older adults understand the cultural, social, and environmental changes they are experiencing. It explores their interpretations of and coping with changing nature and climate, transforming urban centres and rural regions, changes in the intimate contexts of homes and institutions, as well as shifting social roles, norms, and rules in the context of ageing bodies and minds. The presented studies are contextualised within recent developments in theory and research on ageing, namely the cultural, postcolonial, and the 'new' environmental turns in the sociology of ageing and social gerontology.

Declaration of the Use of Artificial Intelligence (AI)

In preparing this work, several AI-based tools were used. Longer citations from the Czech originals have been translated with the help of the large language model tool, DeepL.com; the final version has always been checked and edited by the author. Other AI tools used in the thesis include Grammarly for spell and grammar checks, the Consensus app to support other search tools, such as Google Scholar and Google Scholar Labs. Google NotebookLM was used to discuss the structure and clarity of some arguments. No part of this text was created using the AI generative tools, and the author takes full responsibility for its content.

Brno April, 14, 2026

.....
Lucie Galčanová Batista

Acknowledgements

Firstly, I would like to thank my dear parents for their unconditional love and for their ceaseless care and support in both my personal and academic life. Without their gentle leadership, support for my own choices, and without their active grandparenting, I would not be able to do work that brings me joy and fulfilment.

The following text would not be possible without the support of the Faculty of Social Studies and Masaryk University (FSS MU). I am honoured to be a member of this respected, diverse, and supportive institution, which has provided me not only with an excellent environment for my research and teaching but also with stable support during times when I was unable to fully focus on my work.

I am grateful to the members of the Department of Environmental Studies, especially its heads, doc. Karel Stíbral and Dr Vojtěch Pelikán. I am also grateful for my experience at the Department of Sociology, which will always be my intellectual home. I would like to thank Prof. Emeritus Petr Mareš, who sparked my interest in urban studies and supported my early integration into research, and Prof. Ladislav Rabušic, who endorsed my research in ageing studies, led by an innovative, dedicated and determined scholar, Dr Lucie Vidovičová. My deepest gratitude belongs to Prof. Emeritus Hana Librová. Her first book, *The Colourful and the Green* (Librová 1994), on voluntary modesty, was among the major reasons I decided to pursue sociology and environmental studies.

I would also like to thank the Masaryk Memorial Cancer Institute for their experienced, evidence-based and patient-oriented approach. I refuse to identify myself through cancer, but it is part of my life, for which I hold thanks to this extraordinary institution. I would also like to express my gratitude to Eva Řačáková and Jana Michalová for guiding me through difficult times. Last but not least, I am grateful that my academic life has enriched my personal life. I am fortunate to have dear friends among my colleagues. I am grateful for the inspiring cooperation with Bára Vacková, Slávka Ferenčuhová, Lucie Vidovičová, Marcela Petrová Kafková and Vojtěch Pelikán, among many others. I also owe a debt of gratitude to the social network woven around the Faculty of Social Studies for the wonderful friends Lenka, Lad'ka, Kiki, Teta Kiki and Jana, whose personal support, friendship, and sharing mean so much to me.

And thanks to a lucky conference trip, my life will never be the same (kudos to TAP Portugal). This work is thus dedicated to Miguel and Samuel; without their love, care, patience, and endless support, this thesis would not have come to be. Obrigada.

Table of Contents

1	Introduction	9
2	Contextualising the studies in recent developments in theory and research on ageing	14
2.1	The cultural turn – representations, identities and embodiments	14
2.2	The postcolonial turn – othering, normativity, and ageism	18
2.3	The ‘new’ environmental turn – integrating nature into gerontology (again)	24
3	Overview of the Studies: Methodology, Authorship and Funding	32
3.1	Study I: Socio-spatial aspects of ageing in an urban context: An example from three Czech Republic cities	32
3.2	Study II: Self-perception during the transition to the fourth age in the Czech Republic.....	34
3.3	Study III: ‘I am not that type of grandmother’: (Non)compliance with the grandmother archetype among contemporary Czech grandmothers.	35
3.4	Study IV: Ageing in the changing countryside: The experience of rural Czechs.....	37
3.5	Study V: Doing ageing research in pandemic times: A reflexive approach towards research ethics during the COVID-19 pandemic	39
3.6	Study VI: ‘This year, the weather is like it used to be in our times’: Experiencing climate change in the context of rural ageing in the Czech Republic.....	41
4	Conclusion	44
5	References	48

1 Introduction

This habilitation explores **the meanings of age and ageing across changing contexts**. As human beings, we need a certain level of stability and predictability to thrive. Our *ontological security*, the basic feeling of safe being in the world, lies in confidence of the continuity in our self-identity and in the constancy of our social and material environments, as Giddens puts it (Giddens 1990). Simultaneously, human ageing means living in time (Baars 2010): within the hegemonic notion of time embraced since industrialisation and in the Global North, time is inseparably connected to change (comp. Chisholm Hatfield et al. 2018). The temporality we experience is, of course, highly diverse and complex (Schwanen et al. 2012); however, this thesis addresses the phenomenon of coping with change primarily defined in linear terms, both during and via ageing.

Comprising six studies published between 2015 and 2025, the thesis presents insights from six different research samples, all of which included people identified or self-identified as ‘older’ (*starší lidé*) or ‘seniors’ (*senioři a seniorky*).¹ **It explores their interpretations of and coping with changing nature and climate, transforming urban centres and rural regions, changes in the intimate contexts of homes and institutions, as well as shifting social roles, norms, and rules in the context of ageing bodies and minds.** At the same time, in many contexts, older people are seen or see themselves as guardians of ‘what used to be’ and as those with an uncertain, merely vicarious, relationship to the future. Stability does not necessarily mean the absence of change; rather, it unfolds through various forms of belonging, bonding, or boundary enactment, both in personal, cultural, and material realms.

All the works comprising this habilitation are connected in two central aspects. Firstly, they all adopt a **constructivist theoretical approach** to ageing,

¹ In the last decades, many discursive strategies have emerged to address what used to be labelled as ‘old’. As part of the efforts to strip the negative and ageistic meanings from the concepts used in scientific writing as well as in public narratives, the discourse shifted from using nouns as ‘the elderly’ and ‘the old’ or adjectives such as ‘old’ and ‘aged’ towards more process-oriented or relational terms, such as ‘ageing’, ‘older’ people or being in ‘higher’ age or ‘later’ life.

treating it as a relational category while not ignoring its biological embeddedness. They examine **age as a negotiated, situated and relational part of personal identity**, a powerful **social category** co-constructed and internalised in various contexts by actors in social interaction, linking the unique individual experiences to broader socio-spatial structures (Mills 1959). Secondly, all papers are rooted in the **epistemological and methodological approach of social constructivist grounded theory** (Charmaz 2006). My research has primarily focused on the in-depth understanding of lived experiences and on the development of analytical categories that would serve as a 'conceptual handle on the studied experience' (Charmaz 2006: 3). The thesis consists of six articles from international journals (two in *Ageing & Society*, one each in *Sociologia Ruralis*, *Ethnologie Française* and *Journal of Rural Studies*), and one book chapter (*Grandparenting Practices Around the World*) published by Polity Press. I present them here in chronological order:

STUDY I. Galčanová, L., & Sýkorová, D. (2015). Socio-spatial aspects of ageing in an urban context: An example from three Czech Republic cities. *Ageing & Society*, 35(6), 1200–1220. <https://doi.org/10.1017/S0144686X14000154>

STUDY II. Galčanová, L. & Marcela Petrová Kafková. (2018). Self-perception during the Transition to the Fourth Age in the Czech Republic. *Ethnologie française*, 48(3), 413–426. <https://doi.org/10.3917/ethn.183.0413>

STUDY III. Vidovičová, L., & Galčanová, L. (2019). 'I am not that type of grandmother': (Non)compliance with the grandmother archetype among contemporary Czech grandmothers. In V. Timonen (Ed.), *Grandparenting Practices Around the World* (Pp 253–270). Polity Press. <https://doi.org/10.46692/9781447340669.013>

STUDY IV. Galčanová, L., & Staveník, A. (2020). Ageing in the Changing Countryside: The Experience of Rural Czechs. *Sociologia Ruralis*, 60(2), 329–356. <https://doi.org/10.1111/soru.12292>

STUDY V. Galčánová Batista, L., Urbaniak, A., & Wanka, A. (2024). Doing ageing research in pandemic times: A reflexive approach towards research ethics during the COVID-19 pandemic. *Ageing & Society*, 44(6), 1235–1246.
<https://doi.org/10.1017/S0144686X22000733>

STUDY VI. Pelikán, V., & Galčánová Batista, L. (2025). ‘This year, the weather is like it used to be in our times’: Experiencing climate change in the context of rural ageing in the Czech Republic. *Journal of Rural Studies*, 103633.
<https://doi.org/10.1016/j.jrurstud.2025.103633>

Ageing studies,² and specifically gerontology, represent a broad field that bridges several scientific disciplines, as does this habilitation thesis. My own theoretical and analytical position is primarily sociological. I share the argument of Anna Wanka and Martina Brandt on the crucial role age and ageing are playing in sociology. In their editorial to the special issue of *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie* in 2025, they argue that

1. *Age* is a key marker of *difference* in contemporary societies.
2. *Age* works in *intersections* with gender, race, dis/ability, and other categories of difference.
3. *Ageing* as a *biosocial process* is embedded in and shaped by societal structures, norms, and discourses.
4. *Population ageing* as a *collective* process brings about significant changes at different societal levels.
5. *Age and ageing* as categories are socially constructed and thus socially, historically, and culturally *contingent*. (Wanka & Brandt 2025: 491)

² I use the term in a broader sense, as ‘a synonym for research on the last phase of life’ (Ramos & Fookien 2024: 19); nevertheless, it also serves as the label for research inspired specifically by humanities and literature studies, research related to cultural aspects of ageing and its analysis (Port & Swinnen 2014).

While the sociological analysis of ageing is central to this thesis, the complexity of the ageing phenomenon calls for multidisciplinary approaches and inspiration; hence, I rely on and contribute to gerontological research and writing across disciplines. In the articles, I use both the terms **social gerontology** and **sociology of ageing** without making clear distinctions between them (Bengtson et al. 1997). Nevertheless, social gerontology could be conceptualized as a multidisciplinary, social-scientific field focused on the phenomenon of human (and newly, also more-than-human) ageing, while the sociology of ageing would stand for a subfield of sociology characterised by a focus on the role of age in social structures, their reproduction and change, and the positioning of an ageing individual in networks of social relations. There exist attempts among distinguished theorists to make the disciplinary division strict and impermeable, to distinguish the sociology of ageing as theoretical and value-free, from gerontology, labelled as applied and agenda-oriented (Higgs 2025; Gilleard & Higgs 2026; comp. Katz 2014). I prefer the less discriminatory and more mingled use of the terms, arguing that such usage better reflects what scientists in the field, including me, actually do.

In describing what I do, there is another important level of positioning within the scientific field: my own personal position as an ageing person, as a female academic in middle age doing research with people from different generations. As I approached my research participants, their perception of my age influenced how our interactions evolved, how they explained, framed, or legitimised their experiences, views, or values, and, probably, how open they were in their accounts. At the same time, my own life course and ageing experience became part of my theoretical sensitivity. I also aged with my research; the most important events associated with mid-life occurred in the same decade as the research presented in this manuscript. I found my life-partner, was engaged and married, became a parent, went through the pandemic years while dealing with an oncological disease, and entered the life phase in which healing, care and human relations became absolutely central. Without romanticising or idealising the past, listening to life stories of people who lived through the 20th and early 21st centuries, and simultaneously passing on my research

experiences and knowledge to the students I teach at the Faculty of Social Studies, Masaryk University, in Brno—most of whom were younger than me—was an enriching, fulfilling, and meaningful experience I am grateful for.

In the following chapter, I present three developments in ageing studies, within which my work is embedded: the cultural, postcolonial, and environmental turns in social gerontology and the sociology of ageing. The presentation of these ‘turns’ is followed by a detailed overview of each article’s content, summarising the research design and research questions, linking them to research projects and funding, and, most importantly, specifying the details of my authorship, since the studies were published as co-authored pieces. The habilitation thesis ends with a conclusion outlining how this work will be further developed.

2 Contextualising the studies in recent developments in theory and research on ageing

Much is occurring in the current fields of the sociology of ageing and social gerontology. Longevity has become central to public discourse and policy debates, and generational differences stand at the core of many social disputes and power struggles. The omnipresent features of anti-ageing in culture and industry, biology, longevity science, and some branches of medicine have variously focused on understanding, defying and reversing ageing make social scientific approaches more important than ever (e.g. Dumas & Turner 2007; Fletcher 2020). In this chapter, I contextualise the six studies presented above within three major developments in the sociology of ageing and social gerontology—**the cultural turn, the postcolonial turn, and the ‘new’ environmental turn.**³

2.1 The cultural turn – representations, identities and embodiments

Modern, precise numeric systems and official registries have made age appear solid. However, ‘age’ is a slippery, problematic category, and ‘ageing’ remains scientifically ambiguous (see, e.g., Cohen et al. 2020). The chronologisation of our lives is one of the most common, taken-for-granted everyday practices at both the individual and

³ Other turns have occurred in gerontology, such as the spatial turn (Skinner et al. 2015), the material turn (Höppner & Urban 2019) or the closely related post-humanist turn (Andrews & Duff 2019; Lupton 2024). The first one follows the long-term relation between human geography and geographical gerontology (see Rowles 1978), stressing the unavoidable spatiality of ageing. The other two are presented, for example, by the guest editors of a recent special issue of the *Journal of Aging Studies*, Michela Cozza and Anna Wanka (Cozza & Wanka 2025). Inspired by more-than-human approaches, the authors suggest that, rather than studying ageing as purely a human experience and seeing a ‘human being as the main subject of inquiry’, we should focus on ageing as *becoming*, studying the relational networks or ageing assemblages, and on overcoming the centrality of human ageing by seeing the ‘growing older of humans is multiple’ (Ibid. 1). They suggest that focusing on the ageing of the more-than-human entities that humans age with, and even more, suggest, that ‘leveraging a posthumanist view on aging can (...) enable us to explore multispecies forms of solidarities and material entanglements within large infrastructures and complex ecologies we – humans – inhabit together with nonhumans and more-than-humans’ (Cozza & Wanka 2025: 1).

collective levels (Baars 2015). Using Bourdieu's terms, it is a structuring structure par excellence (Bourdieu 2000), as it almost perfectly evokes a sense of naturalness, concealing its human origin by its neutral-looking, exact representation—the number. Besides age, numbers signifying other 'biological' categories, such as height and weight, are made to appear easily measurable and indisputable, yet they are conventionalised and constructed along cultural meanings and social norms. All these 'numbers' have substantial social consequences, used as categories that enact symbolic and social boundaries (Lamont & Molnár 2002) and enabling or disabling certain emotions, experiences or imaginable agencies. Numbers are connected with sets of more or less legitimate practices, social roles, or repertoires of subjectivities and embodiments. In other words, these 'figures' are excellent at becoming part of our social and personal Selves, since we internalise them as something undeniable, something solidified in our medical reports or ID cards, legal systems, something that forms an important part of defining 'who we are' for others and ourselves (e.g., Pilcher & Martin 2020). Yet in some other contexts, age-related boundaries are, of course, negotiable, permeable and continuously contested. Baars thus suggests distinguishing between biological, socio-cultural and personal levels of ageing (Baars 2010).

The **cultural turn in the sociology of ageing and social gerontology** is characterised by a focus on the socio-cultural and personal, dimensions of ageing, studying, with some simplification, the conditions and variability of what the numbers mean and what role they play in contemporary societies and personal lives. **The cultural turn has fostered increased interest in meanings, interpretations, and lived experiences, and it is shaped by developments and new intersections within and among the social sciences, the arts, and the humanities.** It has strengthened the interest in representation informed by social constructionism, post-structuralism, and cultural theory. Wendy Martin and Julia Twigg summarise two key features of the cultural turn in gerontology: an epistemological element, referring to modifications in the focus of scientific knowledge, production, and interpretation, and an ontological element, pointing to socio-historical changes. The epistemological element is profoundly affected by the impact of poststructuralism, at the core of which is

the 'recognition of the way culture is constitutive of social relations and identities', shifting from 'structure to agency' and seeing society 'as discursively constituted as a web of signs, so that the central focus of analysis becomes the interpretation and deconstruction of these' (Twigg & Martin 2015a: 353). Ontological change reflects the historical shift in the nature of societies, leading to an unprecedented role for culture 'in the constitution of social identities and realities' (Ibid. 353), including the area of population ageing and related demographic changes. Twigg and Martin state that the cultural turn in gerontology occurred relatively late in comparison to other related disciplines; the position of cultural gerontology (as a branch of the broader field of social gerontology) was solidified only around the late 1990s and early 2000s, even though its central themes, such as embodiment, ageing identities and subjectivities, including gender and sexuality, visibility, and consumption, had been explored earlier.

With some simplification, we can say that cultural gerontology developed into two overlapping branches. The one established primarily in the North American context (Twigg & Martin 2015b) follows more humanities-oriented approaches, such as literary studies, focusing on representation, interpretation, and narrativity in both fictional and nonfictional worlds. It is represented, for example, by the North American Network in Aging Studies (NANAS) and the European Network of Aging Studies (ENAS). Both emphasise the interdisciplinary nature of ageing research, but the cultural focus is dominant. The flagship journal affiliated with both networks, *Age, Culture, Humanities: An Interdisciplinary Journal*, 'promotes cross-disciplinary, critical investigations of the experiences of age, aging, and older age, as seen through the lens of the humanities and arts' (NANAS, n.d., n.p.).

The humanities-inspired branch of cultural gerontology served as an inspiration in the chapter published in the edited monograph *Grandparenting Practices Around the World* (Timonen 2019). Together with Lucie Vidovičová (**Study III, Vidovičová & Galčanová 2019**), we examined the contemporary role of literature figure of The Grandmother (from the book of the same name written by Czech writer and collector of folk stories, Božena Němcová, published in 1855), arguing that it still

represents a vivid reference point around which contemporary Czech older people narratively construct their own positions and characterise their own identities and performances as grandparents. The secondary analysis of the interviews with people in the 'third age' showed that both men and women express some affinity for the classical image, but mostly articulate a sense of noncompliance and distance from the idealised version of the literary character (either directly or indirectly). This sense was characterised not only by visual aspects of 'old age', such as wrinkled hands, but also by performing acts of continuous care, practical and moral guidance, specific ruling over materiality via complex and time-consuming cooking and baking practices, the frugality of careful repair and conservation, or penetration of symbolic and religious to everyday practices. The participants used this ideal type in their narratives when referring to social change and to the historical transformation of parenthood, but most importantly, women used it to express their own resistance to the social norms set by the shared cultural meaning of the 'typical' grandmother.

The second branch of cultural gerontology is rooted predominantly in the European context, following the broader cultural turn unfolding in social sciences in the 1990s. According to Gilleard and Higgs, this turn focuses on analysing the changing structures of late/reflexive modernity, commodification, destandardisation, and flexibilisation of lives and life courses: 'In place of the traditional dualism of chronology and corporeality, later life is now being examined through alternative lenses, through consumption and lifestyle, technologies of the self and the life politics of identity' (Gilleard & Higgs 2015: 34). The cultural turn has helped to establish cultural gerontology as one of the major research and theoretical approaches in the broader field of gerontology, with its potential to bridge the related disciplines. It has been institutionalised by monothematic issues of gerontological journals, conferences and edited volumes (including the *Routledge Handbook of Cultural Gerontology*, edited by Twigg and Martin in 2015b, with a second revised edition in 2026).

Importantly, we can identify a third branch of cultural gerontology, the one stemming from the interest in culture in the 'older', narrower sense, as a set of cultural practices of a particular group, mostly on the level of state, region, nation or

ethnic group, aiming at the examination of old age and ageing in particular 'cultural' and historical contexts, at the intercultural comparison (Chi 2011). It is represented, for example, by the *Journal of Cross-Cultural Gerontology* published by Springer. The importance of this third branch lies in the broadening of the Western-centric field: the first two branches are dominantly geographically embedded in the Global North, and publications within the frame of cross-cultural gerontology bring valuable and robust insights from the Global South (Samanta 2017).

Geographically and socio-culturally, the position of the Czech Republic is somehow liminal: the relatively rich, democratic country belongs to the Global North, but it does not unproblematically belong to the West, due to long experience with state socialism and the Soviet geopolitical zone of influence. Most of the studies in this thesis fall into the intellectual realm of the second branch of cultural sociology, focusing on locally embedded identities and the interpretations of changes by older people in particular (environmental, social or institutional) contexts.

The studies presented in the habilitation use post-socialist change and particular historical context as the crucial embeddedness of individual experiences and their meanings in wider cultural and historical contexts (Galčanová & Sýkorová 2015; Galčanová & Petrová Kafková 2018; Galčanová & Staveník 2020, and Pelikán & Galčanová 2025; see STUDIES I, II, IV, and VI). The studies also underscore the importance of reflexivity in the research process and a relational approach to identities in older age, including careful consideration of the researchers' positionality (Galčanová Batista, Urbaniak & Wanka 2024; see STUDY V).

2.2 The postcolonial turn – othering, normativity, and ageism

The postcolonial turn has emerged relatively recently compared to the cultural turn, with a more subtle impact on the sociology of age and social gerontology; it has, however, influenced cultural gerontology more tangibly. Gilleard and Higgs, in summing up the contributions of the postcolonial turn in gerontology, stress that this turn makes clear that old age is often represented as an attribute of others rather

than as a conscious identity of the self (Gilleard & Higgs 2019). The explicit attempt to integrate the perspective of postcolonial theory into ageing studies is evident, for example, in a 2016 special issue of the *Journal of Aging Studies*, edited by Silke van Dyk and Thomas Küpper. Without suggesting a simple analogy between racism and ageism, and with a warning about simply adopting terms and theories from postcolonial studies to gerontology, the authors discuss 'the extent to which concepts and theoretical perspectives from Postcolonial Studies might appropriately be applied to theorize age and aging in terms of cultural representations, identity issues, ageism and subversion' (van Dyk, Küpper 2016: 81). The volume explores this intersection in various ways, from examining the common root of postcolonial theories and ageing studies in existentialism (represented, for example, by work of Simone de Beauvoir) to their joint interest in the 'discourse on others' (Zimmermann 2016: 83), exploring 'late style as exile', inspired by works of Edward W. Said (Hartung 2016), or old age via Homi K. Bhabha's concept of 'colonial mimicry' (Küpper 2016). One of the most influential texts in this regard deals with 'the dual process of othering—glorification and abjection or disparagement' of older people, specifically those in the so-called Third Age (van Dyk 2016: 110). Van Dyk presents Said's theory of orientalism, in which he

reveals that the social construction and stereotyping of the Oriental is not an isolated case but is deeply embedded in modern, dichotomous and complementary systems of representation, such as nature/culture, emotio/ratio and female/male. The Oriental is associated with notions of femininity, irrationality, authenticity and closeness to nature, whereas the Occidental is held to embody masculinity, rationality, modernity and progress. These binary oppositions do not represent equal relations between different polarities; rather, they are structured hierarchically, with the dominant polarity representing the universal and the other one representing what is particular and constitutes a deviation. (Ibid. 112)

Following postcolonial argumentation, Van Dyk states that 'midlife is equated with culture; it represents the universal against which the deviating otherness of old age is

measured and assessed' (Ibid.), pointing in particular to *affirmative othering*, which can be 'hierarchical and oppressive' as it applies mid-life standards to later life (Ibid. 117).

At the same time, by emphasising the positive features of the young-old and the Third Age, and by projecting certain values onto it, the cultural framing of the Fourth Age is demarcated as merely residual; it cannot meet the expectations of autonomy, activity, or contribution. Even though the special issue represents a unique attempt to integrate postcolonial thinking and ageing studies, othering theory had been utilised prior to 2016. It was already an integral part of theorising the Fourth Age, as developed, for instance, by Higgs and Gilleard (2014). They used the term 'social imaginary' to capture the Fourth Age's central feature: the 'frailty'. In their view, frailty

has replaced infirmity as a term signifying marginality and personal vulnerability. As age, disability and chronic illness have each been affirmed as viable social, economic and personal identities, frailty has come to serve as a residual category, replete with the negative qualities that these other earlier identities shed along their way to achieving recognition and a voice. (...) As the financial position of later life has been secured as part of the predictable and standardised life course, and as disability and chronic illness have been reframed as sources of (albeit contested) personal and social identity, the traditional fears of sickness, impairment, and lack in old age have been 'excluded' from these more socially differentiated identities. Residualised and marginalised, frailty has acquired a powerful, if largely unspoken, role within the revised social imaginary of old age: That feared and decrepit fourth age. (Ibid. 16, 17)

Gilleard and Higgs also trace the definition of older people as 'the other', hearkening back to the work of Robert Butler, who first coined the term *ageism* in 1969.

As previously mentioned, Van Dyk uses the theory of othering in relation to the Third Age. She compares midlife to other *universalities*, such as masculinity or whiteness, pointing out that its hegemony, unlike that of the other two, has not yet been sufficiently challenged: midlife remains 'ageless' and neutral. Inspired by Dipesh

Chakrabarty's concept of 'provincialising Europe', she suggests employing the perspective of *provincializing midlife*, by which she does not imply 'marginalising people in the middle years of their life but rather challenging the norms, values and concepts related to midlife that affect people in all stages of life and indeed influence the construction of the life course itself' (Ibid. 116). The norms challenged here include independence and individual autonomy as opposed to 'vulnerability, relatedness and social (inter)dependence of every human life' (Ibid.).

