

Entangled Future Im/mobilities: Interdisciplinary Perspectives on Mobility Studies

Atanasova, Daniela (Ed.); Bund, Romana (Ed.); Buschmann, Dovaine (Ed.); Diniega, Rachael (Ed.); Donat, Jana (Ed.); Gfoellner, Barbara (Ed.); Kopf, Nicola (Ed.)

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VERNETZEN — BEWEGEN — VERORTEN
KULTURWISSENSCHAFTLICHE PERSPEKTIVEN

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ENTANGLED FUTURE IM/MOBILITIES

INTERDISCIPLINARY PERSPECTIVES
ON MOBILITY STUDIES

[transcript]

Daniela Atanasova, Romana Bund, Dovaine Buschmann, Rachael Diniega,
Jana Donat, Barbara Gfoellner, Nicola Kopf (eds.)
Entangled Future Im/mobilities

Networks, Transfer, and Spaces:
Perspectives of Cultural Studies | Volume 6

Editorial

The interdisciplinary and internationally oriented series focuses on the movement of people, objects, and practices in cultural spaces. It includes studies on mobility and mobilization as well as research on the practitioners and the media of cultural transfer. The migration of people and the distribution of wares, ideas, and knowledge will be explored from the perspectives of cultural studies and social history. Thereby, the main focus is laid on Europe and its global networks from the early modern era to the present.

The series is edited by Martin Eybl, Eva-Bettina Krems, Annegret Pelz and Melanie Unseld.

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Daniela Atanasova, Romana Bund, Dovaine Buschmann, Rachael Diniega,
Jana Donat, Barbara Gfoellner, Nicola Kopf (eds.)

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Interdisciplinary Perspectives on Mobility Studies

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Introduction

Entangled Future Im/mobilities

Nicola Kopf, Barbara Gfoellner, Jana Donat, Rachael Diniega, Dovaine Buschmann, Romana Bund, Daniela Atanasova

In the wake of the COVID-19 pandemic and with the crossing of the 2°C threshold of global warming, the planetary future has perhaps come to appear more precarious than ever today. These crises intersect with many others around the globe: species extinction, famine, wars, deadly migrant crossings, decreasing welfare state provisioning in Europe, and police brutality, to name just a few.¹ However, while John Urry speaks of a “new catastrophism” in the Western imagination since the 1990s (2016, 33), the future has always been a contested horizon. Im/mobilities have featured and continue to feature prominently in how futures are imagined and represented in cultural texts, policies, and scientific projects. The future as an open horizon of possibilities also variably shapes people’s everyday practices of im/mobility, manifesting at the level of im/mobility-related decisions, aspirations, hopes, imaginations, as well as affective and embodied experiences. This volume explores the mutual articulation of futures and im/mobilities. As notions of linear progress are abandoned (Tutton 2017), the multi-layered contexts from which mobility futures are conceptualized come into view and reveal their complex spatio-temporal entanglements with different contested im/mobile realities of the past and present.

The crises that make the headlines today are not singular events but have built up over time. They are not just one crisis but many, many of which are ongoing and longstanding, as they are linked to colonialist, imperialist, and capitalist exploitation. Whether the future appears to be threatening or hopeful is, and always has been, intricately linked with power relations in the past and

1 On the concept of contemporary crises as global and permanent, see, e.g., Tickin (2017).

present. Unsurprisingly, power relations are crucial to understanding contemporary im/mobilities as well. They can be made graspable through questions about who moves and who does not, how one moves, by what means and at the expense of whom, and how uneven mobility regimes impact practices and experiences of im/mobility (Sheller 2016).

Our book responds to “future” as a contested concept through a mobility Studies perspective from the social sciences and the humanities, the fields represented in our interdisciplinary research platform “Mobile Cultures and Societies: Interdisciplinary Studies on Transnational Formations” at the University of Vienna. The question of what the future is and what it should look like, we propose, can be viewed as a “wicked problem”, a term Richard Tutton (2017) assigns to the future to describe the challenges of grasping or disentangling it. In this book, the future serves as a thematic reference point that calls forth different questions in and beyond the respective disciplines and individual research projects centering on im/mobilities, and as a frame that brings these perspectives together and deepens inter- and transdisciplinary exchange. At the same time, we believe that scholarly reflections on the future need to take heed of varied imaginations and conceptualizations of the future, which is why we discuss a plurality of futures, rather than a singular or universal idea of the future. Applying a *futures* lens to ongoing conversations on *entangled im/mobilities* in this book brings into focus im/mobility phenomena and representations as they shape visions of the future.

Founded in 2014, the Research Platform “Mobile Cultures and Societies” has promoted innovative methodological, theoretical, and contextual understandings of im/mobilities, advancing im/mobility within academic research and bringing our discussions to public fora. An interdisciplinary group consisting of early career and advanced researchers in the fields of African Studies, American Studies, Cultural Studies, German Studies, Geography, Development Studies, and Political Sciences, the platform has hosted seven doctoral students who started their projects in 2019 at the platform’s doctoral program “Cultural Mobility Studies”, funded through the FWF’s (Austrian Science Fund) doc.funds program. The contributions to this collection stem from research conducted in the context of individual dissertation work over four years. The platform has provided space for intense interdisciplinary exchange with regard to mobility Studies by organizing a three-day international conference in 2021 on “Entangled Im/mobilities” (held virtually because of COVID regula-

tions), and by hosting public lectures by scholars in the field² as well as a series of research retreats, workshops, and colloquia. In addition, four of our PhD researchers organized a panel on “Future Im/mobilities”³ at the 2021 Global Mobility Humanities Conference, exploring imaginations, representations, and materialities of im/mobilities geared towards the future.

During and in the aftermath of these events and our discussions, future-related issues kept reappearing as a discursive undercurrent when thinking about entangled im/mobilities in the context of contemporary debates on the multiplicity of crises. Hence, crisis-driven futures are a shared thematic concern across our individual research projects and a pivotal element in connecting multiple disciplinary perspectives and approaches in this interdisciplinary setting. In this volume, we address various aspects of entangled future im/mobilities, through an examination of Afrofuturist poetry on space travel from the Caribbean (Ganser and Gfoellner); im/material afterlives and mobilizations of extinct animals (Bund); narratives of catastrophe and standstill in fiction of the 20th and 21st centuries (Kopf and Pelz); experiences of waiting in forced community relocations in Montevideo (Donat and Dannecker); rural immobility and Future-Making among women in Zambia (Atanasova); climate adaptation in Morocco (Diniega); and mobile policies of financial literacy in the Organisation for Economic Cooperation and Development (OECD) and Austria (Buschmann and Sauer).

Our reflections on entangled future im/mobilities did not arise in a discursive vacuum – many scholars are deliberating on the topic of the future as we speak, or have done so in recent years and decades (not to mention the realms of policy and politics).⁴ We are aware that by offering our unique contributions,

2 Lecturers included Andrea Davis, Raquel Lejtregger, Suzy Blondin, Marja Hinfelaar, Ingrid Boas, Steve Hoelscher, Mimi Sheller, Ingrid Boas, Peter Merriman, Tim Cresswell, Peter Adey, Sara Upstone, Jan Röhnert, Katharina Manderscheid, Kevin Potter, Joanna Pfaff-Czarnecka, and Lore Van Praag.

3 Romana Bund, Barbara Gfoellner, Nicola Kopf, and Sigrid Thomsen (2021, October 29–30): Future Im/mobilities. Global Mobility Humanities Conference. Konkuk University, Seoul, South Korea.

4 To give just one example, alongside a heightened public discourse about the future(s) of Africa, in African Studies a number of volumes exploring the theme of the future has appeared in the last decade, such as Goldstone and Obarrio (2016), and Greiner, Wolputte and Bollig (2022). In addition, the 2023 European Conference on African Studies, the biggest conference in the field in Europe, which took place in Cologne, was entitled “African Futures.”

bringing a futures perspective to bear on im/mobilities research, we participate in a wide-ranging academic and public debate engaging with imaginations, discourses, and representations of many different futures (and/or calling the future per se into question). In the following sections, we will briefly review existing research on the future within mobility Studies and present our shared analytical framework for studying entangled future im/mobilities.

I. Mobility Studies and Conceptions of the Future

Since the proclamation of what John Urry and Mimi Sheller termed the “new mobilities paradigm” (Sheller and Urry 2006), the field of mobility Studies has become a flourishing space for interdisciplinary debates on different im/mobility phenomena. Whereas at the outset the field was more social sciences-centered (Faist 2013; Salazar 2010), it has gained ground in the humanities in the past years, for instance in literary, film, and cultural Studies (see, e.g., Berensmeyer and Ehland 2013; Greenblatt 2010a, 2010b; Merriman and Pearce 2017; Murray and Upstone 2014; Parkins 2009; Pearce 2020; Pratt 2008). This stronger connection to the humanities has contributed to a distinct understanding of im/mobilities by focusing on representations and cultural constructions of im/mobilities.

While scholarship was concerned with movement or mobility in its various forms long before this field was constellated – e.g., in migration Studies (see Carling 2002; Fielding 1992), transport Studies (see Law 1999; Metz 2000), nomadic theories (see Braidotti 1994), or diaspora Studies (see Cohen 1997; Gilroy 1993) – mobility Studies explicitly draws attention to the complex interplay of mobilities and immobilities, as well as their spatio-temporal dimensions and relations to agents and objects. Many of the core themes and concepts of mobility Studies are now widely received frameworks, such as Nina Glick Schiller and Noel B. Salazar’s “regimes of mobility” (2013), Tim Cresswell’s “politics of mobility” (2010), or Mimi Sheller’s “mobility justice” (2020a). Inter- and transdisciplinary conceptualizations that have developed around the nexus of “mobility, meaning, practice and power” stand out as particularly influential (Adey 2017, 64). Questions such as who or what is im/mobile; what and how power relations enable, inhibit, or prevent mobility what meanings are culturally constructed around im/mobilities; and how they are experienced by actors are some of the discourse-guiding considerations from which a wide array of research topics has emerged.

Recently, the topic of the future has become visible in mobility Studies in various ways. In one line of inquiry, it has been used as an entry point to explore intersections of mobility Studies with other fields of research, such as, among others, science and technology Studies, transport planning and policy, feminist theory, (dis)ability Studies, and disaster Studies (Büscher, Sheller, and Tyfield 2016; Goggin 2016; Matthewman 2017). At the same time, there has been an emphasis on thinking about new mobility technologies, such as autonomous vehicles, drones, and tracking devices that promise to take over our cities, roads, skies, and ultimately our bodies in the future (Clark, Atkinson-Palombo, and Garrick 2019; Freudendal-Pedersen and Kesselring 2016; Hildebrand and Sheller 2018; Manderscheid 2014, 2018; Sodero and Rackham 2020). Further future-related interventions in the field have included research on digital futures (Perng 2019), future tourism (Johnson and Martin 2016), and crisis and emergency mobilities (Adey 2016, 2022), among others.

In recent years, however, Sheller and others have suggested that, given the numerous crises of the present, it is necessary to develop “alternative mobility futures” (Sheller 2020a, 19), a task or challenge Clarsen, Merriman, and Sheller (2018, 15) direct at mobility Studies itself: “If our scholarship can contribute to debates about such futures and advancing such futures, then we need to enter the public fray and make our voices heard more.” Some of the works that have taken up this challenge mobilize utopian or dystopian visions as a method of theorizing im/mobilities (e.g., López-Galviz, Büscher, and Freudendal-Pedersen 2020; Sodero and Rackham 2020), interrogate what the future of mobility might look like (Adey et al. 2021), and call for studying im/mobility histories and genealogies to locate “uneven mobilities of the future” (Sheller 2016, 28). A further body of work is devoted to envisioning “just” mobility transitions and sustainable futures, while advancing a mobilities perspective in debates on environmental crises, climate change, and the Anthropocene (Adey et al. 2021; Baldwin, Fröhlich, and Rothe 2019; Bettini 2019; Sheller 2020a, 2020b; Sustar, Mladenović, and Givoni 2020).

The future has not only been relevant as a topic of research, but also as a horizon for the development of the field of mobility Studies itself. Already since the proclamation of the mobility turn (Urry 2000) and the announcement of the “new mobilities paradigm” (Sheller and Urry 2006), scholars have been drawing interim conclusions on what has been done in the field and formulating research desiderata for the future (as in, prominently, Faulconbridge and Hui 2016; Sheller and Urry 2016). Faulconbridge and Hui (2016, 12) emphasize that in the next decade of the field’s development, mobilities scholars should devote

attention not only “to questions of how mobile worlds can be studied”, but also “to questions of how the field itself is represented, envisioned, and ever on the move.”

Departing from the diagnosis of multiple, ongoing crises, we contribute to future-related research within mobility Studies in a twofold manner. First, within our interdisciplinary research, we use futures as an analytical frame to continue the dialogue of mobility Studies across seemingly disparate fields and thereby hope to enrich existing approaches and understandings of the future within mobility Studies. Second, we take up Tutton’s (2017, 485) positing of futures as “entanglements of matter and meaning” in the context of our respective research topics and apply “entanglements” as a conceptual lens to explore representations, practices, and materialities within the futures-im/mobilities nexus.

II. Interdisciplinary Approaches to Futures: Entanglements of Materiality and Meaning

Whereas much of the mobilities literature with a focus on future deals with questions of mobility futures and future im/mobilities, in broader discussions in sociology, cultural Studies, literary Studies, and other fields, the future itself has been at the center of inquiry for some decades now. With some of these Studies, we ask how futures are anticipated, constructed, represented, imagined, or “enacted” (Tutton 2017, 485) in various contexts. How do crisis-ridden presents and pasts affect such anticipations, representations, and practices, and what does this mean for an interdisciplinary perspective on im/mobilities? All of our research projects in the context of this volume could be seen as broadly motivated by these questions.

In Tutton’s account, the future is “wicked” because sociologists have found it “difficult to do something with” (Tutton 2017, 480). Tutton identifies a tension between “meaning and matter”, or representations and material reality, in existing sociological theorizations of the future: “In the work discussed, there is a clear tension in terms of how to think about the relationship between imagination and materiality, between how futures are represented or performed in discursive practices, and their intended and unintended material consequences” (485). Tutton’s own proposal of how to best understand the future, namely “in material-discursive terms as *enacted* in practice” (485, emphasis in original) strives to unite those two poles of meaning and materiality in a fu-

ture which is neither only imagined nor performed, but *enacted* through social practice (of which imagination itself, following Appadurai [1996], is an example). This understanding of the future, however, needs to be resituated within an interdisciplinary space across the social sciences and the humanities because the problem of the future exceeds sociology and is one with which all disciplines are confronted.

With this volume and our diverse case Studies examining a plurality of *futures*, we show that an approach to the future which emphasizes entanglements of materiality and meaning enacted through practice changes how we view im/mobilities and opens a pathway to illuminating difficult-to-grasp entanglements of temporality, scale, and power in the study of im/mobilities. A material-discursive view of the future lends itself to a dialogue with theories concerning im/mobilities, which have similarly been conceived of as connecting materiality, meaning, and practices within mobility Studies. Most prominently, Cresswell (2010, 18) has described mobility as “a fragile entanglement of physical movement, representations, and practices”, emphasizing the different elements that make mobility meaningful and how they are inextricably linked to one another in the study of im/mobility.

Entanglements among different dimensions of im/mobility have been of pivotal concern to mobility Studies as pointed out by Sheller and Urry, who argue that “all places are tied into at least thin networks of connections” (Sheller and Urry 2006, 209). Dipti Khera (2018) uses the term “entanglement” in relation to mobility to describe the way temporalities and mobilities intersect, to distinguish between different groups and flows of mobile people and objects, and to differentiate between overlapping and yet distinct modes and scales of mobility. For Adey, Cresswell’s emphasis on movement’s entanglement with meaning, or “all sorts of social significance” (Adey 2017, 64), is crucial for the inter- and transdisciplinary study of im/mobility. Recently, an explicit “entangled mobilities” lens has been proposed by Wyss and Dahinden (2022, 6) as a methodological approach to apply to the field of migration Studies, analyzing intersecting human mobilities under different circumstances as “embedded in unequal power relations and colonial legacies, occurring on different scales and temporalities.”

In our volume, entanglements matter because they are what makes the future “wicked.” We conceptualize entanglements as sites of interaction enmeshing multiple dimensions of reality in messy, dynamic, and often unpredictable ways. We adopt the conceptual lens of “entanglements” to analyze and critique visions of im/mobility futures in cultural representations, ex-

plore how futures are embedded within practices of im/mobility, and identify connections among representations, practices, and materialities within the futures-im/mobilities nexus. Across our chapters, entanglements are understood in four main ways: first, as the crossing of disciplinary boundaries and methodologies. A mix of humanities and social sciences approaches makes it possible to study both meanings or representations on the one hand and materialities and practices on the other, as well as their connections. While, we must note, the individual chapters for the most part remain situated in their respective disciplinary methodologies, addressing their topics from distinct vantage points, the volume's interdisciplinarity resides in our shared conversation with/in mobility Studies and the field's cross-cutting analytical research frameworks. A second way to conceptualize entanglements is as interrelations between mobilities and immobilities, and between different kinds of im/mobilities. We understand immobilities and mobilities as mutually constitutive and co-dependent. In our contributions we trace connections among a range of im/mobilities, from those of humans, animals, or objects, to the im/mobilities of ideas, skills, and values. Third, we view entanglements as interwoven spatio-temporalities of pasts, presents, and futures, challenging linear understandings of time and im/mobilities. Connecting different ideas of the future in terms of imaginations, aspirations, potentialities, and possibilities showcases the importance of multilayered and entangled temporalities. Finally, our fourth understanding of entanglements captures the embeddedness of im/mobilities and futures within (unequal) power relations. When conceptualizing futures as processes that are visualized, imagined, constructed, distributed, embodied, or represented on a spatio-temporal dimension, we ask: by whom? And for whom? What regimes of mobility and structural inequalities frame how im/mobilities relate to futures in various empirical contexts? The chapters of this book are divided into three clusters according to three patterns of movement under investigation: *Moving Forward?*, *Coming to a Halt*, and *Circulating*.

Moving Forward?

The first two chapters emphasize aspects of entangled im/mobility futures that critically engage with the idea of mobility as progress-driven. Progress connotes continuous and linear movement towards a desired, improved state. The idea of progress is deeply entangled with Western enlightenment narratives and their emphasis on reason, scientific inquiry, and the pursuit of knowl-

edge as catalysts for societal progress. As such, logics of linear, progress-driven movement are largely based on a Eurocentric understanding of human advancement. The chapters contest liberal, linear narratives of mobility as forward-moving, shaped by modernity's view of humanity as constantly evolving towards a continuously enhanced state. They thereby also challenge anthropocentric and universalizing concepts of mobility and progress. Both chapters in this section focus on movements associated with progress through different technological means and their violent as well as excluding implications.

Alexandra Ganser and Barbara Gfoellner look at Canisia Lubrin's poetic rearticulation of the space rover *Curiosity's* travel to and on Mars, an endeavor following a techno-optimist logic of progress critically examined in the poem "Voodoo Hypothesis" (2017). In "Astropelagic Afrofuturism: Outer Space Im/mobilities in Canisia Lubrin's 'Voodoo Hypothesis'", the authors employ an Afrofuturist lens to explore the poetic retelling of the PBS documentary *Ultimate Mars Challenge*, which follows and records *Curiosity's* journeys. Combining a critical lens on outer space travel with Black diasporic and Caribbean cultural theories, they advance the concept of an Afrofuturist astropelago, which emphasizes the post/colonial entanglements of outer space travel as a material and technological praxis dependent on the exploitation of Indigenous and Black lands and labor in the aluminum industry. They read Lubrin's counterpoetics of *Curiosity's* voyage as a strategy of postcolonial mimicry, a mobilization of epistemological binaries, and, lastly, as highlighting the ontological-material dimension of outer space mobilities. Thus, they join current debates on future im/mobilities to outer space by pointing out outer space ventures' entanglement with immobilities on Earth.

Romana Bund carves out elements of progression in narratives of extinction and critically investigates current attempts to reanimate "lost" species from the dead through genetic technologies and selective breeding techniques. The aim of her chapter "Resurrecting the Past to Save the Future? Mobile Afterlives of the Thylacine" is to examine the mobile afterlives of extinct species and explore the implications of so-called de-extinction practices. Like Mary Shelley's fictional character Victor Frankenstein, different biotechnological approaches currently try to restore species from the irreversible loss of extinction. In a process known as de-extinction, these resurrection technologies attempt to reanimate animal remains in order to contribute to the rescue and preservation of biodiverse ecosystems. With the help of privately and publicly funded genetic research, the aim is to counter mass extinction and mobilize certain species for the future. By drawing on the example of

the so-called thylacine, also known as the Tasmanian tiger, the animal's entanglements in different temporal, spatial, and ideological dimensions are emphasized. The allegedly last thylacine died in 1936 at the Beaumaris Zoo in Hobart, Tasmania. The only traces left today of the animal's existence are furs, bones, and bodies in museum collections. In 1999, scientists at the Australian Museum in Sydney began to study the DNA of the remains in order to clone and animate the animal by using methods of genetic engineering. By tracing the different strands of the animal's past, present, and future mobilities, this chapter shows how animal remains, as seemingly immobilized bodies, are nevertheless in motion and are used to shape visions of origins, identities, and future perspectives of life on earth.

Coming to a Halt

What unites the following three chapters is their spatio-temporal approach towards future im/mobilities in the form of *coming to a halt*, which opens up new interspaces for certain actors within unequal power relations, disrupts linear conceptions of temporality, and brings to light ambivalent entanglements of immobility and visions of the future. By calling the cultural linkage between Future-Making processes and movements of *progress* or *going forward* into question, the chapters examine how futures can both be obstructed and enabled by certain forms of stopping, waiting, staying, standing still, or coming to a halt, and ask how they are produced in and out of various im/mobilizations. The authors point out the importance of re-thinking futurity in light of socio-spatial stillness and immobility, and raise the question of what this could mean for the field of mobility Studies. Locating *pausing* in between humanities and social sciences demonstrates that neither the capacities to act upon future visions, imaginations, or aspirations, nor the capacities to create, imagine, aspire, or represent are equally distributed. Furthermore, not only people, movements, ideas, and aspirations can come to a halt through structural constraints, but also time itself can be perceived as decelerated, retarded, or even static. However, *pausing* cannot necessarily be equated with a total loss of agency either in empirical case Studies or in literary prose which offers dystopian or utopian visions of future im/mobilities.

In their contribution "When the World Comes to a Halt: Imagining Im/mobilized Futures in the Work of Forster, Haushofer, and Lehr", Nicola Kopf and Annegret Pelz examine literary prose texts from the 20th and 21st centuries and ask how these illustrate the cultural diagnosis of a vanishing and immobilized

future (Assmann 2020). By drawing on discourses of im/mobility, the Anthropocene, and acceleration, the authors read an increasingly dystopian fantasy in today's collective imaginary as a result of an eroding time regime of western modernity in which a paradigm of acceleration has reached its limits. By drawing on three exemplary texts, the contribution explores the recurring fantasy of stopping the world in different historical constellations and shows how these can be linked to current mobility theories on acceleration (Rosa 2013), the paradoxes of "polar inertia" (Virilio 2000), and a "new turn to stillness" (Cresswell 2012). Whereas in E. M. Forster's science fiction short story "The Machine Stops" (1909) an entire society has stopped moving, all human and animal life freezes behind a transparent wall in Marlen Haushofer's apocalyptic novel *The Wall* (1963). In the more recent text 42 (2005) by Thomas Lehr, nothing less than time itself comes to a halt and collapses into a futureless present.

The chapter "You Have to Know *How* to Wait': Entangling Im/mobilities, Temporalities and Aspirations in Planned Relocation Studies" by Jana Donat and Petra Dannecker provides new insights from an actor perspective on planned relocation processes of an informal settlement in a so-called environmental risk zone. This study shows that the partial and state-enforced relocation of the settlement "La Chacarita" in Montevideo as part of the Uruguayan National Relocation Plan has a profound impact on actors' future-oriented aspirations from its announcement. By applying waiting as an analytical lens, the authors entangle im/mobilities, temporalities, and aspirations, and thereby encounter meaningful and active as well as disempowering and passive ways of waiting within this specific im/mobility setting. Although structural constraints are extremely high within forced relocation scenarios and a diminished capacity to aspire is the rule, waiting practices are also formed by people's agency. To that effect, practices of waiting are not only an enforced pause created by the relocation plan itself but also shaped and re-negotiated by those who wait. As "waiting" itself is a lived experience constituted by gender, class, and age, an analysis of "waiting" uncovers the diversity and heterogeneity of the affected people and their aspirations which are highly dynamic, especially when everyday life comes to a halt. The case also illustrates the importance of multi-sited and longitudinal fieldwork if we want to understand how people perceive, experience, and navigate their social spaces over time when disrupted by long-lasting and permanent interventions.

Daniela Atanasova's contribution "Staying in the Village: Immobility, Future-Making and Womanhood in Rural Eastern Zambia" pays attention to how a diverse set of women living in three rural locations in the Eastern Province

of Zambia imagine and relate to the future. The chapter shows that studying people's gendered future visions and orientations can lead to a more nuanced understanding of their im/mobility aspirations and decisions. Decisions and aspirations to stay in a rural area are examined in a context where rural-urban migration remains a common social practice and livelihood strategy, but urban areas offer social mobility opportunities only for the most well-armed with resources, skills, and qualifications. At the same time, the life and family histories of women of different classes, ages, and levels of education who have chosen to stay in (or sometimes, return to) the village demonstrate that rural immobility offers its own horizons of striving, to which not everyone has equal access. Women's divergent relationships to the future (of which the chapter explores two) reveal their uneven scope for self-realization and unequal capacities to aspire. Ultimately, the chapter shows, capacities to aspire and future orientations, as well as the meanings women ascribe to their im/mobilities, are profoundly shaped by material and structural conditions and intersecting inequalities of gender, class, education, and age. For some women, rural immobility can be an experience of active future-making, with the future imagined as progress, but entangled temporalities of past, present, and future often come in the way of such linear visions.

Circulating

The final two chapters concentrate on elements of entangled im/mobility futures that can be seen as *circulating*. Used often in the context of global history (Gänger 2017), circulation indicates a continuous movement through time and space, a mobility of material and immaterial things that return to the point of departure. Scholars working with the concept of policy circulation have primarily discussed the speed and velocity of the circulation. While some refer to it as "fast policy" (Peck and Theodore 2015), others conceptualize it as a "constant, gradual, creeping, at times sluggish and sticky" (Wood 2015, 569) process. While recognizing the importance of speed, these chapters explore the patterns as well as entanglements of circulation. The back and forth, there and back movement and its structuring effects on visions of the future is therefore the focus of this section. Here, entanglements of im/mobilities also circulate from and through temporalities: from the past, through the present into the future, changing the present, potential futures, and ideas about the future. With both chapters focusing on policy mobilities, they further explore the circulation of ideas and policy formulation across levels and scales, entan-

gling with forms of temporalities, shaping and shaped by contested visions of futures. There comes an understanding of how mobilities spark continual changes in the meaning and matter of futures, and vice versa.

In Rachael Diniega's chapter, "In the Future Now: Entangled Mobilities and Temporalities in Climate Adaptation in Morocco", she investigates the "entangled mobilities" involved in climate adaptation in a small town in Morocco named Skoura M'Daz. Situated in the fields of climate mobilities and migration-as-adaptation, the chapter takes a look at two levels of climate change adaptation in the context of drought and diminishing water supplies: first, a "planned adaptation" project – dam-building – from the Moroccan government, and, second, "autonomous adaptation" – the spread of drip and sprinkler irrigation – through farmers' mobilities around Morocco. Drawing on qualitative research in Skoura M'Daz over a nine-month period from 2021 to 2022, Diniega finds that the seemingly distinct planned and autonomous adaptation actions actually simultaneously overlap, impede, facilitate, and merge with each other. Human mobilities become fundamentally entangled: in the first case, the dam forces displacement of households, while also beneficially raising levels of groundwater, thus linking to the second case, wherein farmers have begun implementing water conserving irrigation like drip and sprinkler systems after seeing the technology on other farms during their mobilities in the region. Not only do the case Studies reveal the entanglements of human mobilities, but also of temporalities. Future imaginations forecasting worsening environmental conditions play a role in inspiring action in the present, while the past also intertwines in unusual ways.

Finally, the contribution by Dovaine Buschmann and Birgit Sauer, "Circulating Visions of the Future: Analysing Policy Frame im/mobilities among Financial Literacy Education Policies", looks at mobile, entangled futures from a political science perspective. The chapter explores visions of the future that prevail in policies of financial education and asks if and how these visions change while being mobile temporally and spatially. It combines insights rooted in policy frame analysis literature with policy mobility research on policy circulation in order to understand how policy frames change through their mobility from the international (OECD) to the national level (Austria). Based on the method of critical policy frame analysis, the authors demonstrate three distinct policy frames addressing the future that are inherent to financial education policy: future as policy direction, future of individual behavior, as well as future visions of socio-economic developments. The contribution reveals the circularity of some aspects of visions of the future, informing not

only the national strategies of financial literacy education, but also feeding back into the formulations of strategic documents on the international level.

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Moving Forward?

Astropelagic Afrofuturism

Outer Space Im/mobilities in Canisia Lubrin's "Voodoo Hypothesis"

Alexandra Ganser and Barbara Gfoellner

I. Introduction

Afrofuturism is a diasporic discourse of artistic resistance and empowerment that fundamentally rests upon spatiotemporal, mobility-related re-imaginings of Black pasts, presents, and futures. While some of its proponents – most famously, Sun Ra – claim(ed) they descend(ed) from other planets, others – such as Octavia Butler (e.g., *Parable of the Sower*, 1993; *Parable of the Talents*, 1998) – have imagined a liberating future through space travel. At the heart of such Black reconfigurations of spacetime stands the claim that the Middle Passage can be read (and was indeed experienced) as an alien abduction and a radical, even apocalyptic break that propelled the enslaved to another world of which they had no prior knowledge (see, e.g., Mayer 2000); an event that can also be understood, with Paul Gilroy (1993), as delineating the beginning of a distinct Atlantic modernity. Mobility and immobility have been leading tropes in Afrofuturist writing: mobilities of the Middle Passage, generative to modernity, have been shown as intricately entangled with the immobilizations of enslavement, for instance. But Afrofuturist texts notably break the confinements of past and present immobilizations as they bridge spatiotemporal dimensions and imagine alternative, liberating, and empowering futures. Delineating Afrofuturist spatiotemporalities and imaginaries of im/mobility as well as the concept of the cosmos as an “astropelago” (Ganser, Temmen, and Rettenbacher 2023, 286) rather than a terripelago (i.e., an extension of territorial, earth-bound epistemologies; see Santos Perez 2015) in the first part of this essay, an Afrofuturist reading of Saint Lucian-Canadian author Canisia Lubrin's poem “Voodoo Hypothesis” (2017) follows in the second in order to showcase

how contemporary Black poetry enacts astropolagic epistemologies in opposition to the fledgling outer-space frontierism of the Second Space Age.¹

“Voodoo Hypothesis” is set in outer space and poetically engages with the speculative mode: it was written in response to the PBS (Public Broadcasting Service) documentary film *Ultimate Mars Challenge* (USA 2012), following space rover *Curiosity*’s travels to and on Mars. As such, it tackles already existing mobilities – those of robotic machines sent to other planets – as they foreshadow dreams about and techno-optimist projects concerning future human mobilities to outer space. We read Lubrin’s “Voodoo Hypothesis” as a poetic articulation of the post/colonial entanglements of space travel as a material and technological praxis dependent on the exploitation of Black land and labor, e.g., in the aluminum industry (Sheller 2014). The poem is concerned with both the materialities of outer space mobilities as well as with reflections on colonial conquests throughout global history and racist technologies dehumanizing Black bodies by means of their objectification. As Nicola Hunte points out, “Caribbean plantation societies have acted as laboratories for harvesting technologies that have also seen the human body being treated like a machine” (2019, 18), an insight that acts as a point of departure for much Anglophone Caribbean Afrofuturist literature. In this contribution, we propose that “Voodoo Hypothesis” offers a poetic trajectory which builds on Afrofuturist imaginations of Black, de-subjectified ‘techno-bodies’ and their concomitant coerced mobility to present a critique not only of contemporary territorializing, extractivist-colonial Astrofuturist projects of outer-space conquest, but also of the history of Black alienation and dehumanization on Earth. In this, the poem echoes the groundbreaking theorizations of the category of the human through the lens of Blackness as its Other by Jamaican philosopher Sylvia Wynter (see, e.g., “1492: A New World View”).

In recent years, increasing attention has been paid to the articulation of Caribbean and Caribbean-diasporic future narratives and poetics, resulting,

1 A watershed moment that is often seen as the beginning of the Second Space Age is the launch of the first nongovernment spaceship, SpaceShipOne, in 2004. In many respects, the Second Space Age, of course, differs from the First, e.g., with regard to the intensified militarization, privatization, transnationalization, and commercialization of outer space (see, e.g., Peeters 2021). However, it is fundamentally built on a large-scale continuation and mobilization of the techno-optimism that characterized its cold war predecessor. In terms of outer space as a “medial complex”, Haupts and Pischel (2021, 8) also emphasize the similarities between the First and Second Space Ages, characterizing their relation mainly in terms of multiplication and differentiation.

e.g., in the founding of the Caribbean Futures Institute (devoted to futurist writing projects) or in the anthology *Reclaim, Restore, Return: Futurist Tales from the Caribbean* (2020, edited by Karen Lord and Tobias Buckell).² There is certainly no dearth of Afrofuturist literature in the Caribbean, yet it is often not as widely promoted by the international book industry. In a special issue of the *Journal of West Indian Literature* (2019) dedicated to Caribbean speculative fiction, Debra Providence mentions the dangers of artistic movements like Afrofuturism, popular and commercialized in the Global North, to elide “pertinent signposts rooted in Caribbean cultural aesthetics” (2019, II; see also Samatar 2017). Beyond this critique, Kelly Baker Josephs, in a reading of Erna Brodber’s novel *The Rainmaker’s Mistake* (2007) through the prism of Caribbean cosmologies (following Kamau Brathwaite [1996]), argues that Afrofuturist aesthetics “provides the means of representing multiple dimensions of a Caribbean cosmology that is not merely cognizant of, but necessarily engaged with, other spaces in the black diaspora” (2013, 135). Canisia Lubrin’s poem “Voodoo Hypothesis” can be read in this very light, as it accesses a Caribbean cosmology through an Afrofuturist poetics.

Lubrin’s work generally resists easy categorization: the poems in her debut collection *Voodoo Hypothesis* do not adhere to regular patterns or traditional poetic genres or forms; her 2020 book *The Dyzgraph^xst* presents a long poem taking its structure from drama. An Afrofuturist reading of the titular “Voodoo Hypothesis” allows us not only to explore the dis/continuities between im/mobilities across spatiotemporal configurations articulated from a Black diasporic experience, but also to conceptualize poetry/poiesis as a distinct technology to imagine otherwise. To counter teleological mobilities of the future propelled by the space industries, astropelagic Afrofuturist poetry like Lubrin’s zooms in on possibilities which complicate universalist epistemologies, instead brings to the fore, following Wynter, culturally conceptualized ways of knowing (Wynter 1995b, 20).

2 On Caribbean SF see, e.g., the anthology *New Worlds, Old Ways: Speculative Tales from the Caribbean* (2016), edited by Karen Lord.

II. Moving towards an Afrofuturist Astropelago: Theoretical Considerations

NASA's *Curiosity* rover, around which the PBS documentary *Ultimate Mars Challenge* and Lubrin's poem revolve, has been celebrated as a major stepping stone for Mars exploration and space engineering in general. By taking soil probes, it functions as part and parcel in the Second Space Age's extractivist-imperial logic. In "A Sea of Stars: Towards an Astropelagic Reading of Outer Space with Jacques Lacan and Hannah Arendt", Alexandra Ganser, Jens Temmen, and Clemens Rettenbacher have taken up Lacan's and Arendt's specific critiques of the psychological and scientific-discursive underpinnings of the First Space Age to comment on contemporary attempts at territorializing planet Mars. The problematic discourses of territoriality brought forth during the First Space Age are viewed as fundamentally sustaining the twenty-first-century reframing of outer space as a realm of extraction and exploitation in this article. While Lacan speaks about the silencing of the planets in his seminar "Introduction of the Big Other" (1955), Arendt's essay "The Conquest of Space and the Stature of Man" ([1963] 2007) focuses on space science's sensory "earth alienation" (a term introduced in *The Human Condition*; Arendt 1958, 2) and the dangers of technological instrumental reason. Lacan centers on the difference between entangled and incalculable human mobilities and the calculable movements of the planets, while Arendt

is worried about the technocratic de-politicization of human-world-relations and the apocalyptic potentiality of techno-scientific detachment. [...] In the Anthropocene, [...] the terripelagic territorialization of outer space by the establishment of infrastructures of industrial conquest and extractive capitalization as well as tourism and [...] 'scientific' [...] endeavors needs to be understood in light of the political and epistemological shortcomings of a science driven by this "earth alienation." (Ganser, Temmen, and Rettenbacher 2023, 277, 281)

The dominant conception of space as a frontier of discovery via technology neglects, as Chamoru poet and critic Craig Santos Perez argues, its underlying territorializing impulses, which "demarcate[] migration and settlement, inclusion and exclusion, power and poverty, access and trespass, incarceration and liberation, memory and forgetting, self and other, mine and yours" (2015, 620). By suggesting the term terripelago (a portmanteau of *terra*, land, and *pélago*,

sea), Santos Perez expands “the concept of territoriality to include not only land, but also waters, resources, representations, rights, and (im)mobilities” (Ganser, Temmen, and Rettenbacher 2023, 275). The notion of terripelago is apt to “better grasp both the fluid territorial regimes across land and water within US imperialism while also making visible the transnational counter-currents that resist such territorializations” (Ganser, Temmen, and Rettenbacher 2023, 275).³ By gesturing towards a concept of the astropelago, the authors take Santos Perez’s argument to the cosmos, urging towards a similar perspective with regard to outer space: in opposition to an instrumental, terracentric imaginary, which is currently at work in dominant astropelagic discourses that reduce other planets and celestial bodies to a peripheral, frontier extension of *terra*, they suggest astropelagicity as an alternative framework for conceptualizing outer space. Instead of seeing outer space as an extension or function of earth (terripelago), the astropelago puts forth an imaginary of outer space beyond expansionist imperialism and against the silencing of the planetary Other (echoing Lacan as well as Arendt). An astropelagic lens emphasizes the infinity of outer space (literally and metaphorically) for conceiving of alternate visions of human/outer space relations, a recognition that has also always been at the heart of Afrofuturist art and criticism (in the realm of art, see, for example, Yinka Shonibare’s *Refugee Astronaut* or *Cloud 9*, or Tavares Strachan’s *Bahamian Aerospace and Sea Exploration Center BASEC*).⁴

Afrofuturist counter-imaginaries such as Lubrin’s offer a conceptual poetics that articulates such an alternative, astropelagic model, countering the imperial archipelago or terripelago.⁵ They can be read, we propose, as a retort to the space sciences’ techno-scientific indifference with regard to historical-political responsibilities for human suffering, i.e., of humans reduced to masses of bodies required for the development of space travel and rocketry, from the Dora-Mittelbau camp inmates used as a workforce and in hu-

3 See also Santos Perez 2015, 619–21. We understand US imperialism more broadly than traditional conceptions that see it as beginning in the 1890s and ending with WW2. While this period established the US as a colonial power along with its European counterparts through settler colonialism in parts of the Americas and the Pacific, we see the imperial project of the New World as starting centuries earlier and continuing into the Second Space Age, though its qualities and characteristics have of course changed in many respects over time.

4 On Shonibare’s work, see e.g., Bourland 2020; Kreienbrock 2020, 114–16; on Strachan, see Sheller 2015.

5 On the conceptualization of an imperial archipelago, see Thompson 2010.

man space-science experiments by Wernher von Braun to Black mining laborers in the Caribbean.⁶ As Mimi Sheller puts it, these laboring bodies “haunt the footnotes of the Space Age” (2015, n.p.), whose dominant accounts usually eclipse the transnational mobilization of bodies on which it fundamentally rests. Based on Black experiences of earth alienation, an astropelagic Afrofuturist poetics of outer space makes these technologies visible: in Lubrin’s case, her poem brings together the paradox of dehumanized Black bodies and humanized (white) machines like *Curiosity*, and questions technocultural future trajectories that are oblivious to problematic processes of (bodily and planetary) appropriation and frontierist narratives of progress.

African American and Caribbean art and literature have imagined alternative trajectories for Black futures out of the bedrock of Black diasporic experiences especially since the 1960s (the heyday of both the First Space Age and the Civil Rights Movement), though such articulations reach back to the antebellum slave narrative (see Lavender 2019) and the Harlem Renaissance (W.E.B. DuBois’ short story “The Comet” of 1920 is often cited as the first Afrofuturist literary text). Afrofuturism – a term ascribed to Mark Dery (1994) that characterizes a cultural aesthetic underpinned by a philosophy of science and history that addresses themes and concerns of the African American diaspora with regard to science/fiction – has mostly been discussed in terms of Black music (Sun Ra, George Clinton, Drexciya, Janelle Monáe), art, and narrative. In comparison, Black poetics as a site of Afrofuturist aesthetics has been somewhat understudied despite poetry’s epistemological and ontological potential for creating alternative temporalities, subjectivities, metaphors, and tropes that serve to inspire a future world-making which takes heed of Black pasts and presents.

