

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., Ticktin (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.

Acknowledgments

This book constitutes the final publication of the doc.funds program “Cultural Mobility Studies”, sponsored by the Austrian Science Fund (FWF) and part of the Research Platform “Mobile Cultures and Societies: Interdisciplinary Studies on Transnational Formations” at the University of Vienna. Our essays have been inspired by more than four years of work at the research platform, including colloquia, lectures, symposia, and vital informal discussions among colleagues, all of which shaped our collective and individual research in fundamental ways.

This volume is thus a product of collaborative work, which would not have been possible without the invaluable feedback, ideas, insights, and additional help of other people. We are enormously grateful for the support and feedback we received from the key researchers of the research platform: Petra Dannecker, Birgit Englert, Alexandra Ganser, Thomas Macho, Annegret Pelz, Kirsten Rüter, Patrick Sakdapolrak, and Birgit Sauer. As we developed our ideas on “Entangled Future Im/mobilities” further, we received valuable input from leading mobility Studies scholars like Tim Cresswell and Mimi Sheller during workshops organized by the research platform. We also would like to thank the two reviewers of our volume for their constructive and kind feedback. We are thankful for the careful translation and proofreading done by Eléonore Tarla and Adam Baltner, as well as Naomi Shulman. Furthermore, we are sincerely grateful for Eléonore Tarla’s and Marlene Eichinger’s indispensable support in the coordination of the volume. We also thank the series editors of “vernetzen – bewegen – verorten” and our editors at transcript for their work on this book. For the funding of our research within the doc.funds doctoral program and of the publication of this book, we are indebted to the Austrian Science Fund (FWF).

Funding

Published with the support of the Austrian Science Fund (FWF) [10.55776/DOC56].

References

- Adey, Peter. 2016. "Emergency Mobilities." *Mobilities* 11 (1): 32–48. <https://doi.org/10.1080/17450101.2015.1103533>.
- Adey, Peter. 2017. *Mobility*. New York: Routledge.
- Adey, Peter. 2022. "Mobilities at the End: (Inter)-Planetary Futures and the Ethics of Evacuation Mobility." *Mobility Humanities* 1 (1): 23–40.
- Adey, Peter, Tim Cresswell, Jane Yeonjae Lee, Anna Nikolaeva, André Nóvoa, and Cristina Temenos. 2021. *Moving Towards Transition: Commoning Mobility for a Low-Carbon Future*. London: Bloomsbury.
- Anderson, Ben, and Peter Adey. 2012. "Guest Editorial." *Environment and Planning A* 44 (7): 1529–37.
- Appadurai, Arjun. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.
- Appadurai, Arjun. 2013. *The Future as Cultural Fact: Essays on the Global Condition*. London: Verso.
- Ashcroft, Ben. 2014. "Future Thinking: Postcolonial Utopianism." In *The Future of Postcolonial Studies*, edited by Chantal Zabus, 235–54. London: Routledge.
- Assmann, Aleida. 2020. *Is Time out of Joint? On the Rise and Fall of the Modern Time Regime*. Ithaca: Cornell University Press.
- Bal, Mieke. 2002. *Travelling Concepts in the Humanities: A Rough Guide*. Toronto: University of Toronto Press.
- Baldwin, Andrew, Christian Fröhlich, and Delf Rothe. 2019. "From Climate Migration to Anthropocene Mobilities: Shifting the Debate." *Mobilities* 14 (3): 289–97.
- Berensmeyer, Ingo, and Christoph Ehland, eds. 2013. *Perspectives on Mobility*. Amsterdam: Rodopi.
- Bettini, Giovanni. 2019. "And Yet it Moves! (Climate) Migration as a Symptom in the Anthropocene." *Mobilities* 14 (3): 336–50.
- Braidotti, Rosi. 1994. *Nomadic Subjects: Embodiment and Sexual Difference in Contemporary Feminist Theory*. New York: Columbia University Press.
- Büscher, Monika, Mimi Sheller, and David Tyfield. 2016. "Mobility Intersections: Social Research, Social Futures." *Mobilities* 11 (4): 485–97. <https://doi.org/10.1080/17450101.2016.1211818>.
- Carling, Jørgen. 2002. "Migration in the Age of Involuntary Immobility: Theoretical Reflections and Cape Verdean Experiences." *Journal of Ethnic and Migration Studies* 28 (1): 5–42.