Van Dyk's account illustrates the difficulties we encounter when dealing with language very well, as mentioned before. We do need categories to frame certain entities (such as 'adulthood') and give them meaning, for which the dichotomies (such as young/old, young old/very old, agelessness/senescence) serve well; however, using them blurs the fact that these entities, besides being constructed as bounded, are mostly permeable, fluent, and continuous. Categories related to the life course offer a good example – the continuous, incessant flow of a person's life is fragmented into understandable and also manageable and controllable stages in legal (age of adulthood, legality of alcohol consumption or driving, political participation etc.), socio-political (the age for retirement, tax, social and health care limitations etc.) or cultural (such as childhood, midlife, adulthood or old age) systems. Besides being prevalent, the flexibilisation of the life-course and the normalisation of 'out-of-right-time' life events (such as marriage, parenthood, retirement, or (re)entering formal education) characterise (post)modern cultures, organised around relatively strict chronological regimes (Baars 2010). In other words, these temporal categories embody a widespread *chrono-normativity* that Freeman has dubbed 'enforced synchronicity' (Freeman 2010: 39), a 'normative framework that ties societal expectations to calendrical age, creating standardised and institutionalised life courses that maintain hegemonic power while remaining unattainable for a large number of people' (Wanka 2025: 2).⁴

⁴ I addressed this theme in one of the studies published in Czech (Galčanová 2019), exploring spatio-temporal aspects of ageing as experienced by the people in the Third age, addressing research questions on what most fundamentally influences the temporal and spatial nature of their days, and how they relate to the process of their own ageing in the context of their spatiotemporal experience.

To keep chronological categories, norms, and limitations ‘alive’, continuous *boundary work* based on classifying principles is necessary – not only do boundaries based on inclusion and exclusion create inner and outer symbolic spaces of entitlement, belonging and identities, but they also create realms of morally acceptable or unacceptable, suitable or inappropriate, legitimate or illegitimate, and even legal or illegal. Cultural gerontology helps build a deeper understanding of how age-related boundaries are constructed in particular contexts, including spatial and environmental settings.

The negotiation of identities and roles serves as one of the major research axes in all the studies presented in this habilitation. The strongest association with post-colonial theory itself can be found in the paper dedicated to the transitions between the Third and Fourth Age, as interpreted by people living with frailty and relying to some extent on care provision. With Marcela Petrová Kafková (**Study II, Galčanová & Petrová Kafková 2018**), I explore the highly debated dichotomy between the Third and Fourth Ages empirically, seeking an understanding of the transition experiences between the two, from the perspectives of people living in institutional care or being assisted in their homes. We identify four forms of narrating the transition to the Fourth Age, located on the axes of rupture and fluency, external influence and internalisation (external and internal locus of control), the past, present, and ideal self, and the self and the body as an entity that is both internal and external to the self. Even people living with advanced degenerative disease utilise the strategy of identifying someone who was doing ‘even worse’ to narratively construct themselves as ‘able’, coping and autonomous. They also discursively distance themselves from their current state to construct at least a moral distance from negatively perceived dependence and loss of autonomy. The aim is not to criticise these narrative strategies; rather, they highlight the omnipresent (internalised) ageism and the pressure of normative and moral framings of autonomy and independence.

Negotiations over age-related norms represent the key focus of my article on conducting research during pandemic times. Pandemic discourses portray older adults as a vulnerable, homogeneous group identified by chronological age. They are

subjected to both ‘compassionate’ ageism, framing older people as those *at risk*, and ‘hostile’ ageism, framing older people *as risk* (Verbruggen et al. 2020: 230). As articulated by Hasmanová Marhánková (2021: 104), the pandemic public discourse is characterised by ‘the paradoxical position of systematically describing the lives of older people as more dispensable while simultaneously highlighting their protection as justification for society-wide measures that have a significant impact on all citizens.’ This dynamic ambivalence is mirrored in my research as well: the chrononormativity and the institutional and internalised ageism had appeared during the pandemic, as older people became both the subjects of paternalistic protectionism, which they sometimes resisted, objecting to their vulnerabilisation, as well as recipients of targeted care and preferential treatments, which they sometimes perceived as lacking. Together with Anna Wanka and Anna Urbaniak (**Study V, Galčanová Batista, Urbaniak & Wanka 2024**), we utilise the conceptual lens of ethically important moments and ethics in practice (Guillemin & Gillam 2004), arguing that they are central to ethical assessment and decision-making with regard to pandemic research. We explore both *pandemic ageism*, along with our own *epistemic ageism* (Fletcher 2021), as they had occurred in our research within three different projects. Similarly to ‘epidemiological subjects’ (Fletcher 2021: 482), the ‘research subjects’ are also constructed based on chronological age: in gerontology, ‘the discipline’s core subject matter is typically conceived of numerically’ (Ibid.), as the ‘chronological age is a widely available, conventional and accessible proxy that facilitates generalisable social analysis.’ (Ibid. 485) Even in the qualitative research sampling, chronological age is often used as one of the selection criteria, as part of the epistemological consideration helping to frame what is to be explored.

These effects often lead to paradoxical situations during fieldwork. For example, the refusal to self-identify as an ‘old’ person (after being included in the research sample constructed on chronological age by the researchers) is supported by resistance to the vulnerabilisation of older people, which complicated, for instance, the use of protective measures, potentially putting the participants themselves (and researchers) at higher risk.

Besides bringing age and ageing to the forefront of public debates, the pandemic has also highlighted the importance of more-than-human agents influencing the individual ageing process and the ageing of populations. The importance of this revelation extends beyond the medical and biological – it can be interpreted as a socio-environmental crisis *par excellence* (Bertog & Brandt 2025).

2.3 The ‘new’ environmental turn – integrating nature into gerontology (again)

In a 2014 article, Haq and Gutman outline a foundation for climate gerontology, an approach that focuses on the intersection of ageing and climate change. Among other risks, such as increased frequency and severity of disasters, heatwaves, extreme storms, flooding, or wildfires, they also highlight the increased risk of diseases. Higher temperatures and changes in precipitation enable the spread of the potentially dangerous vector organisms beyond their typical regions, and they also increase the risk of waterborne pathogens (Haq & Gutman 2014: 464). The most recent outbreak of zoonotic disease, such as COVID-19, as well as many other health issues, is clearly linked to human-induced destruction of natural biotopes and extreme pressure on natural ecosystems (Kenyon 2020). As Mishra and others put it: ‘Destruction of natural habitats of wild animals, possible reservoirs of novel human pathogens, and an increase in man-animal conflicts is being directly related to the emergence of such pandemics’ (Mishra et al. 2021: 456). The impact of these zoonoses is unevenly distributed, and older people are among those highly affected by the diseases themselves (not because of higher age per se, but due to a higher possibility of frailty and comorbidities with increased age). Older people may be more constrained by containment policies and, in many societies, are more likely to be endangered by economic and social deprivation in comparison to younger cohorts due to widespread ageism.⁵ The increasing impacts of the negative outcomes of the human-nature

⁵ At the same time, ‘younger adults are at greater risk of psychological distress and loneliness during COVID-19 lockdowns than older adults’ (Ayalon et al. 2021: e51).

relationship represent an important field for the subdiscipline of **environmental gerontology**. And there is already a long tradition of environmental focus in ageing studies that has evolved into a distinct subdiscipline (Wahl & Weisman 2003; Rowles & Bernard 2013).

However, as Pillemer and others point out, it has been constructed upon a limited conceptualisation of 'the environment'; the research primarily focuses on 'issues related to older adults' relation to the built environment, focusing on such issues as aging in place, design for dementia, and residential environments for older adults' (Pillemer et al. 2011: 434). Despite scattered calls for a wider notion of 'the environment' in ageing studies (Wright & Lundt 2000) that would incorporate not only 'living environments', but also environmental issues in terms of relation to nature, issues of ecological decline, and sustainability, the use of the 'human ecological' sense prevails, focusing mostly on built or social environments. For example, when Wahl and Wiesman (2003) summarise the development of environmental gerontology, they identify three major domains: private homes, planned environments, and residential decisions. A deeper understanding and theorising of human-nature relationships, including more-than-human actors and processes, is omitted.

There has also been a strong and influential wave of research and policy initiatives related to the concept of Age-friendly cities and communities, connected to a campaign of the World Health Organisation (2007; also, Plouffe & Kalache 2010). It aimed at promoting cities that would encourage 'active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age' and adapt 'structures and services to be accessible to and inclusive of older people with varying needs and capacities' (World Health Organisation 2007: 1). In gerontology, it is represented, for example, by a paper and a book labelled *A Manifesto*, published by Manchester-based scholars Tine Buffel and Chris Phillipson (2018; Buffel, Handler & Phillipson 2018), and a vast number of empirical studies, with the concept of age-friendliness as the central framing for a wide field of themes. However, until recently, studies following this research agenda have not specifically included the impacts of climate change (comp. Lehmann 2019; Buffel & Phillipson

2023; Dabelko-Schoeny et al. 2024; Prina et al. 2024; or Patrick et al. 2025). Overall, the voices calling for a broader notion of the environment and including related topics have been gaining momentum in gerontological research over the last ten years, as the crisis of environmental decline and climate change has intensified, and political debates and conflicts have heated up.

One of the latest developments in gerontology is thus marked by an orientation towards the interconnection of population ageing, personal ageing, and environmental decline or climate change (see Haq & Gutman 2014; Carrol & Walker 2020; Haq 2021; Zhang & Chen 2024; among others). Within the framework of 'climate gerontology', Gary Haq (2017) has developed a 3C model that grasps the intersection of ageing and CC, drawing on the vulnerability theory originally developed within sustainability science (Turner et al. 2003). The 3C model delineates three major roles for older people within climate change discourses: Contributors (those who belong to generations whose affluence was based on fossil fuel consumption and environmental degradation), Casualties (those who bear the negative impacts of climate change, being disproportionately more affected), and Champions (who have the potential to contribute to mitigation and adaptation, engage in volunteerism and intergenerational transmission of environmentally relevant knowledge or practices). While there is a growing body of research exploring the role of older generations as Champions⁶ (Moser 2017; Pillemer et al. 2022; Katey & Zanu 2024), and some research is dedicated to the framing of older adults in environmental communication and intergenerational relations (Ayalon 2023 et al. 2023; Roy & Ayalon 2023; Prina 2024; Roy & Ayalon 2024 among others), in most of the papers focusing on climate change, older people are regarded as casualties, victims of climate change adversities. The theory of vulnerability represents a frequent framing:

The theory aims at explaining overall vulnerability of older people as an interplay of exposure (to heat, stress, pollution, etc.), sensitivity (which is

⁶ In Summer 2022a special issue of the *Generations: Journal of the American Society on Aging* (Vol. 46, No. 2) was dedicated to ageing and the climate crisis, including a section on 'Older Adults as Part of the Solution'.

conditioned by personal characteristics, such as frailty or availability of resources) and adaptive capacity (defining the capacity to cope with the impacts, both on the individual and community level). (Galčanová Batista, 2026, forthcoming, n.p.)

Furthermore, the impacts of the environmental crisis, together with social impoverishment, have been scientifically proven to shorten human life and to prevent many people from even reaching what is in other contexts considered 'old age'. The life-shortening effect also holds in the Czech Republic, where life expectancy differs across regions (Machaczka et al. 2023).

My own work is in line with this development in environmental gerontology, with a paper focusing on urban ageing in the context of so-called post-socialist change (Galčanová & Sýkorová 2015), followed by research on rural ageing (Galčanová & Staveník 2020), and finally researching the intersection of rural ageing and climate change (Pelikán & Galčanová Batista 2025). While the first paper does not fully problematise the limited scope of environmental gerontology, the second paper summarises accounts of environmental change but does not sufficiently stress the broader meaning of 'the environment'.⁷ In the third, most recent paper, I have (finally) focused directly on the perceived impacts and interpretations of environmental and climate change, comparing two rural areas in which different effects are being observed or are expected by climatologists.

In the 2015 paper, we focus on how older people interpret urban change, incorporating theory related to the spatial turn in social science and urban studies, focused on post-socialist cities in particular (**Study I, Galčanová & Sýkorová 2015**).⁸

⁷ Paradoxically, I have not included a separate chapter on environmental change as originally planned in the draft of the paper, to maintain the coherence of the manuscript and to comply with the length parameters of the journal. Environmental issues, such as pollution, the impacts of climate change, and soil degradation or biodiversity loss, form a substantial part of the 'change' narratives and are summed up in Table 2 (Galčanová & Staveník 2020: 341-342).

⁸ An ongoing discussion, especially prevalent in urban and regional studies, relates to the critique of the 'post-socialist' as a category encapsulating very diverse contexts, processes, and experiences in countries from the former post-Soviet bloc or zones of influence. Using the geographical area and the context of the change of political regime might be seen as a debatable scientific innovation (Stenning &

We utilise the conceptual lenses of place attachment, residential satisfaction, and shrinking of space or space centralisation in older age to interpret data from qualitative interviews with older residents from Prague, Brno, and Ostrava, three of the Czech Republic's biggest cities, each undergoing different trajectories of post-socialist change. The transformation from state socialism, accompanied by a shift from central planning and relatively generous social and housing policies (in the 1980s), from political restrictions and totalitarian governance to free-market oriented, neo-liberal policies, new approaches to urban planning, and an influx of international capital, etc., has had different impacts on these three cities. In particular, the decentralisation of the housing agenda to the municipal level, combined with the non-existence of a state social housing policy and legal framework, has affected the housing situation for many older adults (see Sýkorová et al. 2014). In Prague, issues related to rapid population change and neighbourhood gentrification are the most pressing, exacerbated by the deterioration of the housing system and the reconstitution of a more limited welfare state. In Brno, the second largest city in the country, a specific type of gentrification – studentification – is identified as the central problem, putting pressure on housing affordability and availability. In Ostrava, in contrast, the depopulation of the structurally disadvantaged mining area has made housing less insecure; however, some people face challenges to their sense of belonging and local identity due to the deindustrialisation of the city and the region.⁹

The paper published in 2020 focuses on ageing in changing rural areas and explicitly refers to the field of rural gerontology (**Study IV, Galčanová & Staveník**

Hörschelmann 2008; Hirt, Ferenčuhová & Tuvineke 2016; or Chelcea 2025): in the case of research focusing on the life course and long-term experiences, it has proven a productive framing, helping to illuminate the ways people position themselves and interpret social processes influencing their lives (see e.g., Jehlička 2021; Ringel 2022). According to Nagy (2025: 689), the term serves as ‘an ontological context, a subject of scholarly work, and also an epistemic lens’. In my papers, this discussion is reflected; I argue that the term post-socialist is still very fitting to capture some unique features of the structural and cultural features of the region, and (post)socialism serves as a meaningful interpretation framework for older people themselves. More work is now referring to the term when analysing social and political change in China or Cuba, and other countries with socialist regimes.

⁹ A symbolic last cart of hard coal surfaced on Wednesday, February 4, 2026, ending hard coal mining in Czechia, after years of planned run-downs (Fraňková & Knitl 2026).

2020). It also aims to bring perspectives from Central Europe, with its specific post-socialist condition, and is embedded in theories concerning a sense of belonging. We present older people's views in three central arenas of rural change: politics and economy, infrastructure and technology, and local population and community. The self-positioning of older people emerges as the major analytical category, emphasising the relational aspect of local and ageing identity, intertwining interpretations of recent changes with those of the past and with lived experiences and social relations evolving over decades. This temporal dimension is central, leading to the development of the concept of 'biographical contextualisation', which grasps how people interpret their current conditions from the perspectives of their long-term, lifelong, spatially anchored, and culturally shaped experiences. The formulation of the concept is inspired by discussions on the well-being paradox in the sociology of ageing: various empirical studies have brought forth evidence confirming that older people, despite living in 'objectively' worsening or disadvantaged conditions, often express relatively high 'subjective' contentment and a positive evaluation of their environments (e.g., Oswald et al. 2003).

The third and final paper in this group, also based on empirical research with older people living in rural areas, clearly represents the 'new' environmental turn (**Study VI, Pelikán & Galčánová Batista 2025**). While the 'old' ecological meaning of 'the environment' is utilised in defining rurality, the human-nature relation is brought to the fore. The interviews we conducted focus on the environmental changes observed and recognised as significant by older residents. The most important identified include the collapse of spruce forests, decreasing snow cover, long-term drought, and extreme storms, including a local F4 tornado. We then explore their position on scientific explanations for climate change, seeking their own understandings of the causes. The article further demonstrates the usefulness of 'post-socialism' as a meaningful category, appearing not only as a reference in accounts by long-term residents but also as an explanatory tool for understanding how they frame climate change as a political issue in one of the most climate-sceptic European countries. While environmentally framed, the interpretations of climate change are,

of course, culturally shaped; the interpretations tend ‘to be simplifying, consisting of local, visible and feelable, short-term, ‘one cause-one consequence’ explanations, which create assemblages of individual experiences, collective memories, and pieces of expert information.’ (Ibid.: 8). Moreover, the heterogeneity in our sample is embedded in the local history and socio-environmental conditions of the research sites. People in arid areas suffering from prolonged droughts and extractive, large-scale agricultural activities perceive their localities and themselves as vulnerable, and they are therefore more willing to accept the necessity of adaptation measures (even when expressing climate scepticism or denial). In contrast, participants from the localities in relatively less climatically affected region, where major changes are, according to climate models, expected in the near future, perceive themselves and the landscapes as resilient, and the pattern of support of adaptation measures was less noticeable in our data. A ‘resilience paradox’, similar to the one identified in the paper on pandemic ageing research (Galčanová, Urbaniak & Wanka 2024), emerges.¹⁰

Here, finally, I would like to note that ageing research represents one of three major fields of scientific interest that characterise my academic work. The other two include, firstly, research on environmentally friendly lifestyles, a topic on which I worked with Professor Hana Librová, my dissertation supervisor and former head of the Department of Environmental Studies, and with Vojtěch Pelikán and Lukáš Kala (Librová et al. 2021; Pelikán, Galčanová & Kala 2020; Kala, Galčanová & Pelikán 2016;

¹⁰ In recent literature, at least two meanings of the ‘resilience paradox’ (RP) related to climate change can be found. One, like the usage in this manuscript, relies on interpretation and meaning and refers to ‘the likelihood that reduced negative emotional reactions to extreme weather may also mean diminished motivation to address climate change’ (Ogunbode et al. 2019: 706). The second meaning refers more to the structural level, defining the ‘resilience paradox’ as ‘a situation where investments intended to protect vulnerable populations from climate impacts inadvertently increase their exposure to energy deprivation through cost-recovery mechanisms that shift infrastructure expenses to end users’, contributing to what Lei calls ‘selective vulnerability’, when ‘identical policies simultaneously protect wealthy households while pushing poor ones into energy deprivation’ (Lei 2026: 285). Some authors also use a closely related term, ‘vulnerability paradox’, e.g. in situations when ‘some groups that are objectively at higher risk might not experience or notice the heat’s impact on them. Without perceiving heat stress, it is unlikely that they will take precautions, which adds to their already high risk.’ (Wrotek et al. 2025: 2), which refers to the same meaning as the first conceptualisation of the RP. This paradox surely deserves more attention in future research.

2017; or Pelikán & Galčanová Batista 2024). The second field is represented by research embedded in urban studies and studies on domesticity, including research on the meanings of home for solo-living people, with Barbora Vacková, Lukáš Kala and Michaela Kvapilová Bartošová (Galčanová & Vacková 2016a; 2016b; Vacková & Galčanová 2014; Vacková et al. 2014), a study among contemporary residents of the Baťa shoe company workers housing in Zlín, inspired and co-researched by Ing. arch. Jitka Ressorová (Vacková & Galčanová 2010; Galčanová & Vacková 2009a; 2009b), and my dissertation and its follow-up study exploring the positions of mayors situated in the suburbs of Brno (Galčanová 2012; 2013; Lokšová & Galčanová Batista 2021).

These topics and approaches have also influenced my work on ageing and, more importantly, characterise the current and future focus of my work. In the following years, I will work, together with Dr Vojtěch Pelikán, on the research project supported by the Czech Science Foundation entitled 'The intersection of ageing and environmentally friendly lifestyle: Generativity, sources of resilience, and the importance of relationships' (GA26-21202S, I am the principal investigator). The project can be seen as an umbrella encompassing my existing interests in ageing, environmentally friendly lifestyles, and domesticity. Our goal is to conduct a fourth wave of research on the so-called Colourful, who voluntarily opted for a less consumption-oriented lifestyle in the early 1990s, initiated by Prof. Hana Librova (Librová 1994; 2003; 2021). As time has passed, the families from the original sample have grown older, had children, and some have become grandparents. Some of the grandchildren are already young adults, setting up their own households and independent lifestyles. The political, social, and cultural contexts have changed, and the project offers us a unique opportunity to study how environmentally friendly lifestyles evolve over time, how they change as people age and reach later life, and how these values and practices are transmitted and reproduced over generations, etc. At the same time, with the deep ontological shift we are experiencing in the current polycrisis, searching for resources related to higher resilience, frugality, and a high quality of life is extremely important.

3 Overview of the Studies: Methodology, Authorship and Funding

In this chapter, I systematically outline the six empirical studies, presenting their abstracts, research designs and methodologies, and, most importantly, specifying my authorship role as all of them have been written in cooperation with other scholars. The studies would also not come to being without other scholars' invitations to participate in their research projects, and their content was often inspired by our shared analytical endeavours. The specifications and percentage were consulted and agreed upon with all co-authors.

3.1 Study I: Socio-spatial aspects of ageing in an urban context: An example from three Czech Republic cities

Galčanová, L., & Sýkorová, D. (2015). Socio-spatial aspects of ageing in an urban context: An example from three Czech Republic cities. *Ageing and Society*, 35(6), 1200-1220. <https://doi.org/10.1017/S0144686X14000154>

3.1.1 Authorship and funding:

This paper was the first that I wrote in the field of social and environmental gerontology, after joining the research team for the Czech Science Foundation standard project (GA13-34958S, with Lucie Vidovičová as principal investigator) as an expert in urban studies and qualitative research methods. I participated in the fieldwork follow-up and was responsible for qualitative data analysis of the entire dataset. The initial idea for the paper came from Dana Sýkorová, and we developed a conference paper of hers together. I led the submission process and the revisions (60 per cent).

3.1.2 Abstract:

The purpose of this study is to examine how older people make sense of the changing urban environment – that is, how they experience, perceive and interpret their everyday interaction with its materiality, as well as their social ties, networks and relations. The results, based on seven focus groups and 37 individual in-depth interviews with older residents of the three most populous Czech cities, show how older people maintain the continuity of their activities, autonomy and independence within the limits of their personal resources in an active relationship with a changing urban environment and within the post-socialist context. The research supports the results of former studies that emphasise the ability of older adults to negotiate their position and actively cope with change while they age in place.

3.1.3 Main research questions:

The study explored research questions concerning how contemporary urban changes are perceived, experienced and dealt with by ageing inner-city residents in the post-socialist context. The more detailed questions focused on the meanings that older people in urban areas give to town spaces and their changes, and the meanings they derive from them in their everyday lives. We also explored whether they experience or interpret urban dynamics (specifically, the processes of revitalisation, regeneration or gentrification) as restrictive and exclusive or as inclusive and enabling, and, subsequently, what strategies they apply to cope with them or to shape them.

3.1.4 Methodology:

The qualitative research comprised three focus groups and 46 individual interviews with residents of three of the largest cities in the Czech Republic (Prague, Brno, and Ostrava). We spoke to 40 research participants—27 women and 13 men—aged 62-95. A thematic analysis employing open coding was conducted to identify the key themes addressed by older residents living in dynamically changing inner-city environments.

3.2 Study II: Self-perception during the transition to the fourth age in the Czech Republic.

Galčanová, L., & Petrová Kafková, M. (2018). Self-perception during the transition to the fourth age in the Czech Republic. *Ethnologie française*, 48(3), 413-426.

<https://doi.org/10.3917/ethn.183.0413>

3.2.1 Authorship and funding:

The origin of this paper lies in an invitation from the editors of the special issue Vieillir en Europe/Ageing in Europe of the French journal *Ethnologie française*, who contacted me after reading my previous work on ageing in urban settings. The paper is based on data from the Czech Science Foundation standard research project 'Fourth Age: The Identity of Disability During the Period of Active Ageing' (GA15-03156S), led by my co-author, Marcela Petrová Kafková, who has explored the concept of the 'fourth age', focusing on the experiences of people living with frailty. We both participated in fieldwork and qualitative data analysis. The paper was written jointly (50 per cent). I led the review process and served as the corresponding author.

3.2.2 Abstract:

As the overall population ages, a growing number of people reach what has been called the fourth age, a period of life that combines advanced age with a certain level of disability and a need for personal assistance. Although some researchers associate the fourth age with 'social death' and invoke methodological difficulties in conducting research with this population, this essay offers an alternative interpretation based on the oral narratives of a group of fourth-age participants. Indeed, we found that their reflections concerning this transitional period demonstrated differing degrees of agency and provided insights into the ways in which the older people form and negotiate their self-perceptions and sense of identity.

3.2.3 Main research questions:

We aimed to understand how older adults living at home and in institutions, such as care homes, experience various transitions to the fourth age and how they perceive changes in their everyday lives related to their personal identities. We also explored the meanings of activities and personal identities presented by individuals with declining physical and cognitive capacities.

3.2.4 Methodology:

Unstructured qualitative interviews (complemented with drawing lifelines, maintaining a diary of everyday activities, and photo documentation) with ten fourth-age individuals (2 males and 8 females) and field notes taken by four core research team members were analysed to explore how participants remembered and narrated their transitions to the fourth age and how they expressed their self-perceptions related to age, within the specific context of repeated interviews. In-depth interviews were supplemented by semi-structured interviews with each participant's primary carer and representatives of assisted living institutions (7 participants lived in institutional care, and 3 received care at home). A total of 28 formal and audio-recorded interviews were conducted in 2015 and 2016, including one focus group with institutional staff members, three focus groups with carers, and 24 interviews with our ten senior citizen participants. Interviewees' ages ranged from 80 to 90 years, except for one participant, aged 67, and another, aged 99.

3.3 Study III: 'I am not that type of grandmother': (Non)compliance with the grandmother archetype among contemporary Czech grandmothers.