Arguably, Afrofuturism is utopian rather than dystopian in impulse (see Zamalin 2019, 6–18; Brock 2020, 11). It takes Black technologies of resistance (to slavery, violence, disenfranchisement, and segregation) in the past as a source of empowerment to counter the by-and-large absence of Black subjects from

6 The heritage of the Third Reich’s rocket program and the forced labor and human experiments it was built on were pivotal for the US space program, with former Nazi scientists like Wernher von Braun having been brought to the US from Germany after the War via “Operation Paperclip”; see Rainer Eisfeld’s seminal study, first published in 1996, *Mondsüchtig: Wernher von Braun und die Geburt der Raumfahrt aus dem Geist der Barbarei* (2002), or Annie Jacobsen’s *Operation Paperclip: The Secret Intelligence Program That Brought Nazi Scientists to America* (2014).

“popular culture depictions of the future” as well as from the history of science (Womack 2013, 6–7) – and hence, arguably, from ‘the future of humanity’ discourses as we also find them at work in hegemonic astrofuturism (see Ganser 2019, 39). Afrofuturism thus also suggests a revision of dominant models of linear histories of progress and modernity, as they hinge on Eurocentric humanist epistemes, mythologies, and narratives; as many Afrofuturist critiques quip, the traumatic experience of physical abduction by alien ships, for the descendants of the Atlantic slave trade, is in the past rather than in an imaginary intergalactic future (see, e.g., Bould 2007, Nelson 2000, Rieder 2008). Its exhortation to revise white linear temporal-historical models through what Frédéric Neyrat (2020, 120) calls Afrofuturist “cosmic techniques” echoes Wynter’s philosophical demand for a new poetics of a hybrid bios/logos or “NatureCulture” science (1995a, 49–50): Wynter calls for a “conceptual move into a ‘realm beyond reason’ – one able to take our present mode of reason itself, and its system of symbolic representation and mode of subjective understanding that orient the perceptual matrices that in turn orient our behaviors – as the object of a new mode of inquiry” (1995a, 40). She specifically mentions Africa’s “‘voodoo’ model of nonrationality” (42) in this context as opposing “our present model of being ‘Man,’ as totemized in the Indo-European middle-class physiognomy (together with European cultures, ways of life, and rationality)” (42). The formulaic claim to serve ‘all mankind’ by the space industries is revealing in this sense, echoing Wynter’s argument that such claims

function[] strategically to absolutize the behavioral norms encoded in our present culture-specific conception of being human, allowing it to be posited *as if* it were the universal of the human species, and ensuring thereby that all actions taken for the sake of the well-being of its referent model continue to be perceived as if they were being taken for the sake of the human-in-general. (1995a, 43)

All of this continues to happen in the face “of the mounting evidence of its costs to the planetary environment (physical and organic), as well as to the world-systemic sociohuman one” (43–44). In this light, space exploration justifications need to be read as “a struggle over sovereignty in the conceptualization of ‘all mankind,’ and as affirming the western Enlightenment anthropocentrism that keeps the universe and its celestial bodies in stable orbit around this hegemonic conception” (Ganser, Temmen, and Rettenbacher 2023, 283).

Lubrin's poem reconceptualizes technologies of planetary exploration in tune with an Afrofuturist model that questions a "reductive spectrum, or hierarchy, that moves from technology to spirituality"; rather, it highlights "[t]he interplay between technology and spirituality" to express concern with "estrangement, trauma, and powerlessness [...] in the relationship between the captive body and [the] sciences" (Hunte 2019, 17). "Voodoo Hypothesis" builds on an Afrofuturist crossing of established boundaries between science-based technologies and "more ceremonial investigations into the unknown" (2019, 17) – the "Voodoo" in Lubrin's title.⁷

With regard to dominant astrofuturist mobility regimes that posit the movement to other planets as either a natural 'human' impulse or an inevitable step in securing humanity's survival, Lubrin's poetic intervention presents a conceptual corrective in at least three ways: first, it delineates an astropelagic poetics of mobility that is marked by a dismantling of the language of the colonizer through strategies of postcolonial mimicry (e.g., by recontextualizing phrases from the PBS documentary) and by shifting subjectivities and agencies away from its hegemonic centers (e.g., mission control centers); second, it mobilizes epistemological binaries between the sacred and the profane, magic and science, the human and the alien or the machine via the curiosity trope; and third, it highlights the ontological-material dimension of outer space mobilities by placing the Black laboring body as well as natural resources at the center of astromobility discourses.

III. Astropelagic Poetics of Mobility in "Voodoo Hypothesis"

"Voodoo Hypothesis" is the opening poem to the eponymous book, preceded only by an epigraph by Derek Walcott that introduces the first section: "The

7 There are different spelling variants for "voodoo", such as "vodou", "vodoun", or "vodun." The anglicized spelling of "voodoo" is seen as a Western pejorative reference to Haitian culture. As Leslie G. Desmangles argues, "[v]oodoo is then an etic term whose history derives from racist denotations and ill-conceived notions about a religion that is practiced by millions of believers in Haiti, in West Africa, in the United States and Canada, as well as other parts of the world" (2012, 27). As Wynter explains, vodou "has been made, within the logic of contemporary Western thought, into the byword of an antithetical irrationality to its own ostensibly supra-cultural order of rationality" (1995b, 21). On debates around the spelling, see Desmangles 2012.

children of slaves must sear their memory with a torch" (Walcott qtd. in Lubrin 2017, n.p.). The epigraph steeps the collection in a Caribbean cosmology through an intertextual reference to one of Saint Lucia's (and the Caribbean's) most well-known poets. Epigraphs have an anticipatory function as they prime the reader for what is to come; here, it evokes the violence and necessity of remembrance, reminding the reader that any Caribbean future imagination needs to be related to the past. On a metatextual level, the graphic visualization of this epigraph as well as the book cover consist of a mapping atop topographic lines: moving in distinct circular patterns, some lines converge, almost overlap, whereas others are drawn further apart. In geography, they indicate the heights of landscape; in the context of the book, these lines evoke a certain kind of movement – parallel, simultaneous, or distant mobilities – across geographical space, repeated across time. As the titular and opening poem to Lubrin's book, "Voodoo Hypothesis" also sets the tone for the collection. On a spatiotemporal level, it stands out as it peers into future mobilities in outer space and thereby charts dreams of a speaker distinct from the subaltern (Black diasporic) voices of the other poems in the book. Lubrin's poetic inquiry into what she calls elsewhere "the *what if* in the chaos and candour and prismatic challenges of Black life in in this diaspora" (Lubrin in Queyras and Lubrin 2018, 47) inevitably engages ambivalence and contradictions that move into the speculative realm, as evoked in the oxymoron of the title.

The title pairs two seemingly contrastive knowledge systems, "voodoo", as linked to a religion that has moved from West Africa to the Caribbean, and "hypothesis", as a methodological baseline of Western science. The spelling of "voodoo" evokes the derogative usage of the word by US media and politics (disregarding practitioners' spelling of it as 'vodou' or 'vodun') that reduce the religion to sorcery or irrationality. "Hypothesis", in contrast, connotes scientific rationality and objectivity, which hold that facts can only be established on the grounds of repeatable experiments that either confirm or refute a hypothesis. "Voodoo" and "Hypothesis" hence allude to two distinct "culturally instituted order[s] of consciousness or belief system[s]" (Wynter 1995b, 20) and thus to different conceptions of what it means to be human. The "voodoo" in the title also inscribes what Kamau Brathwaite termed a "Caribbean cosmology" (1996) as a counterpoint to NASA's scientific endeavors of space exploration: vodou, to Brathwaite, is both part of and carries all aspects of Caribbean cosmology. Present in the title, yet not explicitly mentioned in the poem, vodou can be read as imbuing the poem with Caribbean qualities, but also casts the poem itself as the performance or enactment of a religious rite.

“Voodoo Hypothesis” takes various phrases, sometimes literally, sometimes slightly changed, from the documentary *Ultimate Mars Challenge* and recontextualizes them to create a counterpoetics via a strategy of postcolonial mimicry. Mimicry as conceptualized by Homi Bhabha describes a subversive strategy of colonized peoples that throws into sharp relief hegemonic epistemes of the oppressor (1994). As a form of repetition, mimicry potentially dismantles the ambivalences of colonial discourse; Bhabha conceives of it as “one of the most elusive and effective strategies of colonial power and knowledge” (1994, 85). In this way, “Voodoo Hypothesis” uses the “master’s tools” (Lorde 1984, 110), that is, the technoscientific lingo of the documentary, to showcase the expansionist logics of outer space mobility discourses. The poem’s free verse stretches over three pages, evoking the sense of an epic poem that recounts the rover *Curiosity*’s travels to and on Mars. Read as mimicry, its heroic tone seems like a mockery, reminiscent of enslaved people’s techniques to ridicule their masters. In this vein, the poem plays with the words from the documentary, arranges them in poetic lines, and substitutes some of them with other words to add layers of meaning offering a more nuanced counterpoetics to the dominant discourse on space travel.

In this way, Lubrin’s poem repeats, “*but not quite*” (Bhabha 1994, 86), the words used in the documentary, using gaps, breaks, and elisions as aesthetic tools that critically inquire into what is erased or not being said. As such, a “pocket of fabric” that “catches air” in the documentary, a reference to failing parachutes crucial for the rover’s landing, is shaped into a question in the poem: “Where else is a pocket / of air more deadly than the atomic bomb?” (Lubrin 2017, 1). Through an enjambment, parts of the original utterance slip away to enable the unfolding of various meanings of “pockets of air” which are being related to the atomic bomb, one of what the poem later describes as the many “disaster[s] to befall Earth” (2) paradoxically linked to “Oxygen” (2): the poem thus entangles the deadliest military invention possible – the atomic bomb – and the most fundamental component of life – oxygen –, exposing the existential risk of scientific invention in the context of the military-industrial complex and its aligned techno-optimism. With references to “Mojave Desert, Waikiki, Nagasaki” (2) – places used for atomic testing or bombings – the poem comments on terripelagic relations between Earth and Mars, countering the belief that such disasters are an “Earth problem, not Mars problem” (1), one of the few almost verbatim *Ultimate Mars Challenge* phrases repeated in the poem. While the poem’s structure largely follows the narrative of the documentary, repetitions in another part disrupt a linear reading practice

and instead invite a relational one that not only moves back and forth between the poem and the documentary, but also between the poetic lines and the spatiotemporal dimensions that propel the reader to Mars with an awareness of its entanglements with im/mobilities on planet Earth.

Another layer of the poem's use of mimicry to dismantle hegemonic outer space discourse can be traced through the employment of pronouns, which engenders a continuous shifting of subjectivities. Pronouns are not coherently attached to one subject or voice but change throughout the poem. The ambivalence thus created reflects the disconcerting use of pronouns in the documentary: for one, the rover *Curiosity* is personified and gendered as female to the degree that one engineer even refers to her as a human subject.⁸ The poem explores *Curiosity*'s personification as the rover either finds mention in the female third person or adopts the lyric voice itself. However, pronouns remain opaque and multiple; a strategy that can be read as resistance to subjugating colonial categorizations of humans used to justify white European supremacy and legitimize slavery.⁹ The change of subject positions through pronouns also serves to challenge the reader, as the poem requires them to remain attentive to swift changes. It not only takes them out of the comfort and risk of following one dominant perspective, or strand of thought, but also asks them to reconsider their own positionalities; it thus demands a willingness to move amid discontinuity and multiplicity.

The poem also employs the pronoun "we", so readily inclusive, as it, in a mocking tone, echoes the "we" used generically for the human species by an engineer in the documentary trying to explain their reasons for exploring Mars: "We're curious creatures, human beings" (*Ultimate Mars Challenge* 2012, 1:27). This explanation is based on a supposed generalized "behavioral norm" of all (and only) humans, "as if it were the universal of the human species" (Wynter

8 "you hear us talk about her as if she is a person. Because for us she is" (*Ultimate Mars Challenge* 2012, 5:50). The space rover's personification and feminization stand alongside numerous other gendered AI technologies, such as Siri or Alexa. Performing their subservient roles as assistants, this feminization of technology is problematic in various respects, especially given the gender (pay) gap in the male-dominated tech industry, one of the most high-paying industries. Furthermore, *Curiosity*'s female gendering evokes the traditional feminization of sailing ships, forming a continuity between outer space exploration and the Middle Passage (cf. Glissant's reference to the ship as "womb", "pregnant with as many dead as living." 1997, 6; on the sexualization of women's bodies through maritime metaphors, see, e.g., Tinsley 2008).

9 See, e.g., Wynter's explanation of "mobile classificatory labels" (2006, 31).

1995a, 43–44). The collective “we”, used as a referent for the human species as a whole, legitimizes all actions as being taken in the collective interest of and for a generic ‘mankind.’ The poem dismantles the potential violence of the “we” in two longer stanzas, which climactically list performative actions of the “we”: “we declared you dead, O Mars” (Lubrin 2017, 2), “we named your heights and depths”, and, ultimately, in a bleak, sober tone, the poem plays with colonial ideas:

she'll take us deeper and convince us to send earthlings
to set up Earth colonies on your deserts. They won't ever
come back, but that's not so bad when we trade in
the grander scheme (2)

This, then, is a “we” evoking colonial actions as the poem troubles its ostensible inclusivity by pointing out its exclusionary bias:

the alien we think we know is the alien we only dream
up starting from the bottom
of the Curious (3)

Who has been included in the “we” of humanity has changed over time, as comprehensively outlined in Wynter's work (e.g., 1995a; 1995b). The alien, here, evokes all sentient beings not included in the category of the “human”, what Wynter refers to as “Man”, “overrepresented as the generic, ostensibly supracultural human” (2003, 288) and which stands in opposition to “its subjugated Human Others” (288). The capitalization of “Curious” elevates its significance for the construction of the alien; C/curiosity – the rover and the trait described as natural to humans – is used to justify “Man's” endeavor to explore other planets for the sake of ‘mankind.’

The poem subverts such hegemonic and singular understandings of ‘mankind’ or the ‘we’ of humanity by unmooring epistemological binaries. Lubrin's astropelagic poetics of mobility follows its own movement as it repeatedly breaks with the documentary's narrative, slowing down to insert new meaning, or accelerating to sharpen the poem's critical voice. As such, the text disrupts the epistemic order of linear movement, as it, according to Purewal, “sets the stage for an epistemic poetic movement that is slower – both against and beyond the flow of colonial ‘comprehension’ – and that approaches the world (and other worlds) in its entanglements. The Black knowing allows

for curiosity about worlds in their emergence, rather than in their capture' (2022, n.p.). Lubrin's astropelagic poetics thus does not simply imitate colonial mobilities but intervenes in a teleological and linear flow of movement.

The poem's epistemological mobilizations are highlighted in the title, which suggests that this mobilization is one motivated by a quest for higher understanding. The first stanza establishes a contrast between a theocentric Christian search for truth in the divine or sacred (Wynter 1995a, 13–14) and vodou, where any ordinary practitioner can be possessed and thus embody *lwa* ("spirit"). Both, however, rely on the imagination:

Before sight, we imagine
that while they go out in search
of God
we stay in and become god (Lubrin 2017, 1)

Vodou needs no intermediary between the divine and the human, meaning that this conception of the human finds humanity within the subject itself instead of in a quest for a higher (capitalized) Divine. "Becoming" refers to the processual nature of identity as a human subject, created, too, through "storytelling" (see Wynter and McKittrick 2015, 25). Brathwaite's definition of a Caribbean cosmology, of which vodou is a substantial part, is central in this respect as it follows the "notion that culture is integrated at a certain level, a level of worship, of celebration, of in-gathering" (Brathwaite 1996, 8). Brathwaite and Wynter both use vodou as a counterexample to Western humanism to make the claim that "culture [...] provides the ground of all human existential reality or actuality" (Wynter 1995b, 20–21). Both Brathwaite and Wynter point out that vodou, as opposed to other religious or cultural practices, has not been fully erased by the colonizer, but in Haiti remains a dominant, albeit stigmatized, belief system that stands in opposition to that of Haiti's elite. This contrasts the move from the sacred to the secular human of the West, which Wynter locates after 1492 with the gradual shift towards *homo politicus* (Wynter 1995a, 122–23). Putting "Voodoo" into conversation with "Hypothesis", the poem (and the book as a whole) can be read with Wynter as a poetic inquiry into the present hegemonic Western epistemology, which is, in turn, closely linked to ontology and what it means to be (conceptualized as) human.

For Wynter, the question of the "human" is not merely biological but is culturally specific, which is why she speaks about "*genres* of the human" (2006, 117), rather than giving unchallenged preference to one ostensibly universal

overrepresented “Man.” As she proffers, “[w]e can experience ourselves as human only through the mediation of the processes of socialization effected by the invented *tekhne* or cultural technology to which we give the name culture” (2001, 53). Lubrin’s astropelagic Afrofuturist poetics complicates singular understandings of the human by offering a lyric voice that is multiple and changing, speaking to different “genres of the human”, including the posthuman variant of the rover. Through the voice of the rover, the poem mobilizes binaries and hence weaves together different epistemic and cultural practices into an astropelagic textual fabric. As an introductory poem, “Voodoo Hypothesis” thwarts the erasure of exploited, mostly non-white subjects from grand narratives of expansion and thereby reinscribes Blackness as not merely a *part of* genres of the human but as potentially overturning such dominant Western epistemes through Afrofuturistic imaginaries that build on an astropelagic poetics.

“Voodoo” and “Hypothesis” not only mark Black diasporic and Caribbean experiences but also offer a wider understanding on how dreams of outer space mobility might be – in this uninterrupted “order of knowledge” (Wynter 1995a, 30–31) – a logical consequence of former colonial dreams of conquest such as of the ‘New World.’ Wynter, who explains shifting conceptions of the “human” as partly construed by the capacity to conjure up narratives and imaginations through “linguaging” (31), evokes poetry as particularly fruitful for unsettling present epistemes (1995b, 32–33). This resonates deeply with Lubrin’s poetic inquiry:

The stuff that determines a belief in belonging extends to speech. And since language is inherent to the project of poetry, whose every ache and luminosity is music, the song and celebration premised in the mode of its creation is troubled by a faith in words. Offered here are the polyvocal rhythms of tracing the creolized landscapes that riddle the West through the immense gravity of our colonial history. Offered, too, is a geography peopled through the very act of mining the complexly unique, simultaneously exilic and concentric circumstances of diaspora. People charged by their own insistence to be alive and to be. But with a place to disembark, yet without a place to claim and to be tethered to, here is, eventually, to reckon a re-entering into humanity, into speech, into body, into life beyond the trauma of unbelonging and even death. The Black body, then, is undeniably always the modern self. This is the project of *Voodoo Hypothesis* and it is one that resists any sure categorization because to be alive in the Black diaspora is to be in constant, ‘conscious’ flux. (Lubrin in Queyras and Lubrin 2018, 44–45)

An understanding of the Black body's presence in the constitution of modernity is indeed pertinent to *Voodoo Hypothesis*. Lubrin emphasizes this presence by alluding to the violence endured by Black people in contexts related to the realization of outer space technologies – such as the “immense gravity” of Black bodies working in the bauxite and other mining industries.

This leads us to the ontological and material dimensions of outer space mobilities, which are articulated through the space rover *Curiosity*, the prosthetically enhanced body that carries out visions of ‘mankind’ in outer space. Propelled to Mars with the hopes and dreams of mankind, the rover represents a different shift towards a posthuman conception of what it might mean to be human in the future. The first stanza illustrates this development, as becoming “god” is turned into “become: *Curiosity*” (Lubrin 2017, 1). The colon requires a short break in the reading of the line and briefly pauses the text at an anticipatory moment to create suspense before introducing the capitalized rover. The colon also points to what is to come and announces a shift towards *Curiosity*, now paralleled to, or replacing, “god.” *Curiosity* embodies something god-like through her ‘divine’ quest on Mars, a quest for a futurity of mankind driven by technology. As such, the subjectivity of the rover is not merely defined by laws of physics and mechanics but also by a human languaging capacity that weaves it into part of ‘mankind’s evolution’, conjured up by their hopes and dreams. Like science/and/fiction figures such as robots, androids, and cyborgs, the rover embodies “the relationship between technology and human subjectivity” (Hunte 2019, 18).

“Voodoo Hypothesis” thus establishes a link between the rover and the Black body on several levels. From the past to the future, the plantation to outer space, the Black body has been reduced to its laboring function. This parallel between the robot and the racialized subject is also a core trope of Afrofuturist SF. As Louis Chude-Sokei argues, “technology has always been racialized” and it is thus “no accident, for example, that robots function much like slaves in science fiction” (2015, 2–3). The rover, operating on the frontier of outer space, is thus linked to the Black diaspora and the Black body, described as a constitutive part of modernity, as evoked by Lubrin: “the Black body in diaspora is the modern body because it exists in modernity before time. It is already beyond circumstance. It ushers in the next thing – the future, if you will – through sheer creative force even when it is given none of the credit” (Lubrin in Queyras and Lubrin 2018, 46). In this vein, the poem comments on the cynicism of AI machines and robots being increasingly humanized, while Black subjectivities continue to be de-humanized.

Lubrin's countering of Black erasure can be read on two levels through an Afrofuturistic lens: on the one hand, she showcases the Black body as essential for the realization of futuristic dreams of 'mankind' (despite its exclusion from the idea of 'mankind') given that the rover can be read as "black technology"¹⁰; on the other, the poem accesses Afrofuturist reconfigurations of time as it explores the temporalities linking *Curiosity's* Mars voyage to the Middle Passage and the plantation. Lubrin's poetics of a hybrid bios/logos raises questions related to the ontological and material conditions of the human as, through *Curiosity's* personification, the machine is humanized due to its function in mankind's space exploration, while humans, in turn, have been rendered machines on the plantation and beyond. As Chude-Sokei proffers, Wynter's understanding of the human illustrates

that this system of thinking in generating structural oppositions also creates *other forms of life* just as much as it denies life to other forms. It transforms humans into objects but allows objects to claim the category of the human by virtue of the fundamental errors of the episteme in its capacity to assign life and meaning. (2015, 222)

Curiosity's particles are humanized as she is given a soul in the poem: "Curiosity, / whose soul is a nuclear battery" (Lubrin 2017, 1). The soul, even though metaphorically engineered as constituted by technological parts, grants humanity to the robot.

In an Afrofuturist reading, the machine can be linked to the Black body figuring as technology on the plantation. *Curiosity's* conception as a laboring body at times evokes work both on the plantation of the past and in the mining industries today. The poem establishes this spatiotemporal conflation through a parallelism in the rover's use of idiomatic expressions of servitude: "at your service, at your sand, at your valley" (Lubrin 2017, 2). The shift from "service" to "sand" and "valley" suggests a transition from slave labor on the plantation to contemporary mining. Hence, *Curiosity's* arrival on Mars brings to mind African enslaved people's arrival in the Americas and linear temporalities are

10 Jacinth Howard suggests the term 'black technologies' in the context of Caribbean speculative fiction, which describes "an intersection of these notions of Caribbean blackness and technology as the invention of mechanisms that exhibit the application of scientific knowledge. It involves the reading of occurrences through Caribbean-rooted epistemologies" (2019, 3).

transfigured through references to both colonial projects and the plantation as past, present, and future are re-entangled.

From an astropelagic perspective, Mars can be read here as a terripelagic extension of the “repeating islands” described by Antonio Benítez-Rojo (1992), which he explains by reference to the first plantations established on European islands, then formed into larger plantations in the Americas. The island that “repeats” is “unfolding and bifurcating until it reaches all the seas and lands of the earth, while at the same time it inspires multidisciplinary maps of unexpected designs” (Benítez-Rojo 1992, 3–4). In a sense, outer space projects’ clear linkages to resources and labor in the Caribbean propels Benítez-Rojo’s “meta-archipelago” (4) beyond the earth and towards the cosmos. Lubrin establishes this by means of an astropelagic poetics, using repetition as a recurring strategy, not merely on a linguistic level as a form of mimicry, but also to establish repeating contextual patterns on Earth and Mars. The paratext and the aesthetics of the poetry collection – the cover, the topographical lines – add to the multidisciplinary map evoked by Benítez-Rojo, which here becomes a cosmological map. Repeating patterns in the poem create the impression of an endless cycle of hypotheses tested: “in her lab within a lab within / a lab” (Lubrin 2017, 1). The repeated lab extends from the rover to Mars, to the cosmos; enclosed “within” this repetitious spatiotemporal circle of racial capitalism and humanist ideas of progress, the poem signals the loop of reproduction that echoes through the laboratory sites of the cosmos.

These dreams of unlimited mobility, repeated across time and space, are embodied by the rover’s very materiality, aluminum, evoking the “aluminum dreams” carved out in Mimi Sheller’s eponymous book (2014). Sheller traces the emergence of aluminum as a crucial material to advance Western dreams of innovation and technological progress. As an essential material in all transportation industries, aluminum has been driving dreams of unfettered movement: it has enabled technologically enhanced human movement to be faster, lighter and thus to go higher, eventually reaching outer space. Aluminum dreams, according to Sheller, are those dreams that involve “hopes and idealistic projections of modernization, prosperity” (2014, 5), as well as “false hopes that led to failed technologies, pollution, social dislocation and environmental devastation” (5). These dreams and fears, projected onto *Curiosity*, are articulated in the poem as “She doesn’t need to know our fears” (Lubrin 2017, 1), yet “she” stands as symbol of hope for techno-optimism: “Curiosity / and her clues to calm our fears of what’s coming” (1). Lubrin plays with the trope of hope through mimicry as she turns the documentary’s metaphorical

reference to *Curiosity* as “hope on a rope” (in reference to the rover’s landing system) into “hope beyond hope, on the tip of your rope” (1). Doubled in the poem, hope becomes a repeating act – beyond hope, there is yet again hope. Yet, dangling at the tip of the rope, the relentless, inexhaustible successiveness of hope exists within what Christina Sharpe calls the wake: hope structures “the atmosphere” (2016, 106), from the Middle Passage and slavery, replaced by lynching and Jim Crow laws, to mass incarceration and ongoing rampant police brutality, still persistent in the aftermath of Barack Obama’s politics of “hope.”

The image of the rope also establishes a link between the slave ship and the rover in outer space, entangling past, present, and future. The poem hence unpacks the double-edged meaning of hope, not merely a positive force but also as fragile and fraught. If beyond hope people are yet again urged to hope, it can potentially obscure structural and systematic problems that keep people in dire circumstances.¹¹ The aluminum dreams embodied by *Curiosity*’s mobility are predicated on the immobilization of workers, often on sites of former colonies. Bauxite, the main source for aluminum, is taken from, among other places, the Caribbean; not without devastating consequences in terms of ecological destruction, health risks for workers, and exploitation of cheap labor (Sheller 2014, 6).¹² Again, mining is shown as a repeating extractivist act, one full of hazards and problems, as the poem retells the Apollo mission’s drilling on the moon:

Apollo drilled on the moon and got stuck
the harder we’ve drilled down here
the more we’ve loosened our screws (Lubrin 2017, 3)

Through the material of aluminum, one can thus trace the violent and fraught costs of accelerated human mobilities. The poem illustrates the ambivalence of acceleration discourses of mobility, necessary for continued capitalist flows of products, growth, and innovation, by opposing them to the decelerative forces of Mars’ gravity. In stark contrast to the acceleration and velocity that propelled *Curiosity* towards its destination, it is decelerated movement which eventually enables the rover – and thus “humanity” – to land on Mars: “with the kindness

11 See also Lauren Berlant’s argument in *Cruel Optimism* (2011) in this context.

12 On Jamaica’s aluminum industry, see also Esther Figueroa’s documentary *Fly Me to the Moon* (2019).

of antigravity slowing you down” (1). Once landed, *Curiosity* roams over Mars with the same teleological and progress-oriented impulse that has brought her there in the first place as, since there is “nothing too strange to keep *Curiosity* off course” (2):

Curiosity will keep on until the organic secrets
of Martian puzzle become as household to us
as carbon. (Lubrin 2017, 2)

The rover moves for the sake of science, and thus allegedly for ‘mankind.’ The poem points to the epistemic violence of a teleological, accelerative mobility as “we move too quick for understanding” (3) and as *Curiosity*’s postcard comes “travelling / on a space dust faster than a bullet” (3). As one of the last lines of the poem, the latter sounds out a warning, sharpened by the consonance preceding the violence of the bullet.

IV. Conclusion

In sum, the poem’s critique of fast-paced mobilities for the sake of science can be read as twofold: on the one hand, it problematizes projects of terripelagic outer-space mobilities oblivious to the concomitant violence and exploitation of those not included in the umbrella term of ‘mankind’; on the other hand, it evokes dreams of outer-space colonization that proceed with exploration in an entrepreneurial competitive urge rather than one taking into account a planetary understanding of care. Against a hegemonic cultural imaginary regarding outer space territorialization, or, in other words, “the transformation of outer space and its celestial bodies into an outer space ‘terripelago’” (Ganser, Temmen, and Rettenbacher 2023, 275), Lubrin’s Afrofuturist take on the technoscientific project of Mars exploration presents a poetic intervention that taps into the epistemic potentialities of thinking outer space astropelagically. As such, it can be read as a much-needed poetic critique concerning “the current transformation in both science and culture of celestial bodies into desirable territories of imagination, capitalization, exploitation, and imperialism” (275). Such a critique, in our view, presents an important commentary on contemporary outer-space territorializations based on Afrofuturist techno-critical discourse; it contrasts traditional atomistic or (neo-)liberalist (hyper-)individualism and promotes “a decentering of the conquering subjectivities of the Second Space

Age”, thus derailing teleological mobilities to outer space that are posited as a ‘natural’ next step in the development of a mythologized US frontierism (see Ganser, Temmen, and Rettenbacher 2023, 277).

Lubrin’s counterpoetics to the PBS documentary – the American Public Broadcasting Service stands for ‘serious’ US media channels that can be read as representing a liberal ‘common sense’ or status quo – troubles one-sided, celebratory conceptions of future im/mobilities. Her Afrofuturist poetics stands in stark contrast to linear and teleological (capitalist, neocolonial, and neoliberal) ideas of mobility. Through poetic strategies such as mimicry, opposition, the unmooring of epistemological binaries, and shifting subjectivities, the poem illustrates the entanglements of mobilities to outer space with immobilities on Earth, related to the materials that facilitate faster travel yet extract terrain resources and immobilize workers on site. It shows future im/mobilities as always already entangled with the past and present, as “repeating” in Benítez-Rojó’s sense of the “meta-archipelago”: as Black and Brown people experience physical movement through public spaces as primarily risky due to blatantly racist police violence and structural racism in general, Western dreams of cosmic hypermobilities stand in stark contrast to such immobilizations ‘at home’ on Earth.

Arguably, “Voodoo Hypothesis” turns poetry itself into a ritual or spiritual practice of exorcising violent, even fatal Western epistemologies of a humanism that excludes the majority of humanity. While, in Lubrin’s poem, “Voodoo” and “Hypothesis” allude to two distinct “culturally instituted order[s] of consciousness or belief system[s]” (Wynter 1995b, 20), it is within the opaque spaces between these conceptions that the poem provides glimpses of how to reimagine Black futures: ones that necessarily need to include hybrid genres of the human, multiple subjectivities, and their culturally constituted conceptions of what it means to move towards a future. An Afrofuturist astropelagic poetics such as the one presented in Lubrin’s “Voodoo Hypothesis” imagines not only outer space mobilities but also epistemologies *otherwise* and enables a critical engagement with questions of im/mobility, on Earth and beyond.

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Resurrecting the Past to Save the Future?

Mobile Afterlives of the Thylacine

Romana Bund

I might [...] renew life where death
had apparently devoted the body to
corruption.

*Victor Frankenstein in Mary Shelley's
Frankenstein; or, The Modern Prometheus
(2017, 10)*

The history of Frankenstein and his monsters is anything but unknown. Since its publication in 1818, the story has been adapted and interpreted countless times in popular culture but has also become a touchstone cautionary tale of technological progress. The narrative centers on the inquisitive Victor Frankenstein, whose obsession with the idea of eternal life and immortality drives him to the cemetery to search for spare parts in a quest to create life. Eventually, he is able to patch together a creature out of animal and human remains, bringing it to life on a dreary November night. Frightened and disgusted by the creature's appearance, Frankenstein flees. Seeking affection, empathy, and responsibility, the nameless creature is disappointed by its creator, whose initial descriptions of a "monster" or "devil" (Shelley 2017, 43, 58) turn into a self-fulfilling prophecy. Shelley's novel warns of the unbridled hubris of modern science and technological advancements.¹ Its cautionary message can also be considered all too relevant for today's biotechnological

1 For the connection between the novel's warnings of the unbridled hubris of science and technology with race and imperial anxieties in the Victorian era, see Chude-Sokei (2016).

progress. In the vein of Victor Frankenstein, researchers and biotech companies aim to resurrect extinct species. Also referred to as de-extinction, the reanimation of specific animals through new biotechnologies attempts to counteract current mass extinction as a means to save biodiverse ecosystems. At the intersection of biology and medicine, recent de-extinction efforts try to lift the boundary between life and death and mobilize specific beings to live in the future.

This chapter inquires into the possibilities, consequences, and meanings of attempts at resurrecting extinct species. Drawing on the example of the eradicated thylacine, also called Tasmanian tiger or wolf, this contribution will show the multilayered material and immaterial mobilities of the animal after its death and make visible its entanglements with different temporal, historical, and spatial dimensions. The attempt to (re-)mobilize the thylacine started in 1999 when scientists at the Australian Museum in Sydney began to examine preserved remains of the animal in order to clone and resurrect it (see Fletcher 2008). In addition to investigating the spatial movements of the remains, this chapter turns to the symbolic processes of transformation in so-called resurrection programs. As Mimi Sheller and John Urry argue, “Mobilities involve complex ‘hybrid geographies’ [...] of humans and nonhumans” (2006, 215). Being mobile or becoming immobilized, as the colonial history underlying the extinction of the thylacine makes visible, is closely connected to colonial domination, power structures, and the commodification of life. The ability to be mobile is unequally distributed and is also complicated by current climatic upheavals and species extinctions (see Glick Schiller and Salazar 2013; Sheller 2018). This chapter offers a critical examination of the mobility of these non-human remains, which de-extinction seeks to bring back to life through new biotechnologies. While terms such as back-breeding, reanimation, and resurrection imply the possibility of restoring these extinct animals as authentic beings, this chapter will trouble this assumption by exploring their hybrid status between nature and culture, death and life, copy and original as well as body and code.

I. Extinction between Ecocide and Genocide

A wolf-like marsupial with brown-black transverse stripes at the back of its body, the thylacine was originally native throughout the Australian continent and parts of New Guinea, though it eventually could be found only on the

island of Tasmania. Like the thylacine, the Indigenous names for Tasmania, *Trouwunna* or *Lutrawita*, were erased when the island was first sighted and later colonized by Europeans beginning in the 17th century. With the establishment of colonial settlements and large-scale sheep breeding, the thylacine lost its habitat and was deliberately hunted. The British wool industry portrayed the animal as a bloodthirsty sheep hunter and paid bounties for each animal killed: “It wasn’t a tiger, at least not in the biological sense. But in the cultural imagination of British and Irish shepherders transplanted to [...] the south-eastern coast of Australia in the early nineteenth century, the carnivorous, striped creature with the stealthy nature certainly fit the bill” (Minteer 2018, 97). The last known thylacine, named Benjamin,² died in 1936 in the Beaumaris Zoo in Hobart, the colonial capital of Tasmania. As the thylacine population was being increasingly decimated, the remains of the animals were comprehensively collected and exhibited. Nowadays, all that remains of them is their furs, bones, and bodies stuffed or preserved in liquid.

2 As has since been shown, Benjamin was not a male animal, as the name would suggest, but a young female animal. The name was most likely not an attempt at subverting the gender binary but a result of Eurocentric patriarchal knowledge production, which conceptualizes progeny and heads of families as masculine (see Paddle 2002, 197–201). In addition to the story of Benjamin the thylacine, similar tales exist of Lonesome George the Pinta giant tortoise, Martha the passenger pigeon, Cecilia the Pyrenean ibex, and Toughie the tree frog. The search for and individualization of last animals of a species has also been subsumed in the term ‘endlings’: “The endling label puts extinction on the human scale – it gives an animal a name, recognizes its worth, and asks for the human to empathize with the imminent end of a whole animal’s line” (Jørgensen 2017, 121; see also Pyne 2022).

Figure 1: Tasmanian tiger, thylacine (NMW ST 132). A specimen of the extinct thylacine is also part of the Natural History Museum's collection in Vienna.



Courtesy of the Natural History Museum Vienna.

An understanding of the possibility that species can become extinct emerged in the modern era. At the beginning of the 19th century, Georges Cuvier proved that vanished species had not moved to other continents but rather disappeared from the surface of the earth completely. By comparing different fossils, he opened the way to past landscapes, lifeworlds, and immeasurable temporalities (see Rudwick 1997; Kugler 2013). Cuvier introduced an unknown history of the planet, which also necessitated a renegotiation of the position and exceptionality of humans. White European men, who had long viewed themselves as the pinnacle of creation, had to recognize that they represented only part of a history that stretched back millions of years and were, like their environment, finite. With the discovery of extinction and species finitude, it became apparent that time, as Michel Foucault writes in *The Order of Things*, “comes to [man] from somewhere other than himself” (1994, 369).³ Additionally, new forms of exploitation and oppression were introduced against those human and nonhuman beings which colonialism had deemed

3 For more on the temporalization of human and natural history, see Lovejoy (1996).

inferior. The history of the idea of extinction is therefore linked to the obliteration of particular animal and human groups, extending scientific claims on the finitude of life into violent hierarchies of who gets to live and who must die. For this reason, the notion of the “genocide-ecocide nexus” (Short and Crook 2002) is used in recent research to illustrate how species extinction is directly tied to the extermination of certain human communities. Against this backdrop, Joshua Schuster’s *What Is Extinction? A Natural and Cultural History of Last Animals* (2023) convincingly connects the destruction of nonhumans to the extermination of Indigenous peoples and languages as well as the Holocaust.⁴ Following Schuster, extinction can be said to represent more than biological decline and is centrally tied to global histories of power and domination: “Yet extinction is not just a biological event and is not knowable only biologically; it also is a concept and a historical event that involves multiple agencies, documentations, metaphors, and cultural forms that solicit multiple kinds of awareness” (Schuster 2023, 8).

This link between species extinction and the exploitation and extermination of certain human communities is also evident in the history of the thylacine, which is closely related to the subjugation and killing of Indigenous peoples of Tasmania. Dutch expeditions came upon the island in 1642, and in 1803, the first British settlers occupied the southeast of the island. Members of the Leenowwenne and Pangerninghe most likely represent the first victims of British settlement. In the course of the 19th century, the British increasingly conquered native land, built colonial settlements, and suppressed countless rebellions of different Aboriginal communities, who were progressively dispossessed of their lands. Tasmanian Aboriginal peoples were forced to labor in agriculture, housekeeping, and transport, abducted, deported to reservations, and subjected to countless massacres (see Clements 2014; Breen 2011). Truganini (or Trucanini), a Nuennonne woman who died in 1876, is storied incorrectly as the last of all Aboriginal peoples in Tasmania. The assumption that Tasmania’s Aboriginal populations were extinguished is part of a colonial myth propagated in the course of British settlement and persists to this day. The British writer James Bonwick recorded and disseminated the history of Tasmania’s Aboriginal inhabitants in *The Last of the Tasmanians* (1870), placing it within a Eurocentric history of discovery and science. As Bonwick’s book shows, motifs of finitude as represented through depictions of last members

4 In his novel *Beatrice and Virgil* (2010), Yann Martel similarly shows the connection between animal eradication and the Holocaust.

of a kind are thus to be found not only in narratives about animals but also about certain human groups.⁵ While the thylacine's status as extinct has led to efforts to mobilize the animal by reanimating and reintegrating it into the Tasmanian flora and fauna through biotechnologies, descendants of Indigenous peoples in Tasmania still have to fight to recover their material and immaterial heritage. As Emma Lee writes, this colonial vestige impedes the political, financial, and cultural self-empowerment of Aboriginal communities to this day:

As an extinct person and *trawl/wul/wuy* Black female body, the former has always taken precedence over the latter as the characterization of my being. The very existence of my body has had to be defended throughout my life and guarded against accusations of extinction through white annihilation. Our supposed extinction was, and still continues to be, taught, historicized, researched and claimed as fact by the colonizers. (Lee and *tebrakunna* country 2022, 140)⁶

Despite the joint disappearance of Aboriginal peoples and animals, the exclusive reanimation of the thylacine shows that not all beings are equally mobilized or expected to live in the future. Rather than representing an innocent practice to protect and preserve biodiversity, the resurrection of some animals is deeply embedded in the desire to control life. The attention paid to the extinction of entire species serves to raise awareness for the shared finitude of life on earth but is also steeped in violent hierarchies. The history of the extermination of Tasmania's Indigenous and animal inhabitants shows how some – certainly not all – lives are mobilized for future generations.

5 Shelley's *The Last Man* (1826) can be viewed as one of these narratives, for it, too, thematized the human species' vulnerability. While this novel subscribes to the Romantic vision of reconquest by nature (see also Horn 2018, 21–54), the story of Truganini shows how communities can be deprived of their right to live.

6 For further important texts, methodologies, and centers on indigenous self-empowerment against the omnipresent colonial myth of the non-existence of indigenous communities in Tasmania, see Smith (1999) and Lee (2019).