- Clark, Andrew V., Carol Atkinson-Palombo, and Norman W. Garrick. 2019. "The Rise and Fall of the Segway: Lessons for the Social Adoption of Future Transportation." *Transfers* 9 (2): 27–44. <https://doi.org/10.3167/TRANS.2019.090203>.
- Clarsen, Georgine, Peter Merriman, and Mimi Sheller. 2018. "Vistas of Future New Mobility Studies: Transfers and Transformations." *Transfers* 8 (1): 112–17. <https://doi.org/10.3167/TRANS.2018.080109>.
- Cohen, Robin. 1997. *Global Diasporas: An Introduction*. London: UCL Press.
- Cresswell, Tim. 2006. *On the Move: Mobility in the Modern Western World*. New York: Routledge.
- Cresswell, Tim. 2010. "Towards a Politics of Mobility." *Environment and Planning D* 28 (1): 17–31.
- Faist, Thomas. 2013. "The Mobility Turn: A New Paradigm for the Social Sciences?" *Ethnic and Racial Studies* 36 (11): 1637–46. <https://doi.org/10.1080/01419870.2013.812229>.
- Faulconbridge, James, and Alison Hui. 2016. "Traces of a Mobile Field: Ten Years of Mobilities Research." *Mobilities* 1 (1): 1–14.
- Fielding, Alistair J. 1992. "Migration and Social Mobility: South East England as an Escalator Region." *Regional Studies* 26 (1): 1–15. <https://doi.org/10.1080/0343409212331346741>.
- Freudental-Pedersen, Malene, and Sven Kesselring. 2016. "Mobilities, Futures & the City: Repositioning Discourses – Changing Perspectives – Rethinking Policies." *Mobilities* 11 (4): 575–86. <https://doi.org/10.1080/17450101.2016.1211825>.
- Gänger, Stefanie. 2017. "Circulation: Reflections on Circularity, Entity, and Liquidity in the Language of Global History." *Journal of Global History* 12 (3): 303–18. <https://doi.org/10.1017/S174002281700016X>.
- Gilroy, Paul. 1993. *The Black Atlantic: Modernity and Double Consciousness*. London: Verso Press.
- Glick Schiller, Nina, and Noel B. Salazar. 2013. "Regimes of Mobility Across the Globe." *Journal of Ethnic and Migration Studies* 39 (2): 183–200. <https://doi.org/10.1080/1369183X.2013.723253>.
- Goggin, Gerard. 2016. "Disability and Mobilities: Evening up Social Futures." *Mobilities* 11 (4): 533–41. <https://doi.org/10.1080/17450101.2016.1211821>.
- Goldstone, Brian, and Juan Obarrio, eds. 2016. *African Futures: Essays on Crisis, Emergence, and Possibility*. Chicago: University of Chicago Press.

- Greenblatt, Stephen. 2010a. "Cultural Mobility: An Introduction." In *Cultural Mobility: A Manifesto*, edited by Stephen Greenblatt, 1–23. Cambridge: Cambridge University Press.
- Greenblatt, Stephen. 2010b. "A Mobility Studies Manifesto" In *Cultural Mobility: A Manifesto*, edited by Stephen Greenblatt, 250–53. Cambridge: Cambridge University Press.
- Greiner, Clemens, Steven Van Wolputte, and Michael Bollig, eds. 2022. *African Futures*. Leiden: Brill.
- Hannam, Kevin, Mimi Sheller, and John Urry. 2006. "Editorial: Mobilities, Immobilities and Moorings." *Mobilities* 1 (1): 1–22. <https://doi.org/10.1080/17450100500489189>.
- Hildebrand, Julia M., and Mimi Sheller. 2018. "Media Ecologies of Autonomous Automobility: Gendered and Racial Dimensions of Future Concept Cars." *Transfers* 8 (1): 64–85. <https://doi.org/10.3167/TRANS.2018.080106>.
- Johnson, Mark R., and Daryl Martin. 2016. "The Anticipated Futures of Space Tourism." *Mobilities* 11 (1): 135–51. <https://doi.org/10.1080/17450101.2015.1097034>.
- Khera, Dipti. 2018. "Arrivals at Distant Lands: Artful Letters and Entangled Mobilities in the Indian Ocean Littoral." In *The Nomadic Object: The Challenge of World for Early Modern Religious Art*, edited by Christine Göttler and Mia M. Mochizuki, 571–605. Boston: Brill.
- Latour, Bruno. 1990. "Drawing Things Together." In *Representation in Scientific Practice*, edited by Michael Lynch and Steve Wolgar, 19–68. Cambridge, MA: MIT Press.
- Law, R. 1999. "Beyond 'Women and Transport': Towards New Geographies of Gender and Daily Mobility." *Progress in Human Geography* 23 (4): 567–88. <https://doi.org/10.1191/030913299666161864>.
- López-Galviz, Carlos, Monika Büscher, and Marlene Freudendal-Pedersen. 2020. "Mobilities and Utopias: A Critical Reorientation." *Mobilities* 15 (1): 1–10. <https://doi.org/10.1080/17450101.2020.1698835>.
- Manderscheid, Katharina. 2014. "The Movement Problem, the Car and Future Mobility Regimes: Automobility as Dispositif and Mode of Regulation." *Mobilities* 9 (4): 604–26. <https://doi.org/10.1080/17450101.2014.961257>.
- Manderscheid, Katharina. 2018. "From the Auto-Mobile to the Driven Subject? Discursive Assertions of Mobility Futures." *Transfers* 8 (1): 24–43. <https://doi.org/10.3167/TRANS.2018.080104>.
- Massey, Doreen. 2005. *For Space*. London: Sage.