Vidovičová, L., & Galčanová, L. (2019). 'I am not that type of grandmother': (Non)compliance with the grandmother archetype among contemporary Czech grandmothers.

In V. Timonen (Ed.), *Grandparenting practices around the world* (pp. 253-269). Bristol University Press. DOI: <https://doi.org/10.46692/9781447340669.013>

3.3.1 Authorship and funding:

The idea for this paper came from Lucie Vidovičová, who had been invited to contribute to a Polity Press volume on grandparenting. For this chapter, Lucie supervised the conceptualisation and theoretical framing. I conducted secondary analysis of our qualitative data (90 per cent) from a research project supported by the Czech Science Foundation (Role Overload: Grandparenting in the Era of Active Ageing, GA13-34958S, led by Lucie Vidovičová), and I contributed to the theoretical framing of ageing identity (20 per cent); we jointly participated in writing (50 per cent).

3.3.2 Abstract¹¹:

The volume contains analyses of topics that have so far received relatively little attention, such as transnational grandparenting and gender differences in grandparenting practices. It is the only collection that brings together theory-driven research on grandparenting from a wide variety of cultural and welfare state contexts - including chapters on Europe, North America, Africa, Asia, and Australia - drawing broad lines of debate rather than focusing on the country level.

In the chapter, we introduce the Grandmother, a literary character from a Czech novel written in 1855 by the female author Božena Němcová. We argue that the Grandmother has become so deeply embedded in Czech culture that it has transformed from a fictional character into an archetype in the sociological sense of the word: a typified picture and frame of reference employed when discussing how the social role of a grandmother should be performed. Our analysis has two goals. The first is to show how cultural artefacts can shape narratives about grandmotherhood and how they may be used to position one's own social role. Second, we aim to add new knowledge on typologies of grandparenthood, because the 'ideal type' (or 'that

¹¹ The original chapter does not have an abstract; the text has been compiled from the abstract of the whole publication and from relevant parts of the chapter.

type') – as the representative of a tacit, cultural archetype – remains poorly understood.

3.3.3 Main research questions:

The research project addressed how people in their 'third age' cope with the potential risks of conflicting demands on their time and role overload. In the chapter, we focused on how young women and men used the 'ideal type' or archetypal grandmother in the semi-structured interviews and how it related to the literary character from Božena Němcová's book.

3.3.4 Methodology:

Thirty semi-structured qualitative interviews were conducted in 2013 and 2014, with 32 grandparents living in the Czech Republic. The sample included 21 women and 11 men aged 56 to 82 years. The interviews were primarily focused on the phenomenon of 'role overload', a situation in which people in the third age face a combination of existing and new roles during the life phase associated with the transition to retirement. For many research participants, involvement in grandparenting, related activities, expectations, and norms were central in the interviews. A secondary analysis using focused coding was conducted for this chapter, focusing on in which contexts and how they use the term 'typical grandmother' and related expressions.

3.4 Study IV: Ageing in the changing countryside: The experience of rural Czechs

Galčanová, L., & Staveník, A. (2020). Ageing in the changing countryside: The experience of rural Czechs. *Sociologia Ruralis*, 60(2), 329-356.

<https://doi.org/10.1111/soru.12292>

3.4.1 Authorship and funding:

The article's data collection and writing were supported by the Czech Science Foundation project 'Rural Ageing: Unanswered Questions in Environmental Gerontology' (2016–2018) (Grant No. 16-20873S, led by Lucie Vidovičová). I did not participate in fieldwork during my maternity leave, but I was responsible for qualitative analysis of the interview transcripts. In this particular study, I was the first and corresponding author, leading the analytical, writing (70 per cent) and review process (90 per cent).

3.4.2 Abstract:

Gerontological research has extensively focused on the experiences of people ageing within changing social contexts. However, accounts from the context of the European post-socialist transformation are missing. In addition, there is a lack of theoretical understanding concerning how older people experience ageing as part of the dynamic process of rural change. In this article, we present the perspectives of older Czech rural residents on living and ageing in the changing countryside. Based on 20 qualitative interviews with older adults, we show how they interpret contemporary changes in three major areas: politics and economy, infrastructure and technology, and local population and community life. Embedded in a constructionist approach, we aim to understand how their interpretations of current changes are related to their views on the past, to their self-positioning within current and past changes and their sense of local and social belonging. We introduce the concept of biographical contextualisation, which grasps the temporal horizon of meaning-making with regard to contemporary changes in rural life.

3.4.3 Main research questions:

We sought to explore the character and impact of the most significant changes experienced by older people concerning their own individual ageing during the Czech post-socialist transformation. We further queried how their interpretations of these changes relate to their past and present positions and belonging within local communities and the wider society.

3.4.4 Methodology:

Twenty semi-structured interviews with 21 older rural residents, covering various localities across six administrative regions in the Czech Republic, were conducted at the interviewees' homes, lasting between 58 and 137 minutes. The interviews were audio-recorded and transcribed in full. The transcripts were analysed using Atlas.ti software, as well as paper coding. Principles of the constructivist grounded-theory approach guided the analysis.

3.5 Study V: Doing ageing research in pandemic times: A reflexive approach towards research ethics during the COVID-19 pandemic

Galčanová Batista, L., Urbaniak, A., & Wanka, A. (2022). Doing ageing research in pandemic times: A reflexive approach towards research ethics during the COVID-19 pandemic. *Ageing & Society*, 1-12. <https://doi.org/10.1017/S0144686X22000733>

3.5.1 Authorship and funding:

All authors contributed equally to the conception and design of the study, the drafting of the article, critical revision for important intellectual content, and approval of the version to be published. I partially participated in data collection and qualitative data analysis in the international research project financed by The Technology Agency of the Czech Republic (TA CR) ('A Life Course Perspective on the GENDERed PATHways of Social Exclusion in Later Life, and its Consequences for Health and Wellbeing', TJ03000002 led by Lucie Vidovičová). My participation in the study was interrupted due to a long-term illness. In this particular paper, the idea emerged from my co-authors' discussions. I was responsible for conceptual framing of the reflexive approach to qualitative research and participated in the writing and review process (33 per cent). Analytically, I contributed to identifying the key dimensions (fragmentation,

fluidity, ambiguity, and uncertainty) shaping social scientific research during the COVID-19 pandemic.

3.5.2 Abstract:

The outbreak of COVID-19 has had a significant impact on societies and individual lives across the globe. In this paper, we address the impact of the pandemic and the protective measures on empirical social scientific ageing research through the lens of ‘ethically important moments’. One of the most crucial measures for preventing the spread of the virus includes social distancing; therefore, empirical research methods based on person-to-person direct contact (as in interviews) and first-hand observation have been scaled back since 2020. For ageing research, the challenges are particularly pronounced due to the ongoing discussion regarding vulnerabilities associated with higher age and age-based discrimination. Hence, many researchers focusing on ageing face difficult questions: How and under what conditions can we carry on with empirical research without putting our research participants and ourselves at risk? Firstly, we systematically identify the key dimensions and challenges that have shaped social scientific research during the lockdowns associated with the COVID-19 pandemic: fragmentation, fluidity, ambiguity and uncertainty. Then, using insights from two international research projects, we illustrate and critically reflect on the ethically important moments and practical dilemmas that have resulted from these pandemic challenges when researching with and about older adults.

3.5.3 Main research questions:

We explored the ethical and practical challenges we encountered in our fieldwork at the beginning of the COVID-19 pandemic and addressed the following three questions: What is characteristic of the pandemic condition in terms of doing qualitative research? How did we adjust our research designs accordingly? What ethically important moments emerged during our fieldwork related to age and ageism?

3.5.4 Methodology:

For this article, the authors analysed their field notes and reflections on their experiences conducting empirical ageing research in various cultural settings (Austria, Czechia, and Germany) during the initial phases of the COVID-19 pandemic. We adopted a reflexive approach to research ethics and used the conceptual framework of ethically important moments developed by Guillemin and Gillam (2004) to compare and describe, explore, and interpret our research experience in situations in which the chronological age became central to pandemic policies and containment efforts.

3.6 Study VI: 'This year, the weather is like it used to be in our times': Experiencing climate change in the context of rural ageing in the Czech Republic.

Pelikán, V., & Galčánová Batista, L. (2025). 'This year, the weather is like it used to be in our times': Experiencing climate change in the context of rural ageing in the Czech Republic. *Journal of Rural Studies*, 116(May), s. 1-11.

<https://dx.doi.org/10.1016/j.jrurstud.2025.103633>

3.6.1 Authorship and funding:

The paper abstract was submitted after an invitation by Mark Skinner (Trent University, Canada) and Rachel Winterton (La Trobe University, Australia), the guest editors of the *Journal of Rural Studies* (Oxford, Elsevier) special issue entitled Contemporary Rural Gerontologies, who contacted me after reading my work on rural and urban ageing. The paper presented the results from the research project 'Ageing and Older People in the Time of Climate Change' (GA20-12567S), supported by the Czech Science Foundation, for which I served as principal investigator. The paper offers insights into locally embedded interpretations of changing rural environments, with an

emphasis on nature (such as changes in weather, new or disappearing species, shifts in phenological phases) and everyday practices related to environmental issues, such as home water management, gardening, small-scale agriculture, or foraging. We aimed to understand how older people perceive and explain the changes they observe, and what role scientific explanations of local climate change impacts play in these interpretations. The paper writing was led by the corresponding author, Vojtěch Pelikán. We both participated in the fieldwork and conducted qualitative data analysis. Vojtěch outlined the primary draft of the paper, including the major argument (80 per cent). I contributed to the theoretical framing of the paper (50 per cent), writing the methodology section (50 per cent), and the analytical part (20 per cent). We participated equally in the review process (50 per cent).

3.6.2 Abstract:

The various contexts in which the intersection of rural ageing and the experience of climate change takes place remain understudied. In our paper, we draw on a qualitative analysis of 40 in-depth interviews collected in 2021 with older (between 54 and 85 years old) long-term residents from two rural regions in the Czech Republic, representing a post-socialist, relatively climate-sceptic society. We address how participants interpret their life-long environmental experiences in the context of accelerating climate change. Our analysis focuses on four issues, which are reflected in the interviews – (1) the collapse of spruce forests, (2) decreasing snow cover, (3) long-term drought, and (4) extreme storms. These issues inspire various repertoires, which participants use to make sense of these occurrences. The findings reveal that research participants often simplify the causes of changes they have experienced, preferring familiar, concrete explanations over abstract scientific knowledge. While experiential knowledge plays a central role, it does not necessarily lead to heightened climate change awareness. Instead, pre-existing beliefs or values significantly affect how climate-related events and processes are interpreted. Contrary to expectations, the volume and proximity of experiences do not imply higher sensitivity to climate change. Besides age-related differences, the study highlights regional discrepancies in climate

change perceptions, with participants in South Moravia acknowledging their vulnerability and expressing greater openness to climate adaptations.

3.6.3 Main research questions:

In this article, we considered how older people living in rural settlements make sense of their lifetime environmental experiences in the context of accelerating climate change. In addition, we explored how older people integrate climate-related scientific discourses into their local environmental knowledge and how environmental changes are contextualised within biographies spanning more than six, seven, or even eight decades.

3.6.4 Methodology:

The paper is based on a qualitative analysis of 40 interviews conducted in 2021 in two rural settings with noticeable climate-related impacts: the Bohemian-Moravian Highlands and South Moravia. The research sites were selected in cooperation with climatologists from the CzechGlobe – Global Change Research Institute of the Czech Academy of Sciences (GCRI). The analysis was inspired by the principles of constructivist grounded theory. The research in the field began with the mayors of the included municipalities, who served as experts on the local situation and as gatekeepers, helping us gain the trust of older participants. The interviews with older inhabitants were focused on their descriptions of perceived environmental changes during their life course and on their interpretations of their causes, including climate change.

4 Conclusion

In this commentary on the habilitation thesis, I present an overview of six empirical studies published between 2015 and 2025, focusing on how older adults live through and cope with ongoing social, environmental, and cultural change, particularly in the context of the post-socialist transformation. The constructivist theoretical approach informed the conceptualisation of age and ageing as relational, negotiated social categories that serve to enact various symbolic and social boundaries. A related methodological approach, constructivist grounded theory (Charmaz 2006), enabled me to study ageing in changing contexts from an emic perspective, exploring how older people describe, interpret, and explain them. In interpreting this level of self-positioning, the concepts of belonging, identity and self-positioning were employed.

The thesis is primarily conceived as a sociological study; however, the complexity of ageing processes and experiences calls for a multidisciplinary approach. Hence, the work bridges several disciplines, most importantly, interconnecting the sociology of age and ageing with social gerontology. The commentary is thus divided into three main parts: In the introductory part, I outline my epistemological and theoretical position, as well as my own positioning in the fieldwork as an ageing researcher. The second part of the commentary is central: in it, I contextualise the presented studies within recent theoretical developments in the field of sociology of ageing and social gerontology, exploring the specific interconnected turns: the cultural, postcolonial, and what I term a 'new' environmental turn. The third part then brings a systematic chronological overview of six included studies, structured by abstracts, research questions, methodology and study design, and, most importantly, my authorship share and funding, as all the studies represent outcomes emerging from the shared efforts of teams of scholars, in terms of project design, field work, analysis and writing.

As described in the second chapter, the cultural turn shifted the focus of gerontological research toward interpretative approaches, putting meaning, interpretation, and lived experience at the centre of analysis and converging perspectives from

the social sciences and the humanities. The cultural turn is thus central to my research, as it employs constructivist epistemologies, focuses on meaning and meaning-making practices, and is evident across all the presented studies. Most strongly, it was demonstrated throughout STUDY III (Vidovičová & Galčanová 2019), in which we explored the changing archetype of *The Grandmother*, based on the book by the same name (Němcová 1855) and how it is used by contemporary grandparents in narrating their own perception of grandparenting roles, related norms and expectations.

The second, postcolonial turn lies beyond the mainstream of social gerontology, but the theoretical concepts it introduces are crucial to gerontological thinking, given the centrality of various forms of othering, boundary work, and distancing it enables. These concepts were analytically important for all of my studies, as ageing identities, like any others, are enacted through the distancing and delineation of who belongs to or does not belong to the category of 'higher age', and whose voices are seen as legitimate and valued. The concept of othering was key in STUDY II (Galčanová & Petrová Kafková 2018), focusing on how people living with daily care provision (either in their homes or institutions) interpret the transition gerontology labels as the one between the Third and Fourth Ages. In STUDY V, we explored how distancing from the chrononormative order of pandemic containment measures affected fieldwork during the COVID-19 outbreak. Employing the theoretical lens of the 'ethically important moments' (Guillemin & Gillam 2004) in research ethics, we reflected upon our experiences with three different research projects (Galčanová Bastista, Urbaniak & Wanka 2024).

Finally, I present the very recent shift in the field of environmental gerontology, involving the expansion of the concept of 'environment' beyond a limited scope, encapsulating not only 'living environments', but also issues of sustainability, (ageing)human – nature relationships and the intersection of population ageing and environmental decline and climate change. Given this shift, which has taken place primarily over the past decade, I refer to this development as the 'new' environmental turn in gerontology. My own studies presented in this habilitation illustrate this trend:

STUDY I (Galčanová & Sýkorová 2015) explores ageing in changing urban environments in the three most populated Czech cities undergoing transformations related to post-socialist development. STUDY IV (Galčanová & Staveník 2020) analogically explores the interpretations of historical changes by rural older adults, developing the concept of 'biographical contextualisation' to explore the timeframe in which meanings of current changes are formed, explaining the 'satisfaction paradox' (older people often interpreting positively the conditions that are 'objectively' worsening). STUDY VI (Pelikán & Galčanová Batista 2025) belongs fully to the realm of this 'new' environmental turn, as it explores how older, rural, long-term residents describe and interpret environmental changes in their localities, including how they relate to scientific explanation for climate change. All the studies sought identifiable patterns and shared meanings, while emphasising the heterogeneity and diversity of people (self-)identified as older adults.

Many of the themes covered in this habilitation thesis have been part of lively debates in gerontological papers and books for decades, and these discussions have, of course, continued after the publication of my work. An abundance of attempts to conceptualise, theorise, and empirically grasp the age and ageing, and a heightened scientific interest in the topic across disciplines (biology, medicine, as well as design and technologies), correspond to rapidly shifting ageing ontologies. Population ageing has been identified as one of the major processes shaping today's world, and people experience it at unprecedented levels, both relatively and absolutely, with higher shares of the population reaching older age, while the number of older people on the planet has never been higher. This development has been vastly reflected in mass media, including the doom-saying, ageist discourses of demographic panic. At the same time, older generations are a central target for marketing strategies and political campaigns, and older people are becoming powerful consumers and an essential part of the electorate, respectively.

The sociology of ageing and social gerontology play a fundamental role here by helping to approach phenomena and their common-sense (as well as scientific) representations reflexively and critically, demonstrating ageing at the personal and

population levels as diversified, complex, and socio-historically embedded. I believe that my scholarly work, summarised in this habilitation thesis, represents a modest yet valuable contribution to this endeavour.

5 References

1. Andrews, G., & Duff, C. (2019). Understanding the vital emergence and expression of aging: How matter comes to matter in gerontology's posthumanist turn. *Journal of Aging Studies*, 49, 46–55. <https://doi.org/10.1016/j.jaging.2019.04.002>
2. Ayalon, L., Chasteen, A., Diehl, M., Levy, B. R., Neupert, S. D., Rothermund, K., Tesch-Römer, C., & Wahl, H.-W. (2021). Aging in times of the COVID-19 pandemic: Avoiding ageism and fostering intergenerational solidarity. *The Journals of Gerontology: Series B*, 76(2), e49–e52. <https://doi.org/10.1093/geronb/gbaa051>
3. Ayalon, L., Roy, S., Aloni, O., & Keating, N. (2023). A Scoping Review of Research on Older People and Intergenerational Relations in the Context of Climate Change. *The Gerontologist*, 63(5), 945–958. <https://doi.org/10.1093/geront/gnac028>
4. Baars, J. (2010). Time and ageing: Enduring and emerging issues. In D. Dannefer & C. Phillipson (Eds.), *The SAGE Handbook of Social Gerontology* (pp. 367–376). Sage Publications, Inc.
5. Baars, J. (2015). Time in late modern ageing. In J. Twigg & W. Martin (Eds.), *Routledge Handbook of Cultural Gerontology* (pp. 397–403). Routledge.
6. Bengtson, V. L., Burgess, E. O., & Parrott, T. M. (1997). Theory, explanation, and a third generation of theoretical development in social gerontology. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 52(2), S72–S88.
7. Bertogg, A., & Brandt, M. (2025). Socio-environmental crises and cognitive ageing. Exploring the cognitive impact of the COVID-19 pandemic and climate crises on older adults' memory and verbal fluency. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 77(4), 849–879. <https://doi.org/10.1007/s11577-025-01028-7>
8. Bourdieu, P. (2000). *Outline of a theory of practice*. Cambridge University Press.
9. Buffel, T., & Phillipson, C. (2018). A Manifesto for the Age-Friendly Movement: Developing a New Urban Agenda. *Journal of Aging & Social Policy*, 30(2), 173–192. <https://doi.org/10.1080/08959420.2018.1430414>
10. Buffel, T., & Phillipson, C. (2023). Growing older in 'extreme cities': The impact of climate change. In T. Buffel & C. Phillips (Eds.), *Ageing in Place in Urban Environments* (pp. 76–91). Routledge.
11. Buffel, T., Handler, S., & Phillipson, C. (2018). *Age-friendly cities and communities: A manifesto for change*. Policy Press.
12. Butler, R. N. (1969). Age-Isms: Another Form of Bigotry. *The Gerontologist*, 9(4_Part_1), 243–246. https://doi.org/10.1093/geront/9.4_Part_1.243

13. Carroll, M., & Walker, J. (2020). 28 Rural older people, climate change and disasters. In *Rural Gerontology: Towards Critical Perspectives on Rural Ageing* (p. 336). Routledge.
14. Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage Publications.
15. Chelcea, L. (2025). Goodbye, post-socialism? Stranger things beyond the Global East. *Eurasian Geography and Economics*, 66(7), 874–900. <https://doi.org/10.1080/15387216.2023.2236126>
16. Chi, I. (2011). Cross-cultural gerontology research methods: Challenges and solutions. *Ageing & Society*, 31(3), 371–385. <https://doi.org/10.1017/S0144686X10000942>
17. Chisholm Hatfield, S., Marino, E., Whyte, K. P., Dello, K. D., & Mote, P. W. (2018). Indian time: Time, seasonality, and culture in Traditional Ecological Knowledge of climate change. *Ecological Processes*, 7(1), 25. <https://doi.org/10.1186/s13717-018-0136-6>
18. Cohen, A. A., Kennedy, B. K., Anglas, U., Bronikowski, A. M., Deelen, J., Dufour, F., Ferbeyre, G., Ferrucci, L., Franceschi, C., Frasca, D., Friguet, B., Gaudreau, P., Gladyshev, V. N., Gonos, E. S., Gorbunova, V., Gut, P., Ivanchenko, M., Legault, V., Lemaître, J.-F., ... Fülöp, T. (2020). Lack of consensus on an aging biology paradigm? A global survey reveals an agreement to disagree, and the need for an interdisciplinary framework. *Mechanisms of Ageing and Development*, 191, 111316. <https://doi.org/10.1016/j.mad.2020.111316>
19. Cozza, M., & Wanka, A. (2025). Editorial for the special issue the growing older of humans, nonhumans, and more-than-humans. *Journal of Aging Studies*, 72, 101305. <https://doi.org/10.1016/j.jaging.2024.101305>
20. Dabelko-Schoeny, H., Dabelko, G. D., Rao, S., Damico, M., Doherty, F. C., Traver, A. C., & Sheldon, M. (2024). Age-Friendly and Climate Resilient Communities: A Grey-Green Alliance. *The Gerontologist*, 64(3), gnad137. <https://doi.org/10.1093/geront/gnad137>
21. Dumas, A., & Turner, B. S. (2007). The life-extension project: A sociological critique. *Health Sociology Review*, 16(1), 5–17. <https://doi.org/10.5172/hesr.2007.16.1.5>
22. Fletcher, J. R. (2020). Anti-aging technoscience & the biologization of cumulative inequality: Affinities in the biopolitics of successful aging. *Journal of Aging Studies*, 55, 100899. <https://doi.org/10.1016/j.jaging.2020.100899>
23. Fletcher, J. R. (2021). Chronological quarantine and ageism: COVID-19 and gerontology's relationship with age categorisation. *Ageing & Society*, 41(3), 479–492. <https://doi.org/10.1017/S0144686X20001324>

24. Fraňková, R., & Knitl, M. (2026, March 2). *Czech Republic closes last coal mine, ending 250 years of the industry* [Broadcast]. Radio Prague International. <https://english.radio.cz/czechias-last-hard-coal-mine-closes-250-years-mining-come-end-8876568#player=on>
25. Freeman, E. (2010). *Time Binds: Queer Temporalities, Queer Histories*. Duke University Press.
26. Galčanová Batista, L. (2026, forthcoming). Climate resilient housing for ageing populations. In R. Gilroy, O. Jolanki, & C. Bigonnesse (Eds.), *Research Handbook on Housing and Ageing*. Edward Elgar Publishing.
27. Galčanová Batista, L., Urbaniak, A., & Wanka, A. (2024). Doing ageing research in pandemic times: A reflexive approach towards research ethics during the COVID-19 pandemic. *Ageing & Society*, 44(6), 1235–1246. <https://doi.org/10.1017/S0144686X22000733>
28. Galčanová L. (2019). Nečekat na Godota / Geografie „lidí ve třetím věku“. (Not Waiting for Godot / Geography of “people in the third age”). In R., Osman, & L. Pospíšilová (Eds.), *Geografie “okrajem”: Každodenní časoprostorové zkušenosti (Geography by ‘the Edge’: Everyday Spatiotemporal Experiences)*. Karolinum.
29. Galčanová, L. (2012). *Narativy touhy a narativy soužití: Sociologický pohled na zkušenosti residenční suburbanizace. (Narratives of Desire and Belonging: Suburban Experience in Sociological Perspective)*. (Dissertation thesis). Masaryk University, Faculty of Social Studies.
30. Galčanová, L. (2013). Svoboda, soukromí a bezpečí: Nové hraniční prostory v narácích obyvatel vybraných brněnských předměstí (Freedom, security and privacy: The new frontier areas in the narration of inhabitants of selected Brno suburbs). In M. Ouředníček, P. Špačková, & J. Novák (Eds.), *Sub Urbs: Krajina, sídla a lidé* (pp. 200–233). Academia.
31. Galčanová, L., & Petrová Kafková, M. (2018). Self-perception during the transition to the fourth age in the Czech Republic. *Ethnologie Française*, 48(3), 413–426. <https://doi.org/10.3917/ethn.183.0413>
32. Galčanová, L., & Staveník, A. (2020). Ageing in the Changing Countryside: The Experience of Rural Czechs. *Sociologia Ruralis*, 60(2), 329–356. <https://doi.org/10.1111/soru.12292>
33. Galčanová, L., & Vacková, B. (2009a). Changes in Housing Culture in Zlín. In K. Gust & K. Klingan (Eds.), *A Utopia of Modernity: Zlín. Revisiting Bat’a’s Functional City*. Jovis. <https://is.muni.cz/publication/922669>
34. Galčanová, L., & Vacková, B. (2009b). The Project Zlín: Everyday Life in a Materialized Utopia. *Lidé Města (Urban People)*, 11(2), 311–337.