II. Mobilizing the Thylacine through Cloning and Digital Archives

The mobilization of extinct life forms generally takes place with the help of biotechnological practices. Currently, the three most promising strategies that can be used to bring species back to life are cloning, back-breeding, and genome editing. These approaches are simultaneously related to the digital storage, classification, and translation of bodies into letters and codes. The initial method chosen to resurrect the thylacine was cloning. In this procedure, referred to as somatic-cell nuclear transfer in genetics research, the nucleus of a preserved cell, such as might be found in a museum specimen, is introduced into a denucleated egg cell and implanted into a closely related surrogate mother to carry to term. If the fetus survives, a genetically identical copy of the respective animal is born. Already in the late 1990s, the Australian Museum announced a research project devoted to achieving this goal using a female thylacine pup that had been preserved in alcohol (see Stark 2018). It is no coincidence that the team around Don Colgan, the head of the Australian Museum's research group on evolutionary biology at the time, chose this de-extinction method for the thylacine. Originating in the field of plant science, the concept of cloning became linked to images of reproducing and creating artificially manufactured human bodies with Aldous Huxley's novel *Brave New World* (1932) (see Marek 2012). Since then, this concept has inspired ideas and fears about the power of the artificial reproduction of human and nonhumans. Drawing on Hans Blumenberg's "metaphorology", literary and cultural Studies scholar Sigrid Weigel has discussed "the constructive importance of the metaphor of 'readability' to the discovery of the genetic code" (2000, 22; translation ET). At the same time, she argues that the "metaphorical origins of genetic terminology are forgotten" (2000, 22; translation ET)⁷ when words such as *program*, *information*, or *code* are used in an unambiguous manner that conceals the blind spots of biological knowledge (see also Kay 2000). In contrast to *Brave New World's* narrative and the idea of artificial reproduction through the splitting of embryos, the research project was suspended after six years due to lack of results. Although genetic material was extracted and information about the animal's DNA was gained, the DNA was too defective to be implanted into a surrogate mother (see Fletcher 2008, 194–97). While the

7 German originals: "die konstruktive Bedeutung der Metapher der 'Lesbarkeit' für die Entdeckung des genetischen Codes"; "das Vergessen des metaphorischen Ursprungs der genetischen Terminologie" (Weigel 2000, 22).

thylacine remains extinct for the moment, not all biotechnological attempts at cloning are mere wishful thinking. Indeed, the artificial reproduction of animals has been a reality since the birth of the sheep Dolly. Even though attempts to reanimate extinct animals are still subject to failure, the genetic duplicates of deceased animal companions are already living among us.⁸

De-extinction is based on organized and categorized collections of information in electronic or digital databases. The translations and orderings of bodies into and within digital catalogs also play a significant role in the case of the thylacine. Despite the failure thus far to genetically reanimate the animal, the thylacine's popularity has highly increased, and its remains have become downright hyper-mobilized. Whether as a helpless farewell ritual or as an actual tool of resurrection, several attempts have been made over the past two decades to conserve the thylacine by translating it into codes and letters. The Australian Museum's research project led to the creation of the International Thylacine Specimen Database.⁹ The aim of the database was to collect and place all preserved specimens, including whole bodies, furs, bones, and further remains in a digital archive. The thylacine was thus entirely transferred to the cultural sign-world of linguistic codes. In a repeat of its inclusion in Carl Linnaeus's system of taxonomy and classification according to his binary nomenclature as *Thylacinus cynocephalus* at the beginning of modernity, the extinct animal yet again became a sign. In 2009, an international research group decrypted the thylacine's mitochondrial DNA (Miller et al. 2009) and, in 2018, the entire genome was finally decoded (Feigin et al. 2018). As the research results, an accumulated series of numbers and letters, were shared via the network of the internet, the thylacine is no longer restricted to individual museums or other institutions. Rather, it has become available worldwide, apparently saved for eternity. This process of translating and securing bodies in digital databases likewise can be read as an attempt to counteract extinction. While the body of the thylacine remains immobile, its collected symbols and codes are mobilized and can be accessed globally. This increasing transformation of life forms into data creates the impression that human and nonhuman organisms

8 One notorious example is Barbara Streisand's dog, Samantha, a clone of one of the singer and actor's previous dog. Companies that clone pets in exchange for large sums of money include the Texan firm ViaGen Pets and the South Korean Sooam Biotech.

9 Unfortunately, not all information in the database about thylacine specimens is (yet) available online. Instead, it is stored on a DVD at the Zoological Society of London (see Sleightholme and Campbell 2018).

are infinitely shapeable and that death itself is deferrable, fostering “the belief that the body is essentially a computer made up of overwritable data and updatable apps” (Friend 2017, n.p.).

Biodiversity databases and lists of endangered species are also important tools in the handling of endangered species. Registers such as the Encyclopedia of Life (EOL), the Biodiversity Heritage Library (BHL), and the International Union for Conservation of Nature’s (IUCN) popular Red List of Threatened Species seek to inventory and classify all life on earth. Any attempt to inventory all of life is, however, doomed to fail, since it is impossible to record all species. In addition, as Katherine Hayles emphasizes, the creation of different analog or digital catalogs cannot be viewed as a neutral endeavor: “Because database can construct relational juxtapositions but is helpless to interpret or explain them, it needs narrative to make its results meaningful” (2007, 1607). Inventorying life is thus not only about documenting and describing a given nature but is significantly shaped by culture, politics, and technologies. In addition to enabling the classification and evaluation of threatened species, these databases also represent important tools to plan and implement concrete protection measures and are directly involved in managing the survival of entire species. Even though non-threatened species are increasingly being incorporated into these lists of endangered species, this particular organization of beings seems to follow the capitalist principle of scarcity. According to these catalogs, plant and animal species are defined as worth protecting if only a few individuals of their kind remain (see Heise 2016, 55–86). The focus lies not on those beings that stand a chance of actually surviving, but rather is given to species that are already or almost entirely lost. This makes it all the more vital to not view individual species in isolation, but to generate habitats, ecosystems, and ultimately sensitivities for complex, multispecies relations.¹⁰ The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) includes factors such as changing climatic conditions and ecosystems in its Studies. In IPBES’s biodiversity assessment report, endangered species are described as “dead species walking” (2019, 207). This descriptor is applied to species whose final disappearance as a result of the destruction and decrease of habitats is assumed to take place in the foreseeable future. A conspicuous reference to the figure of the revenant or zombie, it evokes the sense of an already

10 For a critical assessment of the approach to disappearing species as well as loss, grief, and living together in multispecies worlds during our era of mass extinction, see van Dooren (2014) and Rose, van Dooren, and Chrulew (2017).

irrecoverable species death. In doing so, it produces a state of immobilizing gloom instead of generating awareness and agency to preserve disappearing species and complex ecosystems. In this way, the tragic stories in the databases condense cultural longings, fears, experiences of loss, and painful memories.

III. Breeding Back the Past for the Future

The longing for past eras, places, and value systems also figures prominently in the protection and desired reanimation of animals on the verge of extinction. This emotional orientation towards the past is especially apparent in practices of so-called back-breeding. Based on the millennia-old practice of selectively breeding domesticated animals, back-breeding programs seek to imitate the anatomical and phenotypic characteristics of an extinct animal and create a visual copy with the help of closely related species. In this case, authenticity is defined not as genetic correspondence but outward appearance. Since back-breeding has not been attempted to resuscitate the thylacine, this method will be illustrated with the help of the extinct quagga, a subspecies of the South African plains zebra. The quagga – whose stripes, in contrast to zebras, disappear in the back part of the body – was hunted to extinction by colonial settlers in the late 19th century. In order to reverse this irretrievable loss, the Quagga Project was initiated in 1986 by the German-born animal taxidermist Reinhold Rau, whose motivation for this endeavor can be traced back to the Third Reich. Rau became interested in the quagga when he started working at the South African Museum in Cape Town in 1959. He was inspired by the breeding attempts of the brothers Heinz and Lutz Heck (Rau 1999, 1). During the Nazi era, Lutz Heck had been the director of the Zoological Garden in Berlin and closely connected to Hitler's regime. As he later wrote in his memoir *Animals: My Adventure* (1954), he and his brother had wanted since the 1920s to breed back extinct animals that were part of the Germanic mythology of 19th-century Wagnerian Romanticism (see also Wang 2012):

In my youth my imagination was caught by the famous description in the Nibelungenlied of Siegfried's hunt in the forest of the Vosges. [...] I was interested above all in the two huge wild oxen, which [...] are regarded as the most powerful representatives of primeval German game – the European bison and the aurochs. (1954, 154)

The results of the Heck brothers' experiments can still be found today in the form of heck cattle and heck horses. Yet neither these species nor Rau's later attempts at back-breeding quaggas closely resemble the animals on which they were modelled. Instead of reviving the aurochs, tarpan, or quagga, the experimental crossbreeding of different breeds created entirely new species that do not look like their extinct counterparts.

The quagga back-breeding program reveals how the notion of a seemingly authentic nature is based on idealized visions of lost pasts. Rau's quagga demonstrates that questions of naturalness and authenticity are shaped by the imaginations of a minority and are historically constructed. In "Zombie Zoology: History and Reanimating Extinct Animals" (2015), Sandra Swart traces the history of the quagga's back-breeding. Referring to the figure of the undead in the article's title, Swart questions the seeming neutrality of scientific practices. Instead, she situates the bred creatures and ideals that back-breeding programs seem to reanimate in the past. Similarly, Dolly Jørgensen argues "that the recovery of nature [...] is a nostalgic practice that looks to a historical past and relies on *belonging* to justify future-oriented action" (2019, 4). The word 'nostalgia' consists of the Greek words *nóstos* ("return" or "homecoming") and *álgos* ("pain"). Nostalgia thus describes the longing for a home that has disappeared or never existed. It is connected to the feeling of loss of origins and includes romanticized images of the past. This state of painfully looking back becomes problematic when essentialized belonging and identity are framed as means "to repair longing" (Boym 2001, xv).¹¹ For Jørgensen, models of belonging are a significant driver of back-breeding experiments. Rau's quagga and the Heck brothers' cross-bred animals reveal the way in which a present believed to be decaying draws on images of the past to influence and restore future biodiversity. Turning back to the thylacine, it becomes clear that this animal never entirely disappeared from colonial memory and in

11 The definition of this term draws primarily on Svetlana Boym's discussion of nostalgia in her book *The Future of Nostalgia* (2001); see also Fredric Jameson's concept of "nostalgia mode" and his critique of postmodernity (1991). In this context, Renato Rosaldo has also written about "imperialist nostalgia": "Imperialist nostalgia thus revolves around a paradox: a person kills somebody and then mourns his or her victim. In more attenuated form, someone deliberately alters a form of life and then regrets that things have not remained as they were prior to his or her intervention. At one more remove, people destroy their environment and then worship nature. In any of its versions, imperialist nostalgia uses a pose of 'innocent yearning' both to capture people's imaginations and to conceal its complicity with often brutal domination" (1989, 108).

fact significantly contributed to the creation of Tasmania's colonial identity. This is illustrated by its depiction in the logo of the local Cascade Brewery or in Tasmania's coat of arms, which was granted by King George V in 1917. Shortly before its final disappearance, the animal became Tasmania's national symbol, once again reflecting colonial boundaries.

In addition to hiding colonial violence and strengthening national identities, longing for a long-gone or nonexistent past also enables the significant growth of capital. This is the case because if de-extinction succeeds, it promises to make risky aspects of birth, life, and death malleable, marketable, and upgradeable. It is thus no wonder that early attempts to resurrect the thylacine at the Australian Museum were financed not only by government funds but also through private donors (Fletcher 2008, 197). In the case of the Quagga Project no government support has been given. Instead, the project website points to companies such as Gordon Verhoef & Krause and Mondi Paper Waste as well as advocacy groups such as the Confederation of Hunting Associations of South Africa, the Detroit Chapter of Safari Club International, the Friends of the South African Museum and anonymous private donors as sponsors. In both cases, it becomes apparent that back-breeding programs and de-extinction in general provide fertile ground for commodifying and marketing life forms.¹²

IV. Genome Editing and the Quest for Future Immortality

At the moment, the most promising and most funded method for reviving extinct species is genome editing, also known as the CRISPR/Cas system. While CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) is an acronym for stretches of repeating DNA, CRISPR-Cas9 refers to a technique for the targeted alteration and manipulation of genetic material. This technique is relevant for reviving extinct species because genetic material extracted from preserved specimens is often too defective to be manipulated, as was the case with the cloning attempts undertaken in the Australian Museum in the early 2000s. By allowing genetic material to be cut, deactivated, and modified as desired, CRISPR-Cas9 promises to restore damaged genomes of extinct species. The idea here is that such genomes could then be carried to

12 For a critical reading of biotechnologies and the collapsing of nature and culture in concrete techno-scientific constellations and products such as the transgenic Onco-Mouse™, a patented organism created in a lab, see Donna Haraway (1997).

term by a surrogate mother, making the fantasy of directing life and death a reality.

The thylacine is among the species that researchers are trying to reanimate with CRISPR-Cas9. In March 2022, the Thylacine Integrated Genetic Restoration Research Lab (TIGRR) was founded at the University of Melbourne thanks to a generous private donation of five million Australian dollars. In collaboration with the US biotech firm Colossal Biosciences, the lab aims to create “a de-extincted thylacine-ish thing” (Evans 2022) within a decade. The necessary genetic material will be obtained from remains preserved in liquid at the Victoria Museum in Melbourne. Headquartered in the US state of Texas, Colossal Biosciences specializes in genetic engineering for protecting and restoring biodiversity. One of its co-founders is the Harvard University molecular biologist George M. Church, a leader in contemporary genome research and a part of various other past de-extinction projects. One of Church’s major ambitions is to reanimate and rewild the woolly mammoth, which is believed to have largely disappeared from the surface of the earth more than 10,000 years ago. According to Colossal Biosciences’ website, the company’s projects are supported by numerous private investors, including billionaire businessmen such as Thomas Tull and James W. Breyer or celebrities such as the actor Chris Hemsworth. Before Church took over the woolly mammoth reanimation project after founding his own company in 2021, he had collaborated with the organization Revive & Restore to use biotechnological processes to raise the animal from the dead and release it into the wild. Not by coincidence, Revive & Restore is headquartered in Silicon Valley, where the attempt to reanimate dead bodies and optimize living ones has already mobilized billions of investor dollars. Countless reports demonstrate that the Silicon Valley billionaire and co-founder of the payment service PayPal Peter Thiel has invested in woolly mammoth reanimation and has funded firms that sell blood transfusions from young donors to supposedly enhance longevity (see Solon 2017; Ward 2022). If such practices evoke associations with the vampire, they pale in comparison to the offerings of firms such as United Therapeutics or the SENS Research Foundation. Drawing on literary and cinematic models such as Michael Bay’s *The Island* or Kazuo Ishiguro’s *Never Let Me Go*, these companies aim to produce organs from human DNA or completely eliminate aging processes through targeted interventions in the body. All of these attempts at technological optimization share the goal of rendering death either a matter of choice or – if the resurrection programs are to be believed – reversible.

V. Conclusion: Mobile Afterlives, Biopolitics and Necropolitics

Thiel and the aforementioned organizations within and beyond Silicon Valley illustrate that programs for reanimating extinct animals represent merely the beginning of a much larger quest for immortality. The attempted (re)mobilization of extinguished species for the future must be interpreted as a strategic project for perpetuating colonial superiority and oppression. Reanimation attempts can be read as epitomizing the transhumanist fantasies of a small community that seeks to determine future life on earth with its resources and capital. At the same time, biotechnological methods of cloning such as CRISPR-Cas9 serve as an optimal breeding ground for transhumanist beliefs in the technical optimizability and domination of human and nonhuman life. Yet the history of breeding life forms is anything but a modern idea. For millennia, domesticated animals have constituted a major influence on everyday human life, and, to this day, they continue to be tamed, trained, and bred to be close human companions. While pets have become increasingly adapted to the indoor human environment, other domesticated animals were long indelible fixtures in human transportation, agricultural work or in warfare.¹³ Similar to the breeding and domestication of animals for purposes of care or physical labor, contemporary attempts to reanimate extinct species also reveal that the authority over life and death is in the hands of a privileged minority. As shown above, individual firms and actors of the Global North are currently defining biotechnological competition and the race for survival. At the start of 2023, Colossal Biosciences raised more than 200 million dollars to reanimate the dodo. While the aim is to reintroduce the famed flightless bird to the island of Mauritius where it lived before going extinct, the company's plans for the woolly mammoth are even more spectacular. If successfully reanimated, the animal is to be settled in its very own nature reserve, the so-called Pleistocene Park in northern Siberia. A team of scientists based in Germany is working to fill this section of tundra with flora and fauna from geological times long past

13 Among other places, the desire to artificially produce life forms was present in the so-called freak shows of the 19th century. Exploiting the formerly religiously motivated interest in monsters and prodigies, these shows did not simply present humans, animals, and objects as metaphors for otherness, ugliness, or foreignness. Entrepreneurial businessmen and circus directors also sometimes took it upon themselves to intentionally breed figures as monsters on the margins of acceptability (see Garland-Thomson 1996; Macho 2005).

in order to counter global warming (see Hunt 2023; Zimov et al. 2012). Yet, the question is whether the ecological niches that the woolly mammoth or the dodo filled still exist and whether it is actually necessary to revive these animals in service of protecting and preserving biodiversity. Even though promoted as projects to address ecological and climate challenges, the potential commercial and economic benefits through corporate investment and tourism cannot be denied as a main motive for species de-extinction.

Experiments in de-extinction may yet provide a path for reversing species extinction. However, as the previously mentioned examples illustrate, these experiments also subordinate these beings and their environments to colonial and capitalist control. Though performed in the name of care and ecological diversity, they protect the survival of some life forms while immobilizing, marginalizing, and exploiting others. Following Michel Foucault, these projects ultimately should be understood as biopolitical practices. Describing processes of social and political regulation of life and whole populations, Foucault's concept of biopolitics can provide insight into why some lives are preferred while others are suppressed and eliminated. In a decolonial critique of Foucault's concept, Achille Mbembe goes so far as to claim that biopolitical practices even turn marginalized and oppressed groups into "living dead" (Mbembe 2019, 92), what he refers to as necropolitics. Mbembe's recurring references to the figure of the undead not only recall the term "walking dead", as applied to endangered species in reports on biodiversity, but also underscore the central significance of colonial practices in contemporary structures of dominance and rule. Histories of extinguished species such as the thylacine reveal that the oppression and killing of certain animal and human communities go hand-in-hand. The extermination and attempted reanimation of non-human species is thus closely tied to the management and control of human populations. The violence inflicted on human and nonhuman species in the history of extinction makes visible that only select lives are mobilized and bred, while others become "disposable" (Mbembe 2019, 80).

As this chapter has shown, the thylacine and its translation into specimen, national symbol, or genetic code stay mobile after its extinction, oscillating between culture, nature, and technology. In other words, resurrection projects attempt to reverse the environmental changes wreaked by colonial and capitalist interventions by trying to (re)fill the holes punched in ecosystems through the biotechnological reanimation of species. At the same time, the resurrection and (re)settlement of extinct species can also conceal the very reasons for their disappearance. In this way, it becomes possible to promote the notion of

animals' lack of history, ultimately making previous exploitation and violence invisible. Examining the mobile afterlives of extinct species' remains thus unveils de-extinction as more than an innocent practice of saving extinguished and endangered animals. The attempts at resurrecting the thylacine and other extinct creatures, such as the ones exemplified in this chapter, are linked to a quest for control over future life and are deeply rooted in nostalgic fantasies of an unspoiled nature and authenticity. This chapter has thus shown the importance of a critical examination of actual extinction and de-extinction efforts by trying to make their violent implications visible.

Translated by Adam Baltner and Eléonore Tarla.

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Coming to a Halt

When the World Comes to a Halt

Imagining Im/mobilized Futures in the Work of Forster, Haushofer, and Lehr

Nicola Kopf and Annegret Pelz

I. Disappearing Futures

The resources of the future have been eroded.

Aleida Assmann (2020, 4)

Knowledge of the future can only be generated under the proviso of the imaginary and therefore can only be “conceived as imagined, made, fictional future” (Bühler and Willer 2016, 9). Nevertheless, the figures, forms, cultural techniques, and social practices with which the future is imagined, thought, and designed are a condition of the formation of social realities. Since future-oriented thinking is subject to and intervenes in the epistemological conditions and possibilities of the present (Bühler and Willer 2016, 17), research in Futures Studies addresses uncertainties by sustaining rather than eliminating them and finds a way to recognize, handle, and communicate them. This is especially true of the catastrophic perspectivation of the future that emerges in cultural imaginaries of the late 20th and of the 21st century, as John Urry notes in *What is the Future?* (2016). Urry refers to a “new catastrophism” in the Western imagination and detects an apocalyptic “*Zeitgeist*” in academic discourses since the 1990s (2016, 35). Warnings concern the *End of the World as We Knew It* (Leggewie and Welzer 2011) or evoke a present *Living in the End Times* (Žižek 2011), in which the capitalist system heads towards its cataclysmic ground zero. Catastrophe has become “a ubiquitous category of crisis” for (late) modernity in the 20th century, which, in the Western imagination, does not exclusively

refer to the future (Horn 2018) but increasingly extends into the present as a “concept that reflects a condition” (Briese and Günther 2009, 188).

For Aleida Assmann (2020), the impression of a disappearing or “eroded” future stems from the crisis of a modern time regime, in which the cultural construction of the linear progression between past, present, and future breaks apart and the paradigm of modernization reaches its limits. Since 1950, the Great Acceleration has played a significant role in this development, marking the period after World War II as one in which “numerous parameters relating to consumption and the environment have escalated” (Horn 2020, 45). “Industrialization, consumption, mobility, and many other factors that had had their first major boom in the 19th century exploded after the end of World War II” and revealed their catastrophic consequences (Horn and Bergthaller 2019, 33). In the 21st century, multiplying crises culminated in the concept of the Anthropocene, which stands for the manifold ways in which humans are entangled in planetary balance and exposes the paradoxes of a modern “time regime of progress and endless growth” (Horn 2020, 46).

II. Acceleration / Polar Inertia

In discourses of mobility, the crisis rhetoric of acceleration correlates with perceptions of comprehensive temporal and spatial transformations, expressed in pithy phrases such as a “shrinking” (Lübbe 2003) or “broadening present” (Gumbrecht 2010), an annihilation of space, and “polar inertia” (Virilio 2000, 2015). What is striking in these discussions is that acceleration not only increases mobility but also provokes the opposite effect: In the German-speaking context, it is above all the sociologist Hartmut Rosa who retells European cultural history under the auspices of modern acceleration and analyzes the dynamics associated with it in his book *Social Acceleration: A New Theory of Modernity* (2013). Describing humanity’s increasing alienation from its eco-social environment, Rosa presents late modernity as an epoch in which “all motion seems to come to an end” – by an immobilization that is not opposed to acceleration but results from it (2013, 15). The philosopher Paul Virilio (2000) already coined the term “polar inertia” in the 1990s, projecting a dystopian future in which all bodily movement terminates. He describes the fixating force of this development with the term “DOMOTICS”, which refers to a state of “paralysis”, as people withdraw entirely into the space of “domestic comfort” (Virilio 2000, 65). Domotics seeks to institute immobility as a prerequisite of a digital

mobility that extends into space and serves to bring about societies' "absolute sedentariness" (Virilio 2000, 31).

The cultural tendency towards petrification, which Virilio and Rosa describe as the reverse side of modern acceleration, suggests a thought-provoking critique of common mobility narratives. For today, (late) modernity still promises to increase speed and mobility (see Conrad 1999; Borscheid 2004), while concomitant tendencies towards immobilization or the need for an energy and mobility transformation are obscured. Given global crises, the philosopher Peter Sloterdijk (2011, 97) argues that "prophetic reason" must seek to modify mobility, as he calls for a deeper engagement with the associated ways of life:

Above all else, today, wising up means understanding that if we cannot end the kinetic expressionism of the last centuries, we must radically modify it. By kinetic expressionism, I mean modernity's way of life, which was enabled above all by the easy availability of fossil fuels. (Sloterdijk 2011, 97)

Rosa also poses "the question of the consequences that unchecked further dynamization would have for the earth's ecosystem", asserting (with reference to Sloterdijk 1989) that we need "a 'critique of political kinetics' and of 'mobilization'" to draw meaningful conclusions for the future – and thus also for the present (2013, 298). In this context, immobilization as a figure of thought derives its virulence from its semantic ambiguity, which oscillates between utopia and dystopia: On the one hand, it expresses the threat of stagnation and the dangerous endpoint of a spiral of acceleration, and at the same time, it feeds on a longing for temporal autonomy, for heterochronous places or another time. Calls for reversal, exit, and rethinking aim to revise the "*modus vivendi* based on fossil fuels" (Sloterdijk 2011, 101) and also touch on the current meaning of catastrophe: While the semantics of catastrophe hinge on turn and reversal, according to its Greek etymology (*καταστροφή*) (see Bühler 2016, 169), the modern paradigm of acceleration allows a different connotation to emerge: Catastrophe is also that which prevents reversal, which can no longer be stopped, the perpetuated dynamic of an eternal continuation. Programatically, we can already find this notion in the writings of Walter Benjamin, who thinks catastrophe and progress together and emphasizes the revolutionary potential of interruption as a figure of thought: "That things are 'status quo' is the catastrophe" (2003, 184). Barbara Gronau, too, claims that "immobilization" can be read not only as a consequence of the paradigm of acceleration, but

also “as the negation and provocation of a temporal understanding directed toward efficiency, acceleration, and control” (2019, 8).

III. A New Turn to Stillness?

We either slow down, and then stop,
or face an economic and human
catastrophe on a grand scale.

Ian McEwan (2023, 149)

But what does the prognosis of ‘polar inertia’ mean for the claim that movement is a key concept of the new mobilities paradigm? In 2006, Mimi Sheller and John Urry argued that the sedentary bias in the social sciences needed to be overcome. At the same time, they emphasized that mobility Studies should not analyze mobility without also considering complementary forms of immobility. Accordingly, the new mobilities paradigm seeks not to idealize mobility, but rather to provide questions, theories, and methodological approaches that aim to overcome disciplinary boundaries: “We do not insist on a new ‘grand narrative’ of mobility, fluidity, or liquidity. The new mobilities paradigm suggests a set of questions, theories, and methodologies rather than a totalizing or reductive description of the contemporary world” (Sheller and Urry 2006, 226). Tim Cresswell, who has also shaped this field of research, highlights in a 2012 essay that the concept of “stillness” should not be understood as complementary to mobility but must instead be *included* in the “theorization of movement” (2012, 645). In their book *Stillness in a Mobile World*, David Bissell and Gillian Fuller also note that modern daily life is defined as much by moments of stillness as by a universally perceived mobility: “*Stillness punctuates the flow of all things*: a queuer in line at the bank; a moment of focus; a passenger in the departure lounge; a suspension before a sneeze; a stability of material forms that assemble; a passport photo” (2011, 3).

Rosa’s and Virilio’s thesis that hypermobility and acceleration are not opposed to sedentarism but *serve* it illustrates the complex ways in which mobility and immobility are intertwined. Exposing sedentarism as a cultural norm that continues to be valid today thus means criticizing it *within* a current paradigm of acceleration, while also examining potential ways forward. In this context, a future of polar inertia does not merely constitute a vanishing point of the cultural imagination. It also becomes what Richard Tutton (2017) terms a “wicked

problem” conjoining interdisciplinary perspectives within mobility Studies. In response to a question that is central to our field of research, namely how immobilization and movement are entangled, the proclaimed “mobilities turn” is followed by a forceful plea for a “new turn to stillness” (Cresswell 2012, 648), which views forms of immobilization as significant components of mobility, examines how movement generates stasis, and pinpoints specific dynamics that emerge precisely *from* stillness.

IV. Imagining Im/mobilized Futures

While the new mobilities paradigm is primarily a social-sciences approach, the spatial turn, which has attended to the interlinked phenomena of im/mobility since the 1990s and early 2000s, is of particular importance for literary Studies. Since space and time are inextricably intertwined in literary representations of movement, it is primarily “immobility that gives literary texts a spatially reflexive quality” (Hallet and Neumann 2009, 21) by demonstrating the ways in which movement is central to the cultural and aesthetic construction of space. Within mobility Studies, Peter Merriman and Lynne Pearce have advocated for greater cooperation with cultural Studies approaches, emphasizing that literary Studies offer vital perspectives for conceptualizing movement. In “Mobility and the Humanities” (2017), they highlight the value added by engaging with artistic productions. They introduce the concept of kin-aesthetics to articulate aesthetic representations of im/mobility: “This is particularly the case when the concept is framed broadly as kin-aesthetics – the aesthetics of movement [...]. This is movement enacted, felt, perceived, expressed, metered, choreographed, appreciated and desired” (Merriman and Pearce 2017, 498). By enacting, expressing, and choreographing movement, literature demonstrates the cultural valuations of movement while also capturing them (kin-)aesthetically. Thus, literature illustrates the concept of im/mobility prevalent in mobility Studies, where it is understood as *movement charged with meaning* (see Adey et al. 2014, 8).

In literary anticipations of the future, im/mobility has always played a central role and belongs to the defining repertoire of representations featuring utopian or dystopian worlds. Artistic productions include numerous imaginings of arrested environments, timeless spaces, or polar inertia, as Virilio or Rosa propose them. Moreover, they offer diverse images of future life forms associated with the effects of industrial acceleration (see, among others, Urry

2016, 15–53). Acceleration and deceleration constitute two sides of a specifically modern experience of mobility, at once sedentary and quickened, which, from the late 18th century onwards, has also inscribed itself in literary forms – from carriage rides to railroad poetry, the Futurists’ pamphlets, and the 20th-century novel concerned with its own time (*Zeitroman*) (see Göttsche 2001; Middeke 2002; Röhnert 2015). For instance, literary stagings of movement use aesthetic strategies of deceleration (see Schneider 2013) to capture changes in the perception of space and time and to make visible the “contradictory relationship between dynamics and stasis” in European modernity (Behnstedt et al., 2007, 9).

In what follows, we will consider three literary examples that associate immobility with acceleration in various forms and anticipate a time out of joint. In historical terms, all three texts were written in periods of profound technological or industrial acceleration (around 1900, during the mid-20th century, around 2000) and mark various high points of this development. They extrapolate from the present to the future and reflect existing, declining, or futuristic regimes of mobility.

E.M. Forster: The Machine Stops (1909)

The British author E.M. Forster’s short story “The Machine Stops” is one of the early paradigmatic literary texts depicting a catastrophically immobilized future. Published in 1909, it falls into that phase “before and after 1900” which experienced a “revolution in speed [...] as a result of the industrial revolution and the wide impact its technological innovations had on almost all spheres of life” (Rosa 2013, 42). While the scholarly literature focuses primarily on the pronounced critique of technology in Forster’s work (see, among others, Kibel 1998; Tereszewski 2020), he also proves to be an author who recognized the immobilizing tendencies of modern acceleration early on. As Urry notes in *What is the Future?*, Forster was well ahead of his time in anticipating contemporary developments: “The machine stops’ describes a future society with many echoes in subsequent science fiction and in the digital worlds that have developed since the mid-1990s” (2016, 26). Preempting Virilio’s predictions of polar inertia, he outlines a vision of a civilization that *has stopped moving*. In his dystopia, inspired by H.G. Wells’s *The Time Machine* (1895), a digitally networked society retreats to a lifeworld in catacombs, where people live in temperature-controlled capsules and a machine provides for them around the clock. Thus, Forster’s design of a subterranean form of existence hauntingly illustrates an

absolutized sedentarism that interweaves technical acceleration and spatial immobilization: “[O]ur ‘civilization’ has never known how to do anything other than keep extending the original urban sedentariness”, Virilio writes (2000, 85). Forster tells us, “Imagine, if you can, a small room, hexagonal in shape, like the cell of a bee. It is lighted neither by window nor by lamp, yet it is filled with a soft radiance. There are no apertures for ventilation, yet the air is fresh” (9).¹ This description corresponds to Virilio’s state of “cocooning” in isolation and to “home inertia” (2000, 64), in which any reference to the outside world has been lost.

One of Forster’s protagonists, a woman called Vashti whose living cell is described at the very beginning of the story, embodies the forcibly standardized life in the temperature-controlled and artificially lit space. Even within her restricted radius, she does not need to move at all, since a self-propelled chair transports her through her room.² Basic needs are met at the touch of a button, and communication with other people takes place exclusively through a kind of digital interface. With this description, Forster not only anticipates the current facts of smart living and virtual reality but also illustrates what Virilio seeks to capture with the concept of “*domotics*”: “The intelligent home presents the same kind of trials. Far from being the acme of domestic comfort, the new *domotics* involves a special kind of temporary or permanent disablement whose only parallel is the situation following a traffic accident, except that here the ‘paralysis’ is actually intended” (2000, 65).

Indeed, the protagonist Vashti feels no need to change anything about her living conditions or to break free from her state of physical paralysis. Her body depends on its “electronic prosthesis” (Virilio 2000, 65) and seems chained to the architecture that envelops it.³ The fast-moving traffic of culture in its previous form is now considered obsolete, and the entire world is virtually networked. All places look the same underground, and it is no longer necessary

1 In the following section, all quotations from Forster (2013) are provided only with page numbers in parentheses.

2 For Virilio, sitting and lying are the prototypical positions of polar inertia: “Environment control, whether close or distant, is thus leading our societies towards a final technological hybrid whose ergonomic archetype is the seat or ‘throne’ capable of turning itself into a bed, an invalid’s litter” (2000, 69).

3 Virilio writes, “In the end, people are not so much in the architecture; it is more the architecture of the electronic system which invades them, which is in them, in their will to power, their reflexes, their least desires.” (2000, 66).

to travel or change location thanks to real-time communication in various media: “[W]ithout the need to be anywhere specific as one’s life is lived from the arm-chair and through an internet link, it no longer matters where one is and the idea of place loses its meaning” (Tereszewski 2020, 231). Yet the machine-made restriction of mobility encompasses not only the “elimination of space”, as Tereszewski puts it, but also the approach to time. In his theory on social acceleration, Rosa, comparing temporal constraints to the rules of a totalitarian regime, points out the power of implicit standardizations (2000, 191). Forster, too, describes how machines help to establish a regime of immobility, which consolidates its power by enforcing a rhythm of everyday life (see Glick-Schiller and Salazar 2013). Vashti’s days are structured by countless virtual contact requests, programs, and lectures, which are supposed to enable reflection and self-realization but ultimately have the opposite effect. Like others living in this “accelerated age” (14), Vashti spends her days resting, but she feels a permanent inner restlessness and has no time to contemplate her living conditions: “Men seldom moved their bodies; all unrest was concentrated in the soul” (18).

In this way, Forster exposes the contradictions of the temporal economy that underlie the media’s “culture of speed” (Tomlinson 2007), which obeys the dictates of the moment and makes “tele-reality” the only yardstick of daily life (see Virilio 2000, 7). On the rare occasions that the inhabitants of the capsules leave their own four walls, they travel only in underground elevators or move about in hovering airships to traverse a supposedly toxic atmosphere. This smoothly functioning transport system is a relic from an earlier era that equated acceleration with spatial mobility: “To ‘keep pace with the sun’, or even to outstrip it, had been the aim of civilization preceding this. Racing aeroplanes had been built for the purpose capable of enormous speed, and steered by the greatest intellects of the epoch” (21). Forster also addresses how a lifestyle reliant on fossil fuels has exploited the earth and destroyed nature entirely, leading civilization to retreat underground. By no longer referring to the sun as the most important measure of cyclical temporality, humanity succeeds in denaturalizing time, dominating natural rhythms, and bringing them to a standstill: “The sun had conquered, yet it was the end of his spiritual dominion. Dawn, midday, twilight, the zodiacal path, touched neither men’s lives nor their hearts, and science retreated into the ground, to concentrate herself upon problems that she was certain of solving” (22).

In Forster’s world, the machine’s authoritarian immobility regime condemns anyone who wants to resist the sedentary way of life and break out of the machine-housing complex to “homelessness”, banishing them to the

surface of the earth. The story's antagonist and adversary is Vashti's son Kuno, who, as the prototypical embodiment of a hero, rebels against the system and questions the rule of the machine.⁴ Wanting to prove that life above ground is possible, he tries to make Vashti aware of the effects of machine dependence, which threatens humans' very existence: "Cannot you see, cannot all you lecturers see, that it is we that are dying, and that down here the only thing that really lives is the Machine?" (35). Ultimately, Kuno's predictions come true: "The Machine is stopping, I know it, I know the signs" (45). The mechanical system becomes prone to error, as important features malfunction again and again. The machine comes to a standstill, marking the story's dystopian focal point, which also establishes the collapse of subterranean civilization and represents a turning point in human history. While those living in the capsules, who are dependent on the machine, die agonizing deaths, a new beginning awaits the homeless and outcasts on the surface of the earth: "I have seen them, spoken to them, loved them. They are hiding in the midst and the ferns until our civilization stops. Today they are the Homeless – tomorrow --", a dying Kuno tells his mother (52–53). Here, Forster illustrates the aporias of sedentary accelerationism and shows how a society held captive by polar inertia ultimately abolishes its own future. It is only the interruption, the disturbance, and the arrest of the world that sets human history in motion anew and brings about the apocalyptic turn that Kuno predicted.

Marlen Haushofer: *The Wall* (1963)

The novel *The Wall* (*Die Wand*) by the Austrian author Marlen Haushofer, translated in 1990, offers another drastic vision of catastrophic immobilization and, at the same time, of a post-industrial utopia. The novel appeared in 1963 against the backdrop of the Cold War and an emerging ecological movement, but in the 1980s, its first, feminist reception largely read it as a female (anti-)Robinsonade (see Lorenz 1979; Fliedl 1986; among others). From today's perspective, the work appears to be a striking "ecological warning text

4 It is surely no coincidence that Vashti's son Kuno opposes her as the story's antagonist. As the female protagonist, she adapts unquestioningly to spatial immobility, while the male hero revolts against it. This gendered dichotomization is ultimately relativized by the fact that Kuno encounters a female "homeless person" on an illegal voyage to the surface of the earth, as he affirms to his mother: "Because I have seen her in the twilight – because she came to my help when I called" (39).

of the Anthropocene” (Zschachlitz 2019) that thematizes the consequences of modern acceleration and links them to the depicted catastrophe. Caitríona Ní Dhúill declares the novel a “Text of the Great Acceleration” (2022) and locates it directly at that epochal threshold which marks the period after 1950 as a phase of extreme acceleration. Indeed, the central theme of catastrophic immobilization in Haushofer’s novel expresses a profound critique of technology and civilization, in which the obsolete patriarchal world is reconstructed as a world of car factories, oil companies, and turbo-capitalists and linked to reflections on im/mobility.

For Virilio, the process of cultural petrification fueled by acceleration transforms the planet into a “*world for ever lost*” and leaves only “a residue, a ‘reserve’ to be preserved with the utmost urgency” (2000, 79). This insight is particularly relevant to Haushofer’s stasis: The novel projects a post-apocalyptic landscape, which, following an unspecified catastrophe, is enclosed by a transparent wall that separates the nameless female protagonist from the outside world. Beyond the wall, all human and animal life is petrified, and time itself seems to have stopped. People and animals stand in front of their houses like statues; they seem ossified, like exhibits in a museum. The insular space remains spared from misfortune, as if under a bell jar, and becomes the chronotopic refuge of a new existence for the first-person narrator.

The protagonist, left with a cow, a cat, and a dog in a forest area of several square kilometres, adapts to the changed circumstances with her new animal family. Quickly realizing that she is probably the only survivor and therefore completely on her own, she settles into a hunting lodge with the animals. Her daily routine, which she recapitulates in a written account, follows the tasks of her new life and contrasts with her former existence. At first, she clings to temporal patterns from the past: “I also resolutely decided to wind the clocks daily, and cross off each day in the diary” (33).⁵ But traditional “human time” (51) begins to erode more and more. Environmental rhythms, which the protagonist deduces from the weather, the season, the vegetation, or the animals in the forest, become the parameters of a new temporality: “I take my bearings from the sun, or, if it isn’t shining, from the crows as they fly away and back again, and various other signs” (51). The chronotopic oasis within the wall has unmistakably idyllic features, and the cyclical rhythmization of space lends it an almost mythical quality (see Bakhtin 2017, 160–61). In minute detail, the protagonist

5 In the following section, all quotations from Haushofer (2022) are provided only with page numbers in parentheses.

relates her daily errands, her walks in the woods, and her profound experiences with the animals. She claims to cultivate a new way of seeing in which the uneven, diverse, and overlapping rhythms of the environment become apparent for the first time: “It’s only since I’ve slowed down that the forest around me has come to life” (189–90). The novel, composed of an account written by the first-person narrator, thus reflects its own poetic implications, which arise from a “kin-aesthetic” of immobilization and deceleration (see Schneider 2013, 259; Merriman and Pearce 2017).

The novel looks back on a vanished world, portraying its accelerated society as one whose capitalist constraints were primarily temporal: “Before, I always was on my way somewhere, always in a great rush and furiously impatient; every time I got anywhere I would have to spend ages waiting” (190). The first-person narrator emphasizes that a characteristic impatience and boredom, from which she herself suffered as if from a disease, are symptoms of a hectic way of life. Her observations correspond to the consequences that Rosa (2013) associates with social acceleration: The narrator’s memory of a profound sense of alienation from her eco-social environment interweaves the compulsions of capitalism with the consequences of catastrophe. She imagines “that a person tortured by the sense of permanent anaesthetization has conceived the will to break free from the monotony of an alienated, perpetually accelerated society” (Zschachlitz 2019, 75). In this reading, the reality of immobilization presents itself less as a “nightmarish vision” than as a secret “wishful dream” that signifies a way out of the simultaneously monotonous and destructive logic of progress that inheres in a constant “more-of-the-same” (Strigl 2007, 62).