- Matthewman, Steve. 2017. "Mobile Disasters." *Transfers* 7 (3): 6–22.
- Merriman, Peter, and Lynn Pearce. 2017. "Mobility and the Humanities." *Mobilities* 12 (4): 493–508. <https://doi.org/10.1080/17450101.2017.1330853>.
- Metz, D. H. 2000. "Mobility of Older People and Their Quality of Life." *Transport Policy* 7 (2): 149–52. [https://doi.org/10.1016/S0967-070X\(00\)00004-4](https://doi.org/10.1016/S0967-070X(00)00004-4).
- Murray, Lesley and Sara Upstone, eds. 2014. *Researching and Representing Mobilities: Transdisciplinary Encounters*. Basingstoke: Palgrave Macmillan.
- Parkins, Wendy. 2009. *Mobility and Modernity in Women's Novels, 1850–1930: Women Moving Dangerously*. London: Palgrave Macmillan.
- Pearce, Lynn. 2020. "'Text-as-Means' versus 'Text-as-End-in-Itself': Some Reasons Why Literary Scholars Have Been Slow to Hop on the Mobilities Bus." *Transfers* 10 (1): 76–84. <https://doi.org/10.3167/TRANS.2020.100109>.
- Peck, Jamie, and Nik Theodore. 2015. *Fast Policy: Experimental Statecraft at the Thresholds of Neoliberalism*. Minneapolis: University of Minnesota Press.
- Perng, Sung-Yueh. 2019. "Anticipating Digital Futures: Ruins, Entanglements and the Possibilities of Shared Technology Making." *Mobilities* 14 (4): 418–34. <https://doi.org/10.1080/17450101.2019.1594867>.
- Pratt, Mary Louise. 2008. *Imperial Eyes: Travel Writing and Transculturation*. London: Routledge.
- Rittel, Horst W., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (2): 155–69. <https://doi.org/10.1007/BF01405730>.
- Salazar, Noel B. 2010. "Towards an Anthropology of Cultural Mobilities." *Crossings: Journal of Migration & Culture* 1 (1): 53–68.
- Sheller, Mimi. 2014. "The New Mobilities Paradigm for a Live Sociology." *Current Sociology* 62 (6): 789–811.
- Sheller, Mimi. 2016. "Uneven Mobility Futures: A Foucauldian Approach." *Mobilities* 11 (1): 15–31. <https://doi.org/10.1080/17450101.2015.1097038>.
- Sheller, Mimi. 2020a. "Mobility Justice." In *Handbook of Research Methods and Applications for Mobilities*, edited by Monika Büscher, Marlene Freudendal-Pedersen, and Sven Kesselring, 11–20. Cheltenham, UK: Edward Elgar Publishing.
- Sheller, Mimi. 2020b. *Island Futures: Caribbean Survival in the Anthropocene*. Durham: Duke University Press.
- Sheller, Mimi, and John Urry. 2006. "The New Mobilities Paradigm." *Environment and Planning A: Economy and Space* 38 (2): 207–26. <https://doi.org/10.1080/a37268>.

- Sheller, Mimi, and John Urry. 2016. "Mobilizing the New Mobilities Paradigm." *Applied Mobilities* 1 (1): 10–25.
- Sodero, Stephanie, and Richard Rackham. 2020. "Blood Drones: Using Utopia as Method to Imagine Future Vital Mobilities." *Mobilities* 15 (1): 11–24.
- Sustar, Helena, Miloš N. Mladenović, and Moshe Givoni. 2020. "The Landscape of Envisioning and Speculative Design Methods for Sustainable Mobility Futures." *Sustainability* 12 (6): 2447. <https://doi.org/10.3390/su12062447>.
- Ticktin, Hillel. 2017. "The Permanent Crisis, Decline and Transition of Capitalism." *Journal of Socialist Theory* 45 (3): 359–86.
- Tutton, Richard. 2017. "Wicked Futures: Meaning, Matter, and the Sociology of the Future." *Sociological Review* 65 (3): 478–92.
- Urry, John. 2000. *Sociology beyond Societies: Mobilities for the Twenty-First Century*. London: Routledge.
- Urry, John. 2013. "Epilogue: Oil, the American Suburbs and the Future of Mobility." In *The Routledge Handbook of Mobilities*, edited by Peter Adey, David Bissell, Kevin Hannam, Peter Merriman, and Mimi Sheller, 585–92. London: Routledge.
- Urry, John. 2016. *What is the Future?* Cambridge: Polity.
- Wood, Astrid. 2015. "The Politics of Policy Circulation: Unpacking the Relationship between South African and South American Cities in the Adoption of Bus Rapid Transit." *Antipode* 47 (4): 1062–79.
- Wyss, Anna, and Janine Dahinden. 2022. "Disentangling Entangled Mobilities: Reflections on Forms of Knowledge Production within Migration Studies." *Comparative Migration Studies* 10: 1–17.