35. Galčanová, L., & Vacková, B. (2016). "How to wind the clock of the day?" Solo living phenomena and the various stabilities of home. *Home Cultures*, 13(3), 225–254. <https://doi.org/10.1080/17406315.2016.1258124>
36. Giddens, A. (1990). *The consequences of modernity*. Stanford University Press.
37. Gilleard, C., & Higgs, P. (2015). The cultural turn in gerontology. In J. Twigg & W. Martin (Eds.) *Routledge Handbook of Cultural Gerontology* (1st ed., pp. 29–36). Routledge.
38. Gilleard, C., & Higgs, P. (2019). The Individualisation of Ageing. In P. Naskali, J. R. Harbison, & S. Begum (Eds.), *New Challenges to Ageing in the Rural North: A Critical Interdisciplinary Perspective* (pp. 241–251). Springer International Publishing. https://doi.org/10.1007/978-3-030-20603-1_15
39. Gilleard, C., & Higgs, P. (2026). The inherent humanity of old age: A critique of 'post-humanist' gerontology. *Ageing & Society*, 46, e28. <https://doi.org/10.1017/S0144686X25100470>
40. Guillemin, M., & Gillam, L. (2004). Ethics, Reflexivity, and "Ethically Important Moments" in Research. *Qualitative Inquiry*, 10(2), 261–280. <https://doi.org/10.1177/1077800403262360>
41. Haq, G. (2017). Growing Old in a Changing Climate. *Public Policy & Aging Report*, 27(1), 8–12. <https://doi.org/10.1093/ppar/prw027>
42. Haq, G. (2021). The forgotten generation: Older people and climate change. In K. Bell (Ed.), *Diversity and Inclusion in Environmentalism*. Routledge.
43. Haq, G., & Gutman, G. (2014). Climate gerontology. *Zeitschrift Für Gerontologie Und Geriatrie*, 47(6), 462–467. <https://doi.org/10.1007/s00391-014-0677-y>
44. Hartung, H. (2016). Late style as exile: De/colonising the life course. *Journal of Aging Studies*, 39, 96–100. <https://doi.org/10.1016/j.jaging.2016.06.003>
45. Hasmanová Marhánková, J. (2021). 6 Age division and ageism in the public debates regarding COVID-19: Intergenerational solidarity and antagonisms in the era of the coronavirus pandemic. In M. Łuszczynska & M. Formosa (Eds.), *Ageing and COVID-19: Making Sense of a Disrupted World* (pp. 101–114). Routledge.
46. Higgs, P., & Chriss, G. (2025). *Rethinking the Sociology of Ageing: Towards a Sociology of Later Life*. Edward Elgar Publishing.
47. Higgs, P., & Gilleard, C. (2014). Frailty, abjection and the 'othering' of the fourth age. *Health Sociology Review*, 23(1), 10–19. <https://doi.org/10.5172/hesr.2014.23.1.10>
48. Hirt, S., Ferenčuhová, S., & Tuvikene, T. (2016). Conceptual forum: The "post-socialist" city. *Eurasian Geography and Economics*, 57(4–5), 497–520. <https://doi.org/10.1080/15387216.2016.1271345>

49. Höppner, G., & Urban, M. (2018). Where and How Do Aging Processes Take Place in Everyday Life? Answers From a New Materialist Perspective. *Frontiers in Sociology*, 3. <https://doi.org/10.3389/fsoc.2018.00007>
50. Jehlička, P. (2021). Eastern Europe and the geography of knowledge production: The case of the invisible gardener. *Progress in Human Geography*, 45(5), 1218–1236. <https://doi.org/10.1177/0309132520987305>
51. Kala, L., Galčanová, L., & Pelikán, V. (2016). Residential preferences in the context of voluntary simple lifestyles: What motivates contemporary Czech simplifiers to reside in the countryside? *Human Affairs*, 26(4), 410–421. <https://doi.org/10.1515/humaff-2016-0035>
52. Kala, L., Galčanová, L., & Pelikán, V. (2017). Narratives and practices of voluntary simplicity in the Czech post-socialist context. *Czech Sociological Review*, 53(6), 833–855.
53. Katey, D., & Zanu, S. (2024). Climate change and population aging: The role of older adults in climate change mitigation. *Journal of Aging Studies*, 71, 101274. <https://doi.org/10.1016/j.jaging.2024.101274>
54. Katz, S. (2014). What Is Age Studies? *Age, Culture, Humanities: An Interdisciplinary Journal*, 1, 17–23. <https://doi.org/10.7146/ageculturehumanities.v1i.129947>
55. Kenyon, C. (2020). Emergence of zoonoses such as COVID-19 reveals the need for health sciences to embrace an explicit eco-social conceptual framework of health and disease. *Epidemics*, 33, 100410. <https://doi.org/10.1016/j.epidem.2020.100410>
56. Küpper, T. (2016). Age mimicry. A perspective on the young-old. *Journal of Aging Studies*, 39, 121–128. <https://doi.org/10.1016/j.jaging.2016.06.006>
57. Lamont, M., & Molnár, V. (2002). The Study of Boundaries in the Social Sciences. *Annual Review of Sociology*, 28, 167–195. <https://doi.org/10.1146/annurev.soc.28.110601.141107>
58. Lehmann, S. (2019). *Urban Regeneration: A Manifesto for Transforming UK Cities in the Age of Climate Change*. Springer.
59. Lei, X. (2026). When Climate Protection Prices out the Poor: The Resilience Paradox in Energy Access. *Kyklos*, 79(1), 285–301. <https://doi.org/10.1111/kykl.70032>
60. Librová, H. (1994). *Pestří a zelení: Kapitoly o dobrovolné skromnosti*. (The colourful and the green: Chapters on voluntary simplicity.) Veronica.
61. Librová, H. (2003). *Vlažní a váhaví: Kapitoly o ekologickém luxusu* (The half-hearted and the hesitant: Chapters on ecological luxury). Doplněk.
62. Librová, H., Galčanová, L., Kala, L., & Pelikán, V. (2021). *The Faithful and the Reasonable*. Masaryk University.

63. Lokšová, T., & Galčanová Batista, L. (2021). Postsocialist suburban governmentality: A shift from reactive to proactive discourse in the case of Brno, Czech Republic. *Cities*, 110, 103074. <https://doi.org/10.1016/j.cities.2020.103074>
64. Lupton, D. (2024). Towards a gerontology of everything: A more-than-human perspective. *Journal of Aging Studies*, 71, 101278.
65. Machaczka, O., Jiřík, V., Janulková, T., Michalík, J., Siemiatkowski, G., Osrodka, L., Krajny, E., & Topinka, J. (2023). Comparisons of lifetime exposures between differently polluted areas and years of life lost due to all-cause mortality attributable to air pollution. *Environmental Sciences Europe*, 35(1), 73. <https://doi.org/10.1186/s12302-023-00778-5>
66. Mills, Charles W. (1959). *The sociological imagination*. Oxford University Press.
67. Mishra, J., Mishra, P., & Arora, N. K. (2021). Linkages between environmental issues and zoonotic diseases: With reference to COVID-19 pandemic. *Environmental Sustainability*, 4(3), 455–467. <https://doi.org/10.1007/s42398-021-00165-x>
68. Moser, S. C. (2017). Never Too Old to Care: Reaching an Untapped Cohort of Climate Action Champions. *Public Policy & Aging Report*, 27(1), 33–36. <https://doi.org/10.1093/ppar/prw029>
69. Nagy, E. (2025). Post-socialism: Still here? *Eurasian Geography and Economics*, 66(6), 689–696. <https://doi.org/10.1080/15387216.2025.2510354>
70. NANAS. (n.d.). *About the Journal | Age, Culture, Humanities: An Interdisciplinary Journal*. Retrieved 30 October 2025 from <https://tidsskrift.dk/ageculturehumanities/about>
71. Němcová, B. (1855). *Babička: Obrazy venkovského života. (The Grandmother)* J. Pospíšil.
72. Ogunbode, C. A., Böhm, G., Capstick, S. B., Demski, C., Spence, A., & Tausch, N. (2019). The resilience paradox: Flooding experience, coping and climate change mitigation intentions. *Climate Policy*, 19(6), 703–715. <https://doi.org/10.1080/14693062.2018.1560242>
73. Oswald, F., Wahl, H.-W., Mollenkopf, H., & Schilling, O. (2003). Housing and Life Satisfaction of Older Adults in Two Rural Regions in Germany. *Research on Aging*, 25(2), 122–143. <https://doi.org/10.1177/0164027502250016>
74. Patrick, R., Noy, S., McKew, M., Lee, S., Kanda, M., Edwards, S. J., Ali, A., & Bowen, K. (2025). Rapid review on healthy ageing interventions that incorporate action on climate change and sustainability in cities and communities. *Health & Place*, 93, 103435. <https://doi.org/10.1016/j.healthplace.2025.103435>
75. Pelikán, V., & Galčanová Batista, L. (2024). „Myčka? To byla těžká diskuse...“. (\"Dishwasher? That was a difficult discussion...\") In *Chvála otazníků: K osmdesátinám*

Hany Librové (In Praise of Question Marks: On the occasion of Hana Librová's eightieth birthday) (pp. 95–110). Masaryk University, Dokořán.

76. Pelikán, V., & Galčanová Batista, L. (2025). "This year, the weather is like it used to be in our times": Experiencing climate change in the context of rural ageing in the Czech Republic. *Journal of Rural Studies*, 116, 103633. <https://doi.org/10.1016/j.jrurstud.2025.103633>
77. Pelikán, V., Galčanová, L., & Kala, L. (2020). Ecological habitus intergenerationally reproduced: The children of Czech 'voluntary simplifiers' and their lifestyle. *Journal of Consumer Culture*, 20(4), 419–439. <https://doi.org/10.1177/1469540517736560>
78. Pilcher, K., & Martin, W. (2020). Forever 'Becoming'? Negotiating Gendered and Ageing Embodiment in Everyday Life. *Sociological Research Online*, 25(4), 698–717. <https://doi.org/10.1177/1360780420928380>
79. Pillemer, K. A., Nolte, J., & Cope, M. T. (2022). Promoting Climate Change Activism Among Older People. *Generations: Journal of the American Society on Aging*, 46(2), 1–16.
80. Pillemer, K., Wells, N. M., Wagenet, L. P., Meador, R. H., & Parise, J. T. (2011). Environmental Sustainability in an Aging Society: A Research Agenda. *Journal of Aging and Health*, 23(3), 433–453. <https://doi.org/10.1177/0898264310381278>
81. Plouffe, L., & Kalache, A. (2010). Towards global age-friendly cities: Determining urban features that promote active aging. *Journal of Urban Health*, 87(5), 733–739.
82. Port, C., & Swinnen, A. (2014). Age Studies Comes of Age. *Age, Culture, Humanities: An Interdisciplinary Journal*, 1, 1–8. <https://doi.org/10.7146/ageculturehumanities.v1i.129496>
83. Prina, M., Khan, N., Akhter Khan, S., Caicedo, J. C., Peycheva, A., Seo, V., Xue, S., & Sadana, R. (2024). Climate change and healthy ageing: An assessment of the impact of climate hazards on older people. *Journal of Global Health*, 14, 04101. <https://doi.org/10.7189/jogh.14.04101>
84. Ramos, A. C., & Fookien, I. (2024). Age matters: Linking age-related concepts in childhood and ageing research. In A. Wanka, T. Freutel-Funke, S. Andresen, & F. Oswald (Eds.), *Linking Ages: A Dialogue between Childhood and Ageing Research* (pp. 19–34). Routledge. <https://doi.org/10.4324/9781003429340-3>
85. Ringel, F. (2022). The time of post-socialism: On the future of an anthropological concept. *Critique of Anthropology*, 42(2), 191–208. <https://doi.org/10.1177/0308275X221095930>
86. Rowles, G. D. (1978). *Prisoners Of Space?: Exploring The Geographical Experience Of Older People*. Westview Press.

87. Rowles, G. D., & Bernard, M. (Eds.). (2013). *Environmental Gerontology: Making Meaningful Places in Old Age* (1st ed.). Springer Publishing Company.
88. Roy, S., & Ayalon, L. (2023). Intergenerational Relations in the Climate Movement: Bridging the Gap toward a Common Goal. *International Journal of Environmental Research and Public Health*, 20(1), Article 1. <https://doi.org/10.3390/ijerph20010233>
89. Roy, S., & Ayalon, L. (2024). "They Did Not Know What They Were Doing": Climate Change and Intergenerational Compassion. *The Gerontologist*, 64(3), gnad063. <https://doi.org/10.1093/geront/gnad063>
90. Samanta, T. (Ed.). (2017). *Cross-Cultural and Cross-Disciplinary Perspectives in Social Gerontology*. Springer.
91. Schwanen, T., Hardill, I., & Lucas, S. (2012). Spatialities of ageing: The co-construction and co-evolution of old age and space. *Geoforum*, 43(6), 1291–1295. <https://doi.org/10.1016/j.geoforum.2012.07.002>
92. Skinner, M. W., Cloutier, D., & Andrews, G. J. (2015). Geographies of ageing: Progress and possibilities after two decades of change. *Progress in Human Geography*, 39(6), 776–799. <https://doi.org/10.1177/0309132514558444>
93. Stenning, A., & Hörschelmann, K. (2008). History, Geography and Difference in the Post-socialist World: Or, Do We Still Need Post-Socialism? *Antipode*, 40(2), 312–335. <https://doi.org/10.1111/j.1467-8330.2008.00593.x>
94. Sýkorová, D., Nytra, G., & Tichá, I. (2014). *Housing in Old Age and Poverty*. University of Ostrava, Faculty of Social Studies. https://projekty.osu.cz/vedtym/dok/publikace/sykorova_seniori.pdf
95. Timonen, V. (2019). *Grandparenting Practices Around the World: Reshaping Family*. Policy Press.
96. Turner, B. L., Kasperson, R. E., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., Eckley, N., Kasperson, J. X., Luers, A., Martello, M. L., Polsky, C., Pulsipher, A., & Schiller, A. (2003). A framework for vulnerability analysis in sustainability science. *Proceedings of the National Academy of Sciences*, 100(14), 8074–8079. <https://doi.org/10.1073/pnas.1231335100>
97. Twigg, J., & Martin, W. (2015a). *Routledge Handbook of Cultural Gerontology*. Routledge.
98. Twigg, J., & Martin, W. (2015b). The Challenge of Cultural Gerontology. *The Gerontologist*, 55(3), 353–359. <https://doi.org/10.1093/geront/gnu061>
99. Twigg, J., & Martin, W. (2026). *Routledge Handbook of Cultural Gerontology*. Routledge.

100. Vacková, B., & Galčanová, L. (2014). Prostory domova (Spaces of home). In Matoušek, R., & Osman, R. (Eds.), *Prostor(y) geografie (Geography Space(s))*. (pp. 167–187). Charles University in Prague, Karolinum.
101. Vacková, B., Galčanová Batista, L., Ferenčuhová, S., & Galčanová, L. (2010). Inovace, rutiny a cihly: Současnost zlínského baťovského bydlení. (Innovation, Routines, and Bricks: The Present State of Baťa Housing in Zlín.). In B. Vacková (Ed.), *Československé město včera a dnes. Každodennost—Reprezentace—Výzkum. (Czechoslovak City Then and Now: Everyday Life – Representation – Research)* (1st ed., pp. 77–111). Pavel Mervart, Masaryk University.
102. Vacková, B., Galčanová, L., Kvapilová Bartošová, M., & Kala, L. (2014). *Sami doma: Bydlení, práce a vztahy lidí žijících v jednočlenných domácnostech. (Living Solo: Housing, Work, and Relationships of People Living in Single-member Households)*. Masaryk University, Pavel Mervart.
103. van Dyk, S. (2016). The othering of old age: Insights from Postcolonial Studies. *Journal of Aging Studies*, 39, 109–120. <https://doi.org/10.1016/j.jaging.2016.06.005>
104. van Dyk, S., & Küpper, T. (2016). Postcolonial perspectives in Aging Studies: Introduction. *Journal of Aging Studies*, 39, 81–82. <https://doi.org/10.1016/j.jaging.2016.06.007>
105. Verbruggen, C., Howell, B. M., & Simmons, K. (2020). How We Talk About Aging During a Global Pandemic Matters: On Ageist Othering and Aging ‘Others’ Talking Back. *Anthropology & Aging*, 41(2), Article 2. <https://doi.org/10.5195/aa.2020.277>
106. Vidovičová, L., & Galčanová, L. (2019). “I am not that type of grandmother”: (Non)compliance with the grandmother archetype among contemporary Czech grandmothers. In V. Timonen (Ed.), *Grandparenting practices around the world*. Polity Press. <https://doi.org/10.46692/9781447340669.013>
107. Wahl, H.-W., & Weisman, G. D. (2003). Environmental gerontology at the beginning of the new millennium: Reflections on its historical, empirical, and theoretical development. *The Gerontologist*, 43(5), 616–627.
108. Wanka, A., & Brandt, M. (2025). Sociology of Age and Ageing: Theoretical and Empirical Challenges (Re-)Visited. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 77(4), 489–503. <https://doi.org/10.1007/s11577-025-01036-7>
109. World Health Organization. (2007). *Global Age-friendly Cities: A Guide*. World Health Organization. <https://www.who.int/publications/i/item/9789241547307>

110. Wright, S. D., & Lund, D. A. (2000). Gray and green?: Stewardship and sustainability in an aging society. *Journal of Aging Studies*, 14(3), 229–249. [https://doi.org/10.1016/S0890-4065\(00\)08020-8](https://doi.org/10.1016/S0890-4065(00)08020-8)
111. Wrotek, M., Marginean, I., Boni, Z., Chwałczyk, F., Vicedo-Cabrera, A. M., Salvador, C., & Jancewicz, B. (2025). From inequalities to vulnerability paradoxes: Juxtaposing older adults' heat mortality risk and heat experiences. *Environmental Health*, 24(1), Article 24. <https://doi.org/10.1186/s12940-025-01179-2>
112. Zhang, C., & Chen, G. (2024). Rediscovering climate gerontology: An era for older adults to contribute more to climate change. *Sustainability: Science, Practice and Policy*, 20(1), 2381875. <https://doi.org/10.1080/15487733.2024.2381875>
113. Zimmermann, H.-P. (2016). Alienation and alterity: Age in the existentialist discourse on others. *Journal of Aging Studies*, 39, 83–95. <https://doi.org/10.1016/j.jaging.2016.06.002>

Doing ageing research in pandemic times: a reflexive approach towards research ethics during the COVID-19 pandemic

Lucie Galčanová Batista¹ , Anna Urbaniak^{2,3*}  and Anna Wanka⁴

¹Faculty of Social Studies, Masaryk University, Brno, Czech Republic, ²Institut für Soziologie, Universität Wien, Wien, Austria, ³Instytut Socjologii, Uniwersytet Jagielloński, Kraków, Poland and

⁴DFG-Graduiertenkolleg ‘Doing Transitions’, Goethe-Universität Frankfurt am Main, Frankfurt am Main, Germany

*Corresponding author. Email: anna.urbaniak@univie.ac.at

(Accepted 20 May 2022; first published online 2 September 2022)

Abstract

The outbreak of COVID-19 has had a significant impact on societies and individual lives across the globe. In this paper, we address the impact of the pandemic and the protective measures on empirical social scientific ageing research through the lens of ‘ethically important moments’. One of the most crucial measures for preventing the spread of the virus includes social distancing; therefore, empirical research methods based on person-to-person direct contact (as in interviews) and first-hand observation have been scaled back since 2020. For ageing research, the challenges are particularly pronounced due to the ongoing discussion regarding vulnerabilities associated with higher age and age-based discrimination. Hence, many researchers focusing on ageing are facing some difficult questions: How and under what conditions can we carry on with empirical research without putting our research participants and ourselves at risk? Firstly, we systematically identify the key dimensions and challenges that have shaped social scientific research during the lockdowns associated with the COVID-19 pandemic: fragmentation, fluidity, ambiguity and uncertainty. Then, using insights from two international research projects, we illustrate and critically reflect on the ethically important moments and practical dilemmas that have resulted from these pandemic challenges when researching with and about older adults.

Keywords: COVID-19 pandemic; ageing research; older adults; pandemic ageism; research ethics; ethically important moments

Introduction

The global public health emergency caused by the outbreak of COVID-19, and the pandemic policies and regulations aiming at ‘flattening the curve’, have often specifically targeted older people, as higher age was among the factors increasing the

© The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

risk of a severe or lethal course of the disease (World Health Organization (WHO), 2020). Thus, the pandemic brought chronological age to the centre of political decisions (Fletcher, 2021) and public debates (Lichtenstein, 2021). The long-lasting efforts by scholars in ageing research to combat age-based categorisation (Ehni and Wahl, 2020), othering (Verbruggen *et al.*, 2020) and discrimination (D’cruz and Banerjee, 2020) seemed to have been countered by the prevalent pandemic ageism over the last two years (Previtali *et al.*, 2020; Barrett *et al.*, 2021).

Like many researchers in ageing studies, we found ourselves in between contradictory ethical *callings* amidst the pandemic. On the one hand, there was a *call* for ‘urgent and ongoing data collection and rigorous analysis of social and economic inequalities’ in this unprecedented period (British Society of Gerontology (BSG), 2020: 7). Yet, and contradictory to this call, the pandemic measures brought much of social science research based on person-to-person contact to a halt, with new ethical and methodological challenges emerging (Rutherford, 2020). We were, for various periods of time, grounded either by our universities and regional lockdowns, or because we felt that we could not responsibly continue our fieldwork, even if it would be legally possible.

On the other hand, and as Fletcher (2021: 490) argues, pandemic ageism *calls* for reflection on ‘the ways in which we categorise persons and how we might do better’. Hence, as ageing researchers, we knew we could not homogeneously classify our research subjects as a ‘risk group’ and bring research to a halt altogether. Instead, we had to make a range of ethically challenging decisions. We had to decide whether to postpone planned face-to-face interviews for an unpredictable amount of time and focus, for example, on introspective approaches in the interim (Harris and Holman Jones, 2021; Humberstone, 2021). We had to decide whether to move to a remote interview mode (Self, 2021) and, if so, what technologies to use. Most importantly, we had to determine when and how to ethically restart research based on face-to-face encounters with older people again.¹ While the moment of stopping research was quite clearly marked by the ‘hammer’ of strict nationwide lockdowns in the early spring of 2020 (Pueyo, 2020), the moment of re-establishment of person-to-person engagement with older people in our fieldwork was unclear, as the measures were easing and tightening gradually within the ongoing pandemic. The ‘dance’ phase brought in deep ethical ambiguity and moral tensions. Romania (2020: 59) has aptly labelled this state ‘interactional anomie’, ‘a condition of uncertain knowledge of what rules of conduct regarding social distance shall be applied to interactions with non-familiar people in public spaces’. The complexity of the situation gave rise to vivid discussions amongst our international research teams on how to reply to the call for conducting research. How do we assess pandemic-related risks in our fieldwork? How do we take the vulnerabilities of older people into account and respect their refusal to be made vulnerable at the same time? How do we navigate in the new situation of a face-to-face interview in the new moral and interactional order of pandemic social encounters?

In qualitative social research, reflecting on one’s own practices plays a substantial part in the research process and its ethical evaluation. We argue that there is a lack of critical reflection on the ethical and practical aspects of empirical research in the context of a world health crisis (Kara and Khoo, 2020; Rutherford, 2020), and in this article, we aim at opening such reflection in answering the second *call*

(Fletcher, 2021). As, amongst others, Guillemin and Gillam (2004: 263) point out, qualitative research ethics encompass at least two interrelated dimensions: procedural ethics, defined, for example, by ethics committees, and 'ethics in practice', encompassing the 'ethical issues that arise in the doing of research'. Many of the ethical challenges we encountered in our fieldwork at the onset of the pandemic fall beyond the scope of procedural ethics in our institutions. Even the most detailed ethical guidelines, codes of conduct (e.g. International Sociological Association, 2001; British Sociological Association, 2017; American Sociological Association, 2018) or suggestions from ethical committees could not prepare us for the research design dilemmas and unique situations in the field (Atkinson, 2009; see also Karmakar *et al.*, 2020; Lobe *et al.*, 2020).

Moreover, in 2020, when we conducted our research, there were no guidelines for social pandemic research (see Dawson *et al.*, 2020; WHO, 2020), and none of the major professional associations had commented officially on research ethics during the ongoing health crisis (Hanafi, 2020; Pleyers, 2020). In this Forum Article, we use the lens of 'ethically important moments', those 'difficult, often subtle, and usually unpredictable situations that arise in the practice of doing research' (Guillemin and Gillam, 2004: 262), to explore the ethical and practical challenges we encountered in our fieldwork at the beginning of the pandemic. We address three questions: What is characteristic of the pandemic condition in terms of doing qualitative research? How did we adjust our research designs accordingly? What ethically important moments emerged during the fieldwork that were related to age and ageism? We use this Forum Article as a platform to make our reflection on the research process public, and use it as an initial effort in advancing the discussion about ethical aspects of ageing social research in the pandemic context and beyond. In the following section, we briefly explore four dominant features that have shaped social scientific research during and in between the lockdowns at the beginning of the COVID-19 pandemic: fragmentation, fluidity, uncertainty and ambiguity. We continue by outlining the ethically important moments we have encountered in two ongoing international research projects. We stress the relational, situated, and embodied nature of the ethicality of research conduct. In the concluding discussion, we posit a selective set of questions that, from our perspective, seem crucial for a debate on the ethicality of social research in pandemic settings.

Features influencing qualitative research at the onset of the COVID-19 pandemic

Before exploring the ethically important moments we have encountered in research with older adults, we outline briefly the conditions that undermined our conduct. We identify four main challenges generated by the nature of and the responses to the 2019 novel coronavirus pandemic in our regions: fluidity, uncertainty, ambiguity and fragmentation. These features have always been present in the research process to some extent, but the early pandemic situation made them central to research planning and conduct. By fragmentation, we mean the uneven spread of relevant information and lack of coherent guidelines regarding the social distancing and other preventive measures required in different jurisdictions and institutions.

These ‘variabilities in risk governance across national policy regimes’ (Brown, 2020: 3) translate into additional challenges in co-ordinating fieldwork for national and international projects.