Criticism centers on the past, with its fossil-fuel system of “[g]as-pipes, electrics and oil conduits” (190) and, therefore, on motorized mobility as the most concise emblem of late-modern industrial society. The first-person narrator distances herself in an almost cynical way from the proclaimed fetishization of the car, the “undisputed cult object of the fifties and sixties” (Strigl 2007, 262), by abandoning the old Mercedes, which the host Hugo had parked in front of the hunting lodge before the catastrophe, and feeling gratified that with time, the vehicle becomes “overgrown with vegetation, a nest for mice and birds” (190). She herself changes as well, as she comes to feel more and more attached to the forest: “Sometimes my thoughts grow confused, and it is as if the forest has put down roots in me, and is thinking its old, eternal thoughts with my brain” (157). The protagonist’s dog Lynx, her cats, her cow, and the young calf Bull become companions with whom she ‘makes kin’ and whom she soon con-

siders her new family.⁶ The boundaries between human beings, animals, and the forest become increasingly blurred, intertwining in the rhythms of their common habitat.

At the end of the narrative, the utopian features of this post-catastrophic biotope, which saves movement from immobilization and dissolves the stasis of an accelerated meritocracy, are reversed once again: One day, a stranger appears on the mountain pasture where the protagonist has spent her summers and kills her young bull. When the protagonist discovers the stranger, he also slays her beloved dog Lynx with an axe, and so, unhesitatingly, she shoots him. The event on the mountain pasture upsets the spatial and temporal order of the post-apocalyptic landscape again, and the murder of the animals becomes the true catastrophic climax of the plot, where human history ends once more. While the stranger appears as a representative of a patriarchal and destructive civilization (see Zschachlitz 2019, 88), the symbolism of the act extends even further: Arguably, the act of violence signifies nothing less than the ‘murder of time’, a topos that the protagonist herself introduces to the plot. She conjectures that once she is no longer alive, the cultural idea of time will also end: “I’m owed some gratitude, but no one after my death will know I murdered time” (204). Thus, the first-person narrator becomes the model of an eschatological temporality that inheres in her account and, at the same time, establishes the poetics of catastrophe which shapes the plot. Its essential core is the immobilization of space as an apocalyptic fantasy that suspends time, calls it into question and renders it reflexive, and preserves movement in a paradoxical reversal. It is only after the event on the mountain pasture that the protagonist begins to write her account and sets the narrative dynamics in motion in her chronistic retrospection.

Thomas Lehr: 42 (2005)

In his novel 42, published in 2005, German author Thomas Lehr goes even further than Haushofer. He imagines an eschatological scenario that anticipates nothing less than an actual halting of time and depicts the future as it turns into a stagnating present: An accident in the particle accelerator of the nuclear research center CERN triggers a chronospheric apocalypse in which the surroundings of the few survivors congeal into a static backdrop, a kind of

6 Thus, Haushofer illustrates what Donna Haraway would refer to as ‘making kin’ with other species (Haraway 2016, 99).

three-dimensional still shot. At 12:47 and 42 seconds, the clocks stop. People, animals, plants, and objects freeze, becoming sculptures that resemble accessories: “no airplane, no car, no motorcycle, no Vespa, no bicycle, no scooter, and not even a pair of roller skates” can move anymore (104).⁷ In the arrested world under an eternally blazing sun, the survivors must resort to walking as the final type of movement, and so the protagonist Adrian is forced to cross all of Europe on foot. The narrative is a retrospective dystopian travelogue, in which the first-person narrator writes against the spatial expanse of an eternal moment.

To date, Lehr's novel has been analyzed primarily in terms of the physical and philosophical theories of time that it evokes (see, among others, Reulecke and Lehr 2008; Gamper 2016; Haupt 2021). Yet it can also be linked to discourses of mobility and acceleration, in which the relationship between the present and the future, marked by catastrophe, comes into focus (see Kopf 2022).⁸ It stands to reason that the author chooses Geneva as the starting point of the chronospheric apocalypse given the symbolism associated with the city: As the center of the early Enlightenment, Geneva was also the cradle of a European belief in progress, and today it houses the world's most powerful particle accelerator, CERN's so-called “world machine”. This is certainly significant, given the critique of acceleration that may be associated with it, and recalls Virilio's dromopolitical writings. In his manifesto *The Great Accelerator*, Virilio presents the eponymous “Great Hadron Collider” as the symbol of a society that pursues acceleration, arguing that “CERN's ‘Great Hadron Collider’ in Geneva has become the perfect symbol of a postmodern return of illuminism”, which he refers to hyperbolically as “the cult of light speed” (2012, 30).

Thus, it proves to be an especially suitable artifice that Lehr erects the fictional wall of time under a frozen sun, which literally *illuminates* the space. The light that irradiates the characters' new reality and penetrates every corner of their present is a central motif of the entire text and correlates with pervasive photographic metaphors: “Everything would remain, just like in a photograph” (12). The present of what has been chronified has literally been transformed into an image in which “brightness” becomes a “poetological principle” (Völker 2015, 327). The sun also seems emblematic from another perspective: “The suspension of the cycles and rhythms of natural temporal sequences also shows that world time is out of joint”, Metin Genç (2016, 260) writes, arguing that a

7 In the following section, all quotations from Lehr (2005) are provided only with page numbers in parentheses.

8 Parts of the following Passage appeared in German in the cited article (Kopf 2022).

“total exploration of nature” and “mastery over nature” serve to overcome natural time (2016, 261). The static sun suggests nothing less than that the world or the planet has ceased its rotation in space and come to a standstill. If we also understand the motif as a symbol of global warming, the themes of technology and acceleration evoked in the narrative acquire an additional dimension. Notably, the characters experience the heat of an endlessly repeating August day, which contrasts with “numerous word-images of ice” that characterize the changed aggregate state of a “frozen world” (Orth 2014, 42).

From the outset, a paradoxical movement within immobilization shapes the development of the narrative and figures as a plane of reflection for various meanings and their implications. The central – and initially clearest – moment of reflection is the leitmotif of the journey, which emerges, from the perspective of the first-person narrator Adrian Haffner, as the fundamental condition of one’s own existence: “[I]t was only the restlessness that stayed with all of us [...] which produced that half-conscious physical certainty that we had not yet been transformed into statues” (65). The survivors set out, in groups and on their own, to gauge temporal immobilization in spatial terms and to demarcate the topographical boundaries of the apocalypse: “We agreed that traveling was most important” (103). The routes and long-distance trails, roads, and highways on which the first-person narrator walks on his expeditions through Germany, Switzerland, or Italy present themselves as relics of a prehistorical time that is nearly impossible to remember and that highlights the enduring contrast between divergent speeds: “Highway interchanges lie in the summer grass like the immobilized joints of slain giants. Tire depots, junkyards, gas stations [...] follow to mock us with the memories of former mobility” (163). As former junctions of modern mobility, the misused and inoperative train stations, gas stations, and parking lots now become all the more visible and “present in their dysfunctionality” (Völker 2015, 326).

The decelerated movement that characterizes the aesthetics of the text leads the reader to perceive not only immobilized time but also space expanding in slow motion. Digressive descriptions of events, of sense perceptions, and attentive introspection, stretch narrated time. The accompanying acoustic phenomenon of this state is silence, which extends the motif of immobilization. Far from civilizational infrastructures, the wanderers themselves are sometimes overcome by the illusion of a vacation-like calm, as they “surrender themselves, for several restful, delusional minutes, to the belief [...] that they have escaped the frenzy or the hectic pace of urban life” (91). While Lehr thus hints at connotations of immobilization as a break and hiatus, these are, at the

same time, ironically fractured and repeatedly thwarted by extreme feelings of loneliness. Thus, the protagonist Adrian and the others who have entered this chronified state experience a strange alienation from their surroundings, as they feel cut off from any resonance with reality, which has become a kind of “foil” (144). Nevertheless, they can help themselves to the “sculpture garden” of the world, can use their individual time to “infect” the environment and can thus access food, clothing, and other commodities at will (34). Even humans – and this is their most monstrous ability – can be revived by physical approach to such an extent that they become movable, or *compliant*, as it were. The whole world thus seems objectified, exhibiting a power imbalance that unfolds between movement and immobilization.

Meanwhile, the chronostatic reality in the novel is stylized as a post-apocalyptic spirit world situated at the border between life and death. The characters in a chronified state refer to themselves as “zombies” (168), and the other people, too, remain motionless and comatose, like “photographs” (78). This morbid metaphor is reflected in the number 42, which – as the novel explains rather early on – means nothing other than death in Japanese (36). Consequently, the survivors cannot restart time even in a final physical experiment in CERN, which only brings the catastrophe to a head: Ultimately, the first-person narrator Adrian is the only survivor, while the others who had remained now also become statues. In this way, the author shows how the dictate of acceleration symbolized by CERN collapses into a state of radical immobilization and reduces an implied “longing for an entirely different temporal order” to absurdity (Horstkotte 2017, 415).

V. Conclusion

In the three texts, a setting of catastrophic deceleration conveys the authors’ critique of the temporal structures of Western late modernity, which includes the representation of im/mobility. Contemporary diagnoses of acceleration, such as Virilio’s polar inertia and Rosa’s theory of alienation, become ways to mirror theoretical reflection and are fixed in the literature in the moment of spatiotemporal stasis. In the work of Lehr, Haushofer, and Forster, this is compressed into the image of an immobilized future that escalates in technical acceleration and indicates the end of human history. The tension between utopia and dystopia opens a time out of joint and presents varying implications of the meaning of stasis. For Virilio, Rosa, Forster, or Lehr, stasis results from a

sedentary dynamic of acceleration but, as a moment of disturbance or interruption, it also calls attention to avenues of escaping this dynamic. It is not coincidental that we can discern, in all three texts, an apocalyptic longing for the end of modern mobility, which also promises the end of a Great Acceleration and proposes deceleration as a refuge, a final sanctuary before a global catastrophe of petrification. Whereas this place of refuge remains largely intact in Haushofer's work, it does not do so in Lehr's portrayal, and time dissolves in the dystopian aporias of history. Against this backdrop, immobilization becomes the equivocal watchword of a precarious future, promising dystopian stagnation and utopian escape, generating fatalism, or nurturing the hope for change. From the viewpoint of mobility Studies, it seems vital to understand this new perspective and to consider how literary works depict the menacing or redemptive moments of im/mobilized futures.

*Translated by Naomi Shulman.*⁹

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9 Naomi Shulman also translated the citations from Behnstedt et al. (2007); Bühler and Willer (2016); Briese and Günther (2009); Horn (2020); Horn and Bergthaller (2019); Horstkotte (2017); Genç (2016); Hallet and Neumann (2009); Leggewie and Welzer (2011); Lehr (2005); Lübke (2003); Orth (2014); Sloterdijk (2011); Strigl (2007); Völker (2015) and Zschachalitz (2019).

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“You Have to Know *How* to Wait”

Entangling Im/mobilities, Temporalities and Aspirations in Planned Relocation Studies

Jana Donat and Petra Dannecker

We have to wait, yes, we always have to wait. The ministry has its own timeline which is never-ending. But you have to know *how* to wait!

(INT #10, F/A/32)

I. Introduction

This article aims to contribute to the emerging research on the dynamics of mobility and immobility with particular focus on the meanings, lived experiences, temporalities and inequalities of im/mobility (Bissell and Fuller 2010; Salazar and Jayaram 2016) by analysing the state-planned relocation of an informal settlement in a so-called environmental risk zone in Montevideo. The topic must be seen and read within the context of increasing numbers of people, communities or populations living in high-risk areas for potential disasters and the effects of environmental change (Faas et al. 2020, 345–46). Consequently, some states and other actors begin to, or are increasingly forced to, react in the form of national or local policies, including planned relocation. On the global level, several frameworks have been developed for disaster risk reduction and climate adaptation, including planned relocation as an important preventive and responsive measure to reduce risks of disasters and displacement (see UNHCR et al. 2015). Planned relocation is a distinct form of human mobility, although, as Petz (2017) argues, it is not clear-cut from migration and displacement. By introducing the challenges and the contradictory nature of

(partial) planned relocation encountered in the case study, this article questions the central assumption underlying planned relocation, namely that this form of mobility, whether chosen or forced, will reduce risks and vulnerabilities in the future (UNHCR et al. 2015, 5).¹ To conceptualize planned relocation not only as a distinct form of mobility but also one of immobility enables an analysis of the fluid nature of outcomes and experiences of relocations as conditional, varied, relational and dynamic over space and time.

Against this backdrop, this article aims to discuss and analyse to which extent relocations have substantial and diverse effects on people's risks and risk perceptions and, more importantly, how their general life aspirations towards the future change in the course of time-consuming relocation processes. To understand how mobility and immobility in planned relocation are perceived and influence people's aspirations is an important dimension for the comprehension of the possible outcomes as well as the challenges which accompany the process. We adopt waiting both as a concept and as an analytical lens to study experiences of waiting, which are inherent to im/mobility. Thereby, we can, first, reveal differences and relate to people's im/mobility and general life aspirations, which do not only influence their waiting experiences but also the negotiations between different actors involved. Second, waiting offers a perspective to understand social relations and power structures, since waiting for a state-enforced community relocation implies (socio-)spatial immobility for some and mobility for others. Furthermore, to analyse waiting as an affective experience (Bissell 2007, 278), prompted by the official announcement of the relocation and the residents' ensuing anticipation of its impacts allows us to not only understand people's relationship with space but also with time – a dimension often neglected in resettlement Studies.

The article is structured as follows: To embed the case study into existing conceptualizations, relevant concepts of waiting in relation to im/mobilities, temporalities and aspirations are discussed as a first definitional approximation. After giving an overview of the Uruguayan National Relocation Plan

1 Therein planned relocation is defined as “a planned process in which persons or groups of persons move or are assisted to move away from their homes or places of temporary residence, are settled in a new location, *and* provided with the conditions for rebuilding their lives. Planned Relocation is carried out under the authority of the State, takes place within national borders, and is undertaken to protect people from risks and impacts related to disasters and environmental change, including the effects of climate change. Such Planned Relocation may be carried out at the individual, household, and/or community levels” (UNHCR et al. 2015, 5).

(NRP), especially the specific relocation of the settlement *La Chacarita* at the outskirts of Montevideo, our methodological approach, the methods and fieldwork will be introduced. Then, empirical findings will be presented and analysed in its pre- and post-relocation phases, revealing that waiting is not only imposed but also inscribed into the relocation plan's logic. Additionally, the meaning of waiting changed over time, as can be shown by the temporal approach chosen. All in all, the qualitative and actor-oriented approach will allow us to reveal how waiting influences and structures people's aspirations, perceptions and agency. It will be shown that waiting is meaningful in varied ways. Waiting has its disempowering effects when it is experienced passively, like feeling "trapped" in the present, but waiting can also be animating, actively leading to alternative notions of the future, and, thereby, transforming the actors' capacities to aspire.

II. Waiting: Im/mobilities, Temporalities and Aspirations

In mobility Studies, approaches to and appearances of waiting "are as various as mobility itself" (Vozyanov 2014, 66) and pursue a clear analytical focus on the diverse ways in which people wait. Transport infrastructure and non-places have been constructed as scenes of waiting and im/mobility. Some scholars have studied attitudes towards waiting and the usage of travel time. However, as Vozyanov (2014, 68) argues, most of these Studies mainly refer to waiting time rather than to waiting itself. There is no definition of waiting in mobility Studies, nor a shared understanding of waiting across disciplines. In the context of this article, we conceptualize waiting as the time and space between the anticipation of mobility – beginning with the official announcement of relocation – and its realization in the studied settlement in Montevideo. Thus, in this paper, it is not the essence of waiting that will be analyzed; rather, waiting serves as an analytical lens and a frame in which activities take place or take time (Vozyanov 2014), which will allow us to understand the relation between mobility and immobility as well as the reciprocal relationship between future aspirations and the experience of waiting in the present.

Beyond mobility Studies, waiting as an analytical lens has been applied to analyse the relationship between displacement, migration patterns, control systems and migrants' experiences of immobility and time (e.g., Bélanger and Silvey 2020; Biner and Biner 2021; Hänsch 2020; Ibañez Tirado 2019; Jacobsen, Karlsen, and Khosravi 2020; Jansson-Keshavarz and Nordling 2022;

Mountz 2011; Musset and Vidal 2016). These Studies have shown that there are multiple ways in which waiting is “produced, embodied, experienced, politicized and resisted across a range of migrant spaces” (Conlon 2011, 355). The term ‘politics of waiting’ is used to refer to structural and institutional conditions that compel people to wait and, as a strategy, make existence intolerable for certain groups such as refugees, asylum seekers and squatters (Andersson 2014, 796; Auyero 2012; Gaibazzi 2012). Doubtlessly, forced relocation programs share some of the characteristics of the ‘politics of waiting’. In the context of refugee resettlements, for example, waiting has gained special attention, tackled by growing Studies on displacement in the field of anthropology, “engaging themes of waiting, futurity, and uncertainty” (Adhikari 2021, 239). By re-conceptualizing refugee camps as dynamic and waiting as an active process (Brun 2015), refugees emerged as operative actors (El-Shaarawi 2015), even if their resettlement was accompanied by a loss of past futures (Secor, Ehrkamp, and Loyd 2022). Ramsay termed the “resettlement imaginary”, referring to a “constructed landscape of collective aspirations” (2017, 100) that immanently improves the quality of life for refugees through the prospect of mobility potentially materializing in the future. Also, ethnographic Studies on African youth used waiting or “waitthood” (Honwana 2012) to show the productive nature of waiting and to reveal that the process and temporality of waiting become “inextricably linked with, and filled by, what Bloch (1986) has described as the *principle of hope*” (Stasik, Hänsch, and Mains 2020, 3). Even though waiting often includes a sense of uncertainty, the empirical data will show that waiting also involves future-oriented aspirations and desires, which influence one’s activities in the present.

Understanding the inherent characteristics and dynamics of waiting within the planned relocations of informal settlements in “risk zones” can help to comprehend the processual character of aspiring as well as emerging conflicts that underlie different temporalities. Nonetheless, aside from calling waiting a disempowering and dynamic aspect of development-related resettlements that reduces future agency and might increase the complexity of the overall process (Bartolomé 1984; Najman and Fainstein 2018; Perry and Lindell 1997; Ramakrishnan 2014), ‘waiting’ as an analytical lens has not yet been applied in academic knowledge productions in this field. Therefore, in this article, we will discuss how officially announcing a partial relocation makes people wait in different ways and not only shapes the experiences of waiting pre- and post-relocation, but also their aspirations. We understand waiting as “a lived experience that unfolds in time and as a practice” (Musset

and Vidal 2016, 4) in relation to im/mobilities, which necessarily entails a collective dimension when studying community relocations.

Since 'waiting' is not neutral but influenced by gender, class, race or age, waiting as an analytical perspective will further allow us to show that people and their aspirations are diverse and heterogenous. Furthermore, it can shed light on the varied ways in which waiting is experienced, since the announcement of the relocation shapes people's capacity to aspire. Drawing on Appadurai, who situates aspirations to the good life in a broader map or system of local beliefs and ideas that are formed in interaction and can become "especially precious in the face of the peculiar forms of temporality within which they ['the poor'] are forced to operate" (2004, 81), the role of temporalities can be analysed through waiting. Residents of informal settlements live according to different temporalities, contrasting with those of the market and state institutions, which are imposed through their relocation and, thereby, also interfere in and confound temporal logics. Unequal power relations, which become apparent through the experience of waiting, influence the future-oriented *capacity to aspire* as a navigational capacity that is unevenly distributed in any society, because "part of poverty is a diminishing of the circumstances in which these practices [wanting, planning, aspiring] occur" (Appadurai 2013, 189). Consequently, this article engages with temporalities that relate to the extent of time in which change is accelerated by the intervention itself and distinct ideas about the future in its pre- and post-relocation phases (Meth, Belihu, Buthelezi, and Masikane 2023, 843) which regard the future "in material-discursive terms as enacted in practice" (Tutton 2017, 485).

III. The Uruguayan National Relocation Plan (NRP)

The National Relocation Plan (*Plan Nacional de Relocalizaciones*) was first initiated by the Uruguayan Ministry of Housing, Land Management and Environment (MVOTMA) in 2010 and includes ongoing projects throughout the country. On an international level, Uruguay was one of the few countries connecting "human mobility in the context of climate change, more precisely to planned relocation" (IOM 2018, 10) in its *First Nationally Determined Contribution to the Paris Agreement* (see República 2017, 15). Although climate change is neither explicitly mentioned nor integrated in the NRP's operational directive, relocations are described as aiming at "an improvement of life quality for those who settled down on inundated and/or contaminated soils" (MVOTMA

2018, 3; translated by the author). Outlined in its requirements, the directive further limits its possible target communities to “precarious areas formed by informally occupied public land” (MVOTMA 2018, 4), which explains the state’s legal capacity to intervene and impose relocations. Coinciding with two legislative periods of the progressive party alliance *Frente Amplio*, the NRP relocated around 2245 families throughout Uruguay in its first ten years of existence (MVOT 2020, 28). While the new ministry’s five-year-plan (*Plan Quinquenal de Vivienda 2020–2024*) states that there are more than 1000 families still in the process of relocation, it does not commit to any new relocation projects (see MVOT 2020).²

While some projects relocate the whole community to various relocation sites, others are not only consecutive but also partial, excluding those that are supposedly less vulnerable. Relocating groups and individuals from an irregular settlement to other sites – from the first decision, financing and planning to the administration and supervision of the process – takes several years.³ Relocation modalities varied from community relocation into newly constructed housing blocks to individual relocation through a subsidized housing program. The latter, *Programa de Compra de Vivienda Usada* (PCVU), represents an individual relocation alternative for some. Families look for a house on the market by themselves and make use of a subsidy of 55,000 US-dollars to process the payment through the National Housing Agency. In practice, not only do potential houses need to fulfil many criteria (e.g., intact sanitation, no humidity etc.), but so do the subsidized contenders (e.g., formal working conditions, minimum income etc.). Due to these restrictive requirements, the empirical data underlined that finding a house was a challenging endeavour. Most residents were excluded from this individual relocation option, leading to 93% participating in community relocations as in the case of *La Chacarita*.

2 Since 2021, under newly elected president Luis Lacalle Pou (*Partido Nacional*), the Ministry of Housing, Land Management and Environment (MVOTMA) was divided into two ministries: the Ministry of Housing and Land Management (MVOT) and the Ministry of Environment (MA). Several interview partners working for and advising those ministries or collaborating state institutions in Montevideo described the communication between MVOT and MA as impeded and decisions as opaque or just on hold.

3 All projects within the NRP are financed through the national budget. While 80% are allocated by the ministry (MVOT, earlier MVOTMA), around 20% need to be provided by the respective departmental co-executor of the specific relocation, in this case the *Intendencia de Montevideo*, who is also responsible for relocation management and accompanying social work.

Setting the Scene: La Chacarita de los Padres

The settlement *La Chacarita de los Padres* (short: *La Chacarita*) has its origins in the 1950s (Bolaña 2018, 178). In general, scholars differentiate between more recent informal *asentamientos* (Spanish for 'settlements'), which were founded by and grew due to the expulsion of the urban formal working-class from the 1990s onwards, and long-standing settlements (*cantegriles*) (Álvarez Rivadulla 2017, 252; Bolaña 2018, 29–30; Renfrew 2013, 205–206; Rossal et al. 2020, 17–19).⁴ The latter were mostly founded by landless, rural labour migrants coming to Montevideo from the 1950s onwards when the import-substitution-industrialization model slowly came to an end. *La Chacarita* presents a mixture of both types, which is also one of the reasons for the settlement's heterogeneity. Uniting those getting displaced from the city centre who find refuge in a corrugated iron shack with rural migratory families in third generation living in auto-constructed brick houses already hints at the convergence of diverse life stories.⁵ Parts of *La Chacarita* therefore belong to "a new generation of Montevideans" that never lived in the formal city, which makes sociologist Álvarez Rivadulla question "[h]ow this affects their worldviews, practices and their 'capacity to aspire'" (2017, 264) – especially when being confronted with formal procedures due to forced relocation.

La Chacarita's vast heterogeneity is not an exception in Uruguayan informal settlements but rather the rule: "There is more homogeneity among the poor than among the irregularly settled. In other words: the poor in *asentamientos*

4 Since the 1990s, the terms *asentamiento* and *cantegril* (with its discriminatory character when used as an external attribution) are mostly subsumed under the umbrella term *asentamiento*, which has become synonymous with informality and poverty "as far as both targeted state policies and the general public are concerned" (Álvarez Rivadulla 2017, 260).

5 As the materiality of housing goes beyond the content of this article, we just want to draw attention to the symbolically materialized dividing character among the residents, which was also encountered in this study: "Pride in the quality of the housing was often apparent among my interviewees as a mechanism of spatial distinction. The new squatters invested a lot of their time and their energy, not to mention their always scarce money, in their houses and their neighbourhoods. Building with bricks rather than with metal sheets was pivotal to avoid being considered a *cantegril*. [...] Through these practices and policies, the neighbourhood space became an arena in which symbolic boundaries were made visible, material and tangible" (Álvarez Rivadulla 2017, 256).

resemble the poor living under formal roofs more than the non-poor in *asentamientos*" (Menéndez 2014, 49; translated by the authors). Like many informal settlements, *La Chacarita* lies at the outskirts of the city, where densely populated urbanity merges with rural uninhabited territory.

In order to plan *La Chacarita*'s partial relocation, the city government (*Intendencia de Montevideo*) carried out a census of the whole settlement in 2017, which became the basis for relocation decisions. All in all, 865 people were living in 226 houses in the settlement, coming down to 3.8 people on average per house. While women and men contributed to nearly fair shares (51.6% and 48.4%, respectively), residents of *La Chacarita* tend to be exceptionally young (28.7 years compared to a national average of 36 years), with only one quarter (26%) being 40 years or older (nationally 40.7%) (INE 2011).⁶ Also, race is unequally distributed entailing socio-spatial inequalities that developed historically, leading to 40% of the residents⁷ auto-perceiving their "principal ancestry"⁸ within the Black, Indigenous and People of Colour (BIPOC) community (33% afro⁹, 7% indigenous), compared to a national BIPOC proportion of 7% (4.6% afro, 2.4% indigenous) (Cabella et al. 2013, 15).

6 Data from the latest census (2011), Total País > Características Generales > Población por área y sexo, según grupo quinquenal de edades y edades simples. Total País: <https://www.ine.gub.uy/web/guest/censos-2011>.

7 The census' race query in *La Chacarita* only included one representative per house (not every resident!).

8 In Uruguay it is very common to choose multiple answers because racial identity is constructed as fluid, which explains the core category of "principal ancestry" that is frequently used (see Cabella, Mathías, and Tenenbaum 2013).

9 The category "afro" is used as an abbreviation for Afro-Uruguayan which is the predominant race category in Uruguayan academia, politics and everyday (colloquial) language. But until the mid-1990s, Uruguay was unwilling to integrate race as a category in its census. Historically, there were not as many African slaves as in other Latin American countries due to the lack of plantation possibilities. Nevertheless, the history of slavery was only poorly processed in Uruguay (Hübener 2010, 150–51) – not to mention the genocide of the indigenous population in the massacre of Salsipuedes in 1831. As a result, Uruguay constructed (and continues to present) "a very European (white) public image" (Townsend-Bell 2011, 189).

M1: Map of Montevideo (mostly Municipio F), showcasing the settlement La Chacarita and its four corresponding relocation sites



Provided by IdeM.

For *La Chacarita*'s partial but permanent relocation, 57% were foreseen to be relocated while the rest was supposed to stay and be integrated into an improvement plan targeting the most urgent housing deficits. As a result, the NRP does not only impose spatial mobility for some, but also co-dependent immobilities within changed circumstances for others (Glick Schiller and Salazar 2013, 188). According to the city government, the overall river basin in the area, exceeding *La Chacarita*, not only left many residents exposed to recurrent inundations but also to contamination of soil by heavy metals and extreme accumulations of solid waste (IdeM 2020, 48–49). Nonetheless, neither a risk map for future inundations nor a precise examination of contaminations were provided in *La Chacarita*, although both are listed as preconditions in the NRP's guidelines (see MVOTMA 2018, 4). For those getting relocated, there are two relocation modalities with corresponding materialities. On the one hand, the individual relocation alternative (PCVU) can theoretically lead to spatial mobility towards any part of the country at any time since 2018, of which 20 families made use between 2019 and 2023. On the other hand, community relocations

of *La Chacarita* were spatially and temporarily split into four groups: 52 families moving to *Zitarrosa* in December 2021, 54 families moving to *Villa Farre* in August 2022, six families moving to *Belloni* in December 2022 and nine families moving to *Campillos* in March 2023 (see M1).

As can be assumed in M1, two relocation sites (*Belloni* and *Zitarrosa*) provide its new residents with central urbanity and better infrastructure than before. *Campillos* and *Villa Farre*, the other relocation sites, pushed the residents even more to the outskirts, where the surrounding adjoins to green fields and new construction sites with worse urban connectivity than before. Hence, the residents' forced spatial mobility by the NRP also led to different aspirations, perceptions and evaluations of their social im/mobility in a locality-specific way.

IV. Methodology and Methods

To accompany the overall relocation processes and observe changes over time from an actor-oriented perspective, the study's methodology did not only profit from its multi-sited but also its longitudinal research, including multiple re-visits, as will be outlined in the following. As this article tries to understand experiences of waiting for future im/mobility in relation to people's aspirations within state-enforced relocation processes from an actor perspective, *grounded theory* was applied as the methodological approach. In contrast to mostly quantitative approaches on waiting (see Bissell 2007, 292), this project's methodology stresses the study of conditions, perceptions and processes informing the im/mobilizing interplay between waiting and aspiring by anchoring "academic knowledge in practical problems in the world" (Charmaz 2020, 167). To this effect, the focus on experiences of waiting and their interrelation with the future-oriented *capacity to aspire* (Appadurai 2004, 2013) represents an angle that was inducted from the empirical material as one of the most pressing topics for the affected community. *La Chacarita* built an exceptionally suitable case study to pursue this endeavour and investigate the relocation's processual character. The site was selected due to its partial relocation modality, stressing the importance of an entangled im/mobility approach, and due to its ideal access and timing. When field research (conducted by the first author) started in October 2021, *La Chacarita* was the only relocation in progress within the NRP in Montevideo within its planning phase, starting preparational meetings with the residents.

One advantage of grounded theory methodology is its temporal simultaneity of action and reflection, leading to necessary alignments of the research design to better understand the statements, decisions and living contexts of all research participants. The methodically flexible and methodologically constructivist approach of grounded theory (Charmaz 2014, 2017, 2020) helped to better grasp how the residents (re)act within unequal power relations shaping their relocation experiences. Thus, the iterative process of data generation and analysis gave more space to the topic's processuality and future-anticipation by re-interviewing participants, which yielded insightful dynamics before and after relocation. Further, the theory-generating approach did not previously define any social categories or the relation between them; instead, the intersectional findings are *grounded* in data.

All in all, this article draws on 55 intensive interviews ranging from single- to three-person settings (40% of the participants getting re-interviewed), three focus group interviews and 43 multi-sited (participative) observations with informal talks throughout different relocation phases.¹⁰ Locality-wise, the multi-sited approach focused on but was not limited to *La Chacarita* and two community relocation sites, *Zitarrosa* and *Villa Farre*, as well as some individual PCVU sites. Temporally speaking, two fieldwork visits spanned over six months in between October 2021 and December 2022 but were complemented by (online) interviews with risk assessment, relocation management and Uruguayan scholars before and after the research stays to include contextual knowledge and local critiques on preliminary findings. Additionally, the broad census of the residents and all houses in *La Chacarita* from 2017 was surveyed and made available by the *Intendencia de Montevideo*. Due to an open, critical and close collaboration with many social workers in the project, regular access was established rapidly and held consistently – despite many security risks like floods or rising street criminality (see Ladra 2021). Given the numerous structural inequalities exposing the residents to various vulnerabilities, the overall objective always entailed to do no harm to those most vulnerable (Fluehr-Lobban 2012, 104), which not only required *methodological* but also *ethical reflexivity* that is inclusive of the latter (Unger 2021, 200). Critical statements towards the government or the relocation did not bear any risks for the participants but were still anonymized to do no harm with respect to power imbalances within the settlement.

10 The first author conducted and coded all interviews in Spanish and translated relevant citations to English.

V. Living and Waiting in *La Chacarita* before Relocation

Numerous residents in *La Chacarita* settled down decades ago, leading to many second- or even third-generation families. According to the census (2017) provided by the city government, over 60% of the homeowners surveyed reported having resided in the settlement for a decade or longer. Living in *La Chacarita*, waiting – be it in individual or collective forms – always had been inevitable. During their lifetimes, residents not only witnessed and created social changes which materialized in their enacted environment, domestic life or cohabitation, but also produced different meanings and lived experiences of waiting. On the one hand, those experiences touched upon the individual- or family-based everyday life, which was often characterized by poor living standards and inequalities within *La Chacarita* and between other Montevidean settlements. While some people wait for rain to collect water, others wait for their hunger to subside. Some wait for a call offering a temporary job for the day, while others wait for their delayed salary to be paid. *La Chacarita*'s long and dynamic history with its heterogeneous residents contains manifold experiences of waiting, which were always connected to social im/mobility and revealed social inequalities limiting the future-oriented capacity to aspire. On the other hand, residents shaped and were shaped by communal waiting experiences in a context of recurrent inundations and with regard to the settlement's improvement. Especially community aspirations to be "regularized" as a formal neighbourhood or little steps towards this goal (e.g., paving the road, getting electricity and water supply) made many residents complain about unheard wishes for decades, despite their self-administered requests and preliminary but unfulfilled agreements with state actors. For the community, waiting for several years or even decades for the street to be paved in order for the ambulance to pass or for electricity to be regularized to prevent further electrical fires has resulted in frustration, disempowerment, and a loss of trust. These partly mundane examples uncover that 'making' people wait influences their experiences of time and agency. As shown, it is important to highlight that these processes of waiting also led to meaningful activities in the present. However, in contrast to pre- and post-relocation waiting, they were not necessarily linked to mobility aspirations.

Waiting is an inevitable part of life for every person. But not everyone has to endure waiting within such unequal power relations for such a long time, which can create a sense of being governed by these temporal dynamics through which "political subordination is reproduced" (Auyero 2012, 2). As an-

thropologist Auyero states in his "tempography" *Patients of the State: The Politics of Waiting in Argentina*: "Shanty residents are always waiting for something to happen. Those poisoned outcasts [...] live in an alienated time" (2012, 4). Waiting hopefully or frustratedly for others to turn words into actions highlights the significance of an affective lens, allowing us to consider how resonances of impatience, insecurity, anxiety, resistance or surrender "transcend the personal and are implicated in the experiences of others" (Bissell 2007, 291). One can even argue that the self-attribution of being poor and not worthy of any improvements can be aggravated – also across generations – by endlessly waiting for false promises, as this 37-year-old woman explains:

Imagine that when I was about to turn four years old, the *Intendencia* (City Government) had already informed us that they were going to build a square here and the street. Of course, years passed. Being a poor ignorant person, we used to say, "years will go by and nothing will happen, it's just a fairy tale", you know. (INT #12, F/W/37)

Others, despite describing the same unfulfilled waiting loops, emphasised their obligations as citizens, albeit without insisting on their rights of citizenship, thereby liberating the state from its responsibility: "*It can't be that we have to ask and wait for the state to come and contribute. No! We are the ones who have to contribute the help we seek*" (INT #34, F/A/48). These examples reveal two things: First, that waiting can actively lead to agency with regard to one's aspirations (see Introduction). And secondly, that the actors do not perceive and interpret waiting as something 'neutral', but clearly related and connected to their ascribed class and status, which can be interpreted as an outcome of the 'politics of waiting'.

Other waiting experiences were made and re-made within the context of recurrent inundations suffered by the majority in *La Chacarita* – be it by passively waiting for inundations to happen again and again or by actively preparing for the next inundation while waiting. Therefore, waiting for recurrent inundations equally included 'not acting' on scenarios of the future (mostly due to lack of money, age, disability or ignorance) and 'actively adjusting' houses, furniture, drainage systems or cleaning the clogged river canal. Even in the midst of heavy rain and storm surges, residents got accustomed to watch water levels go up in their houses, or wait for the rain to stop, for potential aid and donations to arrive. Not a single person in *La Chacarita* wanted to be evacuated during massive inundations in January 2022, but instead they preferred to

wait until their flooded houses, covered in mud and faeces, dried up to prevent robbery of their last belongings. Meanwhile, especially men were staying and sleeping close to their houses, while women and kids found self-arranged shelter nearby and organized informal emergency strategies (e.g., calling for donations on Facebook, collecting clothes, cleaning supplies and food). Although many (pro)active forms of waiting were established as a social practice, recurrent inundations always transformed the settlement into a state of social immobility and made it impossible for many to aspire to a distant future. As recurrent socio-environmental risks were no longer perceived as “intangible futures” (McMichael and Katonivualiku 2020, 287), the capacity to aspire was often limited to the temporal horizon of the very present, tomorrow, or the next impending inundation:

It's difficult to accept the fact that everything you achieved through hard work will be lost in one night of inundation, having to start over from scratch with all you have (left). The most progress you can make in your life here is buying a piece of furniture with your savings, which unfortunately is what people do, only to lose it the next winter when it floods again. (INT #33, F/W/36)

In *La Chacarita*, residents had already developed a significant repertoire of waiting practices prior to the NRP. Sometimes, these practices allowed them to take control of their own destiny, such as collectively building their own houses and infrastructure; thus, the waiting phase was used productively. However, their agency was often constrained by the formalities of urban standards, as many residents in Montevideo aimed to replicate formal standards, waiting for eventual legalization of the settlement as part of the city (Álvarez Rivadulla 2017, 254). Consequently, even if proactive waiting and agency appeared self-determined at first, the underlying aspirations for state regularization in the long run always resulted in dependent waiting. Although the collective aspiration and waiting experience for a regularization that never materialized could be read as a ‘politics of waiting’, the same cannot be said of the NRP, as it, theoretically, tries to end devastating waiting experiences related to recurrent inundations. Nonetheless, the NRP must be seen as a drastic means of formalization due to its compulsory nature, which opens up new forms of dependent waiting and aspirations within particularly unequal power relations. In contrast to these diverse waiting experiences before the NRP, waiting for relocation constitutes a new spatiotemporal interstice

between mobility and immobility. The mere anticipation of future relocation already influenced people's agency and aspirations and had tremendous effects on practices of waiting as a lived experience unfolding in time. As will be shown in the following, the NRP transformed the settlement into a specific *waiting territory*¹¹ because the "situation of waiting (or pause) start[ed] to take over" *La Chacarita* by "permanently modifying the meaning and uses of that space" (Vidal 2016, 330).

Waiting to (Be) Relocate(d)

Temporally speaking, relocation is often scaled down to the actual implementation phase or a short phase after moving day – also in scientific literature. Nonetheless, for some residents in *La Chacarita*, the prospect of relocation, including the anticipated loss of their houses, started decades ago:

I lived for 32 years (in *La Chacarita*), always knowing that every five years they'd tell you "There will be a relocation, there will be a relocation", but we kept waiting and waiting. And then, let's say, 30 years went by since they started announcing. But this neighbourhood has been around for more than 60 years. (INT #13, F/W/48)

Dismissing the thought of getting relocated as a hollow campaign pledge in its predictable rhythmicity also left its mark on the actual relocation. The announcement was accompanied by consistent disbelief over time because many thought "*that it would remain in the same nothingness*" (INT #49, F/A/50). While only the few who always aspired to move wanted to trust the politicians' relocation promises, others describe being (re)taken by surprise when the census was conducted in 2017, when big reunions began in 2019, when small reunions for the first site started in 2021 as well as when construction sites emerged, flats were assigned, and contracts signed. "*And I never thought that this day would come. We had the relocation reunion, and when they said 'relocation', everyone just stared, saying 'how can there be a relocation?'*" (INT #14, F/A/39) Statements like these also

11 In contrast to waiting spaces, the authors apply the concept of 'waiting territories' to "avoid reducing the space and time of waiting to commonplace considerations" (da Costa Gomes and Musset 2016, 63) and emphasise the constraints exercised over people in a given space, which transforms waiting into an organising principle and "hegemonic value that affects all other processes, behaviours, actions and forms of social interaction" (2016, 70).

demonstrate that relocations in complex contexts cannot be reduced to clear-cut spatiotemporal dimensions from start to finish but need to be understood in their processual messiness from an actor perspective, which includes waiting as a lived experience and practice.

Compared to waiting practices in *La Chacarita* prior to the NRP that were mostly connected to *social* mobility *within* the settlement, the actual relocation announcement moved waiting to a socio-*spatial* anticipation *outside* the settlement. This time, waiting also entailed spatial im/mobility within new or intensified unequal power relations between state actors and residents, as this partial relocation forced some people to move to a place at a time of the state's choosing, while others had to stay at *La Chacarita* despite the settlement's overall changes. To which extent waiting was perceived as more active or passive also depended on the relocation modality, constituting and producing different aspirations.