Not only fragmentation but also fluidity characterised the pandemic research context: local preventive measures, their interpretations and related practices in everyday life of pandemic cultures (Davy, 2020) were shifting quite rapidly as new expert information regarding the nature and spread of the virus was becoming available and became (or not) part of everyday life. Fluidity and fragmentation complicated the research process and increased overall uncertainty (Higgins *et al.*, 2020). Uncertainty also stemmed from a lack of reliable knowledge about the future development of the pandemic and from the nature and scope of preventive measures introduced by different (and possibly changing) governments (Cook, 2020; Weible *et al.*, 2020) under various timeframes (Brown and Galantino, 2020; Ward, 2020).

Anticipation plays a central role in procedural ethics, a fact extensively criticised in recent debates (Markham, 2018; Bell and Wynn, 2021). Fluidity and uncertainty of the situation render research re-planning and adjustments of research protocols especially challenging. The entanglement of fragmentation, fluidity and uncertainty leaves researchers in an ambiguous position, in which they nevertheless must make research decisions before data collection is initiated, as well as in the field. We consider ambiguity mostly in terms of new forms and definitions of risks and safety connected with interpersonal contact (Brown, 2020) and new forms of risk management that, in many aspects, contradict the use of standard social science research techniques (Rutherford, 2020). All of these factors are dynamically interconnected, and in their entanglements, they influence many parts of the research process significantly, as we highlight in the following section.

Ethical practice in interviews with older adults in pandemic times

This reflexive article is based on two research projects and utilises two crucial stages of the research process as examples: the (re-)planning of fieldwork and the interview situation itself. PROJECT1 was initiated in March 2020 and aimed at reconstructing reconfigurations of intergenerational provisioning during the pandemic in three European countries. PROJECT2 was an international study initiated in March 2019 that aimed at analysing the origin of gender differences in exclusion from social relations across European countries and the consequences of this exclusion for health and wellbeing in older age. The latter project was already ongoing when the pandemic broke out, whereas the former was implemented in March 2020 explicitly to research the pandemic situation. Both projects deployed mixed-methods research designs, with qualitative data collection (problem-centred, face-to-face interviews) scheduled for 2020.

Planning for the interview

In terms of *planning*, the fundamental ethical question of the research in the evolving health crisis and possibly disastrous and traumatic setting of the pandemic context had to be answered: Should we do the research at all? (O’Mathúna, 2018: 445). The answer was affirmative (as a unified response to the first ethical call). In

moving from face-to-face to remote interviews in PROJECT2, the adjustments needed to be approved by local ethical committees at the institutions involved, a process taking from several days to several months and possibly deepening the existing fragmentation of data collection across different countries. Discussions also revealed various levels of trust in local ethics bodies in different countries as their understanding of the specificities associated with social research was questioned (Gillam and Guillemin, 2018), especially in the context connecting the highly medicalised discourses of the pandemic with the medical roots of procedural ethics (Strujo *et al.*, 2020). In their approvals, the local committees were helpful in adjusting the formalities for the remote interviews. However, none of the institutions involved in the projects made a formal comment on how to transition from a remote mode back to face-to-face interviewing. This resulted in some of the countries represented in our project conducting all interviews remotely, and some deciding to switch back into the face-to-face mode, applying various forms of protective measures. The dynamically and unevenly developing situation in the countries involved in the projects and the uncertainty about the future led us to consent to these localised strategies of conduct.

Due to the fuzzy nature of the 'dance' phase of the pandemic (Pueyo, 2020), the deliberative debates amongst the PROJECT2 teams pointed to the importance of values related to age and ageing in the ethical decision-making involved in the research process (Hammersley, 2018). The discussion from the Czech context serves as an example, in which the state pandemic measures were eased quite promptly in late spring 2020, making it possible to proceed with face-to-face interviews earlier than in partner countries. This micro-ethical moment evolved into a thorough discussion of a complex question: how to balance the protection of older people, addressed as most vulnerable to the lethal effects of COVID-19, and how to hear their voices via research involvement. For how long should protection from the risk of infection (resulting in not conducting face-to-face interviewing) outweigh the risk of social isolation (D'cruz and Banerjee, 2020) that many older people suffered during the pandemic (and include those who agreed to face-to-face interviews when the state measures let us do so despite the ongoing pandemic)? What does it mean to be ethical in such a setting, and who should handle the responsibility for such decisions?

The ethical challenges in the planning phase thus entailed anticipating the potential harm associated with data collection amongst older research participants. The level of risk would (ostensibly) be addressed in official documents, such as ethics approvals, information sheets and consent forms (Msoroka and Amundsen, 2017). At least in the initial phase, the pandemic situation brought to the fore again the distinction between the medicalised notion of age-related vulnerability (Fletcher, 2021), which undoubtedly affected our perception of older people as a vulnerable research subject (Van den Hoonaard, 2018). Age became an easy proxy for vulnerability, as the other relevant factors, such as weakened immunity, chronic disease or obesity (Williamson *et al.*, 2020; Tehrani *et al.*, 2021) on the side of potential interviewees, were much harder, or even impossible, to take into account in the research planning and sampling process. Being aware of the ethical complexity of the situation, we aimed at obtaining consent ahead of remote as well as face-to-face data collection, as advised by ethical committees. However, the

actual level of risk, often hard to determine in the social research context (Van den Hoonaard, 2018), became extremely difficult to assess beforehand in a pandemic context, in which the very bodily presence and co-breathing or touch could lead to potentially lethal contamination.

In this overall situation of uncertainty and anxiety, some gatekeepers (from nursing homes or non-profit organisations) were more reluctant to connect potential older participants with researchers. In PROJECT2, we learned how important it was to provide extensive information on protective measures to gatekeepers before the recruitment stage. The PROJECT1 team decided to rely less on stakeholder co-operation, integrating a provision through which participants interested in qualitative interviews could leave their contact details through an online survey instead. However, this can lead to shifts in the study populations (*see below*), which might be different from the sample structures produced through gatekeeper recruitment (*e.g.* Ellard-Gray *et al.*, 2015).

In order to bypass the risks stemming from face-to-face settings, both projects at least partially planned for remote interviewing, either online or via phone (*cf.* Dodds and Hess, 2020). Especially in ageing research, however, this decision entailed a range of problems. Not all older adults have access to an electronic device with stable internet, telephone connection, or the respective communication software, and many do not feel entirely competent or comfortable using such systems (Van Boekel *et al.*, 2017; König *et al.*, 2018; Seifert *et al.*, 2020). Hence, the online design was likely to result in a different sample if compared to a face-to-face context, and the scope of the differences is difficult to identify (Davies *et al.*, 2020). Further, data security arose as an ethically important issue and was the subject of procedural ethical assessments (Markham, 2018). In co-operation with ethical committees, we adjusted the informed consent for online interviewing. However, the actual risk of the research event was negotiated with our participants. Even though researchers had access to secure online platforms and planned to use them, some participants preferred to use systems they were accustomed to, like Zoom or Skype, actively adjusting the research situation according to their needs and re-framing what was set in advance as a risk. Dilemmas of this kind slipped from the scope of procedural ethics. This (originally unplanned) *ad hoc* co-production also became central to the interview situation itself.

Doing the interview

With regard to the *interview situation itself*, a variety of ethically important moments had arisen. The pandemic strengthens the connection between the private lifestyles of both the interviewer and the interviewee. The disguised behaviour of the virus made even the asymptomatic or infectious but not yet ill people potential suspects in transmission, causing the medicalisation of social relationships (Romania, 2020). Meeting other people in usual settings, such as in public transportation, turned the interview into a dicey situation even before it actually started, simply increasing the risk of transmission by asking people to leave their (not necessarily safe) homes (Durnová and Mohammadi, 2021). Moreover, the pandemic measures brought new rules into the established social order of personal interaction and imbued even its very basic details, such as a handshake, with a new morality.

The procedural ethics were set by legal measures currently in force (such as mandatory mask-wearing in public or closed spaces, disinfection, physical distancing, etc.).² These measures not only varied geographically, but they were also quite fluid in terms of time and perplexing, with many controversies on what is actually effective (e.g. Cheng, 2020); and most importantly, they translated the behaviour in daily encounters in which many people might not be sure about what is appropriate in a particular situation or even actively oppose the new pandemic etiquette in diverse ways (Hanratty *et al.*, 2021).

In some cases, research participants, informed about safety rules through information sheets and briefed during phone conversations arranging the face-to-face interviews, refused to wear a mask once the interview started. Such refusals would, in turn, put the interviewer at potential risk (Sikic Micanovic *et al.*, 2020). The line between respect for the interviewee's autonomy and self-protection for the researcher remained ambiguous, not least because of the widespread view on masks as constituting the protection of others (Cheng *et al.*, 2020; Zimmerman, 2020), and was addressed on an individual basis, according to the researcher's reading of a particular situation (Markham, 2018).

The portrayal of older adults in the public discourse regarding COVID-19 contributed to this reluctance: especially in the early months of the pandemic, older adults had been depicted as a homogeneous, at-risk group in need of protection (BSG, 2020), whereas younger adults had been viewed as more or less safe from severe consequences (Ayalon *et al.*, 2021). Even though this view has since been contested by scientific research, it has still impacted the ways older and younger adults perceive themselves and others – in the interview situation, we often represented ourselves and were perceived as young and fit by our participants (Tarrant, 2014). The ethicality of the interview situation thus emerged as relational, embodied and contextual. Despite being defined as chronologically 'old enough' (to participate in the research) by the researchers and as 'older' in the situation of the interview with visually younger interviewers, many participants did not identify as 'old', distancing themselves from the category of an age-related 'risk group'. Asked if he perceived himself as at-risk, a 72-year-old study participant replied strictly: 'No. NO. Not at all. Well yes, if you take my age, because I am older than 65, but other than that – no'. Another research participant, aged 68, would not believe in any correlation between risk and age and hence refused to wear a mask during the interview situation, saying: 'Is this because *I am at risk*? Oh my God, guys, seriously? In December, I was still the old grandma; nobody cared about me. And now the government wants to save my life, whatever it takes. What a paradox.' When suggesting safety measures, we had created a scenario in which older research participants would immediately assume that these measures were designed primarily to protect them and not necessarily the researcher. As previous research on ageism and stereotype threat shows (Weiss and Lang, 2012), older adults might refuse to identify as 'old'; they prefer to adhere to their personal definition of age over the societal and chronological one (Baars, 2010). This scenario occurs especially when they associate old age with frailty, dependence and deficiency, to prevent damaging one's own identity – strong notions of the 'othering' of old age (Higgs and Gilleard, 2014; Van Dyk, 2016) were expressed while negotiating the level of risk in the interview context.

Concluding discussion

According to Fletcher, a chronologic epistemology is foundational to gerontology. In his article on ageism during the COVID-19 pandemic, he suggests: '[C]hronological quarantine should be a powerful reminder to all ageing researchers that we cannot always develop methodologies sophisticated enough to fully respect the reality of aged heterogeneity, but we should nevertheless always be trying to advance in that direction' (Fletcher, 2021: 485). This Forum Article represents such an effort. The early period of the pandemic served not only as an opportunity for epistemological reflection but also as a magnifying glass for the existing tensions between the premises of procedural ethics and 'ethics in practice' with regard to qualitative research (Guillemin and Gillam, 2004). The call for urgent research (BSG, 2020) should be accompanied by a discussion on how to conduct social research ethically in pandemic times. To open such a discussion, we have explored the adjustment of the research process in two international projects and made part of the ethical reflection of our research practice public. It is itself a product of pandemic times, inevitably subject to the fluidity, ambiguity or flexibility of the situation. Therefore, it serves not as a comprehensive review of pandemic research ethicality, but merely as a theoretically informed and empirically grounded commentary. We have focused on the characteristics of the pandemic condition in terms of doing qualitative research with older adults and explored ethically important moments (Guillemin and Gillam, 2004) as they emerged in the re-planning of our fieldwork under the relative novelty of the early pandemic conditions and while conducting the interviews. As Hughes *et al.* (2021) point out, social research is inevitably 'messy'; there are many unplanned outcomes of various interactions in the field irrespective of an ongoing pandemic. However, we argue that the fragmentation of pandemic measures (e.g. geographically, temporally), the flexibility and fluidity of pandemic-related knowledge and subsequent recommendations and rules, and the uncertainty of pandemic conditions and their framings have caused specific challenges for the ethicality of conducting social research. These challenges have not yet been addressed in professional ethical guidelines, which are clearly not tailored towards addressing an unprecedented health crisis.

Our reflection of the ethicality of pandemic research has highlighted the centrality of micro-ethics in the pandemic setting. Procedural ethics in research involves anticipation (especially of risk and potential harm) and supposes a certain level of predictability of the situation in the field. The unpredictable and rapidly evolving pandemic condition, due to its aforementioned characteristics, together with missing formal guidelines for pandemic social research, has made the planning necessary for procedural ethicality exacting. Micro-ethics have become central to ethical assessment and decision-making in the research process. We have therefore presented the pandemic ethicality as situated, relational, negotiated and embodied. In these micro-ethical events, the individualised responsibility of the researchers conducting the interviews was essential to the ethicality of the research process, as were the deliberative and reflexive team discussions. We view this text as a part of the process too.

We have also encountered our own epistemic ageism (Fletcher, 2021), represented, for example, by chronological sampling, intertwined with pandemic ageism,

leading our participants to feelings of being made vulnerable. Many of them actively objected (Latour, 2000) to the 'othering' of homogenising cultural framings of older people as an 'at-risk' category endorsed by our own practices in the field. The pandemic has highlighted the question of reflexivity in social research. Therefore, we can only hope that in response more researchers will be interested in applying reflexive approaches in ageing research in pandemic times and 'beyond'.

Author contributions. All authors contributed equally to (a) conception and design, (b) drafting of the article or revising it critically for important intellectual content, and (c) approval of the version to be published.

Conflict of interest. The authors declare no conflicts of interest.

Ethical standards. Approval was granted by Masaryk University, Universität Wien and Goethe-Universität.

Funding. GENPATH is part of the GENDER-NET Plus ERANET COFUND project, which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 741874. The national teams have been supported by the following grants: Austria (FWF I4210/GNP187), Czechia (TAČR ZĚTA TJ03000002), Ireland (GNP-187), Israel (MOST3-15667), Norway (NFR 299859), Spain (PCI2019-103627), Sweden (VR 2018-00929).

Notes

1 In addition, there was a third ethical *call*, of course – regarding intensified care for our communities, our significant others and ourselves in the work-from-home situation (Corbera *et al.*, 2020).

2 For both the interviewer and the interviewee, wearing masks during an hours-long interview became not only uncomfortable, but also problematic. For participants with hearing difficulties, masks covering the mouth of the interview partner created additional issues with hearing and, therefore, understanding each other. Both parties must speak more loudly and clearly, which was exhausting for people who easily suffer from shortness of breath. When conducting interviews in the private homes of participants, they were responsible for ventilation or disinfection, what linked their participation with additional efforts, and took control of the 'risk management' from the researchers.

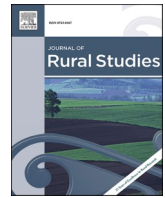
References

- American Sociological Association (ASA) (2018) *Code of Ethics*. Available at https://www.asanet.org/sites/default/files/asa_code_of_ethics-june2018.pdf.
- Atkinson P (2009) Ethics and ethnography. *Twenty-first Century Society* 4, 17–30.
- Ayalon L, Chasteen A, Diehl M, Levy B, Neupert SD, Rothermund K, Tesch-Römer C and Wahl HW (2021) Aging in times of the COVID-19 pandemic: avoiding ageism and fostering intergenerational solidarity. *Journals of Gerontology: Series B* 76, e49–e52.
- Baars J (2010) Time and ageing: enduring and emerging issues. In Dannefer D and Phillipson C (eds), *The SAGE Handbook of Social Gerontology*. London: Sage, pp. 367–376.
- Barrett AE, Michael C and Padavic I (2021) Calculated ageism: generational sacrifice as a response to the COVID-19 pandemic. *Journals of Gerontology: Series B* 76, e201–e205.
- Bell K and Wynn L (2021) Research ethics committees, ethnographers and imaginations of risk. *Ethnography*. Available online doi:10.1177/1466138120983862.
- British Society of Gerontology (BSG) (2020) *Covid-19: Statement from the President and Members of the National Executive Committee of the British Society of Gerontology*. Available at <https://ageingissues.wordpress.com/2020/03/21/covid-19-statement-from-the-president-and-members-of-the-national-executive-committee-of-the-british-society-of-gerontology/>.
- British Sociological Association (2017) *Statement of Ethical Practice*. Available at https://www.britisoc.co.uk/media/24310/bsa_statement_of_ethical_practice.pdf.
- Brown P (2020) Studying COVID-19 in light of critical approaches to risk and uncertainty: research pathways, conceptual tools, and some magic from Mary Douglas. *Health, Risk & Society* 22, 1–14.

- Brown P and Galantino MG** (2020) Theorising–problematising categories: understanding the COVID-19 pandemic through the sociology of risk and uncertainty (RN22). *The European Sociologist* **45**. Available at <https://www.europeansociologist.org/issue-45-pandemic-impossibilities-vol-1/theorising-problematising-categories-understanding-covid-19>.
- Chen L-K** (2020) Older adults and COVID-19 pandemic: resilience matters. *Archives of Gerontology and Geriatrics* **89**, 104124.
- Cheng VC-C, Wong S-C, Chuang VW-M, So SY-C, Chen JH-K, Sridhar S, To KK-W, Chan JF-W, Hung IF-N, Ho P-L and Yuen K-Y** (2020) The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. *Journal of Infection* **81**, 107–114.
- Cook TM** (2020) Personal protective equipment during the coronavirus disease (COVID) 2019 pandemic – a narrative review. *Anaesthesia* **75**, 920–927.
- Corbera E, Anguelovski I, Honey-Rosés J and Ruiz-Mallén I** (2020) Academia in the time of COVID-19: towards an ethics of care. *Planning Theory & Practice* **21**, 191–199.
- Davies L, LeClair KL, Bagley P, Blunt H, Hinton L, Ryan S and Ziebland S** (2020) Face-to-face compared with online collected accounts of health and illness experiences: a scoping review. *Qualitative Health Research* **30**, 2092–2102.
- Davy B** (2020) Social distancing and cultural bias. *Journal of the American Planning Association* **87**, 159–166.
- Dawson A, Emanuel EJ, Parker M, Smith MJ and Voo TC** (2020) Key ethical concepts and their application to COVID-19 research. *Public Health Ethics* **13**, 127–132.
- D’cruz M and Banerjee D** (2020) ‘An invisible human rights crisis’: the marginalization of older adults during the COVID-19 pandemic – an advocacy review. *Psychiatry Research* **292**, 113369.
- Dodds S and Hess AC** (2020) Adapting research methodology during COVID-19: lessons for transformative service research. *Journal of Service Management* **32**, 203–217.
- Durnová A and Mohammadi E** (2021) Intimacy, home, and emotions in the era of the pandemic. *Sociology Compass* **15**, e12852.
- Ehni HJ and Wahl HW** (2020) Six propositions against ageism in the COVID-19 pandemic. *Journal of Aging & Social Policy* **32**, 515–525.
- Ellard-Gray A, Jeffrey NK, Choubak M and Crann SE** (2015) Finding the hidden participant: solutions for recruiting hidden, hard-to-reach, and vulnerable populations. *International Journal of Qualitative Methods* **14**. Available at <https://doi.org/10.1177/1609406915621420>.
- Fletcher JR** (2021) Chronological quarantine and ageism: COVID-19 and gerontology’s relationship with age categorisation. *Ageing & Society* **41**, 479–492.
- Gillam L and Guillemin M** (2018) Reflexivity: overcoming mistrust between research ethics committees and researchers. In Iphofen R and Tolich M (eds), *The SAGE Handbook of Qualitative Research Ethics*. London: Sage, pp. 263–275.
- Guillemin L and Gillam L** (2004) Ethics, reflexivity, and ‘ethically important moments’ in research. *Qualitative Inquiry* **10**, 261–280.
- Hammersley M** (2018) Values in social research. In Iphofen R and Tolich M (eds), *The SAGE Handbook of Qualitative Research Ethics*. London: Sage, pp. 23–34.
- Hanafi S** (2020) Toward a post-COVID-19 sociology. *ISA Digital Platform: Global Sociology and the Coronavirus*. Available at <https://www.isa-sociology.org/frontend/web/uploads/files/Post-COVID-19%20Sociology.pdf>.
- Hanratty J, Bradley DT, Miller SJ and Dempster M** (2021) Determinants of health behaviours intended to prevent spread of respiratory pathogens that have pandemic potential: a rapid review. *Acta Psychologica* **220**, 103423.
- Harris A and Holman Jones S** (2021) Massive and microscopic: autoethnographic affects in the time of COVID. *Qualitative Inquiry* **27**, 861–869.
- Higgins R, Emily M and Vesperi MD** (2020) An anthropology of the COVID-19 pandemic. *Anthropology Now* **12**, 2–6.
- Higgs P and Gilleard CH** (2014) Frailty, abjection and the ‘othering’ of the Fourth Age. *Health Sociology Review* **23**, 10–19.
- Hughes J, Tarrant A, Hughes K and Sykes G** (2021) F**k ups in social research: learning from what goes ‘wrong’. *Impact of Social Sciences Blog*. Available at http://eprints.lse.ac.uk/112057/1/impactofsocialsciences_2021_08_02_fk_ups_in_social_research_learning.pdf.

- Humberstone B** (2021) Ageing, agers and outdoor re-creation: being old and active outdoors in the time of COVID: an autoethnographic tale of different wor(l)ds. 'I'm not vulnerable?' *Annals of Leisure Research*, 1–16. Available online doi:10.1080/11745398.2021.1878380.
- International Sociological Association** (2001) *Code of Ethics*. Available at <https://www.isa-sociology.org/en/about-isa/code-of-ethics>.
- Kara H and Khoo SM** (eds) (2020) *Researching in the Age of COVID-19*, Vol. 3, *Creativity and Ethics*. Bristol, UK: Bristol University Press.
- Karmakar S, Dhar R and Jee B** (2020) COVID-19: research methods must be flexible in a crisis. *BMJ* **370**, m2668.
- König R, Seifert A and Doh M** (2018) Internet use among older Europeans: an analysis based on SHARE data. *Universal Access in the Information Society* **17**, 621–633.
- Latour B** (2000) When things strike back: a possible contribution of 'science studies' to the social sciences. *British Journal of Sociology* **51**, 107–123.
- Lichtenstein B** (2021) From 'coffin dodger' to 'boomer remover': outbreaks of ageism in three countries with divergent approaches to coronavirus control. *Journals of Gerontology: Series B* **76**, e206–e212.
- Lobe B, Morgan D and Hoffman KA** (2020) Qualitative data collection in an era of social distancing. *International Journal of Qualitative Methods* **19**. Available at <https://doi.org/10.1177/1609406920937875>.
- Markham AN** (2018) Afterword: Ethics as impact – moving from error-avoidance and concept-driven models to a future-oriented approach. *Social Media + Society* **4**. Available at <https://doi.org/10.1177/2056305118784504>.
- Msoroka MS and Amundsen D** (2017) One size fits not quite all: universal research ethics with diversity. *Research Ethics* **14**, 1–17.
- O'Mathúna D** (2018) The dual imperative in disaster research ethics. In Iphofen R and Tolich M (eds), *The SAGE Handbook of Qualitative Research Ethics*. London: Sage, pp. 441–454.
- Pleyers G** (2020) A plea for global sociology in times of the coronavirus. *ISA Digital Platform: Global Sociology and the Coronavirus*. Available at <https://www.isa-sociology.org/frontend/web/uploads/files/Global%20Sociology%20in%20Times%20of%20the%20Coronavirus.pdf>.
- Previtali F, Allen LD and Varlamova M** (2020) Not only virus spread: the diffusion of ageism during the outbreak of COVID-19. *Journal of Aging & Social Policy* **32**, 506–514.
- Pueyo T** (2020) Coronavirus: the hammer and the dance. *Medium*. Available at <https://tomaspuoyo.medium.com/coronavirus-the-hammer-and-the-dance-be9337092b56>.
- Romania V** (2020) Interactional anomie? Imaging social distance after COVID-19: a Goffmanian perspective. *Sociologica* **14**, 51–66.
- Rutherford D** (2020) The future of anthropological research: ethics, questions, and methods in the age of COVID-19: part I. *The Wenner-Gren Blog*. Available at <http://blog.wennergren.org/2020/06/the-future-of-anthropological-research-ethics-questions-and-methods-in-the-age-of-covid-19-part-i/>.
- Seifert A, Cotten SR and Xie B** (2020) A double burden of exclusion? Digital and social exclusion of older adults in times of COVID-19. *Journals of Gerontology: Series B* **76**, e99–e103.
- Self B** (2021) Conducting interviews during the COVID-19 pandemic and beyond. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* **22**. Available at <https://doi.org/10.17169/fqs-22.3.3741>.
- Sikic Micanovic L, Stelko S and Sakic S** (2020) Who else needs protection? Reflecting on researcher vulnerability in sensitive research. *Societies* **10**, 1–12.
- Strujo E, Sanders M, Fiscella K, Thomas M, Johnson B, Deets A, Sanchez Lucas C, Holder T, Johal N, Luque A, Cassells A, Williams S and Tobin JN** (2020) COVID-19 impact on multi-site recruitment and enrollment. *Clinical Trials* **17**, 501–504.
- Tarrant A** (2014) Negotiating multiple positionalities in the interview setting: researching across gender and generational boundaries. *The Professional Geographer* **66**, 493–500.
- Tehrani S, Killander A, Åstrand P, Jakobsson J and Gille-Johnson P** (2021) Risk factors for death in adult COVID-19 patients: frailty predicts fatal outcome in older patients. *International Journal of Infectious Diseases* **102**, 415–421.
- Van Boekel LC, Peek ST and Luijkx KG** (2017) Diversity in older adults' use of the internet: identifying subgroups through latent class analysis. *Journal of Medical Internet Research* **19**, e180.
- Van den Hoonaard WC** (2018) The vulnerability of vulnerability: why social science researchers should abandon the doctrine of vulnerability. In Iphofen R and Tolich M (eds), *The SAGE Handbook of Qualitative Research Ethics*. London: Sage, pp. 305–321.

- Van Dyk S** (2016) The othering of old age: insights from postcolonial studies. *Journal of Aging Studies* **39**, 109–120.
- Verbruggen C, Howell BM and Simmons K** (2020) How we talk about aging during a global pandemic matters: on ageist othering and aging ‘others’ talking back. *Anthropology & Aging* **41**, 230–245.
- Ward PR** (2020) A sociology of the COVID-19 pandemic: a commentary and research agenda for sociologists. *Journal of Sociology* **56**, 726–735.
- Weible CM, Nohrstedt D, Cairney P, Carter DP, Crow DA, Durnová AP, Heikkilä T, Ingold K, McConnell A and Stone D** (2020) COVID-19 and the policy sciences: initial reactions and perspectives. *Policy Sciences* **53**, 225–241.
- Weiss D and Lang FR** (2012) ‘They’ are old but ‘I’ feel younger: age-group dissociation as a self-protective strategy in old age. *Psychology and Aging* **27**, 153–163.
- Williamson EJ, Walker AJ, Bhaskaran K, Bacon S, Bates C, Morton CE, Curtis HJ, Mehrkar A, Evans D, Inglesby P, Cockburn J, McDonald HI, MacKenna B, Tomlinson L, Douglas IJ, Rentsch CT, Mathu R, Wong AY, Grieve R, Harrison D, Forbes H, Schultze A, Croker R, Parry J, Hester F, Harper S, Perera R, Evans SJ, Smeeth L and Goldacre B** (2020) OpenSAFELY: factors associated with COVID-19 death in 17 million patients. *Nature* **584**, 430–436.
- World Health Organization (WHO)** (2020) *Ethical Standards for Research During Public Health Emergencies: Distilling Existing Guidance to Support COVID-19 R&D*. Geneva: WHO. Available at <https://apps.who.int/iris/handle/10665/331507>.
- Zimmerman A** (2020) The precautionary principle in mask-wearing: when waiting for explicit scientific evidence is unwise. *Voices in Bioethics* **6**. Available at <https://doi.org/10.7916/vib.v6i.5896>.



“This year, the weather is like it used to be in our times”: Experiencing climate change in the context of rural ageing in the Czech Republic

Vojtěch Pelikán^{*} , Lucie Galčanová Batista

Department of Environmental Studies, Faculty of Social Studies, Masaryk University, Czech Republic

ARTICLE INFO

Keywords:

Rural ageing
Climate change
Experiential knowledge
Environmental gerontology
Czech Republic

ABSTRACT

The various contexts in which the intersection of rural ageing and the experience of climate change takes place remain understudied. In our paper, we draw on a qualitative analysis of 40 in-depth interviews collected in 2021 with older (between 54 and 85 years old) long-term residents from two rural regions in the Czech Republic, representing a post-socialist, relatively climate-sceptic society. We address how participants interpret their life-long environmental experiences in the context of accelerating climate change. Our analysis focuses on four issues, which are reflected in the interviews – (1) the collapse of spruce forests, (2) decreasing snow cover, (3) long-term drought, and (4) extreme storms. These issues inspire various repertoires, which participants use to make sense of these occurrences. The findings reveal that research participants often simplify the causes of changes they have experienced, preferring familiar, concrete explanations over abstract scientific knowledge. While experiential knowledge plays a central role, it does not necessarily lead to heightened climate change awareness. Instead, pre-existing beliefs or values significantly affect how climate-related events and processes are interpreted. Contrary to expectations, the volume and proximity of experiences do not imply higher sensitivity to climate change. Besides age-related differences, the study highlights regional discrepancies in climate change perceptions, with participants in South Moravia acknowledging their vulnerability and expressing greater openness to climate adaptations.

1. Introduction

An overwhelming majority of scientists regard the theory of anthropogenic climate change as an obvious fact, and they are formulating increasingly gloomy predictions about the development of the climate system (IPCC, 2023). Some even warn that climate deterioration is not slowing down but accelerating (Hansen et al., 2023). In line with this assertion, in February 2024, the European Union's Copernicus programme announced that the world had passed a significant milestone; in the last twelve months, the average temperature surpassed a 1.5 °C increase, compared to the pre-industrial reference period (Copernicus, 2024). However, surveys conducted in Europe (Eurobarometer, 2021) as well as in the United States (Gallup, 2024) show that slowly growing climate awareness¹ is not followed by appropriate resolve at both the individual and political levels – support for climate-related policies is sometimes described as “a mile wide and an inch deep” (Drum, 2019).

Clearly, climate change represents an epistemologically contested issue. Academic literature widely acknowledges that insufficient societal response cannot be fully explained by an uneven distribution of scientific literacy or a simple lack of information (Denniss and Davison, 2015; Marshall, 2015). In environmental sociology and anthropology, this discrepancy fuels debate about the complex relationship between the scientific concept of climate change as an abstract, global, and long-term phenomenon and climate change perceptions anchored in concrete, culturally and biographically based contexts. How do people under particular circumstances understand their role in dealing with the climate crisis? How do they make sense of their weather-related experiences? Why do their attitudes and perceptions differ?

Generally, there is mixed evidence regarding the effects of weather experiences on climate attitudes (Sisco, 2021). This ambiguity originates from the variety of populations studied, the nature of their particular experiences, and the methodologies employed. Many researchers (Demski et al., 2017; Lujala et al., 2015; Spence et al., 2011) argue that

^{*} Corresponding author. Department of Environmental Studies Faculty of Social Studies, Masaryk University Joštova 218/10, 602 00, Brno, Czech Republic.
E-mail address: pelikan@fss.muni.cz (V. Pelikán).

¹ In the 2021 Eurobarometer survey, for example, when people were asked the question “Which of the following do you consider to be the single most serious problem facing the world as a whole?”, most of them (18 per cent) mentioned climate change for the first time in survey's history (p. 9).

experiencing the impacts of climate change affects the perception of its seriousness in a significant way. Other scholars consider pre-existing conditions such as values, political beliefs, or sociodemographic factors as substantial influences, associating being male, conservative, older, or rural with a higher degree of climate scepticism (McCright et al., 2016; Palm et al., 2017). However, few discuss the intersections among those factors. For example, if experiences are supposed to play an important role in perceiving climate change, how can those with seemingly richer climate-related experiences, thanks to their higher age or living in rural settings, rate among the most sceptical?

Studying the connection between experiencing climate change and rural ageing² may fall within the domain of environmental, rural, or climate gerontology (Haq and Gutman, 2014). The experiences of older people living in rural areas, as well as their environments and communities across the globe, are diverse and constantly evolving. Rurality is not simply a backdrop or setting where people age – they interact and shape each other (Skinner and Winterton, 2018), with many individual, structural, and cultural factors at play. However, beyond some agenda-setting articles stressing the importance of research on climate change and rural ageing intersection (Burholt and Dobbs, 2012; Keating et al., 2020; Phillips and Feng, 2018), rurality has not been sufficiently addressed. Studies of climate change impacts in rural settings often omit the perspectives of older people and vice versa. In the slowly growing number of studies transcending this gap (Beckwith et al., 2023; Carroll and Walker, 2020; Horton et al., 2010; Schumann, 2015), older people are framed primarily as particularly vulnerable – yet at the same time surprisingly resilient – victims of climate change. However, other framings, such as ‘healthy ageing’ or ‘age-friendliness’, based on concepts from gerontology, can also be identified.

Our research explores the intersection of rurality, higher age, and experiential knowledge in the context of climate change. It focuses on older Czechs living in rural areas – people experiencing long-term interaction with specific environments – and unpacks their perceptions and understandings of situations attributable to climate change. Although the temperature increase in the Czech Republic, exceeding (as in most of Europe) 2 °C compared to the pre-industrial period, is well above the global average (European Environment Agency, 2024), climate change impacts have not thus far required radical lifestyle changes, and at the local level, they seem to be perceived as less serious than in polar regions (Ford et al., 2006) or tropical islands (Lazrus, 2015; Rudiak-Gould, 2009). In fact, according to the 2021 Eurobarometer survey cited above, Czechs are the greatest climate sceptics among all EU countries. The cultural and geographic specificities of the Czech rural environment thus allow us to study a society in which there is no broader consensus on the manifestations, severity, and future impacts of climate change, making it a more contested issue than elsewhere (Čermák and Patočková, 2020).

In the next section, the article delves into the theoretical literature on relationships among climate change, ageing, rurality, and experiential knowledge. An analysis of empirical data from ethnographic research conducted in two rural regions follows. Our research questions can be articulated as follows: How do older people living in rural settlements make sense of their lifetime environmental experiences in the context of accelerating climate change? How do older people integrate climate-

related scientific discourses into their local environmental knowledge? How are environmental changes contextualised within biographies spanning more than six, seven, or even eight decades?

2. Theory and background

2.1. Rural ageing and climate attitudes

Recently, a growing number of studies have sought to link two challenges that have grown in significance in societies around the globe, including most European countries: the ageing of the population and the unfolding manifestations of climate change. These studies tend to present older people as a group particularly sensitive to climate change impacts – as Tara Quinn and Neil Adger note, “risks, perceptions, and the experience of climate change [...] become real as one gets older” (2011, p. 2257).³ Scholars give priority to the urban environment and thematise climate-induced health risks, particularly those associated with rising temperatures and extreme weather events such as floods or heat waves, and related adaptations at the level of infrastructure, institutions, and individual behaviour (Greenberg, 2014; Harrington and Otto, 2023; Wanka et al., 2014).

Another group of studies focuses on older people’s attitudes towards climate change, bringing ambivalent results. Some scholars view people of a higher age as “perfect climate allies” (Jewell, 2017) who can embrace environmental generativity and pro-environmental attitudes and behaviours (Frumkin et al., 2012; Roszak, 2009). For example, Lisa Zaval et al. (2015) show that older people’s legacy motivations can increase engagement with climate change and other environmental problems when activated to become more salient. Moreover, a long-term relationship with the local environment may bring deeper sensitivity towards its deterioration; environmental degradation can induce solastalgia and endanger the feeling of belonging (Ayalon et al., 2024).⁴

However, a substantial share of studies paints a less rosy picture (Andor et al., 2018; Poortinga et al., 2019). Despite the vulnerability of older generations, these scholars consider higher age an important factor affecting climate attitudes negatively – a trend confirmed in the aforementioned surveys (Eurobarometer, 2021; Gallup, 2024). RJ Reinhart (2018), for example, refers to the “global warming age gap” between older (55+) and younger (from 18 to 34) cohorts, a gap that has reached over 20 per cent among those agreeing that global warming poses a ‘serious threat’. Such findings fuel the claims that population ageing might represent a risk to mitigating climate change and that older people should be viewed, rather than victims, as those responsible for current environmental problems, raising questions about intergenerational solidarity and justice (Gardiner, 2011; Moody, 2017).⁵

The third group of studies questions age as a strong predictor of climate attitudes. Some scholars suggest focusing on generational/cohort differences (e.g. Haq et al., 2007). Others, such as Sara Goto Gray et al. (2019), acknowledge significant age-based differences but conclude that the environmental or political values people hold are better determinants of climate attitudes. Similarly, according to Lorraine Whitmarsh (2011), sociodemographic factors such as age, gender, or

² Defining the fluid and complex concepts of rurality and older age has always been challenging (Keating, 2008). From an emic perspective, older people are those who define themselves as such, rural areas can be those in which the rural imaginary, “a reflection of a set of attitudes, behaviours and beliefs” (p. 2), variable across contexts and in time, play an important part in people’s identities and experiences. In a descriptive perspective, older age is usually defined chronologically as being over 55, 60, or 65 years old. Rurality is defined as non-urban, with lower population density, remote (distant from metropolitan areas), with limited access to services, relying mostly on agricultural production, etc. (for a nuanced view, see e. g. Nelson et al., 2021).

³ For example, after Hurricane Katrina struck New Orleans in 2005, there was a disproportionately high share of older people among its victims (Adams et al., 2011).

⁴ The solastalgic yearning for ‘good old climate’ does not necessarily express a reflection of climate change as such. Even more than one hundred years ago, in an article entitled ‘The Remarkable Weather of 1911’, we can read: “There is a general impression among older men that the good old-fashioned winters in which ‘the snow was fifteen feet deep and lasted six months’ do not come any more” (Molena, 1912, p. 339).

⁵ Analogous framing is apparent in climate initiatives such as Fridays for Future. For example, Greta Thunberg stated: “Young people are being let down by older generations and those in power” (2020).

geographic conditions influence climate attitudes only indirectly.

Researchers analysing Czech society present similar results (Čermák and Patočková, 2020). They do not find a significant correlation between climate attitudes and age or other sociodemographic characteristics; instead, they see values as the crucial driver. Political values seem to represent a less important factor when compared to Western countries – the United States in particular – due to the fact that, in Czechia, climate change is not so politicised, and society is not so politically polarised (see also McCright et al., 2016).

Besides studies building on statistical surveys, there are also a number embracing qualitative perspectives, with some even taking personal experiences into account. Several link higher age with positive aspects regarding climate change perceptions and adaptations. For example, in Inuit societies that live in highly unpredictable climate conditions, older people can represent important holders of shared community knowledge based on observations rather than science (Ford et al., 2006; Ostapchuk et al., 2015). According to James Ford et al., they act as an “institutional memory” (p. 15), maintaining and transmitting experiential knowledge to younger generations, and helping them to adapt to the rapidly transforming climate.

A wealth of previous experiences can also provide older people with resources for psychological resilience in the face of extreme weather events (Adams et al., 2011; Strough et al., 2024). The ability to see a disruptive event in the context of situations similar to those they have witnessed in the past, as “something that happens as life keeps moving forward” (Tuohy and Stephens, 2012, p. 28), gives older people emotional protection, facilitates their adaptation, and relates to their identity as they struggle to maintain biographical continuity rather than biographical disruption (Faircloth et al., 2004). As Rebecca Kay et al. (2012) emphasise, the interpretations of the past are not only about remembering but also about (selective and culturally structured) forgetting. *Biographical contextualisation* (Galčanová and Staveník, 2020) can lead to a more positive interpretation of contemporary conditions, especially in the context of a post-socialist rural transformation that brought not only profound structural changes to rural areas but also shifts in shared meanings and dominant discursive framings of these transformations, including environmental change (Pospěch, 2014). Regarding climate attitudes, biographical contextualisation can produce ambivalent results and at least partially explain older people’s higher level of climate scepticism. As Rick Moody states (2015, p. 65): “[L]ong life experience gives many good grounds for scepticism. Many predicted disasters never happened, so is it any wonder that today’s seniors have doubts about global warming?”

Regarding rural ageing, the first texts linking it to climate change impacts come from Australia, focusing on ageing farmers facing harsh ecological conditions, barriers to accessing health and social care, or financial hardship (Austin et al., 2020; Harvey et al., 2024; Horton et al., 2010; Polain et al., 2011; Rich et al., 2012). Graeme Horton et al. (2010) frame their pioneering study with the ‘healthy ageing’ concept and point out the psychological effects of climate change impacts, ranging from distress regarding uncertain future and solastalgic feelings, to social isolation in communities where drought has intensified depopulation. John David Polain et al. (2011) add a gendered perspective, in which psychological health is affected by the loss of trust in the government and climate change, endangering rural older men’s identity connected to farming. Jane Rich et al. (2012) connect climate change with the experience of individual ageing, representing the perspective of women stressing “the connection between the changing environment, isolation and their experience of menopause” (p. 326).

A modest number of studies on rural ageing and climate change have emerged, whether in the Global South (Beckwith et al., 2023; Roos et al., 2013) – which is remarkable considering the intersection of rural poverty, structural disadvantages, and the seriousness of climate change impacts in many countries (Campbell et al., 2016) – or in the Global North, including Europe (Krawchenko et al., 2016; Schumann, 2015). According to Barbara Schumann, older people in Finnish Lapland,

especially those coming from indigenous populations and living in remote communities, are facing disproportionately severe impacts of climate crisis while having lower adaptive capacities due to structural disadvantage and their closer cultural and economic connection to the environment.⁶ In the context of Central Europe, only one study mentions climate change within issues perceived by older residents of the Czech countryside, reflecting on its post-socialist transformations (Galčanová and Staveník, 2020).

2.1. Ageing and experiential knowledge of climate change

In a certain sense, you have to be ‘old’ to have experienced climate change. The World Meteorological Organisation established that to describe the climate of a place, at least a 30-year period is needed (WMO, 2017). However, individual understandings of climate are neither a mere reflection of meteorological data nor a mere sensual process – in contrast to weather events such as rain or heat, you cannot feel it. As Mike Hulme et al. state (2009, p. 198): “Living in particular places and particular cultures, climate is constructed as a function of their experiences and memories of past weather events, and what is socially learned from previous generations.” This construct helps us evaluate whether particular weather is ‘normal’ or ‘abnormal’. After all, as famous aphorism says, “The climate is what you expect, the weather is what you get” (Quote Investigator, 2012).

As Dina Abbott and Gordon Wilson note, lived experiential knowledge “is a social process of making throughout our lives. [It...] arises from our long-term and short-term experiences of our encounters and dealings with the world around us. [It represents...] subjective knowledge with its own logic [...] that perhaps only make sense to the individual” (2015, pp. 27–28). Such knowledge is difficult to generalise as it is greatly reductionist to local contexts related to individual biographies and the sensing of particular weather events and patterns. Compared to scientific knowledge, experiential knowledge is also much less systematic and continuous, and emotions play an important role. Even when in accordance with scientific discourses, it quite easily brings about disagreement and contestation.

As we have already shown, studies exploring the link between personal experiences and attitudes towards climate change yield inconclusive results. While a number of them attribute significant effects to experiences (e.g. Spence et al., 2011; Zaval et al., 2015),⁷ they admit that a more nuanced assessment is needed and that merely experiencing events and processes attributable to climate change may not suffice to alter people’s attitudes. Adrian Brügger et al. (2021) deal with the question of when and how weather-related experiences are ascribed to changing climate. They argue that cognitive and emotional responses depend on various aspects and are largely biased. Some responses derive from objective characteristics such as magnitude, frequency, or sensory accessibility. While people can observe inconspicuous *processes* such as a recent rise in temperature (Howe et al., 2013), they usually struggle with detecting long-term patterns, and there is a greater chance they would pay attention to – and remember more accurately – dramatic and abnormal weather *events* and link them to changing climate (Marlon et al., 2019; Wang and Lin, 2018).

Other aspects of one’s responses to unusual weather-related situations, such as distinctiveness, emotions raised, or personal relevance, are subjective, and how they are constructed depends largely on previous experiences. For example, some authors argue it is necessary to engage with climate-related events directly to increase climate awareness

⁶ This chapter is part of probably the most detailed publication so far (Naskali et al., 2015), linking rural ageing and the impacts of climate change in Arctic regions.

⁷ In contrast to attitudes, Anne van Valkengoed and Linda Steg (2019) conclude in their metastudy that on the level of climate-adaptive behaviour, direct experiences have a much smaller effect.

(Demski et al., 2017; Lujala et al., 2015). Others claim that the memories are biased in favour of exceptional climatic events and episodes which have triggered strong personal or collective attention and emotions (Harley, 2003). What is considered 'normal' can also depend on affiliation to a specific cohort – long-term changes can go unrecognised because of the *shifting baseline* (Klein and Thurstan, 2016). Moreover, an evaluation of unusual weather can be intertwined with an evaluation of social processes – for example, it can become “a projection onto the climate of the rapid changes of American life” (Meyer, 2000, p. 213).

Then, there is the perspective on individual agency. When people feel unable to deal effectively with a threat, they may engage in coping strategies – including defence mechanisms such as ignoring or down-playing – to reduce their anxiety (Floyd et al., 2000). In the case of climate change, representing abstract and potentially life-threatening risks without obvious solutions, this option may be particularly appealing. Kari Marie Norgaard (2011), in her ethnographic study of a rural Norwegian town, shows that the denialist approach is socially organised. Being ubiquitous, the existence of climate change is generally acknowledged among well-educated and informed residents. Still, its repercussions are largely ignored as it is symbolically displaced and normalised to create a sense of ontological security. Climate change is something too overwhelming and too threatening to embrace or discuss. Therefore, people fail “to integrate this knowledge into everyday life or transform it into social action” (p. 11) and tend to focus on local, manageable problems or to recreate local history in their “collective backwards focus, whereas the consequences of climate change will be felt in the future” (p. 117). As one of Norgaard's interlocutors expressed: “People want to protect themselves a bit” (p. 80).

In accordance with studies pointing to the importance of values, Kate Sambrook et al. (2021) add that research on personal experiencing of climate change is, more or less, in line with the theory of ‘motivated reasoning’. According to this theory, people process information in a biased manner, preferring to maintain prior values and beliefs and assimilate them into existing mental representations of reality, which can be very stable over time. In the case of extraordinary weather events, such pre-existing factors can influence whether they are reported as something out-of-the-ordinary or something one should be concerned about (Dietz, 2013; Hart and Nisbet, 2012; Lacroix et al., 2020). Dan Kahan (2010) adds that this ‘filtering’ of information is largely collective. In the process of *cultural cognition*, disagreement over issues such as climate change arises not because of the lack of information or understanding but because “people endorse whichever position reinforces their connection to others with whom they share important ties” (p. 296). Moreover, motivated reasoning can even bias recollections of former experiences – climate sceptics are less likely to state that something unusual has been happening in the past (Shao, 2016). As Adrian Brügger et al. conclude, “[N]ot even the most dramatic experience can change how a firm sceptic thinks about climate change” (2021, p. 402).

3. Data and method

3.1. Study setting

We conducted our field research in 2021, in two rural settings situated in the central part of the Bohemian-Moravian Highlands and in South Moravia (see Map 1). The site selection was based on expert assessment by climatologists from the CzechGlobe – Global Change Research Institute of the Czech Academy of Sciences (GCRI), who aimed to identify locations where climate change may have become particularly apparent in recent years and which differ in geography, social structure, and the character of environmental changes (see Zahradníček et al., 2021). Such noticeable climate-related impacts included rising temperatures, changes in precipitation patterns, heatwaves, drought periods, extreme storms, milder winters, more destructive spring frosts, or collapsing forest ecosystems. Each region was also shaped differently by cultural and historical developments deriving from turbulent changes

occurring in the 20th century, such as modernisation and a dramatically improved standard of living, communist collectivisation and nationalisation of properties, subsequent restitution, privatisation, and the declining importance of agriculture after 1989, or recent rural gentrification (Galčanová and Staveník, 2020; Vidovičová, 2018), resulting in shifts to the population and local identities, or even in the meanings of rurality itself (Pospěch, 2014).

The first locality lies in the **Bohemian-Moravian Highlands**, in a relatively colder, semi-mountainous landscape, at about 700 m above sea level, close to the country's geographical centre. It consists mainly of small, dispersed settlements affected by ongoing rural gentrification – they are just partly inhabited by a permanent population, and many people come here for holidays in winter and summer. Despite the dramatic changes brought about by intensive landscape management, urbanisation, and industrialisation in the second half of the 20th century and post-socialist gentrification, the area maintains⁸ its historical identity associated with the rural idyll and picturesqueness (Librová, 1979).

The second region is situated in **South Moravia**, close to the Austrian and Slovak borders, and it mainly consists of larger villages surrounded by an intensive agricultural landscape. It lies at an altitude of about 200 m above sea level. Its eastern part is sometimes called the ‘Moravian Sahara’ for its sandy soil coming from the air-blown sediments of the Morava River. Meanwhile, the western part has recently garnered the nickname ‘Moravian Tuscany’ for its wavy, photogenic landscape, which has earned it a place among one of the most beautiful landscapes in Europe (Morton, 2021). However, its attractiveness is somehow paradoxical: it partially stems from landscape's poor ecological state. What tourists appreciate are the aesthetics that result from intensive agricultural methods employed on vast fields cultivated by large companies. Agriculture – together with folklore and rich community life – is part of the local identity, and many people have plots where they grow wine grapes or various fruits and vegetables.

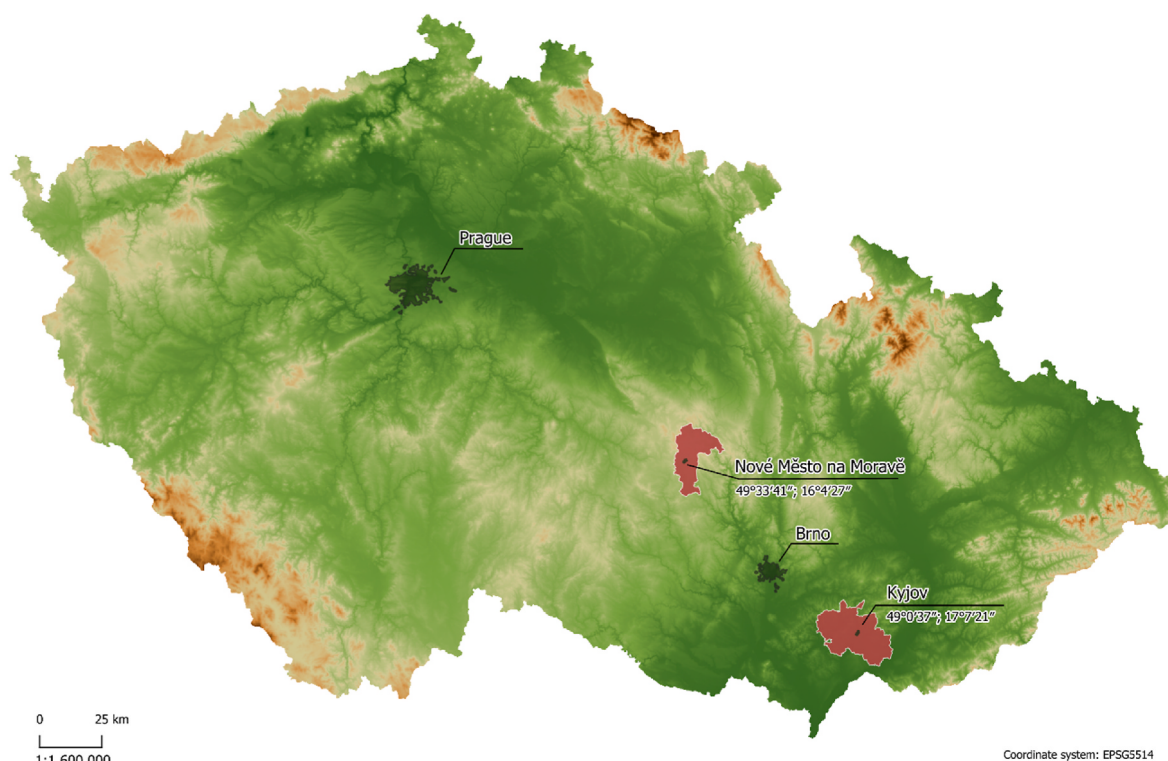
3.2. Research sample

We approached research participants through the mayors of eight municipalities (four in each region), serving as gatekeepers, and through subsequent snowball sampling, looking for long-term older residents.⁹ The youngest participant was 54, and the oldest was 85 years old, with an average age of 73 in South Moravia and 74 in the Highlands. When constructing our sample, we maintained as high a level of heterogeneity as possible with regard to occupation or the type of interaction with the environment. At the same time, we preferred people we thought would be open to reflecting on environmental changes in greater depth, such as farmers, winemakers, or people working in tourism; we also preferred people who had lived in the same place for decades.