PCVU – or When the Most Privileged Might Wait the Longest

Power relations are not only unequal between state actors and residents, but also within the highly heterogeneous population of *La Chacarita*. As has been mentioned before, the individual relocation modality (PCVU) was only accessible to a few. Pre-conditions for getting a subsidy were relatively high, so that only around seven percent of the settlement were able to make use of this modality, which is marked by different administrative mechanisms and temporal logics. In theory, the most obvious benefit of this relocation alternative was the free choice of a house and location within the constraints of the market. Indeed, most participants named “preferring a house instead of a flat” for various reasons and “choosing the neighbourhood” as causes to aspire to PCVU. Nonetheless, the primary reason named in the PCVU focus group was conflict avoidance. In this way, the future visions that were anticipated were based on past experiences and enacted in practice (Tutton 2017):

Because of the amenities, in a complex [community relocation] you could end up with any neighbour, and knowing the neighbours in the area, we preferred to be alone rather than being with those kinds of people. [...] Most of us who choose PCVU work all day and when we come home, we want to be at peace, not look for problems. (FG #1, F/A/32)

We know all the neighbours who left for the community relocation.

We know who the good ones are and who the bad ones are. (FG #1, M/A/33)

Yes, there [the community relocation site] it's like starting anew in a neighbourhood, and you end up living next to Pablo Escobar. [By PCVU] we're going to have to see, whether it's good or bad, it's like a lottery, whether I end up with Pablo Escobar or El Chapo Guzman, it's sad, but that's how it is. (FG #1, M/nd/33)

Although the alternative modality gives more space to the families' aspirations (e.g., opening a business in-house, living more spaciouly, holding many animals) and freedom as to where and when to move, it also transfers time-consuming bureaucracy and nerve-wracking responsibility from the state to the residents. So, how does this influence their experiences and practices of waiting in the present? On the one hand, some participants were able to have rather short waiting phases from the application for the subsidy to the moving day (around two years). On the other hand, others were still waiting to find a house, get permission or receive the money transfer when most community relocations were already finished in 2023. The longest waiting patterns consisted of recurring bureaucratic processes, which had to be self-organized by the residents, but in which financing had to be approved "from above" by the Ministry of Housing and Land Management. Once general participation was approved, families received a "ticket" (*boleto*) with 180-days validity to find a house fulfilling all requirements. As soon as it expired, the process started anew. Many families experienced that the market's temporality did not fit that of the state – and much less their own.

We would have already bought it and everything, the house just needed to be paid for. It's a matter for the ministry to pay for it. We had already signed everything, and the owners urgently wanted to sell it. (FG #1, M/A/33)

We applied and everything, but the deadline expired. 180 days passed and then the pandemic hit, and the man sold the house [to others]. (FG #1, M/nd/33)

It happened to me too when they approved the money. The woman [seller] got upset with the wait and decided to back out. Everything was already set up too. It's the same that happened to almost all of us. [...] The real estate agents already tell you that the ministry doesn't want to sign the

contract because they like to make things difficult, and many real estate agents say they won't do anything for the ministry. (FG #1, F/A/32)

Especially since the Covid-19-pandemic, many lamented the unadapted subsidy amount despite increasing house prices, which again shows the conflicting temporal logics of the market and the state. As a result, contenders were not only dependently waiting for political bureaucracy but also for variable market-based opportunities, which shows the spatiotemporal limits of new-developmental compensatory policies like the PCVU modality in a capitalist city (Gabriel Hernández 2019, 516–17). Due to the shortage of houses in this price segment fulfilling all prerequisites, administrative waiting loops and delays in approval or payment, some residents with the “most formal mode of living” turned out to be waiting the longest.

The Immobilizing Effect of Announcing Mobility (for Some)

Families participating in the PCVU modality were not the only ones experiencing delays and postponements, thus waiting for their im/mobility within unpredictable circumstances. After the census was carried out in 2017 as a basis on which to elaborate who would (not) be relocated, where to, and with whom, big reunions followed in 2018 and were supposed to converge into actual soon-to-be relocations. Staff from the relocation team confirmed difficulties in getting permits, delays at construction sites and, most importantly, frozen assets when two decisive events hit almost simultaneously: the change of government and the Covid-19-pandemic. From the perspective of the residents, these and other causes were identified to explain the many delays spurring overall uncertainties about the relocation:

The problem is that it was supposed to be money that was already there. I trust the political party [Frente Amplio] that was in charge when all this started, and they openly showed us that the money was there. But it seems that Covid brought an economic problem to the country, and the funds were released. (INT #20, F/W/45)

Despite many differences between the two relocation modalities, for all residents ‘waiting’ became a lived and affective experience (Bissell 2007) from the announcement and the prospect of relocation to its realization. The perceived duration, or “the temporal quality of waiting”, can only be understood through

“a non-linear apprehension of qualitative temporality – of time as perceived, felt and experienced through the body” (Bissell 2007, 284). While some residents developed agency and plans of what to do while waiting, others passively awaited their relocation for years. In the last case, residents not only experienced immobility as a side-effect while “waiting to become mobile” (Kempny 2023, 80) but precisely due to the anticipation of their enforced mobility. On the one hand, active waiting reactions to the announcement included self-organized individual moves, resistance by blocking communication or practices of impatience by complaining about being kept waiting (e.g., putting pressure on state actors via social workers or social media), and thereby challenged the ‘politics of waiting’ informal settlements got accustomed to. On the other hand, the majority was passively waiting. Describing ‘waiting’ as a source of uncertainty, they underwent its paralyzing climax as soon as residents started believing in the announcement and consequently no longer dared to make any more investments in their houses, living even more from day-to-day than before and no longer aspiring to social mobility *within* the settlement. Hence, the sole prospect of relocation led to the perception of one’s residency in *La Chacarita* as immobile and of the waiting phase as socially immobilizing due to the potential discontinuity in space and time, both of which had formerly been the basis of their system of reciprocity. The anthropologist Bartolomé already outlined this *entropic effect* in one of his publications on development-enforced resettlement of the urban poor in Argentina:

Doubtless the additional stress generated and the disorganizing effects that the very announcement of the relocations has are important determinants of the circumstances under which the resettlement will take place and also of the attitudes of the population toward the program and the relocation agency. The lowered efficiency and productivity of the survival systems of the urban poor is a consequence of the additional uncertainty generated by the relocation prospect. (Bartolomé 1984, 190)

Through the collective experience of waiting for relocation, the immobilizing perceptions of some even aggravated the practices of others, as living in *La Chacarita* transcended into a specific ‘waiting territory’ (Vidal 2016), in which waiting became “a social event, rather than a collection of feeling individuals” (Bissell 2007, 291). This can be well illustrated with the category of age. Many older residents that were born or at least raised in *La Chacarita* explained their desire to leave the settlement in the past when they did not have any means

or ideas of how to act upon this aspiration. Now, many felt neglected by the state for decades but also “found peace” with it. Nonetheless, the elderly, rooted in long-established networks of trust and solidarity, claimed that it was too late for them to start anew. Contrary to younger residents, the time window in which state interventions were considered justified had long passed.

Especially for those describing themselves as free of any aspirations, the prospect of spatial mobility resulted in an immobilizing effect mixed with apathy while waiting: “*Look, I at least don't desire anything. I live day by day and see what the next day brings me and that's it. I don't expect anything [by the NRP], nothing. I'm just here because I'm here*” (INT #32, F/A/50). Dividing the settlement into two main groups – those who live within the temporal horizon of each day and those that want to “move forward” (*salir adelante*) – occurred in most narratives used by the residents to differentiate amongst each other. Attributing not having any capacity to aspire to others while self-ascribing to belong to the hard-working people with future aspirations represents a dualistic vision that was reproduced in all interviews:

There are people who can move forward and there are those who don't want to because they got used to this lifestyle, you know, you get used to a way of living and don't do anything to move forward. But when you see people suffering just because they don't want to progress, it makes you angry. (INT #24, F/W/45)

This line of argumentation was especially frequent among PCVU participants and female residents that lived in materially better houses, had higher incomes, pro-actively strived for regularization and described being proudly rooted in *La Chacarita* and/or at least in their self-constructed houses as a symbol of their hard-working sacrifices. Due to their own experience of upward social mobility within *La Chacarita*, these othering narratives did not leave any room for structural inequalities restraining the navigational capacity to aspire but handed over full responsibility and blame to those who are living inactively and waiting passively for their future to pass by.

In some cases, even moving day itself was still perceived as “very sudden” or “unreal”, which might be traced back to seemingly endless waiting experiences, unfulfilled announcements in the past, general uncertainties and mistrust, ultimately leading to detachment from time itself – or at least from the state's temporality: “The times of the state are not the same as the times of individuals; these do not coincide with family times, which in turn are not the same as the

times of the neighbourhood. Social temporalities overlap and can come into conflict with each other" (Filardo and Merklen 2019, 153; translation by the author). Although the Uruguayan authors Filardo and Merklen did not explicitly conceptualize practices of waiting in their ethnographic study about Montevidean *asentamientos*, they conclude that any state intervention in informal settlements automatically leads to a collision of temporal logics. Many residents in *La Chacarita* thought that waiting finally came to an end after relocation. But re-interviewing and re-visiting the same residents shortly and one year after their relocation shed some light on new forms of waiting that are produced by the conflicting overlap of social temporalities that also persist over space.

VI. Post-Relocation: Formally Waiting for Life to Begin

While pre-relocation life in *La Chacarita* was nurtured by spatiotemporal proximity, including informal networks persisting over time and relations of localized solidarity inscribed in the territory (Filardo and Merklen 2019, 52–53), in post-relocation life most people experienced a "formal awakening" which produced new forms of waiting and aspiring. Moving day, as a collective experience for each group and site, was an emotional undertaking for all participants. Besides many overwhelmingly happy and thankful reactions to their new flats, losing one's mostly auto-constructed home left many residents, especially the elderly, women and those who raised their children in *La Chacarita*, filled with nostalgia, grief, estrangement and uprooting. Through the NRP, the state forcefully intervened in the residents' lifeworlds and their territorial inscriptions which were based on the temporal logic of proximity. Imposing formality on communities that had mostly not experienced any formal life in the city they were displaced from (Álvarez Rivadulla 2017, 264) interfered with the fabric and structure of their social ties. Many families needed to re-organize school, work, care tasks, transport and neighbourhood ties for social security, amongst other things. Inherently, these challenges were constructed by their new socio-spatial setting, but also by the formal temporality imposed on them – leading to many new experiences of waiting, which limited their future as enacted in practice (Tutton 2017) to which they had grown accustomed. In contrast to their kaleidoscope of pre-relocation waiting practices, now their aspirations are no longer necessarily entangled with spatial mobility, but with immobility and new forms of imposed waiting at the new relocation site.

Some of these waiting practices had their origin in the change of locality itself, like being on waiting lists for childcare and school, and demanded new routes and schedules to get to work, visit family, go to the hospital etc. Other waiting experiences were clearly bound to their dependence on the NRP's rules and their entry into formality within particular post-resettlement temporalities (Meth, Belihu, Buthelezi, and Masikane 2023, 843). On a community scale, people already knew how to organize themselves to formally apply for improvements in the new neighbourhoods: e.g., *Zitarossa's* residents requested and waited for waste containers and lighting outside; *Villa Farre's* residents for the re-opening of a polyclinic and a canopy for their self-organized soup kitchen. But in comparison to their old life in *La Chacarita*, now they had to navigate urban formalities, e.g., clear distinctions between public and private spaces. However, the latter did not even fully include their own flats yet, which made it even harder for them to grasp the new property relations in which they had been placed. According to the NRP's operative regulations, housing is initially organized by a *comodato*, through which the state grants temporary possession to the residents without transferring ownership (MVOTMA 2018, 9). Within a maximum of three years after the move, participants have the right to receive ownership of the housing units which includes official property registry and titles for each flat. In case of "technically sound reasons" (2018, 10), however, the NRP also allows the ministry to remain owner of the property.

But what kind of formalized waiting processes does this lead to? Most obviously, relocation participants have to wait up to three years until they officially own their new flat. In case of conflicts, domestic violence, families splitting up etc., property titles may never be transferred to everyone who originally relocated, resulting in waiting experiences with uncertain duration. Little knowledge about who and when one could receive property rights was available among the residents. This led to assumptions that the flat was already legally their own or that it will always belong to the state which often resulted in a general critique of how their agency had been taken away by the *comodato*: "*We had a house, we lived there. I prefer being able to work, five years working and living [in La Chacarita], so that I can buy a house by myself instead of the state giving me one this way*" (INT #16, M/A/32). This view is shared by many describing themselves as hard-working, being used to taking care of themselves and not ascribing any obligations to the state to help them out. Retrospectively, many residents relate emotionally and materially to their old houses as a symbol of their social mobility within *La Chacarita*. Many describe, partly in a very romanticized way,

how they matched their (housing) aspirations with 'the little that they had' and proudly speak about their 'sacrifices made from scratch', which materialized in their old houses (Rossal et al. 2020, 139).

At the new relocation sites, people had to wait for approval by the city to build shelter for their animals or a stone barbecue in their patio, to open their little in-house kiosk with window sale or to get something repaired under warranty. Waiting throughout these formalized procedures on a private housing scale was especially difficult to understand for people who had never lived in the formal city and had been taught to take their future into their own hands. Additionally, many residents waited anxiously for their first bills to arrive: *"There you will have to pay for electricity, water and something else that comes up later. And there are people that won't pay for it, because they don't have a job, live a different lifestyle and people that didn't want it, they don't want the new flat"* (INT #8, F/W/71). In *La Chacarita*, residents were already used to wait for improvements and changes that mostly never materialized on a community scale, but to do so on an individual housing level is a new – and mostly unsatisfying – experience for most of them. Nonetheless, all residents were aware of the flats' qualitative benefits and appreciated the eliminated risk of inundation, amongst other things: *"This house offers all the amenities. You don't have problems when there is wind and it moves the cables, or losing power or water, no, it's not a big deal here"* (INT #22, F/A/29). But seeing and appreciating the advantages of the relocation still cannot be equated with the affective experience of waiting coming to an end. For some, more time was needed to hopefully make the new setting start to „feel like“ home soon:

I will never get used to it and it has been almost a year now. More than anything I miss my house, it's not only about material things and habits, because my children were born there, and all their life was there. I will have to get used to it, but I don't know when that will happen. (INT #49, F/A/50)

Waiting to be Settled Down or "Cada Casa es un Mundo"

Especially women, who are predominantly responsible for domestic and care work and also spend more time at home, identified and emotionally connected with their old houses. The phrase "each house is a world" (*cada casa es un mundo*) was used in many interviews, signalling that each home is perceived as unique and as an important space for individual expression and life aspirations. Now, control and autonomy over their living space was partly withdrawn by the NRP

and their capacity to aspire within the realm of housing got limited by formal waiting procedures and standardization. Many residents wondered how they could still give it an individual touch because they were used to express aspirations and demonstrate upward social mobility through house investments. Others complained about their limited ability to act in their new flats by referring to their old houses as life works that were literally demolished:

They tear off your life project that you built, they tear it down and they give you a different house. I think that when you have property, or you build a house you should do it the way you like it, every detail that you made is important. But you cannot touch anything, you can't break a wall or change the door, you can't do this, you can't, they prohibit everything, it's like it's not even yours, you know, it's not yours. (INT #42, F/A/55)

This statement is representative of many residents that perceived the seemingly paradoxical development they had undergone: from losing an illegal house on state property that nonetheless reassured them of providing an inheritance and which “felt theirs” to a legal flat corresponding to all quality criteria, in which they were still awaiting – and thereby doubting – ownership in its legal but also emotional sense. Especially when talking about the distant future, aspiring to provide for loved ones after being gone represented an emotional insecurity and anxiety that came up regularly while waiting for clarified property rights: *“They don't give you a hand, they give you a flat that you don't own. If something happens to us tomorrow, I have a grandson with us. I didn't think to include him in the census”* (INT #8, F/W/71). The vague life aspiration to “move forward” (*seguir adelante*) and provide a “better future” for their family persisted over time and space in all re-interviews, which, unsurprisingly, also led to attempts at family extension in the new flat. These rule violations against the NRP's code of conduct and other conflicts kept the control function of relocation management high in the first post-relocation year, while around 46% experienced social without spatial mobility by staying in *La Chacarita*.

From Partial to Full Relocation? Waiting to be Continued

In planned relocation Studies, a clear focus is mostly kept on those who relocate. By focusing on those who were spatially mobile, the co-dependent immobilities produced by the project are often neglected. In *La Chacarita* around 43% were not included in the relocation. Thus, what about those that had to stay (be-

hind)? According to the 2017 census, around 18% of those who were not included in the NRP were already affected by inundations and, as the latest floods in January 2022 reached new devastating scales, many more families were affected for the first time. Now, waiting for the next storm surge and heavy rain until the river canal gets clogged again acquired a new meaning for those still living in *La Chacarita*. Many residents predicted and feared that inundations will get even worse for them because the demolished houses left so much debris and thereby changed the flow of water, bringing more mud and faeces, bugs, rats and general contamination. Also, apart from any future flooding scenarios, life in *La Chacarita* changed drastically, influencing people's aspirations, with some even tending to leave the settlement. People who never imagined leaving their house before now aspired to be part of the NRP – due to their loss of social ties, security networks or customers for their informal businesses. Long-established family and neighbourhood relationships of trust were lost, which made many feel more insecure and afraid of violence, robbery and shootings than before. Therefore, the central assumption of planned relocation to reduce risks and provide "the conditions for rebuilding their lives" (UNHCR et al. 2015, 3) should also be guaranteed to the remaining residents who also underwent an obstruction of agency in their Future-Making.

But, as the city government acknowledged the devastating scale of the inundations in January 2022, the mayoress Carolina Cosse (*Frente Amplio*) visited *La Chacarita* in September 2022 to announce more relocations. At the time being, the announcement consisted of vague details, promising that an unknown part of *La Chacarita* would be relocated to someplace else in the remote future. The residents' reactions were mixed but always strewn with doubts and their experience-based habitus of waiting: "Of course, we have to wait. Well, in the long run, one year, year after year, could be a thousand years, because all those who left also had to wait, those who left and those who stayed. And now it's just us" (INT #42, F/A/55). Again, the announcement of further relocations without the naming of any details let the informally settled know that they needed to wait and "patiently comply with the seemingly arbitrary, ambiguous, and always changing state requirements" (Auyero 2012, 9). Therefore, *La Chacarita* as an interstitial space between mobility and immobility continues to persist as a specific 'waiting territory' and a space of constraint that forces the residents to aspire to spatiotemporal mobility and more generally a future "from the perspective of the provisional and the uncertain" (Vidal 2016, 331).

VII. Conclusion

This article provided insights from an actor perspective on the entanglements of im/mobilities, temporalities and aspirations within the realm of planned relocation. Through the analytical lens of waiting, the case study of the informal settlement *La Chacarita* has shown that modalities of waiting are enforced by the relocation plan itself but also shaped by those who wait. Residents of *La Chacarita* perceived a spectrum of specific waiting experiences based on intersecting categories like gender, class or age and previous waiting practices that constituted their relation to the state.¹² Meaningful and active as well as disempowering and passive ways of waiting were encountered, having direct impacts on the actors' capacities to aspire within this forced im/mobility setting before and after relocation. Those who internalized the attitude "*We are the ones who have to contribute the help we seek*" (INT #34, F/A/48) lost this very agency as soon as the relocation announcement was perceived to be true, which often created a long and burdensome inactive waiting phase. The elderly, those living alone, women and especially older women with strong roots in *La Chacarita* and emotional connection to their houses did not aspire to relocate and had the most trouble feeling safe and at home in their new flats. In its post-relocation phase, aspirations and waiting were not bound to any future visions of spatial mobility anymore, but to socio-spatial immobility experienced due to the residents' loss of informal proximity. For the first time in their lives, residents had to regulate their individual housing aspirations according to formal standards, leading to new practices of waiting for autonomy and social mobility.

Delaying techniques employed to respond to the collective aspiration for regularization and recurrent relocation promises during election phases can be subsumed under the term 'politics of waiting', as they naturalized the relationship of temporal domination between the informally settled and the state by (re)producing uncertainty and arbitrariness (see Auyero 2012, 19; Filardo and Merklen 2019, 154). However, the same cannot be said about the NRP. As soon as the relocation went into its actual implementation phase, it did not work according to the same deceptive temporal logic and rhythmicity, as it ended the permanent state of im/mobility insecurity for some and broke the waiting cycle for recurrent inundations for many. Nonetheless, in the waiting period

12 The category of race, although immensely contributing to the structural inequalities of the settlement itself, did not result in any observable explicit or implicit assumptions about waiting.

from 2017–2023, *La Chacarita* insidiously transformed from an informal settlement with all its mundane im/mobilities and aspirations to a 'waiting territory', which was born of anticipating forced mobility or immobility (see Vidal 2016, 330). In September 2022, by announcing a shift from partial to potentially full relocation, *La Chacarita* as a 'waiting territory' was reproduced before the territorial inscription could come to an end.

Still, imagining forced relocations as a solution to formalize (environmentally threatened) *asentamientos* may not only lead to a conflictive collision of temporalities, but also a "housing bias" (Najman and Fainstein 2018, 2894) which limits the program to housing access. Furthermore, it could conceal exacerbated experiences of uprooting by the relocation itself which were also witnessed in refugee resettlements (see Ramsay 2017, 100). Social inequalities in *La Chacarita* entailed different anticipations of the future and became more tangible by focusing on waiting as a "lived experience that unfolds in time and as a practice" (Musset and Vidal 2016, 4). All in all, using 'waiting' as an analytical perspective in planned relocation Studies allowed us to unravel the relation between mobility, immobility, temporality and aspirations, which should be explored more profoundly by multi-sited and longitudinal fieldwork in the future.

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Staying in the Village

Immobility, Future-Making and Womanhood in Rural Eastern Zambia¹

Daniela Atanasova

The futures people imagine and how they assess places' abilities to act as conduits to such futures can give a powerful hint as to why they decide to migrate, or stay. This chapter interrogates how considerations of the future influence the aspirations and decisions to remain in a rural area of a diverse set of women in Zambia's Eastern Province. While migration has been extensively studied in Zambian historiography and social science literature, immobility, and in particular the choice to stay in rural areas, has rarely received attention in its own right. Rural dwelling has mostly been treated as a default strategy or a symptom of lacking the resources to migrate to urban centres (Peša 2013; Hepburn 2016). In addition, although some research has been done on individual actors' aspirations (Peša 2019, 2020), neither immobility nor migration have been explicitly examined with an eye towards people's gendered constructions of the future and future-related attitudes.

This research therefore explores connections between rural immobility aspirations, future orientations and ideals of womanhood in the life histories of 62 women from three rural locations in Eastern Province. It does so by asking the research participants about their im/mobility aspirations and decisions, imaginaries of home and elsewhere, and visions of the future. How do the research participants relate to the future, what kinds of futures do they imagine and what place does spatial im/mobility have in their aspirations? Additionally, in what ways are aspirations gendered and what does this tell us about

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local ideals of womanhood? The answers to those questions illuminate some of the nuances of decision-making around immobility in this rural setting.

I. Literature, Concepts and Methods

Immobility is understood here as “continuity in one’s center of gravity, or place of residence, relative to spatial and temporal frames” (Schewel 2019, 329). The spatial frame is a rural-urban one, so immobility is defined as such in contrast to migrating to an urban area. The temporal frame is one of continued rural dwelling over a number of years, making it possible to account for the experiences of women who may have previously spent, or may yet do so, periods of residence in town. Immobility is thus not “merely the absence of mobility”, but “is formed relationally with and through the potential for and practice of mobility” (Salazar 2021, 1). Immobility can be motivated by a variety of reasons and manifest in as many different ways as migration, and is essential to understanding the complex dynamics of moving and staying (Schewel 2019; Zickgraf 2018).

Mobilities research has noted the gendered nature of im/mobilities (e.g., Clarsen 2014; Cattán 2008). Many cultures mark geographical mobility as a masculine value, assigning women a less valued sedentary connection to the home and the private sphere (Sheller 2008; Ahmed et al. 2003). Studies of immobility have similarly documented a tendency, in various contexts, for women to be “left behind” while men move away (Chatterji 2017; Zickgraf 2018). However, focusing on women’s actual practices of im/mobility destabilizes such dichotomies (Jónsson 2011). For a long time in colonial Zambia, women were officially excluded from labour migration flows to urban centres, but they found their way to towns nevertheless (Chauncey 1981; Parpart 1994). Nowadays, adult women still migrate somewhat less often than men,² and differences in women’s and men’s im/mobility strategies at certain points in the life course have been identified (Ashbaugh 1996; Hansen 1997; Cliggett 2005).

2 The 2010 Census of Population and Housing (CSO 2013) indicates that in the 0–24 age bracket, women migrants are more numerous, with the lowest sex ratio of males to females at 81.9 for the 15–24 age group. The opposite is true for the age bracket 25–60+, where more men migrate, the highest male-to-female ratio being 107.9 for the 25–44 age group.

But other dividing lines in addition to gender exist as well. Rather than viewing women as universally more likely to be immobile, the focus should be on how their social positionings along dimensions such as age, class and education “affect their possibilities and experiences of migration” and immobility (Jónsson 2011, 12). Accordingly, this chapter traces how gender articulates with other categories of difference to shape women’s future orientations, im/mobility aspirations and heterogeneous experiences of rural immobility in Zambia’s Eastern Province. It thereby aligns with an African feminist (or Afro-feminist) perspective which takes intersectionality as its guiding principle (Tamale 2020; Chipuriro 2021), recognizing that people’s complex identities are steeped in multiple, context-specific and historical “interlocking systems of oppression” (Collins 2015, 8).

In recent migration scholarship, aspirations have been described as emotionally coloured “purposeful constructions of the future which evolve over time” (Boccagni 2017, 1) and their relational, temporally distributed and non-linear nature recognized (Wang and Collins 2020). Inspired by this literature, aspirations and im/mobility decisions are analysed here not only as a form of reaching towards (or away from) imagined futures, but as entanglements of past, present and future temporalities. Aspirations can reflect a person’s experiences (Wang and Collins 2020) and the limitations of their structural position (the past lingering in the present), and at the same time can motivate action now, as people engage in Future-Making, or as the future is made present (Anderson and Adey 2012).

While the future is elusive and ultimately indeterminate (Goldstone and Obarrio 2016), often characterized in spatial terms as a “site” not yet there, but capable of taking “shape within a mental space” (Sarr 2020, 99; see also Koselleck 1985), not all possibilities can be actualized or even imagined, or affectively experienced, by everyone in the same way. At an individual level, this manifests in different future orientations, i.e., different ways of relating to the future in the present (Anderson and Adey 2012). In this chapter, future orientations refer to beliefs people hold about whether, to what extent and in what manner they can shape their futures. As such they are related to Arjun Appadurai’s “capacity to aspire”, a navigational capacity to negotiate social norms and “explore the future”, which is unequally distributed among the rich and the poor (2004, 69). Two narrated future orientations identified in the empirical material are considered: *postponed futures* and *active future-making*.

The aspirations/capabilities model developed by scholars of international migration (De Haas 2014; Carling and Schewel 2018) is also relevant to the

discussion in as far as it sheds light on the research participants' im/mobility decisions. These, according to this model, arise from the interaction between aspirations and the capability to move or stay.³ However, other factors also affect im/mobility aspirations and decisions. Among them are socio-cultural norms and values (Frye 2012; Mata-Codesal 2015), such as those pertaining to gender relations. In addition, "imaginaries" of town and village figured prominently in the life histories. Noel Salazar defines imaginaries as "socially shared and transmitted representational assemblages that interact with people's personal imaginings and are used as meaning-making and world-shaping devices" (2018, 11). Geographical imaginaries help visualize potential futures in a given place and thus inform im/mobility aspirations and decisions.

This chapter introduces evidence from life and family history interviews with 62 women from three rural locations in Petauke, Chipata and Chadiza Districts, conducted during two research stays in 2021 and 2022. It also incorporates evidence from two group discussions held in 2021, as well as from informal conversations and my observations. The study locations were selected with the help of informants from the cities of Lusaka and Chipata who had relatives in rural Eastern Province and were willing to either accompany me to their "home villages" or arrange for family members to host me. The research participants in the study locations were identified through a combination of theoretical and snowball sampling, with the aid of local hosts and informants. The goal was to include a broad range of im/mobility experiences. The interviews ranged from semi-structured to unstructured, and the interview partners were encouraged to narrate⁴ their life and family histories and reflect on their im/mobility experiences.

Since most of the interviews took place in the related languages of Chichewa/Chinyanja and Nsenga, research assistants who acted as interpreters, or later transcribed and translated the interviews, played a key role in creating the source material.⁵ Co-leading the interviews, they provided

3 The capability to move stands for "a fundamental human freedom" to choose where to live (De Haas 2014, 26). While less dynamic than aspirations, it connects past, present and future in comparable ways (Wang and Collins 2020).

4 Thenceforth the research participants will be referred to as "narrators".

5 By interpreting and translating, the research assistants also created the first textual interpretations of the spoken interviews. The interpreters I worked with across the three research locations were Maliya Mzyece Sililo, Taonga Sibuta, Malisela Zulu and Tinenji Phiri. The interviews were subsequently transcribed and translated by Twasy Mu-

valuable information on the local context and assisted with recruiting participants, arranging interviews and explaining my presence to anyone who asked.⁶ For the thematic analysis, I chiefly worked with the English transcripts of the interviews, coding them with the help of the qualitative data analysis software Atlas.ti. Some nuances of meaning may have been lost in the process of translation.⁷

II. Research Context and the Research Participants

In Zambia, rural-urban migration has long been a prominent social practice and livelihood strategy (Peša 2013). Bolstered by enduring colonial legacies of rural-urban inequality, it has fluctuated over the postcolonial period, partly in response to economic “booms and busts” in urban areas (Fraser 2010; Potts 2011). In recent years, state support for agriculture and service provision in the countryside have improved, but most employment and superior infrastructure, educational and health services are still found in urban centres. A far larger share of the population living below the national poverty line resides in rural areas, 76.6 percent in 2015 (CSO 2016). Therefore, at least theoretically, rural dwellers could stand to gain from moving to urban areas. However, some of the differences between rural and urban areas have shifted over time. Living standards experienced by the urban poor have deteriorated, and examples of rural prosperity and larger-scale farming have multiplied, albeit mostly funded by the off-farm incomes of urban-rural migrants (Üllenberg et al. 2017,

taka, Natasha Chibuye, Charles Simwanza, Mofya Chibuye, Taonga Sibuta and Ellah Jere. Some of the interviews I conducted in English without assistance.

6 On the complex, often under-acknowledged role of research assistants in knowledge production on Africa, see Schumaker (2001) and Bank (2008). On issues of translation and working with interpreters in qualitative research, see Temple and Edwards (2002), Temple and Young (2004) and Turner (2010).

7 To ensure some translation quality control, each interview was interpreted and translated by different research assistants. When analysing the transcripts, I compared the transcribed interpretation provided on site with the usually more thorough translation of the narrators’ statements done afterwards. In the course of the field research, I acquired an intermediate knowledge of Chichewa/Chinyanja and a Nsenga-influenced dialect spoken in Petauke and Chipata Districts, so occasionally I was able to personally verify the translations by listening to the recordings.

38; Sitko and Jayne 2014). Nowadays, as cities become increasingly unwelcoming to those with seemingly little to offer their unequal economies, some aspiring rural movers redirect their routes towards mid-size and smaller towns or other rural areas (Üllenberg et al. 2017; Chamberlin, Sitko, and Jayne 2018).

The Eastern Province of Zambia is the site of a historical culture of migration (Peša 2019) dating back to the colonial era. As most other rural regions of Zambia, it supplied labour migrants to colonial Zimbabwe, South Africa, and later the Zambian Copperbelt and Lusaka (Zgambo 1992). Besides reflecting economic, political and personal impulses, migration formed part of the region's "sociocultural outlook" (Peša 2019, 168; see also Cohen and Sirkeci 2011), generating cultural beliefs and representations which changed over time and affected the localities and people involved, the migrants as well as the stayers (Hahn and Klute 2007). In postcolonial times, a large share of migrant flows from the Province were directed towards the capital city Lusaka. Women have been distinct agents of this history,⁸ often utilizing different pathways of migration than men owing to formal employment being less open to women for the most part of the 20th century. Besides education and marriage, family connections, domestic service and informal trade are channels through which women and girls have been migrating to Lusaka and other Zambian towns (Ashbaugh 1996; Hepburn 2022). Over the period 2000–2010, 11.6 percent of the Eastern Province's population were outmigrants (CSO 2013), pointing to a large percentage of stayers, who are the focus of this study.

The research was conducted in three rural locations in the Province: the neighbouring Nsenga villages of Felesiano and Jackson in Petauke District (25 research participants), located at about 30 km from Petauke town; the adjacent Ngoni villages of Lulaka and Wemba in Chipata District (17 participants), located at 18 km from the city of Chipata; and the predominantly Chichewa villages Kalolo Mwangazi and Chinyama, and some surrounding farms, in Chadiza District (20 participants).⁹ These districts have been prominent migrant-sending regions ever since the colonial period, but are also among the

8 In the period 2000–2010, the percentage of women among out-migrants from the Eastern Province was 49.1, almost equal to that of men (CSO 2013). The age distribution in the two groups was different, however, with women dominating in the younger age brackets from 10 to 29 years old, and men in the older age groups.

9 The number of households in the villages in 2022, as per information from the village headmen (population estimates were unavailable or vague), was as follows: Felesiano, about 450 households; Jackson, 37 households; Lulaka, 75 households; Wemba, 62 households; Kalolo Mwangazi, 31 households; Chinyama, 400 households.

agriculturally most productive ones in the Province.¹⁰ Apart from the small, relatively remote off-road village Kalolo Mwangazi, the remaining villages have good road and market access, schools, marketplaces, and shops in the immediate vicinity, as well as access to electricity. Owing also to the villages' proximity to the district capitals Petauke and Chipata, the study's findings may not necessarily reflect the immobility experience in more remote, sparsely populated rural regions in Zambia.

The group of narrators is diverse in terms of age, place in the life course, class, marital status, number of dependents, mobility/migration experience, level of education and occupation. The oldest narrator was 91 years old at the time of interview, whereas the youngest was 23 years old, with the majority relatively evenly distributed as per year of birth across the 1950s–1990s range. All but one narrator had at least one child of their own, having passed a culturally defined threshold into adult womanhood, hinging foremost on becoming a mother and on getting married and living apart from one's parents, as many participants explained. The levels of formal education of the narrators mirror the overall lower levels of educational attainment in rural areas in Zambia (Burger 2011). 62.9% had from zero to seven years of schooling (primary education level), 19.35% had continued into secondary education without completing it, 6.45% had a full secondary education (Grade 12), and only 11.3% had any post-secondary training or higher education.

Besides two nurses and two teachers, only seven other women held or had at one time held wage jobs. Most of them were concentrated in the study location in Petauke District, where the schools, missionary societies and hospital at Minga Catholic Mission provide some wage employment. A handful of women had also worked as domestic workers, in Chipata, Lusaka, or in neighbouring rural areas. Otherwise, virtually all of the research participants are small-scale farmers, growing maize, groundnuts and soya beans as the most common crops. For most, this is a main occupation and source of income, which they sometimes combine with various kinds of casual work (like fetching water,

10 The Eastern Province itself has the highest proportion of households engaging in agriculture of all other Zambian provinces, 89.9 percent in the 2013/14 farming season, with more than half of all households owning some type of livestock (CSO 2016).

doing laundry or working in other people's fields),¹¹ informal trade¹² or home-based crafts.

III. Understanding Decisions and Aspirations to Stay - Imaginaries of Town and Village¹³

For the majority of women interviewed, im/mobility decisions seemed to be a thing of the past, as they had for some time already committed to rural dwelling. However, only about a fifth of them had always lived in the same village. The rest shared shorter or longer, simpler or circuitous histories of migration, often echoing historical patterns of mobility. For instance, some narrators had initially moved to rural Eastern Province as children when their labour migrant parents returned from the Copperbelt or Lusaka, or from more distant labour centres in Zimbabwe and South Africa. Some had migrated to urban areas with husbands who worked there, and then came back following the husband's retirement, death or divorce. Others had moved across rural areas upon marriage. This testifies to the fluidity of mobility and immobility in this rural context (Stockdale and Haartsen 2018).

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- 11 Men engage, additionally to farm work, in other kinds of casual work and income-generating activities, such as bricklaying, carpentry, cattle herding, and motorcycle taxi services.
- 12 Many narrators occasionally sell vegetables, homemade pastries, basic groceries and other goods from their homes or by walking around the villages. The more ambitious traders in the Petauke and Chipata Districts locations have stalls at the local markets, whereas the most successful run small shops, bars or restaurants. The brewing of local alcoholic beverages popularly referred to as "beer", such as *chibuku* and *kachasu*, traditionally a women's activity, is among the most lucrative businesses.
- 13 According to an official definition by the Central Statistical Office of Zambia (now Zambia Statistics Agency), "an urban place is a locality with at least 5,000 people, half of whom are not engaged in agriculture. Such a locality should have urban attributes such as electricity, piped water, schools and hospitals" (CSO 2013, 24). No official definition of village exists. In the interviews, the narrators used the term "village" to refer chiefly to their own places of residence, ranging from small, remote settlements and larger, more "urbanised" ones forming part of growing rural agglomerations. The term "town" was reserved for district centres like Petauke, mid-size urban centres like some of the Copperbelt towns, and most frequently referred to cities like Chipata and Lusaka.

Narrators explained past and ongoing decisions¹⁴ to stay in (or return to) a rural area and their general lack of aspirations to move to urban centres by drawing on distinct imaginaries of the urban chiefly focusing on the cost of living and economic opportunities in towns, as illustrated below. They seemed to possess quite detailed knowledge of living conditions in Lusaka and other Zambian towns, acquired through their own visits, past migration experiences or contacts with migrant relatives and neighbours.

Here in the village things are good. I do anything for myself. In town before I build I need to buy, before doing anything I have to buy, but here I don't have to buy anything. (Translated.)

Fostina¹⁵, 61, Chipata District

Town life is good but also it's not good because in town, there's no farming, you can only eat what you buy. In a village I can go farm instead of buying food. (Translated.)

Memory, 26, Petauke District

Even in town, life is not as good. Even in town you need money, you can't go and look for firewood anywhere, you have to buy, charcoal you have to buy, anything to eat you have to buy. So even in town, it's problems, so we women will be suffering in town unless you have a head on how to make money, otherwise you'd suffer the same way in town as you'd suffer in a village. (Translated)

Miriam, 29, Chipata District

As the quotes reveal, the narrators' main perception of life in an urban area involved being deprived of their main source of livelihood – farming – and depending fully on an income for survival. They expected to reside in the densely populated, poorest urban neighbourhoods called “compounds”¹⁶ in Zambia, where land for farming or gardening is seldom available, and housing has to be rented. Since an income is hard to come by in a job-strapped, crisis-ridden economy in urban and rural areas alike, for those unemployed or precari-

14 Rather than representing a distinct moment in time and space, decisions can be thought of as “an ongoing response” to changing life circumstances (McCormack and Schwanen 2011, 25).

15 Only the first names of the narrators are given to protect their privacy.

16 *Komboni* in Nyanja and Bemba; the more common term for this type of urban settlements elsewhere in Africa is townships.

ously employed, life in the compounds becomes a struggle to meet basic needs – food being the most basic one.¹⁷ Similar to Salazar’s findings on migration imaginaries in Tanzania, the narrators were aware that by moving to town they would be joining populous “spaces of marginality” replicating, or possibly exacerbating, their rural conditions of hardship (Salazar 2011, 680).

In contrast to such an unappealing urban reality, in rural Eastern Province most villagers have access to land through inherited use rights under customary tenure, even if on a small scale. This despite the fact that such access is being slowly encroached upon by land markets and an increase in middle-scale farms (Sitko and Jayne 2014; Honig and Mulenga 2015), as well as land fragmentation resulting from decades of population growth, especially in areas in proximity to markets (Sitko and Chamberlin 2016). Some narrators, facing insecurity of land tenure in their village, along with unfavourable climatic conditions, were saving up to purchase a farm elsewhere and harboured rural-rural migration aspirations. Still, most villagers I spoke to had access to land sufficient to meet their own food needs, and to produce some surplus for sale. In the study locations women too could control land, on their own or jointly with husbands when married, either inherited from parents or from a husband’s family.¹⁸ Access to land and housing¹⁹ along with agricultural skills acquired already in childhood represent assets rural dwellers can mobilize to ensure survival. In a widespread imaginary of “the village”, rural farming provides a measure of basic security and self-sufficiency not found in the city.

Some narrators even construed it as a path to prosperity, with a vocal minority subverting binary discourses of rurality and urbanity to (re)define rural-

17 Being able to engage in food production is particularly critical to women for in most cultures of Zambia women are the designated food providers and play a bigger role in agriculture (Himonga and Munachonga 1991). Men are supposed to be the money providers and overall breadwinners, a role they can rarely fulfil owing to limited job opportunities. My observation in the study locations was that women do more of the daily provision for their households, including sourcing food, fetching water and firewood, cooking and cleaning, while agricultural work is often done jointly with men.

18 This seemed to be the case both in the traditionally matrilineal Nsenga and Chichewa villages (Petauke and Chadiza Districts, respectively), and the patrilineal Ngoni villages in Chipata District. However, I did not examine the question of land in detail; a substantial body of literature on women’s access to land in Zambia has documented women’s discrimination in customary and state systems of land control and ownership (see Himonga and Munachonga 1991; Kajoba 2002; Veit 2012).