Because of the participants' age, the research process was substantially affected by the COVID-19 pandemic (see Galčanová Batista et al., 2024). However, from June to October 2021, we were able to carry out 40 interviews (10 women and 7 men in Highlands and 11 women and 12 men in South Moravia). While reaching a certain level of theoretical saturation, when the patterns regarding climate change related explanations started to repeat, the sample size was also based on convenience (both in terms of time and resources). Our attention focused on participants' memories, attitudes, feelings, experiences, and coping strategies related to their interaction with the environment and the changes it has been undergoing. The logic of our interviewing was emic – we primarily let our participants talk about issues they themselves considered important. However, if not emerging organically, we also asked about various issues that they might have noticed, issues we raised based on

⁸ It is apparent, for example, in tourism marketing (e. g. Vysočina Tourism, n. d.) and in our interviews.

⁹ The definition of “long-term” and “older” was based on self-identification criteria, not on prescriptive chronological age or length of residential history.



Map 1. Two research fields on a map of the Czech Republic (author: Tereza Váľková, data source: ZABAGED DMR 5G and ArcČR 4.0).

consultations with climatologists. Special attention was devoted to creating a safe atmosphere when discussing sensitive moments, such as the loss of a familiar environment (Guillemin and Gillam, 2004). The interviews were supplemented with participant observation and, in some cases, with go-along ethnography and photovoice, techniques aimed at eliciting place-related memories and personal biographical contexts. All participants signed informed consent forms, and we have anonymised their identities.¹⁰

3.3. Data analysis

We conducted the data analysis utilising Atlas.ti software, inspired by the principles of constructivist grounded theory (Charmaz, 2006). In the initial phase, interviews were transcribed verbatim and open coding was conducted. Consequently, an inductive, climate-focused coding was performed, after conceptualisations were discussed and particular research questions were formulated by the team. In this phase, an etic perspective was also applied, to contextualise participants' explanations within current climatological knowledge. Our goal was not to evaluate the 'correctness' of our participants' responses but rather to understand the ways in which they related their own understandings to available scientific and other framing and how they perceived the relevance of such understandings.

4. Results

During the interviews, older people living in both localities mentioned various experiences with environmental changes, especially

those related to shifts in landscape management.¹¹ They proved to be good observers, critically evaluating agricultural and forestry practices, describing in detail the transformation of places in which they grew up, or naming new or vanishing species of flowers and animals. Many expressed feelings that something strange or even wrong was occurring in the natural world around them, and they associated them with negative shifts in society, such as an excessive level of consumption or human arrogance. Less often, participants mentioned transformations of nature that people caused indirectly, such as those related to temperature, snow cover, or precipitation. However, even then, they proved to be able to notice subtle processes or patterns.

When we shifted our conversations towards climate change and whether it somehow relates to participants' observations, the mood usually changed. For the majority, it seemed to be an inconvenient topic, and they resisted the idea that its impacts could be felt currently or that they possibly would be in the near future. Only episodically did we hear climate-related expressions of remorse or intergenerational responsibility.¹² Regarding the future, participants leaned towards embracing fatalistic, techno-optimistic, or wishful thinking. Sometimes they even downplayed the seriousness of the climate crisis and mentioned uncertainty regarding its causes. Such scepticism may have been coupled with distinguishing themselves from 'urban elites', represented by media, politics or academia. Others were ready to acknowledge the climate was changing. However, even among these individuals, many wavered, distancing themselves temporally or geographically. With confidence, they claimed to be 'safe' – at least for

¹⁰ Therefore, in presenting our findings, we use nicknames, and we avoid referencing places or situations in identifiable detail.

¹¹ The human impact on the landscape was evaluated ambivalently. Sometimes, it was framed as the ecologically harmful pressure of technological civilisation; sometimes, it was understood as the opposite – the lack of human intervention leading to rewilding was considered a problem.

¹² In perceiving intergenerational relationships, the experiential perspective also played a role. Participants often associated environmental activism with young, unexperienced 'kids', too young and too urban to really understand things.

now – because of the surrounding forests or hills or generally because of the favourable geographical position of the Czech Republic.

Four climate-related issues became salient in our interviews: (1) the collapse of spruce forests, (2) decreasing snow cover, (3) long-term drought, and (4) extreme storms. Other issues identified by climatologists, such as rising temperatures or changes in biodiversity, seemed to be perceived as less meaningful to participants – or perhaps they were simply more difficult to notice or verbalise. These four tangible occurrences, comprising the focus of our analysis, sometimes produced strong emotional responses; they seemed to disrupt participants' ontological security or the understanding of what is 'normal' for the place they considered 'home'. Two of the phenomena were more long-term, two appeared quite suddenly, and each produced different kinds of responses.

4.1. Collapse of spruce monocultures

In the Bohemian-Moravian Highlands, the most pressing environmental change participants reflected upon concerns the recent collapse of the spruce monocultures that made up most of the forests in the region. The deterioration of these vulnerable biotopes was triggered by the most destructive bark-beetle overpopulation in Czechia in documented history, enabled by warmer climate and drought (Brázdil et al., 2022).¹³

Looking back into history or at old paintings, one would surmise that aesthetic appreciation and identity in Highlands would be linked to the Arcadian-like landscape. However, in our conversations, spruce forests seem to be even more important. They are depicted as "the most beautiful forest" which "the Highlands are known for" and where people are accustomed to go for walks and pick mushrooms or blueberries. The rapidity, radicalness, and strikingness of transformation – with large clearings emerging on numerous sites where the grown forest had previously stood – may have contributed to the prominence of this issue in our conversations.

Nevertheless, some participants tend to normalise the current situation. They portray bark beetles as part of natural processes and something they had experienced in the past. The causes for its exceptional spread are seen elsewhere than in unusual climate conditions – primarily in poor forestry management, exemplified by a comparison between the "tidy" forests of the past and the current "mess". The experience of disappearing forests is assimilated into existing mental frameworks and interpreted through simplified – linear, concrete, human-made and localised – causalities. Rudolf (85), a forest worker and farmer, states: "In the Bohemian Forest National Park, I think the 'wise guys' let it spread. And that's how it turned out." Being sceptical towards natural scientists and environmental activists ("wise guys"),¹⁴ Rudolf doubts climate change is occurring. He also doubts the recent drought period, which he noticed, could have contributed to the problems with the spruce trees. Instead, he embraces a business-as-usual attitude, tenaciously building on his long professional experience and place-based collective memories:

There's a creek running not far from here. It's damp, but there was a bug there, too. So, it's difficult to make up one's mind. [...] We are preparing to plant spruces again. I don't think you can eradicate

them all at once. For example, the forests around used to be cut down for the smelters. And they grew up again.

Others, such as Lenka and Gabriela, don't normalise the situation. They describe the spruces as an integral part of the place in which they grew up. Expressing solastalgia, they situate their own experiences in accordance with negative scientific prognoses. Lenka (70), running a small organic farm, admits to having changed her mind recently:

No one expected the weather to change in such a way. It's much warmer. [...] Earlier, when the bark beetle attacked the spruce tree, he covered it with resin. But because of the dry years, they had no power at all. [...] I don't know what the weather's gonna do, but I no longer believe the spruce forest could thrive because the planet is really different. And I'm glad I won't live to see it.

Gabriela (70) spent decades working in a forest and a cowshed. Her attitude is more ambivalent. On the one hand, she also brings scientific discourses into consonance with her – quite skilled – observations:

The forests bloomed once every five to seven years. That was enough to have seeds to regenerate. But in the last few years, they bloom every second or third. I asked a forester about it, and he said, "Yeah, the forests aren't stupid. They're getting ready for some kind of disaster".

On the other hand, Gabriela is coping with her negative emotions by resorting to wishful thinking. She displaces the problem, hoping that changes won't affect her home, where she feels safe thanks to its higher altitude. Emphasising recent experiences, which might, in her eyes, signify a return to normalcy, she attributes them to nature's resilience:

It's not that bad. When someone comes from Jihlava or Třebíč, they are envious.¹⁵ They say we're golden. So maybe we have such a chance here. [...] This year, the weather is like it used to be in our times. They say that COVID has rectified nature, that it has had an effect, that the planes don't fly so much. First and foremost, it's raining. So, I think that nature can't be commanded.

4.2. Thinning snow cover

The second big issue emerging during interviews in the Bohemian-Moravian Highlands relates to the winter season. It used to be normal that thick snow cover lasted for several months, offering perfect winter sports conditions. But with rising temperatures, it has started to change, jeopardising, for example, the famous biathlon and cross-country races (Narguet, 2024).

The snowy landscape seems embodied in the participants' identities. They notice snow cover is getting thinner, lasts for a shorter time, and is often interrupted by thawing periods. Almost everybody reminisced about "snow as high as the fence" or "piles of shovelled snow to make it possible to walk along the road"; the scale of the change was voiced by dramatically increased car accessibility of remote places during winters. However, many cast doubt on whether it is some permanent trend or just some kind of temporal fluctuation.

One example is Cecilie (75), who grew up in a secluded homestead and then worked at the post office. With solastalgia, she associates snow with her childhood memories. She acknowledges – with a mixture of relief and concern – that the snow conditions may be irreversibly changing, and she puts them in context with other weather-related occurrences:

There used to be terrible winters here. There used to be so much snow. Once there was a blizzard for a week and it was snowing so

¹³ Drought emerged as a prominent theme especially in South Moravia, but its manifestations were evident throughout the country. In elevated regions such as the Highlands, where rivers originate and it is a problem to keep water in the landscape (partly because of insensitively engineered drainage systems), the problem of water supply was sometimes palpable as well.

¹⁴ Rudolf refers to the conflict over solving the bark-beetle overpopulation in the valuable parts of Bohemian Forest National Park, which in the summer of 2011 resulted in direct environmental action. The blockade, supported by a number of natural scientists, brought a strong negative societal response (Pelikán and Librová, 2015).

¹⁵ Areas around the cities of Jihlava and Třebíč represent the southern and lower part of the Highlands, where the calamity hit hard and led to substantial changes in forest composition and shape of the landscape (Brázdil et al., 2022).

much that we couldn't even ski to school. So, my dad harnessed the horses onto a big sled. All the kids from the village came, we got on the sled, and dad drove us to Sněžné and returned for us in the afternoon. We don't have winters like that anymore. The warming's already made itself felt. [...] I guess it's also responsible for the recent heavy rains. I don't remember anything like that.

Jarmila, a 54-year-old operator of an accommodation facility, also admits snow conditions have changed dramatically. She emotionally links them with trends affecting forests. However, she's not sure climate change is to blame and leans towards wishful thinking. Emphasising – in quite a bit of detail – aesthetic aspects, she perceives ecological conditions “as they used to be”, as part of her home, and she rejects imagining things could be different in the future:

There used to be more snow. And you knew it fell in November and was gone by March. Now it's like, it snows, it melts, it snows, it melts... For ten years, it can be like this, like a seesaw. Anyone who says they can't see the changes is drivelling. If he's lived here long enough, the changes are there. [...] It's better not to think about the future. Because one might worry unnecessarily that nature won't be what one has been used to since childhood. And it might not even happen. I can't imagine going out in the morning and not seeing spruces. The cobwebs on those young trees, that dew. Nobody's gonna get me into the woods if it's just those leafy beasts.

Others interpret snow-related memories differently – the broad spectrum of winter conditions they had experienced allowed them to relativise. Bohumil (79), a homestead owner who worked in the metalworking industry, refers to the authority of science. However, somewhat paradoxically, he is distancing himself from the mainstream climate narrative, which he construes as abstract knowledge assigned to outsiders who can't know – or remember – the “real” state of things. His scepticism is founded in localised, decades-long experiences to which he gives priority. Withstanding many demanding situations throughout his life allows him to contest – albeit inconsistently – the severity of manifestations attributable to the changing climate:

They say it's getting warmer; glacier after glacier is melting. That could be out there somewhere. I don't have that wide a view, I just look around. [...] The weather goes through cycles. It is said to be either an eight- or eleven-year cycle. And it's probably true; it's been observed. There was the catastrophic winter of 2005–2006. Snow was up to the roofs, and several barns fell. [...] In the cities, it can appear to be somehow because they live in those rabbit hutches. But here, I don't think there's any significant deviation.

4.3. Drought

In South Moravia, different kinds of climate-related situations gained prominence. Probably the most discussed issue was the drought. The region in which we did our fieldwork was among those most affected by an exceptionally long and severe period of drought, which lasted between 2015 and 2020 and, based on analysis of carbon and oxygen isotopes, was unprecedented in the last two thousand years (Büntgen et al., 2021). In Czech society, it became one of the most pressing environmental issues, even if it wasn't followed by similar growth in climate concern (Eurobarometer, 2017, p. 16).¹⁶ The longer the drought lasted, the more it also became contextualised within climate change in the media (Čada, 2023).

A once rather abstract threat became tangible for our participants as well. They recall how water levels in wells fell dramatically, the

landscape became yellowish in early summer, and how the situation became especially dire for farmers. Nonetheless, their statements are somewhat similar to the Highlanders' reflections on snow cover – maybe because both are temperature-related, non-linear, and long-term processes that can be difficult to grasp. Participants normalise the situation by talking about natural cycles or describing themselves with self-confidence as historically prepared, being natives of the “Moravian Sahara”. However, despite the drought being perceived as more common than the lack of snow up in Highlands, worries that an event of such unprecedented magnitude could become the ‘new normal’ seem to be more pronounced. Alois, a 71-year-old winemaker, has founded his concerns on an experience which affected his family:

We are afraid that this will go on and on. That wells will run dry. My brother lives nearby. And when he was building there 30, 40 years ago, his foundations almost went into the water. Now it's been fourteen days since I asked him, and he said, “Man, I don't have any water”.

Participants' seemingly higher level of concurrence with a scientific discourse is accompanied by competing explanations. In a manner similar to the Highlanders' deliberations regarding snow, they simplify the causes of the drought. They tend to link them to a single easily observable determinant, and relate to local geographical conditions or landscape management rather than distant atmospheric processes. A diversity of explanations appears: an extensive system of mine shafts or sandy bedrock soaking the water, the presence of a small hill, a lake, or a big field affecting air flows, or the end of the drought as a consequence of grounded planes during the COVID-19 pandemic.¹⁷ Actually, it made us smile each time we were told that the rain always falls “over the next village”, and then we would come to this very next village and hear a similar narrative, that it only rains in the village from which we just came.

Karel (81), a professional driver who grew up on a small farm, represents someone who typically makes such reflections. He anticipates drought to intensify in the future, yet he still seems to count on his senses and community-shared knowledge more than on science's empirical findings:

I think everyone will be looking to stock up on rainwater. I'm not worried about my home – I'm worried about the landscape. We're still at the stage where if you plant something, it grows. We will make it, but in thirty or fifty years, it will be bad. [...] Here is the driest area. The west winds go over the hill – I know this from my youth. You could see how the storm came from the west and then dissipated. We were dry, and it was raining everywhere.

Some participants have begun to adapt their behaviour to their experiences. Building irrigation systems for vineyards and fields, deepening wells, and expanding capacities to stock up on rainwater, they do not seem to think that a similar situation will only happen again in the distant future. Marie (74), who engages in a healthy lifestyle and had several jobs related to alimentation before her retirement, explains:

When there's a storm, I scream that the water's overflowing [the rain barrel], and I use a pot to scoop it up. I'm a water freak. When we had those dry years, we paid a lot. And I figured we gotta start saving the rainwater. [...] Also, I run the water from the washing machine into the bathtub and wash the ground with it.

4.4. Extreme storms

For our South Moravian participants, the second notable climate-

¹⁶ When asked about four most pressing environmental issues, 40 per cent of Czechs named “frequent drought or floods”, earning them second place in the EU. In contrast, only 23 per cent – least in the EU – named “climate change”.

¹⁷ The discourse is much like Gabriela's quote concerning the spruce forests.

related issue represent exceptionally powerful storms, sometimes accompanied by floods and gales.¹⁸ The growing concern relates in particular to the situation that occurred in June 2021 when, right next to the research location's eastern boundary, there appeared something never seen before – a violent tornado that, within minutes, swept away houses in several villages and left six dead and hundreds wounded.¹⁹ Although our participants were not directly affected, they seemed traumatised, so naturally, it was a very sensitive topic to discuss.

Vlasta (75) lives just a few hundred meters from where the tornado's raging stopped. She vividly describes seeing devastated places she has known her whole life. Feeling helpless, she acknowledges the randomness of the event, which brought radically different outcomes; some people lost their property while others, living just a short distance away, barely noticed something was happening.

From the bus, it's twice as bad. I was going to rehabilitation, and it scared me every day. Seeing the gamekeeper's house made me sick because I used to go there. Now we've been there to collect it, so we've recalled that it's happened. Traverses twisted, everything destroyed... There was this two-metre carved bear, and it's not there anymore. We turned into this street by the railroad tracks, and there was damage to every house.

Naturally, participants seek to protect themselves psychologically, hoping the tornado was a one-time event. However, despite the shocking event, which dramatically disrupted ontological security and perceptions of what is possible, participants remain surprisingly open to expressing their fear that something similar might happen again in the foreseeable future. They acknowledge that the appearance of tornados or extreme storms might be a sign of gradual change, and they link these issues to the extreme event discussed above – drought.

Hana (75), who spent most of her career performing manual labour for an agricultural company, tries to normalise the situation, finding the precedent in collective memories. However, she admits that tornado can foreshadow what climate conditions will look like in the future:

Our elderly said they were driving, and the wind lifted the wagon with the cows. It must have been some kind of whirlwind. [...] I think such extremes will be more common. Maybe we weren't as aware of it, and it was before, too, but it seems to me that it's escalating. And now it's affecting us in our backyard... I'm afraid there's gonna be a drought and then sudden rains and floods, or there could be some horror like that.

Several participants engaged in reasoning similar to that which we encountered when discussing the drought. In fact, the tendency to localise and simplify the causes of extreme storms seems even more prevalent in this case. The dynamic of storms – including the tornado – is explained by the presence of ore below the surface or geographical features such as ridges, hills, fields, or forests. The sudden termination of the tornado's destructive path is interpreted as the result of specific attributes of the place where it occurred, for example, the presence of a large forest or elevated railway embankment. Emil, a 75-year-old livestock technician, switches between local and global explanations. Being able to contextualise both levels within the framework of his experiences, he doesn't see a contradiction between seemingly disparate interpretations.

In the past, the landscape here was bare, literally the Sahara. With the reforestation, it started to rain a bit again. Because the diversity of the landscape attracts water. [...] However, I think climate change is having some effect. I can't back it up scientifically, but you can see

that it's extreme on the extreme. It has never happened that 200 mm per one square metre fell at once. Well, has there ever been a tornado here? It means that the air is extremely hot and the ground is abnormally heated. The vortex has to form somehow, right...? And only the forest, just down the road from us, stopped it.

5. Discussion and conclusion

Despite its increasing relevance for environmental gerontology – considering the deterioration of the global climate system and the acceleration of population ageing – there remains a lacuna in studies from diverse geographical and sociocultural contexts that focus on the intersection between rural ageing and climate change perceptions. Our research has brought greater clarity to this issue, although it represents merely a fragment in this emerging mosaic. Coming from the Central European, post-socialist, and relatively climate-sceptic cultural context, it has introduced various repertoires through which older people living in two Czech rural areas explain climate-related changes in the environment they have inhabited for decades. The analysis has focused on four issues which became salient during in-depth interviews: (1) the collapse of spruce forests, (2) decreasing snow cover, (3) long-term drought, and (4) extreme storms.

A brief look at the data we have presented might lead to the conclusion that participants do not fully comprehend the complex nature of the environmental changes surrounding them. The narratives shared with us are full of paradoxes and, from a scientific point of view, often wrong; some even deny anything significant is happening. Despite repeatedly describing climate-related issues as mutually interconnected, only occasionally does climate change emerge as a shared explanatory framework. However, is it possible to assert that people we interviewed do not understand the place in which they have spent nearly their entire life? Certainly, the knowledge of our participants constitutes meaningful systems rich in detail and context. And after all, they appear look confident that their knowledge is more genuine than the abstract reasoning of 'experts' living far away.

In their frequent scepticism, or even denial, our participants resemble their peers from relatively similar rural backgrounds in cultural terms, such as Norway (Norgaard, 2011) or Australia (Austin et al., 2020). Moreover, they are people from Western consumerist societies, who can be considered – from a global perspective – disproportionately responsible for current climate crisis. In places situated in the Global South or populated by Indigenous societies, where communities are imminently endangered by climate change impacts, people have fewer options to adapt. They may perceive climate-induced threats as something brought upon them by rich, fossil-fuel-dependent economies, and such relativisations are much less common or are, at least, more nuanced (Ford et al., 2006; Lazrus, 2015; Rudiak-Gould, 2009). Changing climate endangers not only livelihoods and traditional cultural practices, such as hunting, foraging or harvesting but also intergenerational relations in Indigenous communities. Elders are often respected as authorities who bear valuable traditional knowledge that continues to lose its relevance under new climate conditions (Herman-Mercer et al., 2016; Ostapchuk et al., 2015).

Our participants prefer to make sense of climate-related events and processes by translating them into more familiar and imaginable logic (comp. Norgaard, 2011). Their culturally shaped interpretations tend to be simplifying, consisting of local, visible and feelable, short-term, 'one cause-one consequence' explanations, which create assemblages of individual experiences, collective memories, and pieces of expert information. These epistemological shifts from complex to simple and abstract to concrete can be understood as a part of the effort to normalise changes that may be perceived as threatening and difficult – if not impossible – to influence from the perspective of an individual. These changes raise emotions such as uncertainty or solastalgia and affect ontological security, identity, and perceptions of home. The

¹⁸ Increasingly powerful storms were noticed in Highlands as well. See, for instance, Cecilie's quote.

¹⁹ Rated as an F4 on the Fujita scale, it became the deadliest tornado in Europe since 2001 (Korosec, 2021).

participants' higher age might make those changes even more threatening and traumatic, as they refer to scenarios that used to seem stable, to the landscapes in which they grew up or to the values and attitudes that solidified over their lifetime (comp. Ayalon et al., 2024; Beckwith et al., 2023; Polain et al., 2011). In other words, at a higher age, it may be too difficult to change one's perspective on the world around and one's role in it, especially when feeling increasingly powerless. It may be a logical step to stick to the narratives one is accustomed to.

In interpretations of the four climate-related issues, personal experiential knowledge seems to play a pivotal role. Higher age enables participants to perceive themselves as experienced – those who 'know better'. Despite conceding that their knowledge may be imperfect, they construct it primarily through changes they have directly felt, seen, or talked about, rather than those they have read about or heard about on television. Sometimes, their experiential knowledge supports scientific discourse – and sometimes, it provides authority for other explanations. However, none of the participants has exhibited the conviction that climate change is (or is not) happening solely based on their long-time experiences; pre-existing values and beliefs – especially the belief in climate change as such – seem to play a crucial role (comp. Dietz, 2013; Hart and Nisbet, 2012; Lacroix et al., 2020).

With regard to participants' specific characteristics, their higher age and rurality, it does not seem – somewhat counterintuitively – that the volume and proximity of climate-related experiences themselves make them more perceptive to climate change manifestations or make them understand reasons for their occurrence more accurately. On the contrary, our analysis shows how counting on previous experiences can become misleading in the context of a rapidly changing environment. A wide range of experienced events allows new ones to be assimilated more easily into existing mental frameworks, facilitates their contextualisation within their own biographies, and obfuscates the existence of climate change (comp. Galčanová and Staveník, 2020; Tuohy and Stephens, 2012). Our research is thus in accordance with those considering the effect of age or rurality on climate attitudes as rather indirect (e.g. Whitmarsh, 2011).

Clearly, there exists considerable heterogeneity within our group of research participants. Coming from different environments and belonging to different cohorts, there is a wide scale of understanding concerning which state of landscape or which climate conditions are to be considered 'normal'. A *shifting baseline* is related to the "landscape of my childhood", which underwent a dramatic transformation in the second half of the 20th century, rather than to the climate. Nevertheless, the higher the age, the more sceptical our participants seem towards the existence of climate change, and the more they succumb to *biographical contextualisation*. They have lived through so many dramatic changes – including war and communist persecution – that it seems difficult for them to become excited by another intense change in the final phase of their lives. In contrast, the younger participants – especially the women (comp. Rich et al., 2012) – seem more concerned about and emotionally involved in climate-related changes, and they often refer to them as an issue that touches them personally.

We do not observe any significant differences regarding each of the four analysed phenomena; their perceptions seem to be driven by similar logic. This similarity may be caused, for example, by the fact that even in the case of long-term processes, their manifestations have only recently become more tangible. More distinctive is the difference between the two regions. In the Bohemian-Moravian Highlands, participants seem to construct their situation as less severe, maybe because the environmental impacts haven't yet directly affected their livelihood – they instead relate to their free time, aesthetic preferences, or identity. People from the Highlands tend to express that they feel safe, embracing wishful thinking and even highlighting the bright side of the environmental changes.

In contrast, in South Moravia, people consider themselves more vulnerable. They acknowledge the fragility of the local ecosystem, heavily transformed by human activity, with whom they are more

interconnected on an everyday basis. The multiplicative effect of dramatic events with severe consequences for the communities as a whole, which have occurred in a short period, prompting climate-related discussions, may have contributed to such position (comp. Demski et al., 2017; Harley, 2003; Lujala et al., 2015). South Moravian participants less often normalise the situation and are open to the possibility that the events they experienced are interconnected and that the future might not look like their childhood. This acknowledgement materialises in adaptations at both individual and institutional levels.

Finally, the difference in the character of responses in the two regions might also be explained by the different collective identities. In South Moravia, where people themselves – individually as well as at the level of collective memory – identify as vulnerable, they could be more open to facing the climate crisis than in the Highlands, where embracing future threats posed by climate change would require a more radical cultural transformation.

CRediT authorship contribution statement

Vojtěch Pelikán: Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Lucie Galčanová Batista:** Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used the Consensus tool in order to find more relevant texts for theoretical framing. Moreover, the authors used the Grammarly tool to help them improve the language level of the text written by non-native English speakers. After using these tools, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

Funding

The data collection for and the writing of this article were supported by a grant from the Czech Science Foundation „Ageing and Older People in the Time of Climate Change“ (GA20-12567S).

Declaration of competing interest

We, as authors of the manuscript “*This year, the weather is like it used to be in our times*”: *Experiencing climate change in the context of rural ageing in the Czech Republic*, declare that we have no conflict of interest.

Acknowledgements

We want to thank the guest editors for giving us the opportunity to publish this study in the special issue and for their helpful service throughout the publication process. We would like to express our gratitude to the CzechGlobe – Global Change Research Institute of the Czech Academy of Sciences (GCRI) members for their consultations and cooperation, namely to Pavel Zahradníček and Professor Miroslav Trnka. We also thank Professor Bernadette Nadya Jaworsky for proof-reading this manuscript. Besides, we are grateful to the rest of our research team – Marcela Petrová Kafková, Terezie Lokšová, Tereza Válková, Jaroslava Pivcová, Kristýna Kaymak Minaříková, Kateřina Lorencová, and Vojtěch Prazák – for their involvement in the data collection process and their critical insights. Last but not least, we'd like to appreciate the openness of our research participants to strangers who asked them to share their experiences and stories.

Data availability

The authors do not have permission to share data.

References

- Abbott, D., Wilson, G., 2015. *The Lived Experience of Climate Change: Knowledge, Science and Public Action*. Springer.
- Adams, V., Kaufman, S.R., Van Hattum, T., Moody, S., 2011. Aging disaster: mortality, vulnerability, and long-term recovery among Katrina survivors. *Med. Anthropol.* 30 (3), 247–270. <https://doi.org/10.1080/01459740.2011.560777>.
- Andor, M.A., Schmidt, C.M., Sommer, S., 2018. Climate change, population ageing and public spending: evidence on individual preferences. *Ecol. Econ.* 151, 173–183. <https://doi.org/10.1016/j.ecolecon.2018.05.003>.
- Austin, E.K., Rich, J.L., Kiem, A.S., et al., 2020. Concerns about climate change among rural residents in Australia. *J. Rural Stud.* 75, 98–109. <https://doi.org/10.1016/j.jrurstud.2020.01.010>.
- Ayalon, L., Ulitsa, N., AboJabel, H., Engdau-Vanda, S., 2024. “We used to have four seasons, but now there is only one”: perceptions concerning the changing climate and environment in a diverse sample of Israeli older persons. *J. Appl. Gerontol.* 43 (5), 527–535. <https://doi.org/10.1177/0734648231212279>.
- Beckwith, L., Warrington, S., Nguyen, H., et al., 2023. Listening to experiences of environmental change in rural Vietnam: an intergenerational approach. *Prog. Dev. Stud.* 23 (4), 461–480. <https://doi.org/10.1177/14649934231173849>.
- Brázdil, R., Zahradník, P., Szabó, P., et al., 2022. Meteorological and climatological triggers of notable past and present bark beetle outbreaks in the Czech Republic. *Clim. Past* 18 (9), 2155–2180. <https://doi.org/10.5194/cp-18-2155-2022>.
- Brügger, A., Demski, C., Capstick, S., 2021. How personal experience affects perception of and decisions related to climate change: a psychological view. *Weather, Climate, and Society* 13 (3), 397–408. <https://doi.org/10.1175/WCAS-D-20-0100.1>.
- Büntgen, U., Urban, O., Krusic, P.J., et al., 2021. Recent European drought extremes beyond Common Era background variability. *Nat. Geosci.* 14, 190–196. <https://doi.org/10.1038/s41561-021-00698-0>.
- Burholt, V., Dobbs, C., 2012. Research on rural ageing: where have we got to and where are we going in Europe? *J. Rural Stud.* 28 (4), 432–446. <https://doi.org/10.1016/j.jrurstud.2012.01.009>.
- Čada, K., 2023. „Tady prostě umírají lidi a budou umírat“: Příběhy sucha, kulturní kódy a environmentální diskursy. *Czech Sociol. Rev.* 59 (5), 487–512. <https://doi.org/10.13060/csr.2023.016>.
- Campbell, J., Singh, A., Sharp, J., 2016. Rural communities and responses to climate change. In: Shucksmith, M., Brown, D. (Eds.), *Routledge International Handbook of Rural Studies*. Routledge, pp. 531–543.
- Carroll, M., Walker, J., 2020. Rural older people, climate change and disasters. In: Skinner, M., Winterton, R., Walsh, K. (Eds.), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. Routledge.
- Čermák, D., Patočková, V., 2020. Individual determinants of climate change scepticism in the Czech Republic. *Slovak Sociological Review* 52 (6), 578–598. <https://doi.org/10.31577/sociologia.2020.52.6.24>.
- Charmaz, K., 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. Sage.
- Copernicus, 2024. Copernicus: In 2024, the world experienced the warmest January on record. Copernicus Climate Change Service Press Release. <https://climate.copernicus.eu/copernicus-2024-world-experienced-warmest-january-record>.
- Demski, C., Capstick, S., Pidgeon, N., et al., 2017. Experience of extreme weather affects climate change mitigation and adaptation responses. *Clim. Change* 140 (2), 149–164. <https://doi.org/10.1007/s10584-016-1837-4>.
- Denniss, R.J., Davison, A., 2015. Self and world in lay interpretations of climate change. *International Journal of Climate Change Strategies and Management* 7 (2), 140–153. <https://doi.org/10.1108/IJCCSM-03-2014-0046>.
- Dietz, T., 2013. Bringing values and deliberation to science communication. *Proc. Natl. Acad. Sci. USA* 110 (Suppl. 3), 14081–14087. <https://doi.org/10.1073/pnas.1212740110>.
- Drum, K., 2019. Support for climate change policies is a mile wide and an inch deep. Mother Jones. <https://www.motherjones.com/kevin-drum/2019/05/support-for-climate-change-policies-is-a-mile-wide-and-an-inch-deep/>.
- Eurobarometer, 2017. Attitudes Of European Citizens towards the Environment (Special Eurobarometer 468). European Commission. <https://europa.eu/eurobarometer/surveys/detail/2156>.
- Eurobarometer, 2021. Climate Change (Special Eurobarometer 513). European Commission. <https://europa.eu/eurobarometer/surveys/detail/2273>.
- European Environment Agency, 2024. Global and European Temperatures. European Environment Agency Indicators. <https://www.eea.europa.eu/en/analysis/indicators/global-and-european-temperatures>.
- Faircloth, C.A., Boylstein, C., Rittman, M., et al., 2004. Sudden illness and biographical flow in narratives of stroke recovery. *Sociol. Health Illness* 26 (2), 242–261. <https://doi.org/10.1111/j.1467-9566.2004.00388.x>.
- Floyd, D.L., Prentice-Dunn, S., Rogers, R.W., 2000. A meta-analysis of research on protection motivation theory. *J. Appl. Soc. Psychol.* 30 (2), 407–429. <https://doi.org/10.1111/j.1559-1816.2000.tb02323.x>.
- Ford, J.D., Smit, B., Wandel, J., 2006. Vulnerability to climate change in the Arctic: a case study from Arctic Bay, Canada. *Glob. Environ. Change* 16 (2), 145–160. <https://doi.org/10.1016/j.gloenvcha.2005.11.007>.
- Frumkin, H., Fried, L., Moody, R., 2012. Aging, climate change, and legacy thinking. *American Journal of Public Health* 102 (8), 1434–1438. <https://doi.org/10.2105/AJPH.2012.300663>.
- Galčanová, L., Stavenfk, A., 2020. Ageing in the changing countryside: the experience of rural Czechs. *Sociol. Rural.* 60 (2), 329–356. <https://doi.org/10.1111/soru.12292>.
- Galčanová Batista, L., Urbaniak, A., Wanka, A., 2024. Doing ageing research in pandemic times: a reflexive approach towards research ethics during the COVID-19 pandemic. *Ageing Soc.* 44 (6), 1235–1246. <https://doi.org/10.1017/S014686X22000733>.
- Gallup, 2024. *Environment*. Gallup. <https://news.gallup.com/poll/1615/Environment.aspx>.
- Gardiner, S.M., 2011. *A Perfect Moral Storm: The Ethical Tragedy of Climate Change*. Oxford University Press.
- Gray, S.G., Raimi, K.T., Wilson, R., Árvai, J., 2019. Will Millennials save the world? The effect of age and generational differences on environmental concern. *J. Environ. Manag.* 242, 394–402. <https://doi.org/10.1016/j.jenvman.2019.04.071>.
- Greenberg, M.R., 2014. *Protecting Seniors against Environmental Disasters: From Hazards and Vulnerability to Prevention and Resilience*. Routledge.
- Guillemin, M., Gillam, L., 2004. Ethics, reflexivity, and “ethically important moments” in research. *Qual. Inq.* 10 (2), 261–280. <https://doi.org/10.1177/1077800403262360>.
- Hansen, J.E., Sato, M., Simons, L., et al., 2023. Global warming in the pipeline. *Oxford Open Climate Change* 3 (1), kgad008. <https://doi.org/10.1093/oxfclm/kgad008>.
- Haq, G., Gutman, G., 2014. Climate gerontology: meeting the challenge of population ageing and climate change. *Z. Gerontol. Geriatr.* 47 (6), 462–467. <https://doi.org/10.1007/s00391-014-0677-y>.
- Haq, G., Minx, J., Whitelegg, J., Owen, A., 2007. *Greening The Greys: Climate Change And the over 50s* [SEI Report]. Stockholm Environment Institute. <https://www.sei.org/publications/greening-greys-climate-change-50s/>.
- Harley, T.A., 2003. Nice weather for the time of year: the British obsession with the weather. In: Strauss, S., Orlove, B.S. (Eds.), *Weather, Climate, Culture*. Routledge.
- Harrington, L.J., Otto, F.E.L., 2023. Underestimated climate risks from population ageing. *Npj Climate and Atmospheric Science* 6 (1), 70. <https://doi.org/10.1038/s41612-023-00398-z>.
- Hart, P.S., Nisbet, E.C., 2012. Boomerang effects in science communication: how motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Commun. Res.* 39 (6), 701–723. <https://doi.org/10.1177/0093650211416646>.
- Harvey, G., Bain-Donohue, S., Dewi, S.P., 2024. The impact of extreme heat on older regional and rural Australians: a systematic review. *Aust. J. Rural Health* 32 (2), 216–226. <https://doi.org/10.1111/ajr.13094>.
- Herman-Mercer, N.M., Matkin, E., Laituri, M.J., Toohey, R.C., Massey, M., Elder, K., Schuster, P.F., Mutter, E.A., 2016. Changing times, changing stories: generational differences in climate change perspectives from four remote indigenous communities in Subarctic Alaska. *Ecol. Soc.* 21 (3). <https://doi.org/10.5751/ES-08463-210328>.
- Horton, G., Hanna, L., Kelly, B., 2010. Drought, drying and climate change: emerging health issues for ageing Australians in rural areas. *Australas. J. Ageing* 29 (1), 2–7. <https://doi.org/10.1111/j.1741-6612.2010.00424.x>.
- Howe, P.D., Markowitz, E.M., Lee, T.M., et al., 2013. Global perceptions of local temperature change. *Nat. Clim. Change* 3 (4), 352–356. <https://doi.org/10.1038/nclimate1768>.
- Hulme, M., Dessai, S., Lorenzoni, I., Nelson, D.R., 2009. Unstable climates: exploring the statistical and social constructions of ‘normal’ climate. *Geoforum* 40 (2), 197–206. <https://doi.org/10.1016/j.geoforum.2008.09.010>.
- IPCC, 2023. *Climate Change 2023: Synthesis Report*. IPCC. <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>.
- Jewell, C., 2017. Grey and green: how older people are the perfect climate allies. Fifth Estate. <http://thefifthestate.com.au/business/grey-and-green-how-older-people-are-the-perfect-climate-allies/>.
- Kahan, D., 2010. Fixing the communications failure. *Nature* 463 (7279), 296–297. <https://doi.org/10.1038/463296a>.
- Kay, R., Shubin, S., Thelen, T., 2012. Rural realities in the post-socialist space. *J. Rural Stud.* 28 (2), 55–62. <https://doi.org/10.1016/j.jrurstud.2012.03.001>.
- Keating, C.N. (Ed.), 2008. *Rural Ageing: A Good Place To Grow Old?*. Policy Press. <https://doi.org/10.1332/policypress/9781861349019.001.0001>.
- Keating, N., Eales, J., Phillips, J., et al., 2020. Critical human ecology and global contexts of rural ageing. In: Skinner, M., Winterton, R., Walsh, K. (Eds.), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. Routledge, pp. 52–63.
- Klein, E.S., Thurstan, R.H., 2016. Acknowledging long-term ecological change: the problem of shifting baselines. In: Schwerdtner Mañez, K., Poulsen, B. (Eds.), *Perspectives on Oceans Past*. Springer, Netherlands, pp. 11–29. https://doi.org/10.1007/978-94-017-7496-3_2.
- Korosec, M., 2021. The most powerful tornado on record hit the Czech Republic, leaving several fatalities and 200+ injured across the Hodonin district. Severe Weather Europe. <https://www.severe-weather.eu/weather-report/europe-severe-weather-to-rnado-hodonin-czech-republic-mk/>.
- Krawchenko, T., Keefe, J., Manuel, P., Rapaport, E., 2016. Coastal climate change, vulnerability and age friendly communities: linking planning for climate change to the age friendly communities agenda. *J. Rural Stud.* 44, 55–62. <https://doi.org/10.1016/j.jrurstud.2015.12.013>.
- Lacroix, K., Gifford, R., Rush, J., 2020. Climate change beliefs shape the interpretation of forest fire events. *Clim. Change* 159 (1), 103–120. <https://doi.org/10.1007/s10584-019-02584-6>.
- Lazrus, H., 2015. Risk perception and climate adaptation in Tuvalu: a combined cultural theory and traditional knowledge approach. *Human Organization* 74 (1), 52–61. <https://doi.org/10.17730/humo.74.1.q0667716284749m8>.
- Librová, H., 1979. Relationships of the local population to the landscape of Kamenický. In: *Progress Report on UNESCO MAB Project No. 91 „Function of Grasslands in Spring Region*, pp. 255–269.
- Lujala, P., Lein, H., Rod, J.K., 2015. Climate change, natural hazards, and risk perception: the role of proximity and personal experience. *Local Environ.* 20 (4), 489–509. <https://doi.org/10.1080/13549839.2014.887666>.
- Marlon, J.R., van der Linden, S., Howe, P.D., et al., 2019. Detecting local environmental change: the role of experience in shaping risk judgments about global warming. *J. Risk Res.* 22 (7), 936–950. <https://doi.org/10.1080/13669877.2018.1430051>.

- Marshall, G., 2015. Don't Even Think about it: Why Our Brains Are Wired to Ignore Climate Change. Bloomsbury.
- McCright, A.M., Dunlap, R.E., Marquart-Pyatt, S.T., 2016. Political ideology and views about climate change in the European Union. *Environ. Polit.* 25 (2), 338–358. <https://doi.org/10.1080/09644016.2015.1090371>.
- Meyer, W.B., 2000. *Americans and Their Weather*. Oxford University Press. <https://doi.org/10.1093/oso/9780195131826.001.0001>.
- Molena, F., 1912. The remarkable weather of 1911. *Popular Mechanics*. March, pp. 339–342.
- Moody, R., 2015. Overcoming objections by elders to action on climate change. *Int. J. Aging Hum. Dev.* 80 (1), 64–75. <https://doi.org/10.1177/0091415015591110>.
- Moody, R., 2017. Elders and climate change: No excuses. *Public Policy & Aging Report* 27 (1), 22–26. <https://doi.org/10.1093/ppar/prw031>.
- Morton, C., 2021. The 27 most beautiful places in Europe. Condé Nast Traveler. <https://www.cntraveler.com/galleries/2016-03-31/the-50-most-beautiful-places-in-europe>.
- Narguet, 2024. Nové Město na Moravě: Mecca of Czech biathlon hosting 2024 World Biathlon Championships. Radio Prague International. <https://english.radio.cz/no-ve-mesto-na-morave-mecca-czech-biathlon-hosting-2024-world-biathlon-8807312>.
- Naskali, P., Seppänen, M., Begum, S. (Eds.), 2015. *Ageing, Wellbeing and Climate Change in the Arctic: An Interdisciplinary Analysis*. Taylor & Francis Group.
- Nelson, K.S., Nguyen, T.D., Brownstein, N.A., Garcia, D., Walker, H.C., Watson, J.T., Xin, A., 2021. Definitions, measures, and uses of rurality: a systematic review of the empirical and quantitative literature. *J. Rural Stud.* 82, 351–365. <https://doi.org/10.1016/j.jrurstud.2021.01.035>.
- Norgaard, K.M., 2011. *Living in Denial: Climate Change, Emotions, and Everyday Life*. MIT Press.
- Ostapchuk, J., Harper, S., Willox, A.C., et al., 2015. Exploring elders' and seniors' perceptions of how climate change is impacting health and well-being in Rigolet, Nunatsiavut. *International Journal of Indigenous Health* 9 (2), 6–24. <https://doi.org/10.18357/ijih92201214358>.
- Palm, R., Lewis, G.B., Feng, B., 2017. What causes people to change their opinion about climate change? *Annals of the American Association of Geographers* 107, 883–896. <https://doi.org/10.1080/24694452.2016.1270193>.
- Pelikán, V., Librová, H., 2015. Motivation for environmental direct action in the Czech Republic: the case of the 2011 blockade at the Šumava National Park. *Soc. Stud.* 12 (3), 27–52. <https://doi.org/10.5817/SOC2015-3-27>.
- Phillips, D.R., Feng, Z., 2018. *Global ageing*. In: Skinner, M., Andrews, G.J., Cutchin, M. P. (Eds.), *Geographical Gerontology: Perspectives, Concepts, Approaches*. Routledge, pp. 93–109.
- Polain, J.D., Berry, H.L., Hoskin, J.O., 2011. Rapid change, climate adversity and the next 'big dry': older farmers' mental health. *Aust. J. Rural Health* 19 (5), 239–243. <https://doi.org/10.1111/j.1440-1584.2011.01219.x>.
- Poortinga, W., Whitmarsh, L., Steg, L., et al., 2019. Climate change perceptions and their individual-level determinants: a cross-European analysis. *Glob. Environ. Change* 55 (March), 25–35. <https://doi.org/10.1016/J.GLOENVCHA.2019.01.007>.
- Pospěch, P., 2014. Discursive no man's land: analysing the discourse of the rural in the transitional Czech Republic. *J. Rural Stud.* 34, 96–107. <https://doi.org/10.1016/j.jrurstud.2014.01.006>.
- Quinn, T., Adger, W.N., 2011. Climate change when you are getting on in life. *Environ. Plann.: Econ. Space* 43 (10), 2257–2260. <https://doi.org/10.1068/a44372>.
- Quote Investigator, 2012. The climate is what you expect; the weather is what you get. <https://quoteinvestigator.com/2012/06/24/climate-vs-weather/>.
- Reinhart, R.J., 2018. Global warming age gap: younger Americans most worried. Gallup. <https://news.gallup.com/poll/234314/global-warming-age-gap-younger-americans-worried.aspx>.
- Rich, J.L., Wright, S.L., Loxton, D., 2012. 'Patience, hormone replacement therapy and rain!' Women, ageing and drought in Australia. *Aust. J. Rural Health* 20 (6), 324–328. <https://doi.org/10.1111/j.1440-1584.2012.01294.x>.
- Roos, V., Chigeza, S., van Niekerk, D., 2013. Relational coping strategies of older adults with drought in a rural African context. In: Wissing, M.P. (Ed.), *Well-Being Research in South Africa*. Springer, Netherlands, pp. 375–388. https://doi.org/10.1007/978-94-007-6368-5_18.
- Roszak, T., 2009. *The Making of an Elder Culture: Reflections on the Future of America's Most Audacious Generation*. New Society Publishers.
- Rudiak-Gould, P., 2009. *Surviving Paradise: One Year on a Disappearing Island*. Union Square Press.
- Sambrook, K., Konstantinidis, E., Russell, S., Okan, Y., 2021. The role of personal experience and prior beliefs in shaping climate change perceptions: a narrative review. *Front. Psychol.* 12, 669911. <https://doi.org/10.3389/fpsyg.2021.669911>.
- Schumann, B., 2015. Climate change in Lapland and its role in the health of the elderly and rural populations. In: Naskali, P., Seppänen, M., Begum, S. (Eds.), *Ageing, Wellbeing and Climate Change in the Arctic: An Interdisciplinary Analysis*. Routledge, pp. 93–109.
- Shao, W., 2016. Are actual weather and perceived weather the same? Understanding perceptions of local weather and their effects on risk perceptions of global warming. *J. Risk Res.* 19 (6), 722–742. <https://doi.org/10.1080/13669877.2014.1003956>.
- Sisco, M.R., 2021. The effects of weather experiences on climate change attitudes and behaviors. *Curr. Opin. Environ. Sustain.* 52, 111–117. <https://doi.org/10.1016/j.cosust.2021.09.001>.
- Skinner, M., Winterton, R., 2018. Interrogating the contested spaces of rural aging: implications for research, policy, and practice. *Gerontologist* 58 (1), 15–25. <https://doi.org/10.1093/geront/gnx094>.
- Spence, A., Poortinga, W., Butler, C., Pidgeon, N.F., 2011. Perceptions of climate change and willingness to save energy related to flood experience. *Nat. Clim. Change* 1 (1), 46–49. <https://doi.org/10.1038/nclimate1059>.
- Strough, J., Parker, A.M., Ayer, L., et al., 2024. Aging and emotional well-being after disasters: vulnerability and resilience. *Gerontol.* 64 (3), gnad099. <https://doi.org/10.1093/geront/gnad099>.
- Thunberg, G., 2020. At Davos we will tell world leaders to abandon the fossil fuel economy. *Guardian*. <https://www.theguardian.com/commentisfree/2020/jan/10/greta-thunberg-davos-tycoons-fossil-fuels-dismantle-climate-crisis>.
- Vysocina Tourism (n.d.). *Tourist Brochures*. Vysocina Tourism webpage. <https://www.vysocinatourism.cz/cinnost-vysocina-tourism/propagacni-materialy/turisticke-bro-zury>.
- Tuohy, R., Stephens, C., 2012. Older adults' narratives about a flood disaster: resilience, coherence, and personal identity. *J. Aging Stud.* 26 (1), 26–34. <https://doi.org/10.1016/j.jaging.2011.06.002>.
- van Valkengoed, A.M., Steg, L., 2019. Meta-analyses of factors motivating climate change adaptation behaviour. *Nat. Clim. Change* 9 (2), 158–163. <https://doi.org/10.1038/s41558-018-0371-y>.
- Vidovičová, L., 2018. Age-friendly rural areas. The challenges of measurement and evaluation in Czech older adults. *Soc. Stud.* 15 (1), 25–43. <https://doi.org/10.5817/SOC2018-1-25>.
- Wang, X., Lin, L., 2018. The relationships among actual weather events, perceived unusual weather, media use, and global warming belief certainty in China. *Weather, Climate, and Society* 10 (1), 137–144. <https://doi.org/10.1175/WCAS-D-17-0058.1>.
- Wanka, A., Arnberger, A., Alex, B., et al., 2014. The challenges posed by climate change to successful ageing. *Zeitschrift Fur Gerontologie Und Geriatrie* 47 (6), 468–474. <https://doi.org/10.1007/s00391-014-0674-1>.
- Whitmarsh, L., 2011. Scepticism and uncertainty about climate change: dimensions, determinants and change over time. *Glob. Environ. Change* 21 (2), 690–700. <https://doi.org/10.1016/j.gloenvcha.2011.01.016>.
- WMO, 2017. *WMO Guidelines On the Calculation Of Climate Normals* (WMO-No. 1203). World Meteorological Organization. <https://library.wmo.int/viewer/55797>.
- Zahradníček, P., Brázdil, R., Štěpánek, P., Trnka, M., 2021. Reflections of global warming in trends of temperature characteristics in the Czech Republic, 1961–2019. *Int. J. Climatol.* 41 (2), 1211–1229. <https://doi.org/10.1002/joc.6791>.
- Zaval, L., Markowitz, E.M., Weber, E.U., 2015. How will I be remembered? Conserving the environment for the sake of one's legacy. *Psychol. Sci.* 26 (2), 231–236. <https://doi.org/10.1177/0956797614561266>.