19 In the rural areas, it is relatively easy to obtain a housing plot for free, and building materials and labour are cheaper.

ity as a condition of possibility and modernity, as in the following statement by Agnes P., a 56-year-old laboratory assistant and farmer from Petauke District: “[...]back then we had houses with grass, built with clay, but now we have houses with blocks and iron sheets, solar panels and electricity, it’s just like living in town.” It was a handful of wealthier rural women who voiced this perspective. For them, staying in the village was not only a matter of ensuring survival and avoiding suffering and potential downward social mobility in town, but of enjoying a standard of living that comes close to an urban ideal, in a less stressful and competitive environment.

Yet, an awareness of some advantages of town life, most of the time unnamed or vaguely implied (and often expressed as consumption aspirations – there is “nice food” in town, one drinks tea there), did sometimes seep through the women’s narratives. They were conscious of affluent settings and social mobility opportunities in urban areas offering standards of living superior to their own. Nonetheless, pragmatic considerations usually erased any (at least verbalised) morsels of fantasy about urban living.

Besides unfavourable structural conditions, many narrators were acutely aware of personal circumstances they believed disqualified them from pursuing a future in town. Two of these – the lack of formal educational qualifications and employment – were repeatedly emphasised and revealed another imaginary of the urban, connecting urban residence with wage jobs and formal education:

If I’m to leave this place I would want to move to a farm, not to town. I think that for me to live a good life and have wealth I can only farm because I have not been educated, that is what I have found out. If I go to town, I will suffer even more than here. [...] Yes, if I had the job I wanted, I would have wanted to be in town, because I wanted to get educated. But life would be hard if I went to town without an education. (Translated.)

Brenda, 32, Chadiza District

Interpreter: Have you ever thought of moving from here to town?

No, I don’t think about it. We in this family we are not educated, why should we go to town to do what. So, with us staying here we go to the field to cultivate, so that our children can eat. So that’s why we say we would keep the family here. Maybe these children after they follow our advice

they will get educated. Maybe they might one day come get us and take us to town to drink tea. (Translated.)

Juliana, 44, Petauke District

An influential discourse linking jobs to schooling, along with limited resources and not envisioning a possibility to resume educational trajectories interrupted long ago, serves to immobilize Brenda and Juliana (and their families) in a rural area, even though they may still cultivate urban-directed mobility aspirations for the next generation. The quotes convey a poignant ‘sense of one’s place’ (Goffman 1956; Bourdieu 1997), not only in geographical space, but in the social hierarchies inscribed in it.

These include not only hierarchies of formal education, but intersecting ones of class, gender and generation as well. Having stopped school in Grade 8 and Grade 5, respectively, Brenda and Juliana are among the majority of narrators with an incomplete primary or secondary education. Most of these women cited their parents’ inability to financially support them through school as the reason for their unfinished education. Juliana remembered feeling “lazy” or rather discouraged by the fact that she could not have the things her friends had “in abundance”, such as school supplies and uniforms. Resonating with Bajaj’s findings among secondary school students in the Copperbelt town Ndola (2010), others painted dropping out as a personal failure even though they had been facing overwhelming odds, given their parents’ modest means and the under-resourced nature of rural schools. Next, in a few cases, particularly among the older research participants, parents had prioritized the education of sons to that of daughters. Some schooling paths had been cut short by early pregnancies and marriages, testifying to the strength of cultural discourses placing a high value on marriage as a path to social adulthood and status and as an economic strategy, especially for girls²⁰ from poorer households (Blystad et al. 2020). The lack of formal education, which narrators frequently framed as a matter of individual responsibility, is thus revealed as the outcome of multiple intersecting disadvantages with complex structural roots, such as socially constructed gender ideals and state educational and economic policies (Bajaj 2010).

20 Girls in Zambia still have higher school dropout rates than boys, and women lower levels of education overall (CSO 2018). Eastern Province has one of the highest incidences of early pregnancies of all ten provinces (Menon et al. 2018).

For another dimension of gender ideals, women frequently assume the role of caregivers to children and other family members, more so at certain ages and junctures of their life course, which can come in the way of their mobility aspirations. Consider the example of 42-year-old farmer Christine, who lives in Petauke District with her husband and eight children:

I wanted to [move to town] but I saw that my children are too many it's better I farm here, if I was to go to town I would have to start renting, I don't know how much money I would get as a maid and how I would split that for rent and food. But I want to go there, however my children are just too many. (Translated.)

In fact, all narrators' im/mobility decisions regularly took into consideration the needs and views of the other members of their families and immediate households and were thus situated in relational contexts blurring the line between voluntary and involuntary im/mobility. However, since Christine voiced a clear aspiration to move to town, according to the aspiration/capability model she could be described as "involuntarily immobile". Brenda and Juliana, in turn, could be considered examples of "acquiescent immobility", where both the aspiration and capability to move are lacking (Schewel 2019). Yet, their statements also illustrate the limits of theoretical models and the elusive nature of aspirations. Should Brenda's declaration that she would have chosen to live in town had her life path been different be interpreted as a present but frustrated aspiration to move to an urban area? Or should it be read as an absence of such aspirations, following the suppression or transformation of past unfulfilled ones? How can we understand this pragmatic "levelling" of aspirations (Boccagni 2017, 11)?

First, the majority of narrators referenced unfulfilled childhood aspirations, chiefly articulated in the idiom of occupational dreams, the pursuit of which would have meant departure from rural areas of origin.²¹ Judging from these, it is not a want of broader life aspirations that explains the narrators' rural immobility, but rather an insufficient capacity to pursue them. In Apadurai's (2004) terms, these women lack the capacity to aspire, denoting the tools and knowledge needed to navigate structural obstacles and translate desired futures into concrete achievements. This would imply that there may

21 Most women had wanted to become nurses and teachers, some secretaries and police officers (note the gendered content of such dreams).

be social mobility pathways in Zambian cities that poorly resourced rural dwellers are unable to identify and access, which could be hindering their ability to form aspirations to move. Schewel (2019) warns that focusing on the capacity to aspire carries the danger of prioritizing certain kinds of aspirations (economic or profit-maximizing ones) while neglecting others that people may find equally meaningful. For instance, as mentioned, a number of narrators cited care responsibilities towards family members as reasons for not considering moving. These could be seen as constraints on their capacity to form migration aspirations or their capability to move, or both. At the same time, they could be interpreted as part of more general aspirations to cultivate a form of socially valued personhood or womanhood. However, valuing other aspirations besides economic ones does not have to deny a person's low capacity to aspire; both interpretations can be true simultaneously.

Second, the narrators' assessments of their prospects in town compared to their villages, with their levels of education, type of skills and other resources, could be fairly realistic. In an economy that fails to provide sufficient formal sector employment for educated youth, unschooled rural migrants to cities usually end up in precarious, informal and marginal employment (Üllenberg et al. 2017). Domestic service is one of the most common avenues for rural-urban women migrants, especially young girls (Hepburn 2022), but low pay, exploitative conditions and own care obligations make this option unattractive to many older women. It is no surprise then that aspirational horizons adapt to the current structure of opportunities and its geographical expression, framing the future not as "an open-ended 'place' where all that is not available or achievable now can be projected", but a narrowing field (Boccagni 2017, 13). Of course, this leaves open the possibility that if external conditions were to change, new aspirations could develop (or old ones resurface) and a repressed curiosity about town life given free rein, hinted at by younger narrators in particular. Aspirations are dynamic and "decision-making [...] often opportunistic rather than planned" (Griffiths, Ali, and Anderson 2013, 16).

In their imaginaries of town and village, the narrators consistently referenced structural conditions and personal circumstances affecting their capabilities and aspirations to move (De Haas 2014). The women's positioning in hierarchies of gender, class, formal education and age/generation and their perceptions thereof influenced how they assessed their capacities to pursue desired futures in urban areas, in view of the resources at their command and their relational obligations. In prevailing imaginaries of the urban, migrating to an urban area holds possibilities for upward social mobility only for those

with resources, schooling being the most highly prized asset. For everyone else, as the next section will show, rural dwelling supplies its own horizons of striving. These are motivated by similar aspirations for social and what Ghassan Hage calls existential mobility – the feeling that one is “going somewhere”, moving towards a place from which it would be possible to improve one’s circumstances and launch an imagined future self (Hage 2009, 97).

IV. The Village as a Future Space (?) – Future Orientations and Self-Realisation

The narrators’ im/mobility decisions and aspirations can be illuminated further by examining their attitudes towards the future, or future orientations, as narrated in the life history interviews. While migration can be understood as a fundamentally future-oriented act, albeit one that can introduce a high degree of uncertainty (Griffiths, Ali, and Anderson 2013), in this section I wish to demonstrate that rural immobility can equally be a future-affirming experience, a plausible choice in the service of smaller or more capacious future visions. These visions are intimately connected with prevailing (and contested) ideas of the good life, notions of womanhood and other cultural norms and values that influence individuals towards the making of a particular kind of self.

One such cultural notion that emerged from the life histories and observations in the study locations could be termed “self-realisation”. Akin to the concept of personhood, this refers to the unfolding and achievement over time of a person’s singular identity, which takes place within certain social parameters and derives value via recognition from others in the same community (Peša 2013, 2019; Guyer 1993; De Boeck 1998). Self-realisation can be accomplished through any number of culturally sanctioned avenues, such as acquiring skills, performing valued work and services, and accumulating and sharing wealth (Peša 2019). I trace some of the contemporary meanings it has acquired for women in the study locations as a way of elucidating key differences between the future orientations analysed. Some of these meanings are unequivocally gendered and shed light on local ideals of womanhood.

Two kinds of future orientation are discussed – *postponed futures* and *active future-making*. They differ in the time horizons they address (present/near, mid-term or long-term future) and in the scope of self-orientation or *personal* aspirations they afford to the narrators embodying them. At the same time, they share a core relational component, expressed in intergenerational aspi-

rations for protection and social mobility of children (one's own and any one decides to adopt/support), which many women placed at the centre of their understandings of self-realisation and womanhood.

The first orientation, that of *postponed futures*, is exemplified in the life narrative of Juliana, a 44-year-old farmer and mother of nine, who was introduced in section 3. Her first quote is worth reiterating here:

Interpreter: Have you ever thought of moving from here to town?

Juliana: No, I don't think about it. We in this family we are not educated, why should we go to town to do what. So, with us staying here we go to the field to cultivate, so that our children can eat. So that's why we say we would keep the family here. Maybe these children after they follow our advice they will get educated. Maybe they might one day come get us and take us to town to drink tea. (Translated.)

This kind of narrated future orientation was expressed by women with low levels of formal educational capital and marketable skills, and a sense of few alternative options. Juliana and her husband rely on subsistence farming and occasional casual work to feed their family and meet their children's school expenses. She was one of few narrators who declared that they barely produced enough food for their own consumption and sometimes went hungry as a result. Marital troubles further undermine the frail livelihood base. According to Juliana, her husband does not always contribute his income to the family budget and sometimes uses joint earnings for his own needs rather than those of the children.

In such a situation, and with many young children to support, Juliana found it difficult to imagine that life could be different elsewhere. It was difficult to contemplate the future at all, shrouded as it was in doubts and fears about her ability to provide for her children.

My wishes for the..., for..., for you to think that this wish I will find it. It's just the same as when you reach a certain stage where you begin to say that there is two years more coming ahead and you say I can do something big. But now with the way we are staying, we are just seated and knowing that God is the one keeping us. So with that in mind we wouldn't wish for the future, we don't have any wishes, let me not lie those thoughts are not there. (Translated.)

The first two sentences of this excerpt are worded somewhat cryptically because they have been rather literally translated from spoken Nsenga into English. The interpreter I was working with for this interview, Taonga Sibuta, explained the meaning: it is only when you have made some progress that you can start planning for the future. Otherwise, one has to take existence one day at a time and be grateful to God for the gift of life. Besides revealing a deep spiritual attitude, which can engender its own kind, or layers, of future orientations, which I will not explore here but were meaningful to most narrators, this quote exemplifies a future orientation characterised by little faith in one's ability to change one's circumstances. With the personal future indefinitely deferred and surrendered in the hands of a higher force, the focus is on the present and immediate time ahead in which children have to be fed, clothed and sent to school. One's effort at self-realisation is confined to fulfilling the relational obligations arising from the social identities of mother and adult woman. As shown in Juliana's first quote above, children carry the hope for potential spatial and upward social mobility in the long term; the future is passed on to them. Raising children is a Future-Making activity par excellence, representing a form of investment in old-age security, particularly in settings like Zambia where formalized social welfare systems are underdeveloped (Asenso-Agyemang 2023). It is also a selfless act on the part of parents, whose efforts to carve out a better life for their offspring is a bid to protect them from suffering and ensure that the family's transgenerational arc reaches forward in time into continuity and thriving.

Although representing the personal future as a retreating horizon, dampened by the weight of the past, the responsibilities of the present, and by past, present and future contingencies, the postponed futures orientation is not a completely futureless vision. The aspiration that one's children could be educated and live better lives speaks to an interpretation of rural immobility as a coherent choice of an environment more likely to support a person's efforts to ensure positive future outcomes for their children, however distant that prospect may appear. By making it easier to live in one's own house, which many women pointed out as a hallmark of social adulthood in Zambia, and to enjoy basic independence by having some control over food provision for one's family, rural areas facilitate a degree of self-realisation – as the fulfilment of

local ideals of womanhood – that would likely not be possible in town with the same level of resources.²²

Crucially, ideals of womanhood and motherhood and the associated self-realisation have come to include providing children not only with physical and emotional care, instruction in practical life skills and indigenous knowledge (farming, domestic chores, healing) and in the moral and social norms of the rural community, but also with formal schooling (Serpell 1993). In fact, schooling was the main medium through which parents envisaged their children could bid for a better future. It was a key reason why underage children were sometimes “sent” to live with relatives in town for years on end. But it could equally be a motivation for staying in a rural area. Once again illustrated by Juliana, when asked what life lessons she wanted to teach her children:

What I want to teach my children about life, I want to tell them about a good life, and good behaviour, how they can live here on the face of the earth. I want to say when you look at me, I didn't finish school, so while you are at school and while I am alive even with the challenges and difficult experiences take this opportunity to get educated so that you have a future. So that you have a future... (Translated.)

As this quote shows, some rural women constructed formal education not just as *the* gateway to a better future, but to “having a future” at all, and virtually all expressed a commitment, discursive at least, to supporting their children's schooling.²³ The latter was presented as one of the main markers of success for women and a core component of their dominant ideal of self-realisation as mothers and *as women*, regardless of the kind of future orientation they managed to perform. For example, Agnes P., a 56-year-old laboratory assistant, shop owner and farmer from Petauke District, identified having put her children through school as her life's achievement, which led her to declare: “I am in my future now.”

22 This is supported by Hansen's findings on blocked social adulthood and socio-economic mobility of youth in Lusaka's compounds (2005).

23 Like in Mazanderani's study on rural youth's aspirations in South Africa (2020), the regular emphasis on the importance of schooling by the research participants may have had something to do with my positionality as a white scholar and outsider. Informal conversations testified to the existence of other discourses questioning the payoffs of schooling, especially secondary-level schooling, which in many cases did not seem to make a difference in finding employment.

From some conversations and interviews with men in the study locations, it was possible to glean that “educating” and providing for children formed part of ideals of masculinity as well, and for some women it was a joint project with their husbands. However, the following statement by 50-year-old Suzeni from Petauke District exemplifies a dominant discourse among the narrators, partly normative, partly observation-based, that concern for children’s well-being was primarily a woman’s job:

Women face a lot of challenges, because in the morning when I wake up, I have to think about what the children will eat together with their father. Men can just wake up and go, but with a woman she has to leave home knowing that I have left relish for the children to eat. So, the challenges we face as women they are a lot because men don’t offer support so us we have to find a way, even piecework so that the children at home can eat. For the children to wash and go to school, what will I do. So, for us women, the challenges we face are a lot. (Translated.)

Most narrators defined womanhood in terms of the work culturally assigned to women, and care for children and their future fell into this category. In some cases, it was even essentialised as an inborn affinity or characteristic of women. There were exceptions, however. Forty-year-old Precious L. from Petauke District, who is a mother of four, claimed that a gender division of work within households no longer existed, and that men could cook and take care of children as well as women. Precious’ perception likely reflects her own experience – her husband had nursed their last-born child while she was at work, sometimes cooked for the family and contributed towards school expenses. She herself is formally employed, owns property and manages several income-generating activities. Her eldest children carry out most of the domestic chores in her household, pointing to a work division by age besides gender. This example could be an outlier, but it also suggests that some flexibility is always there in practice, amid multiple co-existing and ever-changing systems of gender relations, regardless of the ideal norms a community subscribes to, which are themselves subject to change and contestation (Sanders 2000).

Precious exemplifies the second type of future orientation, *active future-making*, aptly illustrated by a quote which once again demonstrates that looking out for children’s and the family’s future was central to the narrators’ definitions of womanhood:

Researcher: What does being a woman mean to you?

Precious: You're supposed to be a good woman. You should know about your future and your children's future and the family's future. One who can stand on her own and be independent! (Chuckles). (Translated.)

However, by simultaneously emphasising the value of independence, Precious' brief definition makes space for a broader range of ways to perform womanhood and more diverse aspirations. Moreover, her future orientation is marked by a belief that present actions can contribute to achieving aspirations not only on a more distant time scale and relationally, through one's children, but for one's personal benefit as well. This orientation, as Juliana perspicaciously observed, is associated with a higher level of resources, which are crucial to enabling greater scope for aspiring. Precious grew up in a better resourced household than Juliana and was supported by an uncle who worked in a neighbouring town. Despite an early pregnancy in Grade 12, she finished her secondary education and found a job at Minga hospital as a cleaner. This and a flourishing small business brewing alcohol, along with the carpentry work of her husband and their farming, have helped her accumulate assets she is proud of (she owns a five-roomed house and some cattle, unambiguous markers of wealth in the rural context). Although her long-term plans are to stay in the village, she intends to enrol in a nursing course once all her children have completed their schooling, which may result in a temporary spell of mobility. Class and the related factors of schooling and wage employment can thus be important markers of difference between the two future orientations and the narrators embodying them.

The more expansive future visions accompanying active future-making are not just about ensuring longer-term continuity – physical, intergenerational, cultural and communal – but also about attaining a measure of upward social mobility in the near future. Naomi Haynes (2017) identified the religiously inflected value of “moving” on the Zambian Copperbelt as capturing this striving for social mobility. In the villages I visited in Eastern Province, people spoke about “improving” (often using the English word itself), referring to income-generating activities and material acquisitions harnessed in a project of raising one's standard of living and setting one's family, variously defined, on a forward socio-economic trajectory. Such a project is imbued with moral value (vying or existing next to other positively valued moral “projects”, such as sharing with an “extended” family and neighbours, participating in religious and

communal activities, living in harmony with others) and is at the bottom of efforts at active future-making. However, advancing one's personal "career" and accumulating material wealth increases the circle of people one may wish or feel obligated to help – first and foremost parents, and then siblings, the children of siblings and other relatives and neighbours. In fact, one component of self-realisation for both women and men in this context involved helping as many people as possible. Success meant being on the giving side of frequently unequal relationships of sociality, in return for recognition and status (Haynes 2017; Peša 2019).²⁴

Yet, with active future-making, some scope for women's personal, self-oriented aspirations could be there as well. Precious L. had thus prioritised her children's schooling during their formative years but was planning on continuing her own educational path as soon as resources became available. Miriam, a 29-year-old mother of three from Chipata District, while farming and running a small village restaurant to provide for her children, was hoping that a night school would start in her area where she could obtain her Grade Nine certificate and improve her English skills. Most other women, especially older ones, had given up on their own schooling trajectories, but were still busy acting upon their immediate and longer-term futures in other ways – prominently by making plans for material improvements and pursuing consumption aspirations.²⁵ The content of such plans and aspirations was determined intersubjectively, within a relational social setting where the visible achievements of neighbours set the yardstick for one's own ambitions.

Thus, common aspirations and Future-Making actions included building and improving houses, in some cases to create a future income stream from rent; buying cattle as a way of storing wealth, marking social status *and* acquiring a productive resource; and purchasing bicycles, motorcycles and cars (the latter two possible in rare cases, and usually as a household achievement,

24 Which is not to say that these relationships are purely transactional and devoid of affective bonds.

25 In addition, among narrators with active Future-Making orientations, the goal of educating children is approached more intentionally. It no longer suffices to send children to the nearest local school, supply the minimum necessities and hope that regular attendance will take care of the rest. A promising trader, Lea from Petauke District, who has three young children, declared: "I don't want my children to get educated the same way I did." Instead, she would like them to attend superior schools and hopes to finance their education beyond secondary schooling, something her parents were not able to do for her.

not an individual one for women²⁶) for the same dual purpose. In narrators' accounts, owning a motor vehicle carried the highest amount of symbolic capital, but installing electricity, buying a TV set, a fridge, or simpler items like a dining table, set of dishes or windowpanes after many years of living in a house with tiny holes for windows could also represent aspirational acts. In Haynes' analysis of similar acquisitions by township residents on the Zambian Copperbelt, these acts represent an effort to slow down the vagaries of economic time by "transforming liquid assets into something more enduring, a tangible marker of progress" (2017, 40). They further serve to create a feeling of "moving" or "improving" (reminiscent of Hage's existential mobility [2009], see above), which nourishes the onward effort of aspiring.

Next, the two future orientations explored are differentially and ambivalently linked to a woman's age and place in the life course. Girls and young women are the most likely to engage in out-migration as a Future-Making strategy. In fact, through its focus on adult women, the sample excludes the most migratory group of females in the Zambian countryside. Rural out-migration rates for women in Zambia peak in the mid-twenties and then gradually decrease until the age of 50 when they stabilize (Chamberlin, Ramos, and Abay 2021, 959).²⁷ As far as the urban direction is concerned, this mobile group includes young women and girls who migrate to cities for educational purposes, those who become domestic workers, oftentimes residing with relatives and nourishing hopes of earning an education in town (Chamberlain, Ramos, and Abay 2021; Hepburn 2022), and young women who move to urban areas in search of employment and business opportunities, in some cases upon marriage or together with husbands. Who can be part of this group and in which modality depends, of course, on intersecting factors such as class, level of education, urban social networks, access to capital and wage employment, in some cases a cooperative marriage partner and care obligations. All of these categories of difference, in varying combinations, likewise distinguish the two future orientations discussed and account for the uneven distribution of the capacity to aspire among the women who stay, of which Precious L. and Juliana are emblematic examples.

26 Men are also, most often, the drivers, with only the rare woman possessing the skills to drive a motor vehicle.

27 This aligns with evidence from the immobility literature that continued residence in a given location decreases the likelihood of leaving (Schewel 2019).

Future orientations can also manifest ambivalently with advancing age. The sense of hopelessness Juliana felt was eclipsed in the lives of other narrators who were past the stage of bringing up underage children. In general, lower-income women in Zambia are most likely to postpone their futures during their reproductive age and the time before their children have reached social adulthood (Hansen 1997; Ashbaugh 1996). Afterwards, they are entitled to expect some livelihood support from children and there should be more room for productive activities to ensure their own economic security (Hansen 1997; Ashbaugh 1996). However, Zambian women are commonly entrusted with the care of grandchildren or other parentless children from their families, so they can end up supporting children and “passing on the future” far into their old age. Sometimes this is caused by the premature death of family members or by the fact that the self-realisation paths of offspring are blocked due to lack of employment and other productive opportunities. Socially prescribed ideal stages of life and successful transitions between them cannot always constellate in practice because of contingent circumstances and a lack of supportive structural conditions (Johnson-Hanks 2002). In other cases, the care work performed by older women enables their adult children to migrate. For instance, the second year I visited the study location in Chipata District, 33-year-old informal trader Precious M. was no longer there; she had married and moved to rural Petauke District, leaving her two young children behind in the care of her widowed mother.

In a final example, elderly women can often feel that they “have no future” (interview with 80-year-old Agnes M., Petauke District) or that their earthly horizon is emphatically short and unpredictable. At the same time, they can still harbour aspirations for material improvements, accumulate savings and make concrete plans (such as to “paint the house from the inside”) to ensure greater material comforts, but also advance a little more along socially recognized metrics of success. The pursuit of self-realisation and “improving” is never finished.

Although different in the perceived degree of agency over the future animating them, the two future orientations discussed in this chapter, postponed futures and active future-making, share an understanding of the future as progress, or “departure of some form from the here and now” (Anderson and Adey 2012, 1531). “To have a future” for narrators with either orientation meant not only continuity of embodied experience, or a progression of life stages, but essentially socio-economic mobility – securing a marked and ideally lasting improvement in the material conditions of life. In the best-case scenario, this

would take the form of a continuous unfolding over a lifetime and across generations. Of course, this is hardly ever the case – accounts of setbacks, stasis and hiatuses abound in the narrators' biographies.²⁸ Temporalities are messy and entangled; a biographical and historical past sedimented in material and psychological resources and in current structural conditions, along with past and present contingencies, limits the extent to which narrators (feel they) can act on the future at any given moment.

For some narrators, the future felt indefinitely deferred and inaccessible, others worked towards small milestones foreshadowing growing aspirations, adjusting, stepping back and redirecting as necessary, and yet others (a precious few) had arrived at their destinations, but usually continued their efforts at Future-Making on behalf of the next generation(s). Much like in the chapter by Donat and Dannecker in this volume, these differences expose the unequal distribution of the capacity to aspire and shed light on some of the intersecting categories producing it in this rural setting. As sketched above, class, formal education, age and place in the life course, along with number of dependents, degree of cooperation in marriage and other characteristics, all interact with context-specific gender ideals and economic conditions to result in uneven access to the future among women in the study locations.

V. Conclusion

This chapter has demonstrated the multi-layered nature of im/mobility decision-making among women in rural Eastern Zambia. Future visions and orientations have been shown to interact with ideals of womanhood, imaginaries of town and village and with the narrators' positioning in social hierarchies to mould their decisions and aspirations to stay. Attention to narrators' considerations of the future has revealed that for many rural women staying in the village is not only a default option when town prospects disappoint, but a way of making possible minimal or larger Future-Making visions, even when the future is difficult to imagine. However, future orientations, imaginaries and

28 Drought and a bad harvest can delay plans for material acquisitions, immobilising physical accidents can suspend trading, cattle can fall prey to disease, hard-earned new agricultural implements can be stolen. But perhaps nothing epitomises better this loss of connection to wider aspirations and dreams of existential mobility than children straying from schooling trajectories in spite of their parents' best efforts.

the capacity to aspire are all shaped by multiple intersecting inequalities resulting in uneven experiences of gendered rural immobility. Not only could the narrators better endowed with valued resources relate to the personal future in more agentic ways, but they also had a wider array of options for performing womanhood and for fulfilling the intergenerational aspirations and relational obligations central to local understandings of womanhood and personhood.

One dominant view of the future emerged from the narrators' life histories – the future as progress. But while aspirations for socio-economic advancement united all narrators, few achieved them fully, and seldom via a linear route. Most narrators were already living alternative futures, constructed after a normative path to social mobility from schooling (via migration) to formal employment had been frustrated and abandoned. At the same time, a discourse of national and global proportions touting the promise of formal education to lead to employment and an exit from poverty (Bajaj 2010; Mazanderani 2020) has if anything become even more persuasive. Despite the consistent failure of an economy in permanent crisis to deliver jobs, the dream of schooling has captured the imaginations of these Zambian women. Yet, it is uncertain to what extent widespread educational aspirations can be realized and if this would result in new waves of rural-urban migration. Ultimately, the directions future im/mobilities take will depend on the condition of urban and rural economies, the Zambian state's efforts to remedy the gaps between the two, and people's abilities to mobilize rural and urban resources in a bid to achieve aspirations.

Finally, some of the life histories offered glimpses into other kinds of futures envisioned by the research participants, beyond the progressive ones captured in active future-making. Further research is needed to uncover some of these potentially spiritual, non-hierarchical futures and investigate how they may challenge or collude with the image of the future as striving (Davis 2022). In addition, what non-migratory spatial mobilities do women practice in rural Eastern Zambia? In what ways are these entangled with migration and staying, how are they implicated in active future-making and what other purposes and futures do they serve? These are all questions for future study.

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Circulating

In the Future Now

Entangled Mobilities and Temporalities in Climate Adaptation in Morocco

Rachael Diniega

I. Introduction

The first thing you would notice as the taxi climbs the winding road up the mountain in this remote region of central Morocco is the waterfalls. There are three that fall from the cliff onto the slopes below, splitting into irrigation canals that bubble from village to village down into the valley. If you climb the trails next to the biggest waterfall, like the teenagers often do at sunset, you'd arrive at the top of the cliff. You can follow the water streams, the ones that feed into the waterfalls, back through the fields of corn and wheat, past the government-contracted tree nursery – little cedar seedlings grow as future foot soldiers against desertification – to where the mountain begins to grow out of the plateau. That's where the spring is. Here in the summer is where young boys learn how to swim and dive in deep pools of clear gurgling water, and where women bring their tagines to picnic with their families under the shade of walnut and fig trees.

This collection of villages, from the top of the cliff and down to the river and across the valley, is called Skoura M'Daz.¹ Unlike many places across the spread of desert, mountain, and Mediterranean climates within Morocco, this ~11,000-person commune² on the westward side of the Middle Atlas Moun-

1 Skoura M'Daz is often shortened to Skoura in everyday speech within the town. However, this is not to be confused with the more well-known "Skoura" in the southern desert near Ouarzazate.

2 Commune: an administrative district that encompasses a set area of land, including its villages or small towns, below the level of the province. The Skoura M'Daz commune is made up of ~23 villages.

tains is rich with water. “It’s like a paradise”, Saeed,³ a 30-year-old community activist, said to me. Tourists come in the summer to soak in the famed natural beauty, away from the cutting heat of Fez and Meknes. Many come from families with origins in Skoura M’Daz, seeking to reconnect with their Amazigh⁴ roots, while others are hikers, outdoorsmen, and wildlife photographers.

Fig. 1: The main waterfall of three in Skoura M’Daz, alongside which tourists, like these medical student volunteers, hikers, and residents often climb.



Photograph taken by the author.

Yet when I left Skoura M’Daz in fall of 2022, the dull roar of the waterfalls was conspicuously absent. From the roof of my apartment building, I could see only a thin ribbon of water in the main waterfall channel. For weekly souq⁵

3 All names in the chapter are changed to pseudonyms to protect the confidentiality of participants.

4 Amazigh: an indigenous ethnic group across Morocco and North Africa.

5 In rural areas, residents go to the weekly souq, or market, in the central village for groceries and supplies, as well as social catch up. Market vendors for produce, household supplies, toiletries, clothing, animals, and other supplies travel to a different commune each day of their work week.

on Wednesday, I strategically waited until eleven in the morning, the busiest time, to ensure I would run into people I knew to catch up, say goodbye. But the normal crowds were thin. I approached Bilal, an overextended association leader and commune representative, sitting at a café paying the rosemary cooperative's harvesters. As soon as I greeted him, he commented, "Souq is empty today, right?" *Aiwa, 3lach* — yes, why? "The olives are bad this year, and people don't have money." The week prior, I had walked through the olive groves in the valley below, called Lfwerem, and seen the olives turning from green to violet to black — time to harvest. But they had also seemed drier, wrinkly, and shriveled. Farmer after farmer told me about their water problems, and there was the result.

The problem of water is clear and worsening. The abundance of water one can hear and see walking through Skoura cloaks the other reality of its diminishing water supply. Prolonged and repeated droughts in Skoura, across Morocco in the past decades, have harmed agriculture and thus the livelihoods of smallholder farming families like the ones I met. Mohcine was originally raised in Skoura M'Daz but is now living in Casablanca, and he sees the changes when he visits his mother and brothers still remaining in Skoura. "[There is] less rain [...] People steal water, people clear lands, and the climate has changed as well [...] Before there used to be more rain, and the drought years were spaced out in four years, eight years, ten years. Now the drought comes one year, then the next year, it doesn't." Skoura M'Daz has not been immune to climate change, to overconsumption of water, to changes in agricultural crops, livelihoods, and mobilities.

What, then, is the future of Skoura M'Daz? While many people I interviewed suggested that agriculture was going to die out, still many others are adapting. Farmers like 54-year-old Tariq are taking action. "We demanded that the government renovate the well — because the olive trees had dried, and people had migrated because of drought — so that we could refresh the land. The olives have dried, so there is no harvest." After visiting a friend near Meknes, Tariq was inspired to install a drip and sprinkler system on his land, increasing vegetable production and ensuring his olive trees were watered. He applied for and received funding for three more community wells to be dug across his village. Another farmer, 30-year-old Farid, excitedly told me his upcoming plans for the year. He had seen the pool and drip system of his neighbor, who had seen larger farms with drip irrigation during travels around Morocco. With his income affected by the drought's effects on his carob trees, Farid was making moves to dig a pool and install a drip system.

Their efforts are, in theory, supported by the national government's agricultural strategies, the Green Morocco Plan (2008–2020) and Green Generation Plan (2020–2030), which provide subsidies for water-conserving irrigation methods.

At the same time, the water landscape of Skoura M'Daz will be drastically changing in the next few years due to the building of a dam nearby. The Moroccan government has also been concerned about the future of the kingdom's water supplies. The M'Daz dam project is explicitly represented as a climate adaptation project that seeks to conserve the aquifer in the Saiss Plain, an important agricultural region encompassing Meknes and Fes, due to rapid over-withdrawal disproportionate to its renewal rate. Yet consequences for farmers in Skoura M'Daz include displacement and limitations on digging wells.

This chapter seeks to understand how forms of mobilities and temporalities are co-produced with climate change adaptation across scales in Skoura M'Daz, Morocco. I assess how complex entanglements of mobilities and temporalities create and are created within the process of adapting to climate change, thus subsuming this chapter under the conceptual direction of “climate mobilities” (Boas et al. 2022). Specifically, looking at mobilities-in-adaptation, I examine the interlacing and circulation of mobilities deriving from “planned adaptation” from the national government with mobilities involved in “autonomous adaptation” from the farmers' side, both driven by diminishing water resources. I employ the analytical lens of “entangled mobilities” (Wyss and Dahinden 2022) to illuminate these interactions.

II. Entangling Concepts to Study Mobilities-in-Adaptation

News reports have highlighted the “human face of climate change”: people being forced to move due to drought, rising sea levels, or extreme weather (see Bittle 2023; Pannett 2023; Burleigh 2023; Office of the High Commissioner for Human Rights 2022). Alarmist narratives of “climate displacement” or “refugees” have dominated news headlines and politics, as well as early in migration-environment research communities (Durand-Delacre et al. 2020; Morrissey 2012; Boas and Wiegel 2021). Yet the fact remains that the relationship between people's movements and environmental changes varies and is more complex than what is often portrayed (McLeman 2014; Tacoli 2009). In the context of environmental change, people have many reasons for moving, a decision to move or stay can range from voluntary to involuntary, they can

move far or nearby, and the temporalities of such movements can fluctuate from a few weeks to years (Borderon et al. 2019; Obokata, Veronis, and McLeman 2014; Barnett and McMichael 2018).

This diversity of movements resulting from climate change can be encompassed under “climate mobilities”, a term expounded upon by Boas et al. (2022). Rather than seeing climate mobilities or migration only as exceptional, they can also be understood as part of everyday life. Instead of pointing to a simple causal relation between climate change effect and physical, human mobilities, they can be considered in relation to local environmental changes, climate policies, and other social, political, or economic contexts produced by climate change (Boas et al., 2022). Moreover, we can view “climate mobilities” as “deeply embedded within historical, current, and evolving practices of mobility” (Boas et al. 2022, 3368). Studying climate mobilities simultaneously means studying climate immobilities (Wiegel, Boas, and Warner 2019); more research points to the complicated relationship of staying or of immobility in the context of environmental change, whether voluntary or involuntary, within contexts of governance and socioeconomic factors shaping capabilities and aspirations (Schewel 2020; Black et al. 2013; Zickgraf 2019).

“Migration-as-adaptation”, a specific strain of literature investigating the relationship between climate change and migration, could also be placed under this overarching category of climate mobilities. Migration-as-adaptation as a concept grew out of awareness that migration could be a choice, intentionally or unintentionally in reaction to environmental change, that could allow a household to diversify incomes, livelihoods, and locations (Black et al. 2011; McLeman and Hunter 2010). In turn, migration could potentially enhance adaptive capacity or resilience to climate change effects through financial or social remittances (Sakdapolrak et al. 2016; Porst and Sakdapolrak 2018; Birk and Rasmussen 2014). However, researchers also caution against misplacing a responsibility to adapt through migration only on the individuals affected by climate change (Bettini, Nash, and Gioli 2016), that migration-as-adaptation can have limits or even reduce adaptive capacities (Vinke et al. 2020; Sakdapolrak, Borderon, and Sterly 2023), and that local contexts and people’s own perceptions should be considered when linking migration, environmental change, and adaptation (Van Praag et al. 2021).

Two categories of adaptation have emerged in literature and policy documents: planned and autonomous (Intergovernmental Panel on Climate Change [IPCC] 2007). Especially within climate negotiations and on the international stage, planned adaptation has taken a front seat. Planned adaptation

are the deliberate plans and programs from national or other policy-level actors that directly organize climate adaptation action, facilitate adaptation at more local levels, or “strengthen conditions favorable for effective adaptation and investment in new technologies and infrastructure” (IPCC 2007, Chapter 5.5). This type of adaptation is heavily forward-looking, based on anticipated futures, forecasts, or scenario-planning (Rickards et al. 2014). They can be based on quantitative research, use technological solutions, and aim to respond to the need for understanding the future and predicting the future for policymaking. For example, Rahman and Hickey (2019) describe two types of planned adaptation with technical solutions by Bangladesh’s government: one, an explicit adaptation plan to build flood protection infrastructure, and two, a livelihoods support policy through agricultural technology transfer, which indirectly supports climate adaptation at the local level.

Autonomous adaptation⁶ means the actions taken by individuals, households, or communities to adapt, whether consciously or not, to environmental changes that they are experiencing (Thorn, Thornton, and Helfgott 2015; Mycoo 2014). For example, environmental changes like erratic precipitation patterns and increasing temperatures affected the agricultural productivity and, thus, livelihoods of smallholder farmers in Ghana. Households adapted their farming practices, including using fertilizer for soils and introducing crop rotation and additional irrigation (Adade Williams, Crespo, and Abu 2019). Adaptive capacity depends on the level of power or control agents have within communities and over resources, including financial ability and access to information (Pecl et al. 2019; Adade Williams, Crespo, and Abu 2019).

As such, planned and autonomous adaptation do not function in completely separate spheres; rather, they overlap, influence, or even create barriers for each other (Juhola et al. 2022; Mycoo 2014). Assefa Mersha and van Laerhoven explore the interplay between the two scales of adaptation for drought in Ethiopia, whereby “both government and smallholder farmers attempt to tackle this issue, and as a consequence, their respective actions become linked” (2018, 95). However, they found that the planned adaptation program that they examined dominated over the autonomous adaptation of those the policy aimed to assist; there were some negative effects, a result somewhat of problematic framings and assumptions within the adaptation program

6 The usage of “autonomous” should not be taken to imply that these adaptation actions happen in a vacuum or separately from contexts, as this chapter also seeks to demonstrate.

and surrounding contested political narratives (Assefa Mersha and van Laerhoven 2018). Despite seemingly successful local adaptation practices being developed by slum residents in Nairobi in the face of flooding, they are left out of adaptation planning at the municipal and national levels, due to the ‘illegitimacy’ of informal settlements (Thorn, Thornton, and Helfgott 2015). Rahman and Hickey (2019) argue that planned adaptation actors should take the autonomous adaptation actions of beneficiaries into consideration to ensure that policies do not end up being maladaptive. Power asymmetries between governments and people then create differentials that create an unequal interplay between planned adaptation and autonomous adaptation.

What can also lead to differences between scales of adaptation is a difference in temporalities (Arnall and Kothari 2015; McMichael and Katonivaliku 2020). Rickards et al. (2014) describe how scenario planning brings the future into the present, though there is a discrepancy in how the future is understood and imagined between scales. In describing residents’ experiences with anticipated sea-level rise in Australia, Fincher et al. (2014) argue that people link the imagined futures in climate change adaptation to the past and present through time stories, which allow them to make sense of their experiences – quite different from how policymakers understand the issues. “If implemented as intended”, Fincher et al. write about an Australian sea-level rise policy, “this would bring forward the costs of adaptation over multiple generations onto present generations who, as we have explained, at present see little need and even less justice in this cost shifting exercise” (2014, 207).

Instead of viewing migration as a form of climate change adaptation, this chapter seeks to understand how forms of mobilities are co-produced with climate change adaptation. I analyze the interactions between planned and autonomous adaptation action through the concept of “entangled mobilities.” This concept provides a way to “systematically examine the ways in which mobilities are interconnected and interdependent – and thus to consider the local and global entanglements as well as the power structures in which they are embedded” (Wyss and Dahinden 2022, 2). This chapter adds to their work by proposing to study entangled mobilities surrounding a specific process or action: in this case, climate adaptation in Skoura M’Daz, Morocco. What are the mobilities that help create climate adaptation action, and which mobilities are created by climate adaptation? What are the interactions among and across the different actors, and how do they shape the goals and direction of climate adaptation actions? Through following these linkages in the case of Skoura M’Daz, the entangled temporalities in adaptation are also exposed. Thus, I argue that

both entangled mobilities and entangled temporalities influence and commingle with each other to create climate adaptation outcomes.

The starting point of the two cases explicated below are the planned and autonomous adaptation counteracting diminishing water resources experienced by residents in Skoura M'Daz. One is the planned adaptation of the dam-building project in M'Daz, and the other is the autonomous adaptation of farmers' conversions to drip and sprinkler irrigation. By exploring the mobilities and temporalities involved in these changes, we can better understand the relationship between planned and autonomous adaptation, between far-off futures, current happenings, and past histories.

I lived in Skoura M'Daz from 2017 to 2019 as a US Peace Corps Volunteer in youth development, then again for nine months from 2021 to 2022 for dissertation fieldwork. During fieldwork,⁷ I conducted 120 household surveys and interviewed over 80 people. They were mostly residents of Skoura M'Daz, with some translocal residents still connected to Skoura M'Daz but living in other cities, in addition to regional and provincial government officials. I worked with two research assistants, Mustapha and Driss, from Skoura M'Daz and fluent in English, Darija,⁸ and Tamazight.⁹ I talked to farmers and herders, cooperative and association leaders, amghrars,¹⁰ university students, and seasonal laborers. These participants skewed male, 66 of the 81 total, in stark contrast to my job as a volunteer working with young women and girls and hanging out with families, usually the mother and children, at home. They are the ones who taught me another side of life: my host mother Aziza showed me how to sort the olives shaken to the ground, my neighbors, Aicha, Layla, and Basma, took me along to festivals and family visits in other villages, and the middle school girls to whom I taught English – Hanae, Nadia, Mouna, and Sabrine – hiked with me to various springs, pools, and waterfalls around town. Everyday conversations with them and others helped contextualize the collected data from interviews and surveys and gain a holistic understanding to embed the processes and actions of environmental change and human mobilities. Thus, I

7 Project was approved by the Ethics Committee at the University of Vienna in spring 2021, Reference Number: 00631.

8 Darija: the spoken Moroccan Arabic dialect.

9 Tamazight: the spoken indigenous language in Skoura M'Daz.

10 Amghrar: the water irrigation manager for a certain sector of the overall irrigation system in Skoura M'Daz and who is elected by the water users.

situate my understanding of these climate adaptation issues from this participant observation through frigid winters, Ramadan iftars, and school assembly days.

III. Making Way for a Planned Future: The M'Daz Dam

The wells will refill, and the ravines will have water. And there will be fish, birds, and boats. The region will prosper.

—Rachid, 27-year-old farmer

We will not benefit at all. They will only bring some fish. If you can, you can go fishing.

—Hafid, 79-year-old farmer and herder

The clouds will affect the trees in the period of pollination. It will have an effect on the olive trees... so it will create a big problem for us.

—Ali, 24-year-old agriculture diploma graduate

From the top of the cliff in Skoura M'Daz, as of 2022, one can make out the white blocks arising between two hills: a dam is being constructed. In talking to residents of the commune, I found positive and ambivalent responses to the dam's construction. All were aware that the conserved reservoir water itself is not to benefit Skoura, as the water is intended for Saiss Plain, where most of the industrial agriculture in the region is. Nevertheless, this state-mandated structure will most certainly change the environment, for better or worse, and its construction has entailed the entanglements of various mobilities to make sure this planned climate adaptation project of the government succeeds.

Droughts have had major effects across Morocco, as seen also in Skoura M'Daz, particularly for agriculture (Taha 2022). With precipitation steadily decreasing over the past few decades (Jnina 2022; The World Bank Group 2021), 2022 marked one of the most severe droughts recorded (Eljechtimi 2022). Water overexploitation and inefficient irrigation systems for agriculture have only further exacerbated the issue (USAID 2016; Verner et al. 2018). After announcing a “water emergency” in June 2022 (Ministry of Equipment and Water 2022; Aamari 2022), the Moroccan Ministry of Equipment and Water slapped public service announcements forewarning of desertification on television, buses, and billboards, and encouraging water conservation.

Given the importance of the agricultural sector for Morocco's economy, making up 15% of Morocco's GDP and employing about 31% of the workforce (International Trade Administration 2022a), the government has long been aware of the country's environmental vulnerability. In the 1960s, the government intensified its policy of dam construction. The government's future vision was to transition to using surface water for agriculture to conserve the fossil aquifers. Now, with growing awareness of climate change, a new program, the National Priority Program for Drinking Water and Irrigation (NPP) under the Ministry of Equipment, Transport, Logistics, and Water aims to build 20 large dams from 2020 to 2027, in addition to desalination plants and wastewater treatment stations (International Trade Administration 2022b). The ambition of its overarching policy, the Priority Water Program, is for 50 large dams by 2050 (International Trade Administration 2022b). Thus, the government has enacted planned adaptation.

Based under the NPP, and with funding from the Green Climate Fund and the European Bank for Reconstruction and Development, the M'Daz dam is explicitly couched as a climate adaptation project (Green Climate Fund 2017, 1–2). It aims to ensure future agricultural productivity in the Saiss Plain through aquifer conservation, also part of the agricultural strategy of the Green Morocco Plan (Green Climate Fund 2017, 9). Two of the three objectives are “to increase climate resilience of irrigation infrastructure”, as well as “to promote [...] improved awareness of climate resilience issues among end users of water services” (Green Climate Fund 2017, 2). On the Plain between the cities of Fes and Meknes are around 200,000 hectares, both smallholder agriculture and company-held, with lines of drip irrigation, greenhouses, and sprinklers, for vineyards, cereals, fruit and olive trees, splayed over red dirt. The irrigation is fed by surface water, but more and more often supplemented with wells. “In this groundwater”, Ilyas, one of the Ministry of Agriculture officials leading the project, told me, “We have 240 million cubic meters from rain and snow, and we use 300 million cubic meters every year, so the deficit is 100 million cubic meters.” The M'Daz dam will have three pipes, twelve meters in diameter – “the largest in Morocco”, he emphasized – and will take 125 cubic meters of water per year from the M'Daz dam to the Plain, a journey of between 80 and 140 kilometers. Secondary objectives include flash flood management and providing potable water. The king struck down the plan to make the dam hydroelectric, which would have increased water prices for farmers; saving the Saiss Plain was the priority.

Here, temporalities come into play; the program – which counts on the mobility of water – is strongly informed by the past. In previous decades, the region around the southern coastal city of Agadir had witnessed an agricultural boom. Corporations, many international, built vast farmlands and greenhouses for all types of agriculture, sending clementines, tomatoes, and onions around the country or exporting to Europe. People from around Morocco moved there to work as seasonal laborers, including many older men I met in Skoura M'Daz. But over time, the aquifer feeding the irrigation there had been depleted. Smallholder farmers could no longer water their lands; big companies let go many of their workers. People moved back home, or to the cities, and now Agadir's municipal water supply is supplemented by a desalination plant. Ilyas explained that, based on the experience in Agadir, “[t]he government addresses the problem, before the problem arrives. So, the objective is to bring 125 million cubic meters from the dam, from the surface water to help the groundwater, to annul the problem. This is the idea of the project; the dam, its first objective is this.” By learning from the past and projecting that possibility into the future, the dam's planned adaptation hopes to counteract it.

But mobilizing 125 million cubic meters of water will not magically end groundwater exploitation. Although the government is well-aware of potential scenarios based on the past, that future vision did not cross easily between scales; local farmers considered temporalities differently – putting more weight onto the present than the future. Water users, including about 2,849 farms, on the Saiss Plain will pay fees to use the water from the dam supply (Green Climate Fund 2017, 1, 47). Signing up the big companies was easy, Ilyas explained. They have technicians and engineers who are well-aware of the risk of continuing without change over the next decades. It was harder to convince the smallholder farmers, who have a less futuristic outlook, and are living day-by-day, rainfall to rainfall, according to Ilyas. The solution? Flying 30 to 40 farmers down to Agadir to see the consequences of overwithdrawal and drought. “We chose farmers who can gossip and are talkative!” When they returned home and shared what they saw (also their experience of flying on a plane for the first time!), more and more farmers signed up to use the to-be-transported water. The program also aims to raise awareness in schools and among farmers, providing support especially to women.

This prior example of mobilities and temporalities intertwining, spurred by the assumption that a past seen before could become a potential future, are not the only mobilities to map in this project's goal to create a different future

through planned adaptation. As material mobilities move into the dam area – rocks from the quarry down the road, machines from France and the Netherlands, pipes from Turkey – people must make room.

Fig. 2: The M'Daz dam in 2022, with the River Guigou flowing towards it.



Photograph taken by the author.

Dams around the world have displaced populations, and the M'Daz dam is no exception: material mobilities entangle with human mobilities. It will be the sixth or seventh largest dam in Morocco at completion. After several delays, it is now expected to be finished by the end of 2024, *inchallah*,¹¹ a dam construction manager, Soulaymane, told me. Despite its visibility from Skoura M'Daz, the physical structure of the dam is located just over the borders of the nearby Tazouta commune, and its reservoir will fill the Guigou river that extends through Aderj and Skoura M'Daz communes. The expected reservoir will be 28 kilometers long, reaching the foothills at the edge of the mountains on which the central villages of Skoura M'Daz are situated. Dozens of former farms and herding lands, an area of 500,000 hectares, will be submerged.

¹¹ Inchallah: Arabic for "God willing."

In this case, climate change is not directly causing migration; rather, the government's planned adaptation action in response to climate change *requires* mobilities. With the reservoir comes the displacement and forced mobility of four villages in Aderj, about 500 to 600 people, 80 to 90 households. The Ministry of Equipment surveyed the land: how many trees, what type of irrigation, if there is a house or not, whether people had land titles or not. Based on predetermined prices under the Law of Expropriation, people who are affected were compensated monetarily. Some of the (future) displaced were offered jobs and training during dam construction. Interestingly, the governmental offices involved in the dam have different ways of operating and compensating, which leads to confusion. The Ministry of Agriculture, the Ministry of Equipment, and the Agency of Water and Forest are each separately responsible for compensating those whose lands they take through eminent domain: for the placement of the water pipes, for the dam construction and the expected reservoir area, and for erosion-prevention measures, respectively. I found that the offices did not fully coordinate with each other, and I did not find a total number of people displaced by each office's activities.

In contrast to the government information on dam displacement, there were competing narratives from Skoura's residents. According to onlookers in the area, several years prior to the dam being built, government workers under the Green Morocco Plan planted trees in rainfed fields surrounding the dam's future location. According to the Forestry official I talked to, if this had happened (which he had not heard about), the point of the plan would have been to prevent soil erosion and help facilitate the health of the ecosystem before dam construction, on lands considered public and, thus, under the control of the Forestry Agency. Here, the main problem is one familiar across Morocco: the lack of land titles for people using the land. There are several reasons for this, including histories of collective land, customary rights through oral agreements, and disagreements over inheritance. The Moroccan government has worked over the past decade to increase the number of farms with land titles (Balgley and Rignall 2022). However, the problem persists.

The dam-building may aim to assist climate adaptation for farmers on the Saiss Plain, but makes some of the displaced local residents more socio-economically – and climate – vulnerable. I met 30-year-old farmer Omar, whose family was displaced from their farming and herding lands located on the slopes in the vicinity of the dam. Said Omar:

They did everything for the sake of the government, not for the people. They did this to take over our lands to indirectly stop and prevent herding. There are some farmers who had more than 500 sheep, but now they have only 50. So, the Green Morocco Plan has only made things worse for small farmers. Now, if the guard catches you herding in the area, you will pay for it.

Omar's grandfather was awarded land for his contributions in the military, but the land was never titled. His family is thus unable to prove the land is theirs, despite cultivating it for decades, not only for the purposes of preventing the land appropriation but also for receiving compensation.¹²

In Omar's interpretation, only the wealthy and those with connections were able to press for compensation. Each family, he said, sought their own individual benefit rather than collectively protesting. Several families chose to take an option of land compensation, moving to land outside a nearby provincial capital called Sefrou. Some families remain on their farm, and others have taken money reimbursement and moved to surrounding communes. Now, a mistrust of government, perhaps a result of past and present experiences, affects his perception of the future. He understands the potential benefits of the dam for those in Skoura M'Daz. But, he emphasized, "They shouldn't forget that some people suffered."

And those benefits for Skoura M'Daz? Ecotourism cooperative leader Mustapha is excited about the possibility of hosting more tourists. An association in Tazouta is already planning biking paths. A wildlife photographer from Skoura, Hassan, looks forward to migratory birds stopping by, and to take visiting photographers with him on tours.

The biggest benefit from the dam and reservoir, as I heard over and over again from farmers, is the rise in the water table for Lfwerem, the agricultural valley. Mohamed I., a co-owner of the most popular hanut¹³ in town, told us his prediction: "The groundwater will be replenished. The people of Lfwerem will find water. The area of Lfwerem is threatened by drought. The water there is not enough. If there is groundwater, people will dig wells." This optimism extended to what Mohamed O., a farmer and amghrar, also felt, "Whoever digs a well will find water. People dig wells now, but they end up with nothing. If there

12 It was unclear from my interviews whether the Ministry of Agriculture or the Agency of Forest and Water was in charge of compensation for this case.

13 Hanut: a small grocery store.

is enough water, we will build a well. In the future, there will be enough water in the ravines; there will be enough water in Lfwerem.” Farmers are already trying to take action against loss of water, from drought, agricultural expansion, overuse, irrigation timing disagreements, and a broken irrigation pipe in the valley. The dam reservoir, spawned by the government’s planned climate adaptation, will inadvertently assist the farmers’ own autonomous climate adaptation actions.

Fig. 3: A well being dug by a farmer in Lfwerem.



Photograph taken by the author.

However, there's an asterisk that comes with this benefit. Once the dam reservoir is filled, the digging of wells will become restricted. Already, farmers need permission to dig wells from the overseeing agency of the Sebou River basin. The additional restriction aims to prevent overwithdrawal, ensuring the reservoir's future for the intended farms in the Saiss Plain, as well as the replenishment of the aquifer over the next century. "The water is public, and anyone has the right to use it. Still, we should manage the usage of it", a Ministry of Equipment official told us. He told us a commission between the various Ministries involved in the dam will be created. They will decide on approval for digging new wells, which will depend on the number of existing wells, for which type of crops they are intended (no water-intensive crops like watermelons allowed!), and how the water will be managed: drip or sprinkler systems preferred. This last consideration of water-efficient irrigation systems is discussed in the next case.

IV. Cobbling Together a Future: Farmers' Drip Irrigation Systems

Complementing the planned adaptation of the M'Daz dam against a future of water scarcity is the seemingly autonomous adaptation arising from farmers' past and current mobilities. Human mobilities, which leads to people encountering different contexts and perspectives shaped by overarching policies like planned adaptation programs, spur the mobilities of ideas for climate adaptation. Therefore, planned adaptation indirectly influences autonomous adaptation through human mobilities. This linkage becomes apparent in Abdellah's case.

Abdellah, a van driver and farmer, drove my research assistant Mustapha and me down from the central village, across the River Guigou, past the commune's landfill, and onto his father's farm. Four years earlier, I had met Abdellah, and I was talking to him again in 2022, a nice surprise to see him, because he and his father were one of only a few farmers in Lfwerem who had installed a drip system. Abdellah had gotten the idea for drip irrigation due to his mobility in the region as a van driver, seeing it on other farms. He thought it was a good idea because drought was affecting their olive trees. Now, Abdellah was taking us on a tour to show how the system worked.

Fig. 4: A water collection pool for a drip system.



Photograph taken by the author.

He walked us to the well that they, together with a technician, had dug four meters deep, a pump running beside it. The way irrigation works here is that water is diverted from the main irrigation canal¹⁴ farm-by-farm for a certain amount of time, in a cycle of every few weeks or so, depending on the season. Abdellah's well and pump supplement that surface water. "We used to have plenty of water. We used to get 12 hours. Now, we have only three hours,

14 The main irrigation canal for Lfwerem is a big pipe connected to a series of concrete irrigation canals, originally built under French management in the 1950s, which siphons off surface water from the River Guigou.

so we were obliged to build this system”, Abdellah told us. He showed us their huge pool, enclosed with a fence for safety and to keep animals out, where they collect the water before pumping it into the drip system. Plastic hoses laced among the trunks and roots in the olive grove, almost taunting the hardened earth of the mud irrigation canals, no longer in use. “The mud canal is useless, we lost a lot of water”, Abdellah explained, “while, with the drip system, the trees get enough water.”

Mobilities of Skoura’s residents entangle for the adaptation practices to be successfully implemented. In addition to Abdellah’s own mobilities giving rise to the idea of drip irrigation and transferring it home, experiences arising from the past mobilities of Achraf, another Skoura resident, enabled Abdellah to implement and install the drip system. Achraf had lived all over Morocco in his 36 years, including near Agadir as an agricultural laborer. He had learned a lot – installing drip irrigation, building greenhouses, working with pesticides and fertilizers. He has been able to share these skills and knowledge with others during a period of immobility in Skoura M’Daz. He got stuck in Skoura during the pandemic lockdown in 2020, and since then, he had already assisted four farmers in installing drip irrigation: one for potatoes, and the other three for olive trees. Achraf was anxious to get back to traveling for work; he was a mobile person, and being immobile in Skoura – though helpful to transmit his social remittances, his expertise – was not ideal for him. He told us he had changed from his travels, “If you meet more people, you will learn more ideas, not like someone who has lived in only one place.” As he seeks out his next job, seven more farmers in Skoura have asked for his assistance with drip system installation.

Physical mobilities have been key to the spread of these autonomous adaptation practices – drip and sprinkler irrigation – as social remittances in Skoura M’Daz in response to decreasing water supplies. In contrast to financial remittances, social remittances are, as termed by Peggy Levitt (1998), the intangible transfers of “ideas, practices, identities, and social capital” that are shared across migrant connections (Brown and Connell 2015, xlvi; see also Levitt 1998). People have seen or had experience with drip and sprinkler irrigation through their mobilities. They then transfer this idea home through communication or returning and sometimes implement it as a new agricultural practice. The nature of these translocal mobilities are diverse: near within the same region, others cross-country. Some are short-term, from a visit of only a few hours; some are from longer migration stints for seasonal or long-term agricultural work.

Saad, the manager of the tree nursery, started using sprinklers to water seedlings after getting the idea from visiting other nurseries in the region: “I visit them if I have work. There are some nurseries that are fully equipped by the government. They have installed surveillance cameras to control the nurseries remotely, and they water the seedlings automatically. I get new ideas from other gardeners.” Sometimes the practices take time to be implemented. Badr had worked as a seasonal laborer on a vineyard near Fes, where he saw drip irrigation for the first time. He wanted to implement it on his family’s lands. However, he was delayed:

My dad was sick, and we were a poor family, so I moved for work, and I sent money back to them. My father didn’t know how to use the land well – he was not a good manager. I told him that we had to work and renovate. He told me no, because we used to share land back then. When my father died, I started to develop our agriculture.

Badr installed drip irrigation for his carob trees near the river, also taking inspiration from the irrigation system the French had designed in Skoura. He had even set up a sprinkler system for his vegetables, after seeing examples on Facebook and YouTube, and has plans to increase his agricultural production in the future.

Yet for every person we met who had implemented new irrigation systems, or were actively making plans to implement them, there were four more who had thought about it, but could not put them into practice. It stood in complete contrast to the places surrounding Skoura M’Daz, which seemed rife with these new irrigation practices. Just one or two towns over, every farm seemed to have drip and sprinkler systems. What was different in Skoura? We visited one other commune, Serghina, deeper into the mountain plateaus, where the crops were organized in rows along drip irrigation hoses. In front of one big tract of land, I took a photo of the white, wooden sign: “Plan Maroc Vert.”

“Plan Maroc Vert”, or the Green Morocco Plan of 2008, was the Moroccan government’s strategy to invest and strengthen the agricultural sector, with parts of the plan taking into consideration diminishing water resources. One program subsidizes the conversion of traditional irrigation systems to water-conserving technologies, like drip and sprinkler. A farmer submits an application to regional agriculture offices, and the farmer (usually) partners with an entrepreneur to assess the land and water supplies, conduct a study plan, and build the new irrigation system. The entrepreneur is then reimbursed by

the government. For farmers who have under five hectares of land, the cost is 100% reimbursed; for others, it can be reimbursed up to 80%. “Climate change” or “adaptation” were not a large part of the Green Morocco Plan’s underlying framing; rather, dealing with water scarcity, building efficient agricultural production chains, and ensuring rural livelihoods were stated as the main objectives. However, since the Green Morocco Plan’s end in 2020, the Green Generation Plan (2020–2030) has been implemented, with a shift to a more “people-centered” approach for economic development (The World Bank 2020, 6). It explicitly seeks to “increase the resilience and adaptation of rural populations to climate change” (The World Bank 2020, 8), especially in the face of more extreme droughts: “Climate Smart Agriculture (CSA) solutions – including more efficient irrigation systems – can sustainably improve agricultural productivity, adapt and build the resilience of the agriculture and food systems, and reduce greenhouse gas (GHG) emissions from agriculture” (The World Bank 2020, 12). The irrigation subsidy program will continue under the Green Generation Plan. Preparing for a future in which climate change may harm people now underlies the continued irrigation subsidy, making it “planned adaptation” from the government.

But planned adaptation has not transferred easily to Skoura M’Daz. While areas surrounding Skoura M’Daz have experienced a rapid spread of these irrigation systems thanks to the subsidy, Skoura farmers in the productive valley farmland of Lfwerem have encountered a key barrier: the lack of land titles to prove land ownership, required to apply for the subsidy. As stated in the previous case, this problem is not unique to Skoura. What is particular to Skoura M’Daz is an ongoing legal question that is still unresolved.

The immobilization of planned adaptation in Skoura M’Daz is a result of history, specifically of French colonization. Following World War II, Skoura M’Daz became home to a French model farm in Lfwerem. As the French protectorate came to an end in 1956, the French parceled out the model farm in Lfwerem to families in the area. However, in the late 2000s, the tribe of Ait Seghrochen, one of the main tribes, put forth their own claims to the land of Lfwerem. According to an agreement with the French in 1952, the land was a gift to its tribesmen, who had been recruited to fight with the French military in the First Indochina War. The dispute is unresolved, because that agreement to the tribe was never signed by King Mohammad V, who was still in exile until 1956. Today, the disagreement has landed with Skoura M’Daz’s qaïd, the commune-level Ministry of Interior official. But in the succession of qaïds since the

late 2000s, not one has broached and solved the case. And so, until the conflict is decided, farmers cannot get their copies of land titles.

The idea of new irrigation systems becomes immobile by other causes, too. There are additionally many barriers that can prevent farmers from installing new irrigation systems: cost, inheritance patterns splitting lands into ever-smaller parcels, disagreements over land inheritance, and more. Temporalities come to play between older and younger generations: decision-making and land ownership by older generations can block innovating members of the younger generation. Agriculture officials I talked to were aware of many of these issues, including the land titling problem in Lfwerem. However, planned adaptation at the national level does not take into account different contexts at the local level, proffering little support for people hindered from taking advantage of the subsidy.

Nevertheless, entangled human mobilities have assisted farmers like Abdellah and Badr in Skoura M'Daz to maneuver around the immobilization of planned adaptation and enabled the mobility of ideas themselves, leading to autonomous adaptation. Their mobilities have exposed them to new irrigation methods in other provinces and regions where the Green Morocco Plan has made a difference. They brought new ideas for agricultural practices back to Skoura M'Daz as social remittances. Mobilities also provide the financial means for implementation without relying on the subsidy: absentee landowners with jobs in the city or living in Europe, as well as transportation drivers like Abdellah, have higher incomes. The immaterial mobility tied to human mobilities enables the climate adaptation the government had aimed for. All of these mobilities become climate mobilities.

V. Present Futures: Entangled Mobilities and Temporalities for Climate Adaptation

These cases reveal the realities of climate mobilities within the context of present futures. Following entangled im/mobilities in the context of planned and autonomous adaptation shows “how new environmental change-related im/mobilities intersect with previously established patterns of relative mobility and relative immobility” (Wiegel, Boas, and Warner 2019, 5). Not only are existing mobility patterns affected by climate change, nor only new im/mobilities created by climate change, but also manmade reactions to climate change are intricately linked to and causing mobilities.

Within planned and autonomous adaptation actions, mobilities circulate and become entangled before, during, and after implementation, including with entangled temporalities. Climate change discourse, including in planned adaptation, is often future-oriented. However, the realities of preparing for the future are tied up in temporalities: in the past (e.g., like an obstruction to obtaining land titles) and in the present (e.g., ongoing generational issues). The actions and mobilities for climate change adaptation then enact “present futures”, wherein acts oriented towards the future take place in the present and affect the present and future (Anderson and Adey 2012). Anderson and Adey (2012) emphasize the paradoxical relationship of a future being present, even though the future has not come to pass; temporalities thus become entangled.

The first case of planned adaptation in the form of dam-building starts from an awareness of climate temporalities and creates mobilities. The dam project, too, exposes a web of entangled temporalities and mobilities, which are derived out of necessity for the government’s planned climate adaptation goals to be fulfilled. The government flies smallholder farmers to Agadir to convince them to join their climate adaptation program. The dam and reservoir displace people and submerge their land to ensure the sustainability of agriculture and livelihoods hundreds of kilometers away. These mobilities are embedded in temporalities. Preventing a certain future is the goal. That future is the projection of what happened in the past in Agadir, where the water gradually disappeared after intense agricultural overuse. Creating a new future, a sustainable future where the government successfully adapts to environmental change, becomes the goal. The im/mobilities that happen in the present – transporting pipes, forcibly displacing families, halting a natural river flow – are steps towards creating a new future, away from that past-inspired pessimistic outcome. And, taking a U-turn back to the irrigation case, the dam will potentially assist the farmers of Skoura M’Daz experiencing diminishing water supplies, too, with the rise in the water table. They seek to dig wells now, soon, and in the future. Planned and autonomous adaptations converge.

In the latter case of drip and sprinkler irrigation, entangled mobilities reveal how the planned and autonomous adaptation actions are intertwined, beyond what would have been expected by the government planners. For Skoura M’Daz itself, the Green Morocco Plan and now the Green Generation Plan will have less direct influence for irrigation because of the lack of land titles. However, the planned adaptation for water-conserving irrigation has indirectly influenced the autonomous adaptation of farmers fighting drought and water scarcity in Skoura M’Daz through farmers’ own mobilities. They

travel or work in other locations, where farmers may have directly benefited from the Green Morocco Plan, and return home with social remittances to implement. Throughout each of their actions, farmers' own mobilities give rise to social remittances: inspiration for ideas, a transfer of knowledge, a method for implementation, as well as concrete means through which to obtain wealth. The planned adaptation of the government may not have expected mobilities in this way to assist the implementation of water-conservation irrigation. After all, one of the objectives of the Green Generation Plan is to bolster rural livelihoods to decrease youth migration to cities. However, as these cases exemplify, mobilities are deeply entangled in these climate adaptation actions.

Again, climate mobilities intertwine with and become spatial dimensions of climate temporalities. Mobilities enable a work-around of the barrier from the past: the land dispute preventing farmers from getting land titles for the irrigation subsidy. The present discomfort with solving it – the decision stuck in the qaid's office – seems to delay the future imagined by the government. Fortunately, the government's goal to conserve water overlaps with the goal of the farmers. The farmers are reacting to diminishing water resources through their own water-seeking and -conservation methods, through saving money; installing drip irrigation, sprinklers, wells, and pumps from the river; and changing crop types. They know that to ensure their future, they must take action. The imagined futures of planned and autonomous adaptation align, but the past creates complications for the present to address.

The cases reveal the give-and-take between planned adaptation and autonomous adaptation for climate change. However, power differentials between actors and scales lead to the goals of the government often superseding local concerns, thus questioning the efficacy of planned adaptation. The lack of consideration given to local situations, in addition to lack of coordination of local adaptation actions, can potentially lead to maladaptation. Like the M'Daz dam, hundreds of dams, including hydroelectric dams, are being built around the world with the justification of climate adaptation or mitigation (Walicki, Ioannides, and Tilt 2017). Warner and Wiegel (2021) point out the ethical issues that arise from such "climate buffer infrastructure" aiming to decrease climate vulnerability of intended beneficiaries, at the cost of increasing climate vulnerability of the populations displaced by such projects. In the second case, people's mobilities helped transfer the planned adaptation ideas of the government and transformed them into autonomous adaptation by farmers. However, Studies have also questioned the outcomes of the irrigation program in Morocco (Mathez and Loftus 2023; Venot et al. 2014; Alonso et al. 2019). As

seen even in Skoura M'Daz, conversion to drip systems have led farmers to extend their lands, or switch to using more groundwater than surface water, defeating the purpose of the program. Planned adaptation like Morocco's must better track and respond to its resulting effects, even unintended maladaptive ones, that may end up increasing vulnerability to climate change.

Overall, this chapter has shown how researching climate mobilities means looking into these extended effects and complex dynamics that start from or entangle with climate change. Mobilities-in-adaptation stretches beyond a traditional approach that asks whether migration leads to or performs as adaptation, and instead examines the broader web of entanglements of mobilities, temporalities, and power, within planned or autonomous adaptation – or, as is often the case, an amalgamation between both. As climate change adaptation is becoming more embedded into programming at national and local levels, more attention needs to be paid to the power dynamics that potentially frustrate complementary goals and outcomes of planned and autonomous action. Scenarios and imaginations of the future will continue to guide government and people's responses to climate change, creating present futures and alternative futures. Climate mobilities and temporalities expose how people are living in the future – now.

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Circulating Visions of the Future

Analysing Policy Frame Im/mobilities among Financial Literacy Education Policies

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Abbreviations

CPFA – Critical Policy Frame Analysis

EU – European Union

FLE – Financial Literacy Education

INFE – International Network for Financial Education

NAP – National Action Plan

NSFLE – National Strategy for Financial Literacy Education

OECD – Organisation for Economic Cooperation and Development

I. Introduction

Policymaking is, in the wider sense, the making of the future. Policies shape trajectories of action to achieve or to prevent envisioned futures and in order to design pathways of action or behaviour that are supposed to lead to these futures. Rilling (2014) has shown that policies follow the general logics of precaution, prevention, pre-emption, or preparedness in relation to the imagined future. While Rilling primarily engages with environmental, climate change, and security policies, a similar observation can be made with policies that concern financial market regulation. Financial markets trade with tomorrow's uncertainty and make profit out of that unknown future in the present. Finance is, in that sense, the entirety of "activities relating to the provision (or transfer) of liquid capital in expectation of future interest, dividends, or capital gains" (Krippner 2005, 174). Financial temporalities are entangled in a manifold and

complex manner: the past determines the present, the present is structuring the future, and predictions of the future determine actions in the present. Financial regulatory policies that aim to prevent financial crises, to 'tame' inflation rates or to prevent individual indebtedness, too, are related to the management of these entangled temporalities.

Financial literacy education is a good example of such regulatory policy ideas, aiming to optimise the financial behaviour of individuals in the present in order to guide people's behaviour towards financial system stability and thus the prevention of financial crises in the future. Financial literacy education is thus a policy that is designed to impact the financial behaviour of individuals in precaution and in prevention of an imagined future. Since 2012, the OECD endorses national strategies for financial literacy education (NSFLE) by conducting research and developing tools that support policy makers and public authorities to design and implement these strategies. The national financial education programmes are formulated with regard to a unique local context, the joint overarching policy aim is to "sustain or improve current and future financial well-being in everyday life" (OECD 2016, 3). Financial literacy is usually defined as "a combination of financial awareness, knowledge, skills, attitude and behaviours necessary to make sound financial decisions and ultimately achieve financial wellbeing" (Atkinson and Messy 2012, 14). More precisely, financial literacy in the policy narrative means taking personal responsibility for one's financial situation and future: understanding and managing financial risks, having sufficient knowledge of financial products, developing a positive attitude towards investing and saving by using retail financial products and services, as well as "planning for the future, as the financially literate are more likely to save and plan for retirement" (Lusardi, Hasler, and Yakoboski 2021, 185). Activities such as planning and saving for the future and investing in financial market products that are expected to bring financial gains are thus at the centre of envisioning the future itself.

Visions of the future in financial education policies, both on the level of the OECD and in the national strategies, are formulated ambiguously. Some of them complement, while others contradict each other, some are formulated using exactly the same words, and others are translated into the context in which the policy is being implemented. Such variety of future visions, their continuity in some policy elements, and the erasure of alternative formulations are the research objects of this contribution. The selection of the case of Austria is based on two reasons. Firstly, the Austrian National Strategy was released in 2021 during the second government of Sebastian Kurz (Coalition of

the Austrian People's Party/ÖVP and the Greens/Die Grünen), in which Gernot Blümel (ÖVP) acted as the Minister of Finance. The turbulent political circumstances of the short second government of Kurz (lasting from 7 January 2020 until 11 October 2021) represent the interesting political context in which the Austrian National Strategy for Financial Literacy Education was adopted. Secondly, the selection of the Austrian case is based on the authors' advantage in accessing relevant contextual documents, such as official policy stakeholders' agreements, reports on working groups' outcomes as well as legal guidelines or recent laws that are only available in German.

The aim of this article is to further develop an understanding of how visions of the future as well as subsequent policy answers to that imagined future change while travelling temporally as well as spatially. The specific research interest, however, does not lie in practices or techniques of policy transfer, but rather in the *content* of a specific policy as well as its alteration. The article thus adopts the policy mobility approach (Peck and Theodore 2010a, 2012; Peck 2011; McCann and Ward 2012; McCann 2011) to analyse policies and combines it with a policy frame analysis in order to scrutinise changes in future visions that are implicit in financial education policies. The central question that this contribution addresses is how the mobility of a policy through time and space (re)constructs new and prevailing visions of the future in policies of financial literacy as well as how time and space are entangled. More precisely, we ask how visions of the future changed through the policy mobility of financial education, moving from the international level of the OECD to the national scale of the Austrian National Strategy for Financial Education (OECD 2021a).

The research material analysed in this paper is a portfolio of relevant OECD financial literacy education policy documents as well as policy papers and reports addressing the Austrian National Strategy for Financial Literacy Education in particular. The timeframe of the selected documents ranges from 2011 to 2023. This period covers the most active period of the OECD concerning financial literacy, starting with the public release of "G20 High-Level Principles on Financial Consumer Protection", which marks the increased interest and efforts of the OECD to increase financial literacy.

Firstly, we will discuss the theoretical framework, drawing on insights into futuring through policymaking as well as the importance of policy circulation for envisioning and framing future visions. Then, we will outline how these insights can help analyse policy documents. Following that, we will discuss the methods applied. Finally, we will present the results of our analysis.

II. Theoretical Considerations on Futuring, Policy Mobility, and Policy Frame Analysis

The concept of policy mobility stems from mobility Studies literature engaging with questions concerning processes of policymaking (Peck and Theodore 2010a, 2015; Peck 2011; Ward 2008; McCann and Ward 2011, 2012; McCann 2011; Temenos and McCann 2013). Policy mobility scholars are primarily interested in how “best practice” policy models are mobilised in order to solve problems, how these policies are changed while being “on the move” (Cresswell 2006), and how these movements across time and space are conditioned and reproduced by power relations. Furthermore, policy mobility literature investigates the processes and mechanisms through which ideas become mobile, as well as focuses on their “mutation” across divergent policy contexts (McCann and Ward 2012; Peck 2011; Peck and Theodore 2010a). In this strand of literature, the central focus has been on how policy actors exchange “policies, policy models, and policy knowledge” (McCann 2011). Furthermore, researchers in this field have empirically and theoretically scrutinised the role of affects, networks, events, and other mechanisms that enable or disable policymakers’ engagement with each other (Ball 2016; McKenzie 2017; Temenos and McCann 2013). Hence, in that sense, policy mobility is neither a coherent nor a finalised process. To the contrary, policies “rarely travel as complete ‘packages’, they move in bits and pieces – as selective discourses, inchoate ideas, and synthesized models – and they therefore ‘arrive’ not as replicas but as policies already-in-transformation” (Peck and Theodore 2010a, 170). Such a chaotic policy mobility, where some policy elements are on the move, while others remain unmobilised, hints at the importance of considering “immobilities” and “moorings” (Hannam, Sheller, and Urry 2006; Sheller and Urry 2006; Salazar and Smart 2011; Urry 2003). Everything that is mobile also includes moments of immobility and stagnation and, as Adey puts it, “the relationship is dialectical as movement and immobility are dependent upon one another” (2006, 86). Here, too, mobilities and immobilities are entangled and we therefore address this relation as “im/mobility”. The conceptualisation of policy im/mobility as an entangled, incoherent, selective, and ambiguous process complements the insight that the ideas and images of the future that are envisioned through policies, too, are not transferred as finalised policy formulations, but either change in the process of policy movement or remain immobile.

As a continuation and advancement of the insight that im/mobility is an incoherent process, scholars interested in policymaking emphasise that not only

the fact of movement itself, but also the *patterns* of policy mobility are important objects of analysis (Kerr 2017; McCann 2011; Wood 2015a, 2015b, 2016). Referring to Cresswell's notion that rhythm – “composed of repeated moments of movement and rest, or, alternatively, simply repeated movements with a particular measure” (2010, 23) – is an essential element of any kind of im/mobility, these scholars trace the patterns in which policies circulate. The concept of circulation points to the idea of repetition, a movement that is never concluded or finalized. In the context of policymaking, the idea of policy circulation means that policy frames or different aspects of policy formulation are recursive. Policies, and inherent policy frames, depart from a space of policymaking to which they eventually return. Similarly, important to the concept of policy circulation are the notions of velocity that tend to define the “hierarchies of mobility” (Cresswell 2010, 23). While some scholars have emphasised that policy circulation should be regarded as a spontaneous action or as a “fast policy” (Peck and Theodore 2010b, 2015; Peck 2002) that is adopted in a hurry to deal with multiple crises, others argue that circulation is a slow, repetitive, and delayed process (Wood 2015a, 2015b, 2016). In this manner, policy circulation has been defined as a “constant, gradual, creeping, at times sluggish and sticky, and at other times loitering instead of prompt and hurried” (Wood 2015a, 569). In mobility Studies, policy circulation is thus defined in terms of its rhythmic qualities and velocity which reveal how spatial and temporal policy mobility is implicated in the (re-)production of power relations. So, too, is the immobility of a policy or aspects thereof. While the mobility of some policies or policy ideas is encouraged by underlying power structures, other ideas or alternative policy formulations are hindered by these power asymmetries and thus rendered immobile.

The focus on tracing down and describing policy im/mobilities, patterns of mobilities as well as mutations and transformations of policies while being im/mobile requires an elaborate understanding of the state and its role in policymaking. Analysing the mobilities of policies at and in between various temporal (past, present, future) and spatial (local, regional, national, supranational, etc.) scales disrupts the realist understanding of the state as a territorially, politically, and socially bounded entity that acts in a supposedly rational self-interest. Instead, policy im/mobility literature adopts a multi-scalar approach towards the state by underlining the role of events, actor networks, knowledge circuits, and infrastructures of various kinds that underpin the transfer of policies (Peck 2002, 2011; Peck and Theodore 2010b; Ward and McCann 2011). Policy im/mobility scholars emphasise the entanglements

among somewhat 'unbounded' states and state actors as crucial circulatory infrastructures while simultaneously emphasizing the continued importance of territorial fixity and embeddedness – of both state actors and other policy actors – in powerful geographies of knowledge production. (Temenos and McCann 2014, 577)

The mobility or immobility of policies through multiple scales is therefore entangled with the question of power and hegemony. In a Gramscian sense, the concept of hegemony refers to the mechanisms through which dominant social forces universalise their interests and ensure the maintenance of power. Such mechanisms are, for example, the establishment of 'common sense' social beliefs and knowledge, particular social conflict management mechanisms that consolidate power as well as settling on compromises in social conflicts in a way that does not contradict the interests of these dominant forces (Brand et al. 2022; Opratko 2012).

Studies applying a historical-materialist policy analysis (Brand 2013; Kannukulam and Georgi 2012; Staatsprojekt Europa 2014) have contributed to the understanding of policymaking as a "continuously contested process of search of adequate forms of regulation" (Brand et al. 2022, 285) by successfully managing the "underlying contradictions and crisis-tendencies along specific societal interests" (2022, 285). The struggles over hegemony and the im/mobility of certain policies happen not only on the scale of a state, but traverse the networks of civil society, from the individual to the supra- or transnational dimension. These power struggles therefore also rely on the im/mobility of policy ideas, policy discourses, and policy frames as well as on practices of policy framing (Paul and Haddad 2015; Caterina 2018, 2019). Building on these considerations, we understand policy im/mobility as an expression of policy actors' struggles over hegemony, consolidated in and expressed through the specific formulation of a policy. Hence, by tracking the im/mobility of policy frames as well as analysing how these frames change in the process of im/mobility, we reflect on the power relations that underlie particular policy framings.

The approach of policy framing assumes that policymaking is a discursive process, a "sum of policy and political actors' accounts of a policy programme's purposes, objectives and ideals which serve as a guide to action by defining the concepts and norms to be applied, identifying the problems to be solved, explaining the methods to be followed" (Schmidt 2002, 214). Hence, policy framing begins as soon as something (a certain problem, process or phenomenon) is defined: "the name assigned to a problematic terrain focuses attention on

certain elements and leads to neglect of others” (Rein and Schön 1993, 146). Some define framing as a set of systematic interventions of actors to shape representations of reality in a “conscious” and “strategic” way in order to lobby and represent their interests (McAdam, McCarthy, and Zald 1996). Others emphasise the unintentional and coincidental character of policy framing, which lies in the lack of policy actors’ awareness of “deeper assumptions” that underlie policymakers’ understanding of the policy problem (Lombardo, Meier, and Verloo 2009). The process of policy framing results in a definition of the policy problem as well as the suggestion of a solution to the problem that is expressed in the policy documents. Policy frames, thus, could be defined as the sum of underlying assumptions and structures of perception regarding the problem addressed by the policy. By defining a certain problem that is observed in the present, by envisioning some “expected or desirable futures” (Hajer and Pelzer 2018), and by developing concrete policy solutions that would enable these imagined futures, policymakers directly engage with the making of the future. In this contribution we hence define the process of policy framing as both intentional *and* unintentional processes that result in the development of ambiguous and contradictory visions of the future.

As a research approach, policy frame analysis aims to identify the major schemes through which people – especially policymakers – interpret and give meaning to reality, communicate about it, and how these meanings are represented in the policy documents in question (Lombardo, Meier, and Verloo 2009). Hence, policy frame analysis is a useful tool to reconstruct and make explicit these fragments of information that construct visions of the future in financial policymaking. Furthermore, it is a useful approach to determine and analyse how power struggles settle in the specific framing of a policy.

This article combines Mobility Studies insights on policy circulation with the approach of critical policy frame analysis (CPFA) in order to analyse how visions of the future change in the process of their temporal and spatial im/mobility. It is beyond the scope of this article to portray the struggles over hegemony by framing and envisioning the future in the process of policymaking of financial education policies in great detail. Despite this, the question of hegemony and the struggle of interests in policymaking represents the theoretical context of our research interest to study the variety of future visions.

III. Material and Methods

The selection of materials for analysis followed two criteria. Firstly, we selected OECD documents that set the framework for financial literacy education by theoretically and empirically revealing the problem, namely, the lack of financial literacy. These materials constitute the general idea and purposes of OECD's financial education policy. Secondly, we gathered policy documents that address National Action Plans for financial literacy specifically. The documents were limited to the timeframe between 2011 and 2023. They give precise recommendations for National Strategies and evaluate already existing examples thereof. In addition to these documents, we analysed three policy papers that are specific to Austria, namely the National Strategy¹ (OECD 2021a), the Mapping Study that has been assigned by the OECD in order to estimate the levels as well as the need of Austrian society for financial literacy (OECD 2021b), as well as the Guidance Document "Women as a Target Group of Financial Education Measures" (BMF 2023).

In our analysis, we applied the method of critical policy frame analysis² (Verloo 2007; Verloo and Maloutas 2005; Lombardo, Meier, and Verloo 2009, 2010, 2017; Dombos et al. 2012). A policy frame can be defined as an "organising principle that transforms fragmentary or incidental information into a structured and meaningful problem, in which a solution is implicitly or explicitly included" (Verloo and Maloutas 2005, 4). Verloo identifies the following dimensions as constituting policy frames: "diagnosis and prognosis, voice, ascribed roles in diagnosis and prognosis, gender and intersectionality, location and mechanisms, and finally – balance between the different parts of a policy text" (2007, 35). The dimension of "diagnosis" aims to draw light to the question of what is assumed to be the problem that is addressed in the public policy being analysed. The dimension of "prognosis" scrutinises ideas and assumptions that deal with what has to be done and in what way to overcome that problem. The aspect of "roles" addresses questions of who is perceived to

1 The Austrian National Strategy is a collaborative document that was written by OECD policy advisors as well as experts in the Austrian Ministry of Finance that work in the section "Economic Policy and Financial Markets".

2 Even though this approach originates in the feminist policy discourse analysis of EU gender mainstreaming policies, it is also applicable to analyses of different fields, such as financial literacy education policies.

be responsible for identifying the problem as well as who carries the responsibility in bringing about the desired policy outcome or social change. The dimension of “voice” asks whose voice and interests are primarily represented by the policy. The dimensions of “location” and “mechanisms” refer to two questions: what are the main structures in which the problem is seen to be located and what are the main mechanisms that are seen to maintain and reproduce said problem. Lastly, the category of “balance” between the different parts of a policy text refers to the assessment whether or not the correspondence between the “diagnosis” of a problem and the “solution” to it occurs in the policy text. This also includes the aspect of absence, asking what is not thematised or illuminated in the investigated policy text.

These elements of the policy frame were included in a list of sensitizing questions (Verloo and Lombardo 2007; Thiele, Sauer, and Penz 2021) and employed in the analysis of policy texts in order to detect the different aspects of a policy frame. What is the problem represented? Who/what causes the problem to appear or reproduce? Who is affected by the problem that has been identified? What measures are perceived to be the solution? Who is supposed to be responsible for solving the problem? Who benefits from the solution? Additionally, we aimed to identify the im/mobilities: has a formulation been used before? If so, where and in which context does it appear again in later documents?

The content of these “sensitizing questions” builds upon issues of policy circulation, which means considering the repetitive formulations, absences in these formulations as well as their temporal and spatial embeddedness in great detail. However, a reduction and selection of these dimensions was required to fit the scope of this article. Hence, from the whole variety of policy frame dimensions we selected “problem diagnosis”, “roles in diagnosis and prognosis” as well as “problem prognosis”, as they represent the central, structuring aspects of any policy frame. These three dimensions are the most useful for our aim to reconstruct the changes in future visions that take place in and through the process of policy circulation. The selected policy documents were analysed with the software MAXQDA by applying the “sensitizing questions” as well as by assigning codes to each dimension of the text. All the previously discussed dimensions of policy frames have been analysed.

Several approaches have emerged focusing on the circulation of policies – “follow the materials”, “follow the people”, as well as “follow the meetings” (Wood 2016). It is beyond the scope of this article to follow all three elements of a mobile policy. Furthermore, it is also outside the reach of our paper to entirely

fulfil the agenda of “travelling with”, “tracing” or “following” the precise pathways that policy frames have travelled. Departing from our research interest to analyse how policy frames (or particular dimensions thereof) change in the process of their circulation, we “re-visited” two scales of financial education policy: the level of the OECD and the national level (Austria). We hence pursued, in the widest sense, the strategy of following the materials. This required tracking down in which financial education policy documents certain policy ideas (expressed through the dimensions of policy frames discussed above) originate, and how they change while circulating in other policy contexts, for example, to Austria and then back to the level of the OECD. The approach of policy frame circulation is thus an innovative way of analysing how policy frames or singular dimensions of these frames change while departing from one policy context, moving across time and space in the process of going somewhere else.

Our policy frame analysis has resulted in the identification of three distinct frames that address the future in a specific manner. Firstly, the analysis suggests that the future is envisioned in terms of desired policy directions and policy priorities for the upcoming time. This dimension of Future-Making tackles designing the policy in a more efficient manner, establishing more correspondence among existing strategies and building better scientific evidence for future policy development. The second dimension of future visions concern an “improvement” of individual behaviour, knowledge, and attitudes with regard to the financial market. This dimension of future vision is primarily concerned with a notion of a financially literate individual with certain behavioural qualities. Finally, a broader vision of the future concerning societal and financial market developments can be found in the analysed materials. This dimension addresses economic growth as well as some changes towards environmental sustainability, gender equality, and financial stability. We will elaborate on these three frames in the following section.

IV. Im/mobile Visions of the Future in the Process of Policy Frame Circulation

IV.1 Framing Visions of the Policy Future: Governing, Optimising, Targeting

Policy optimisation is an important topic for policymakers that are concerned with increasing the effectiveness, efficiency, and success of policy implementation. Setting future directions for financial education policy is therefore an inseparable aspect of imagining the future. In 2008, the OECD created the International Network for Financial Education (INFE) that includes members from over 130 countries and over 230 public institutions, such as national banks or ministries of finance and education. The concern for future optimisation and making financial literacy policies more effective is universal for all selected documents, and the analysis has shown that their mobility did not change these visions for future policy directions substantially.

The OECD's recommendations and visions for future policy directions are based on the experiences of national states that had already developed and implemented these policies and shared their expertise through the INFE network. The "best practice examples" of financial literacy policy formulation prior to 2012 were presented by "Portugal, South Africa, Armenia, Canada, Colombia, Czech Republic, India, Italy, Jamaica, Mexico, Turkey and the United Kingdom" (Grifoni and Messy 2012, 7). Delegates from these countries provided "significant inputs" (2012, 7) regarding the structure and content in the process of drafting the early OECD recommendations for policymaking. The analysed data do not reveal which parts and which contributions precisely have been done by these members. However, what has "arrived" at the level of the OECD is the framing of financial education policy futures as the need for more structured governance, more optimised and efficient financial education measures, as well as better strategies of targeting so-called "vulnerable groups".

The first issue that is prominent in this frame is the idea of insufficient regulation of the financial education stakeholder community as well as absent *governance* structure of financial literacy policymakers. The OECD's problem diagnosis rests on the observation of "existing initiatives that lack coordination" (OECD 2012a, 16) as well as moderate, constrained or not coordinated involvement of financial education stakeholders (OECD 2012a, 2013, 2015). On the one hand, this problem is brought into relation with possible conflicts of interest

when commercial interests are involved in the provision of financial education (OECD 2013, 33; 2015, 2020). On the other hand, the lack of leadership, unclear division of stakeholders' roles, and undefined governing mechanisms are indicated as problematic (OECD 2012a, 2015). With the establishment of the National Strategy for Financial Education, national states and local authorities are seen as taking over responsibility for solving these problems. The implicit future vision of the OECD thus foresees the establishment of well-functioning "institutional and governing arrangements" (OECD 2015, 8). The OECD envisions making financial education policy more effective by allocating local public institutions (such as ministries of finance and education, central banks, financial markets authorities, etc.) with clear and formal responsibilities in the realm of financial education. "Identifying a leader that is ideally a resourceful and competent authority/structure that can steer and coordinate the collective effort" (OECD 2012a, 21) is an essential part of these future visions. Furthermore, the involvement of private, profit-seeking stakeholders in the provision of financial education is generally perceived to be positive and welcome due to their expertise in the field and their financial resources. However, the involvement of the private sector is seen as requiring regulation based on the OECD/INFE Guidelines for the Involvement of Private Stakeholders (OECD 2014). The future vision of a national governance structure thus also means governing and regulating conflicts of interests as well as adherence to non-commercial financial education measures.

The Austrian National Strategy addresses the recommendations of the OECD that have been described in detail in the mapping study (OECD 2021b). This study has been completed in cooperation between the Austrian Federal Ministry of Finance, the European Commission, and the OECD. The recommendations provided by the study have been adopted as the key elements of the national financial literacy strategy and implemented into its main objectives. Hence, the mapping study advises to award clear mandates to public authorities (OECD 2021b, 46), involve private and non-public stakeholders into the formulation of a financial literacy strategy under an explicitly defined code of conduct for non-commercial practices (OECD 2021b, 48) as well as to foster already existing forms of stakeholder participation by establishing a framework for cooperation (OECD 2021b, 50). The Austrian National Strategy fulfils these recommendations by developing an "inclusive governance structure for effective leadership and co-operation" (OECD 2021a, 16). The document ascribes different responsibilities regarding the implementation of the strategy to different governing bodies. The Executive Board of the Aus-

trian Financial Literacy Stakeholder Council (hereinafter “the Council”) has executive and supervisory/controlling functions over the whole strategy and is the main decision-making body. The Steering Board of the Council is ascribed the responsibility of ensuring the permanent representation of financial literacy stakeholders: Austrian citizens, consumers, the private sector, and the research community. The Scientific Committee of the Council ensures the inclusion of the research community regarding the design, monitoring, implementation, and evaluation of the strategy. Additionally, as recommended by the OECD, to profit from the “added value provided by working groups and consultative committees” (OECD 2012a, 22), sub-Committees (like “women and financial literacy” as well as “scientific working group”) were established with representatives from the Steering Board and the Financial Literacy Community (i.e., all Austrian institutions that are active in the field of financial literacy). The establishment of this governance structure can be seen as being in compliance with recommendations by national states in the INFE network as well as with the vision for future policy directions expressed by the OECD (OECD 2012a, 2013, 2015).

The visions for future policy directions in the Austrian NSFLE overall aspire to “a comprehensive dialogue among public, private and not-for-profit stakeholders” (OECD 2021a, 10) as well as to an inclusive, democratic process of policy implementation. The implementation of the strategy is imagined as a cooperative procedure that includes the views and experiences of all financial education stakeholders, especially those involved directly with receivers of financial education measures and programmes. The Austrian National Strategy also formulates a vision of close and intensive cooperation with the OECD and especially the policy advisors of the INFE network. “[F]uture bilateral cooperation” (OECD 2021a, 39) is assumed to be an important part of future policy-making in Austria because INFE serves as a platform for international collaboration and knowledge sharing in the field of financial education. Such an explicit indication of collaboration between national authorities and the OECD/INFE is rarely found in the documents developed by the OECD.

Another central issue in the frame for future policy directions is the *optimisation* of the policy goals that are set in the national strategies. The assumed problem is that national states often set goals that are rather abstract, aspirational, and therefore difficult to measure. This is related to difficulties in evaluating the success of the strategies (OECD 2015). Furthermore, there are few scientific models and methods of evaluation of the impact or success of the national strategy (OECD 2012a). Therefore, the goal of formulating and set-

ting “measurable and realistic objectives based on dedicated national assessments and following the most efficient and innovative practices” (OECD 2012a, 6) is envisioned. The Austrian National Strategy corresponds with this vision. Four quantitatively and/or qualitatively measurable goals are set by the Austrian Strategy:

develop sound financial decision making early in life and prevent over-indebtedness; promote responsible financial planning for long-term financial well-being; raise awareness on the importance of financial literacy and ensure access to quality financial education for all; increase the effectiveness of financial literacy initiatives through dialogue, coordination and evaluation. (OECD 2021a, 12)

The idea of setting measurable goals in order to be able to evaluate them scientifically, paradoxically, ‘arrived back’ in the documents of the OECD. According to the latest handbook of recommendations addressing how to scientifically monitor and evaluate national strategies (2022),

most often, national strategies appear to have overall goals that are linked to a broad set of quantitative indicators (such as access to financial services, participation in financial literacy and education activities and change in financial knowledge of participants). Less common, a number of national strategies have aspirational goals (such as, for example, improving the relationship of their citizens to finance and helping them achieve their financial goals) that are not directly linked to measurable quantitative objectives. (OECD 2022, 11).

The issue of policy optimisation, in the sense of setting realistic and scientifically measurable goals, has been circulating between the scales. Stemming from the work of INFE around 2012, it then travelled to and impacted the goals set by the Austrian Strategy in 2021 and returned to the scale of the OECD in 2022, where the evaluation of the existing strategies confirmed the fulfilment of the visions for future policy directions created in 2012.

The third aspect of the future vision for policy directions concerns the idea of *targeting* particular “vulnerable groups”. Due to the supposedly low levels of financial literacy among certain demographic groups, the OECD envisions future national strategies to be “particularly designed to provide adapted and resource-effective solutions to the financial literacy needs of individuals, including the most vulnerable” (OECD 2013, 11). The countries thus should “define the

target population and determine the extent and needs of vulnerable groups” (OECD 2012a, 17). This should be done because “targeted and specific interventions may positively impact women’s financial behaviour” (OECD 2012b, 6). The OECD documents indicate good practice examples: while Malaysia “devotes special attention to the needs of school children, youth, women, SMEs, disabled, and rural communities” (OECD 2012a, 27), in Poland, “targeted segments include primary and secondary school students, pregnant women and couples starting a family, retirement age people and over indebted households” (2012a, 27). The OECD’s future vision hence includes a “co-ordinated, tailored and efficient provision of financial education to the population and in particular to vulnerable groups” (OECD 2013, 35). The vision of a strategic targeting of supposedly financially illiterate or disadvantaged groups has also consolidated in the framing of the Austrian National Strategy: “the strategy recognises the existence of other target audiences, such as the unemployed and working poor, people with immigrant background, senior citizens, and the rural population” (OECD 2021a, 27). Overall, the approach to target some groups with particular information concerning saving, investment, and debt has been circulated and accepted as “good practice” both on the scale of the OECD as well as on the scale of national strategies.

Policy Frame Im/mobilities and Circulations

Overall, the future visions addressing pathways of policy development of OECD as well as of Austrian stakeholders are primarily concerned with the issues of governance, policy optimisation, and the targeting of vulnerable groups. The goal to make the effects of financial education policy more “empirically measurable” is certainly driven not only by the incentive to collect an international comparison, but also by the institutional and time pressures that policymakers face in their daily practices. Hence, it can be assumed that in order to make the process of policy evaluation more efficient, the visions of the policy future also need to include ideas about how to make the necessary policymaking processes more adequate to the time resources that are available for the policy stakeholders. These visions for future policies make the future into something that should be “easy to be dealt with”. Hence, all documents wish for the policy future to be uncomplicated, easily administrable, and controllable. The analysis of materials has also led to the observation that the process of policy frame mobility contributes to the self-legitimation of the OECD’s approach to financial literacy. In 2012, the OECD recommended setting scientifically measurable policy goals in order to optimise the evalu-

ation. This approach was adopted in some national strategies, which again led to the OECD's confirmation of good practice examples. The analysis of data also resulted in the observation that visions concerning future policy directions move in a messy way rather than in a circular or linear manner. These visions do not move from A to B, from international to the national, as policy transfer literature suggests (e.g., Marsh and Sharman 2009; Dolowitz and Marsh 2012). Instead, many aspects for future policymaking are rooted in already existing NSFLEs that are considered to be best practice examples. Hence, these future visions stem from local contexts, travel to and are adopted in the policy recommendations on the international level and then move into other national/local contexts. In the case of financial education policy, the early recommendations of the OECD (2013, 2015) often refer to the at that time already existing National Strategies of Brazil, Portugal, Australia, Turkey, South Africa, etc. While our analysis is incapable of precisely tracing the paths that these future visions have travelled, it can be claimed that much of the policy directions that are envisioned in the Austrian NSFLE have been drafted in the same policy context elsewhere. Thus, visions of the future prevailing in the Austrian National Strategy are deeply entangled with the financial education policy contexts and ideas elsewhere.

IV.II Framing Visions of an Individual Lifetime: Planning, Preparing, Saving

The second policy frame of future visions that has been identified in financial literacy education policies refers to the future of an individual. These frames are shaped by the core insights in the field of behavioural economics and therefore refer primarily to the dimension of individual behaviour and changes thereof as a result of gaining new knowledge or attaining new skills in the field of economy and (personal) finance. The envisioned future of financially literate behaviour of individuals includes the aspects of planning for the future, preparing for that imagined future as well as saving for expected and unexpected life events.

The analysis of policy frames concerning future visions for individual behaviour on the scale of the OECD began with the identification of the problem that is addressed in the policy documents: "a majority of individuals do not plan for the future and fail to make effective decisions to manage their finances" (OECD 2013, 5). The "failure" to financially plan for the future is claimed to be resulting from individuals lacking skills and knowledge on the one hand

and lack of – or even absence of – trustworthy, accessible, and understandable information on financial products and services on the other. The lack of skills and knowledge refers to many fields, starting from the individual inability to deal with certain investment-related risks, not being able to distribute these risks in a well-thought-out portfolio, not engaging enough with the topic of one's retirement as well as not having a basic understanding of interest rates, inflation or other issues related to personal finance and economic issues. The problem with individual behaviour is seen to be that

consumers around the world and in particular vulnerable groups display limited knowledge and understanding of financial products and concepts. They also have difficulty making long-term informed financial decisions and selecting financial products that match their needs. (OECD 2013, 11)

Financial “illiteracy”, stretching out to “psychological barriers and lack of awareness” (OECD 2015, 12), is therefore claimed to have negative consequences on individuals' and households' future financial well-being. Moreover, some materials recognise the lack of financial literacy as contributing to crisis-prone tendencies of financial markets: “one of the main reasons for the global financial crisis was consumers' lack of a basic understanding of increasingly complex financial products” (OECD 2013, 106).

The problem concerning individual behaviour is framed in a slightly different manner in the Austrian National Strategy. On the one hand, over-indebtedness as well as early indebtedness are framed as central problems of Austrian financial literacy. Thereby, the negative impact of the COVID-19 crisis on individual indebtedness is recognised (BMF 2023; OECD 2021a). In relation to that, increasing digitalisation of financial market products and services is the-matised. However, the root of the problem is ascribed to the individual level:

despite a favourable international comparison, adults in Austria display important vulnerabilities in their financial knowledge, behaviours and attitudes that can undermine their financial resilience – i.e., the ability to resist, cope and recover from negative financial shocks – and negatively affect their long-term financial well-being. (OECD 2021a, 8)

On the other hand, the problem diagnosis is broadened in the following way:

rapid changes in financial markets, presenting them [Austrian individuals] with new opportunities and challenges. Digitalisation is having an impact on the way retail financial markets operate, the Austrian population is aging rapidly, career and earning paths are becoming more precarious and many worry about their long-term financial security. (OECD 2021a, 8)

Hence, broader societal developments such as changes in and an increased complexity of financial markets, demographic problems, precarious employment conditions, etc. are assumed to impact individual financial situations.

The OECD frames a twofold vision of the future on the individual level. On the one hand, visions of individual behaviour that result in future financial outcomes are presented. On the other hand, the OECD develops the idea of a “life cycle” that illustrates the vision of life in several stages that each individual is assumed to be affected by. In this frame, the idea of financially literate behaviour is rooted in scientific Studies made by economists in order to measure and internationally compare the levels of financial literacy (Atkinson and Messy 2012; Lusardi and Mitchell 2011, 2014; Van Rooij, Lusardi, and Alessie 2012). Being addressed, referred to and in this way circulating among all OECD papers addressing financial literacy, this vision of individual behaviour eventually resulted in a single unifying document that defines what precisely is envisioned to be literate behaviour. The OECD in cooperation with the EU has developed the “financial competence framework” (EU/OECD 2022), which describes in detail competencies adult individuals are expected to have in particular fields of financial knowledge, financial behaviour, and attitudes towards financial matters. The framework includes 564 competencies in the areas of “money and financial transactions”, “planning and managing finances”, “financial risks and rewards”, and “financial landscape”. The central keywords describing the vision of future individual behaviour adopted by the competence framework could be summarized as: 1) knowing, understanding, being aware (i.e., financial knowledge); 2) researching, estimating, calculating, comparing, monitoring, considering, planning, having future goals (i.e., financial behaviour); 3) being confident, aware, and motivated (i.e., financial attitudes and motivation). Based on these keywords, this frame of future vision suggests that individuals’ behaviour should be active, optimizing, calculating, pragmatic, and rational.

In addition to this, future visions for an individual are also revealed in the OECD’s approach to “the life cycle”. The life cycle of financial literacy education defines certain stages, periods, and episodes of life that are supposed to re-

quire target-group-specific financial education. These life stages are assumed to be universal and relevant to everyone. Hence, the life cycle refers to “the lifetime-employment system, ranging from employment, marriage, childbirth and house purchase through to retirement” (OECD 2013, 161). The framing of future visions for individual behaviour means also to develop a life plan, identify life stages, and define future financial goals that are related to these life stages. Based on such a life plan, the individuals are expected to “develop an attitude to borrow appropriately for education and housing; save money and manage assets by planning ahead and identifying the amount necessary for education, housing purchase and retirement; as well as buying insurance products and saving for contingencies” (OECD 2013, 161). This recommended framing of a life cycle approach to financial education as a vision for individual future behaviour has been adopted in many NSFLEs, including the Austrian Strategy.

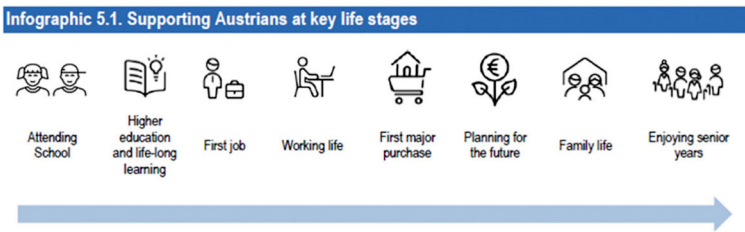
Similar to the previously discussed OECD framing of visions of future individual behaviour, the Austrian vision can be described as two-dimensional, including the adjustment of individual behaviour and envisioning pathways of life. Certain aspects of financial knowledge, behaviour, and attitudes to the financial market are seen as in need of regulation. While the strategy itself tackles these general fields of financial education that are supposed to be implemented (saving, planning for retirement, digital financial competence, planning for unforeseen life events, etc.), the identification of concrete abilities and of actions to be taken happens in other documents. The Austrian competence framework to improve financial literacy for adults (BMF 2022) is almost identical (with minor differences related to individuals’ awareness of green finance and sustainable investments) to the EU/OECD framework.³ In sum, 567 definitions (in total three more than those identifiable in the EU/OECD documents) have been collected. The general idea behind these patterns of behaviour as desirable is identical to the one outlined by the OECD: active, outcome-optimising, risk-calculating, economically rational behaviour is encouraged. Moreover, the future behaviour of Austrian society is supposed to be more conscious of individual economic decisions and consequences regarding the sustainability of the economy, environment, communities, and society at large. Financially literate individuals in the future are thus expected to be aware of how

3 It is relevant to know at this point that EU/OECD framework “is made available for voluntary uptake in the EU by public authorities, private bodies and the civil society” (EU/OECD 2022, 6).

their consumption impact differs depending on the level of sustainability of the product or service purchased (BMF 2022, 52).

Stemming from the OECD's framing of the desired future behaviour of individuals, a life cycle approach to financial literacy has made it into the Austrian National Strategy as an idea of "life stages", also called "teachable moments". This idea has 'mutated' into a graphic that illustrates these "critical moments of financial lives" (OECD 2021a, 25). Figure 1 illustrates how the life stages approach has been adopted in the Austrian National Strategy. Hence, the times in which individuals require and are most receptive to financial education measures include: "attending school" (primary education), "higher education and life-long learning", "first job", "working life", "first major purchase", "planning for future", "family life" as well as "enjoying senior years".

Figure 1: Presentation of Key Life Stages in the Austrian National Strategy.



Source: OECD (2021a, 25)

The illustration of these eight stages in life is underlined with an arrow, indicating the imagined flow of time that starts with "attending school" and ends with "enjoying senior years". This temporality reveals that the "life cycle" is actually envisioned as a "life lane". This depiction of a life foresees that "higher education" happens before the "first job", the "first job" happens before "family life", "planning for future" happens after the "first major purchase" but before "family life". Hence, the future is already planned and structured in accordance with the supposed flow of events. This model does not foresee (at least not explicitly) different sequences or different occurrences, such as starting education later in life, migration, unemployment, individual or familial health crises, disability, early retirement or early widowhood – nor is it gender differentiated. All these alternative life cycles fall under the category of "unexpected

life events in the future” (OECD 2021a, 7), of which individuals are assumed to be unaware and, due to that unawareness, unprepared.

The vision of financially literate behaviour that is adopted here has circulated back to the level of the OECD, with a resulting finding that

a significant number of countries report taking a life stage approach with regards to financial education, including on long-term financial planning related issues [...]. [F]inancial education initiatives seek to target people according to specific life stages such as studying, starting work, getting married, purchasing a house or retiring. (OECD 2022, 19)

The central elements structuring the concept of life stages – education, employment, marriage, purchase of a house, and retirement – have prevailed in the process of policy frame mobility. What has been “lost” in this process, for instance, is the moment of childbirth. The rigid imagination of what elements a lifetime is supposed to consist of as well as the envisioned linearity of a lifetime, starting with education and finishing with retirement, reflect the implicit ideas structuring the policy frame.

Policy Frame Im/mobilities and Circulations

What remained coherent and changed only in a minor way in the process of policy frame mobility are the ascription of responsibility to individuals as well as the detailed vision of financially literate individual behaviour. While reasons for the minor change in the framing through the process of mobility might have multiple explanations, we argue that the question of responsibility actually cannot be framed in a different way due to the logic of the whole policy. Individuals’ education is usually framed as the result of appropriate supply on the one hand as well as demand and individual engagement on the other. Another aspect of this policy frame that was not (or barely) affected on the level of content by the process of mobility, is the vision of what financially literate behaviour would contain in the future. The financial competence framework that defines knowledge, behaviour, and attitudes of financially literate individuals in great detail and precision has changed while travelling from the scale of the EU/OECD to the national scale. Taking into consideration that the framework can be voluntarily taken up and/or adapted to the local context by public authorities, it is rather surprising that translocal mobility had little effects on the content. The precise reasons for this can only be speculated on, but it needs to

be emphasised that temporality – both documents have been adopted in 2022 – is important when discussing this effect.

The process of policy mobility has, however, impacted how the problem diagnosis is framed. The identification of the problem in Austria is more complex and precise in comparison to the one assumed in the materials of the OECD. The Austrian policy frame takes into consideration global socio-economic developments and their immediate effects on individuals. The process of mobility has changed the diagnosis, also because the experience of the COVID-19 pandemic has made the structural nature of social and economic inequalities more obvious. Hence, the temporal policy frame mobility has made problem diagnosis more complex and elaborated. Furthermore, in the process of policy frame mobility, visions of the life cycle have become more visual, graphic, and illustrative. While the essence and the main implicit idea behind the framing remain the same (that life in the sense of future events is linear), the precise ideas of a lifetime and the futures of individual lives has slightly changed. The Austrian vision of individual life, for example, adopts the idea of “family life” instead of “marriage and childbirth” as defined by the OECD. The broad definition of “family life” leaves space to consider various events (that are, however, not explicitly indicated) as part of one’s life – marriage (or partnership), (multiple) childbirths, costly infertility treatments, adoption, prolonged care work responsibilities due to the lack of available childcare options, divorce, death of the partner or of children, health problems, (forced) migration, education of children, etc. In the OECD documents, however, little space is given for a broader vision of what a (future) life might look like. Despite this difference, the general idea is that the future can be planned and prepared for. Even unplannable future events are seen as necessary to be financially incorporated into one’s life plan, e.g., by saving money for unexpected life events. These precautionary, preparatory actions deeply entangle the future with the present.

IV.III Framing Visions for Societies: Preventing Crises, Promoting Economy and Growth

The third identified policy frame refers to the future vision of socio-economic coherence as a whole. This frame tackles the questions of how the policy of financial education would prevent future financial crisis, reduce poverty, contribute to financial stability and gender equality, and ensure sustainable development and economic growth.

The policy frame referring to the future of society and economy starts with a twofold problem diagnosis. *Firstly*, developments in the financial market, its rapid fluctuations as well as the increasing complexity of financial market products and services are seen as problematic developments that require policy solutions. Thus, “the rapid development of the financial services industry, the increasing complexity of available products, and the observation of the financial losses incurred by consumers in the context of the financial crisis are some general incentives underpinning national strategies” (OECD 2013, 23). More precisely, the represented problem is that individuals are “increasingly required to make complex choices” (OECD 2022, 15). Hence, due to this problematic development, the policy of financial literacy is legitimated. *Secondly*, the broader diagnosis of financial or health crises as well as retreating state provisioning for education, retirement, and health care are also identified as problems that need to be addressed in this frame. This side of the problem is described in the following way: “as more and more of the responsibility for financial well-being and decision-making shifts from both the state and the private sector onto the individual, the need to improve levels of financial literacy through financial education becomes increasingly apparent” (OECD 2012a, 9). In the materials of the OECD, financial crisis is seen to be the starting point as well as an accelerating mechanism of these problematic developments. The twofold development – the expansion of the financial market as well as the diminishing responsibility of the state, the financial crisis of 2007/8 and austerity measures that followed – are framed as creating negative effects on individuals’ economic situation and the quality of life. Since 2020, the OECD refers to crisis mainly in terms of health crises, starting with the COVID-19 pandemic. In spite of that, the recognition that multiple crises – health, financial, environmental – are interrelated and therefore should be considered as part of the problem of financial inequality prevails.

In contrast to the OECD framing of the issue, problematising and envisioning the future for society as a whole and for the economy plays a rather minor role in the Austrian NSFLE. What is exceptional about the Austrian case is the recognition of a high standard of living and the exceptionally high satisfaction of the Austrian society with the circumstances of their life. However, policies require a definition of the problem that they tackle and, in the Austrian case, the framing of the future with a focus on societal and economic developments is closely related to the identification of the problem in the frame of individual behaviour. Hence, the main problems of Austrian society identified in this frame are the increasing indebtedness of individuals as well as a gender pen-

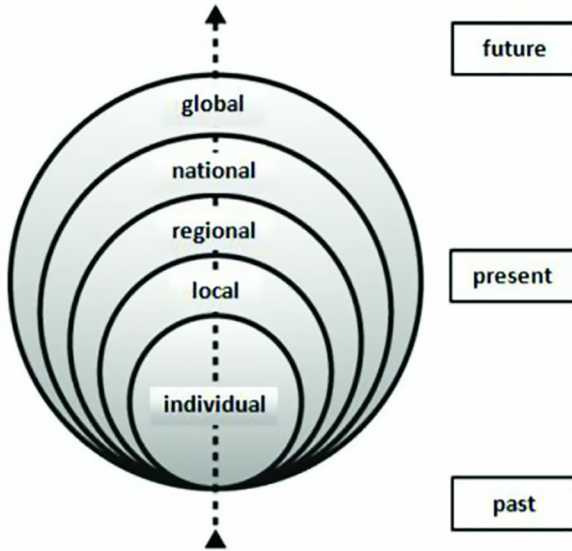
sion gap that is higher than the EU and the OECD average (OECD 2021a, 12). Although health crisis is identified as an aspect that intensifies social and economic inequalities, it does not represent an important element in the framing of the problem.

The responsibility to act and to tackle identified socio-economic developments, similarly to the other frames discussed is primarily ascribed to individual consumers, both on the scale of the OECD as well as in Austria. More precisely, the responsibility ascribed to individuals is to make good, informed, and financially literate decisions. These decisions “could have positive spill-over effects on financial markets and the economy as a whole” (OECD 2012a, 9). The responsibility of individuals, then, is to create room for a more stable and sustainable financial market (and the economy as a whole) by adjusting their behaviour. The addressed role of the state and public institutions in this frame is usually reduced to “supporting”, “preparing” and “helping” individual consumers in their wish to gain more financial knowledge, learn better financial behaviour, and adopt a better attitude towards financial issues.

The OECD vision for the future of society and the economy is based on two main ideas: the vision of stable economic growth and of progressive social developments. *The first aspect* of that vision is financial stability induced by good financial behaviour: the “current generation of young people grow [sic] up to be consumers who are capable of making responsible (financial) choices that pave the way to a healthy financial future for themselves and society as a whole” (OECD 2013, 206). Financial education is thus perceived to be “a key tool for the financial system to correctly fulfil its function of channeling saving, maintaining confidence in it, and contributing to its stability” (OECD 2013, 264). *The second aspect* of the vision includes the dimensions of gender equality and the reduction of poverty. In this vision, measures of financial literacy are claimed to “help in promoting economic recovery and growth, supporting small and medium enterprises, boosting the creation of new jobs as well as decreasing poverty” (OECD 2013, 5). The framing of these visions is not surprising, but rather represents the overall idea of financial education policy as a multiplier of economic and social equality.

The analysis of future visions in the frame has also resulted in some unexpected insights, namely, the OECD’s vision of how spatial and temporal dimensions of financial literacy correlate. Figure 2 illustrates the assumed temporality of financial education initiatives, titled “Spatial and temporal dimensions of Financial Education in the Brazilian National Strategy” in the OECD’s directive “Advancing National Strategies for Financial Education” (2013).

Figure 2: Vision of Temporality in the OECD Frame Referring to Future Socio-Economic Developments.



Source: Spatial and temporal dimensions of Financial Education in the Brazilian National Strategy (OECD 2013, 76).

The essence of the graph is to illustrate the impacts of financial education spatially and temporally:

the spatial dimension encompasses financial education concepts based on the impact of individual actions on the social context, and on the consequences of these actions on economic and financial conditions of those same individuals. The spatial dimension is organised in fields of social coverage, from the more restricted – individual – to the wider – global. (OECD 2013, 76)

The temporal dimension is supposed to show that individual economic decisions taken in the present affect the future. The dotted line crossing the temporal dimensions is supposed to illustrate that past, present, and future are entangled in a chain of inter-relationships. Hence, “this chain makes possible to perceive the present not only as a result of decisions made in the past,

but as the time when certain initiatives are taken, and the results and consequences of these initiatives – positive and negative – will be collected in the future” (2013, 76). Two implicit assumptions are inherent in this visualisation: *firstly*, that actions in the present necessarily have consequences in the future and, *secondly*, that individual actions necessarily have consequences on local, regional, national, and even global scale. This framing of the future is rooted in the Brazilian NSFLE but because it is not available in English further conclusions on how this vision changed in the process of its mobility from Brazil to the OECD cannot be drawn.

The vision of future socio-economic developments in the Austrian National Strategy is presented in great detail and can be summarised as follows: the first aspect of this image of the future is economic. The strategy declares that “higher levels of financial literacy will promote the development of healthy, open and competitive financial markets, supporting financial stability, and can effectively complement approaches aimed at reinforcing financial consumer protection” (OECD 2021a, 8). While the aspiration to attain “healthy, open and competitive” financial markets as well as economic stability is almost identical with how the future is envisioned in the materials of the OECD, what is surprising in this vision is the idea of “reinforcing” consumer protection. This vision only partly corresponds to the rest of this policy frame and requires a slightly different focus on problem diagnosis. The idea of consumer protection presupposes that the problem could be detected in an unfair treatment of financial consumers, limited financial product safety, poor services in the field of financial education or potentially a violation of restrictions of commercial practices. These, however, do not explicitly appear as a problem to be tackled in the Austrian policy.

The second framing of socio-economic future visions is based on the idea that financial literacy policies and initiatives can also be designed “in combination with and as a support to other wider public policy objectives that have been high in the agenda of Austrian governments” (OECD 2021a, 8). Three fields of public policy are mentioned as examples of how financial education can be implemented in combination with 1) policies encouraging life-long learning and entrepreneurship, which are claimed to be “key to the continued success of the Austrian economy” (2021a, 8); 2) policies in the framework of the Austrian Green Finance Agenda which are claimed to help Austrian citizens assess emerging ESG (environmental, social, governance) risks and to understand the EU taxonomy of financial products and their impact on the environment; and 3) gender equality policies which are “helping women to better manage

their financial lives and the effects of fragmented work histories on their financial wealth and their retirement income” (2021a, 8). The vision of incorporating financial education with policies addressing environmental sustainability and gender equality refers primarily to the overarching three goals of the Austrian NSFLE: gender equality, sustainability, and digitalisation. The reference to and the idea of combining financial education policy with employment, entrepreneurship, and lifelong learning policies is innovative but is only mentioned once. Moreover, what remains unanswered are questions of how these three areas of policymaking were selected and why other possible combinations of policies, such as housing policies, mobility policies, policies dealing with recognition and distribution of care work responsibilities as well as fiscal and monetary policies, are not thematised.

Policy Frame Im/mobilities and Circulations

There are two elements of the policy frame envisioning future socio-economic tendencies that did not change in the process of policy mobility. Firstly, what remained consistent despite temporal and spatial mobility is the idea that financial education has a broad and observable impact reaching beyond individual education. Hence, financial literacy is not only seen as a measure to positively impact individual life but is always brought in connection with broader societal and economic changes. Due to the inaccessibility of the Brazilian NSFLE, it is, however, difficult to draw conclusions about how visual illustrations of policy impact change while being on the move. However, the assumption that the past, present, and future are closely entangled, just as the individual impact is also traceable on the global scale, prevails despite the multiple “journeys” this framing undertakes. Financial literacy is thus viewed as a multifaceted individual ability, capable of fostering progress, development, equality, and even financial stability. Another aspect that is implicit in financial education policy documents, despite the process of policy mobility, is the imperative of economic growth. The idea that financial literacy contributes to economic growth, and that growth, in turn, always results in immediate positive effects in terms of individual and societal well-being remains unquestioned. Such a framing, in which individuals are seen as responsible for global social and economic developments, contributes to the entanglement of the individual with the national and the global scales.

What did change in the process of policy mobility is the explicit specification of the interrelation of financial education policy with other public policies. While the majority of the OECD documents analysed briefly alludes to the gen-

eral possibility that financial inequalities may not be solved with financial education alone, the mobility of this policy frame has enabled more precision and concreteness on how financial education can be combined with other policy goals in order to achieve positive socio-economic change. The Austrian vision that financial education policy should not be treated in isolation, but combined with a broader spectrum of other policies represents a new and innovative take on policymaking.

V. Conclusion

By combining the approaches of critical policy frame analysis and policy im/mobility, this article has identified three entangled policy frames of future visions that shape financial literacy education policies in a multi-scalar setting. These frames include visions referring to 1) future policy directions; 2) future financially literate individual behaviour; as well as 3) broader future visions addressing developments in society, economy, and the financial market. All of these visions shape policy documents both on the scale of the OECD as well as on the level of Austria. In this article we have shown that the process of policy circulation, through which these future visions become im/mobile, is incoherent: while some aspects of the policy frame remained immobilized and did not “arrive” in Austria, other aspects of the policy frame become more precise during their journey, while yet others did not mutate at all. In some cases, policy circulation has resulted in a more illustrative, creative, and graphic representation of a certain issue. This insight strengthens the conclusion that policy circulation is not a completed process in which policy frames return to their points of departure. Instead, our analysis has shown that some elements of a policy frame have been circulating from the scale of national states as “best practice examples”, consolidating into the recommendations of the OECD/INFE for conceptualising other national strategies, arriving to recent national documents such as the Austrian National Strategy, and again circulating back to the scale of the OECD as examples of already established policymaking practices. Therefore, policy circulation should be further thought of and conceptualised as a helix – a multidimensional curve that allows im/mobility of policies both spatially and temporally. The entanglement of the different temporalities that financial education policies bring about as well as the entanglement of various future visions both locally and globally has also become visible in our analysis. The conceptualisation of policy

im/mobility as a helix would thus offer some space for considering the various entanglements (temporal, spatial, conceptual, etc.) that policies undergo while being on the move.

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