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From Climate Futures to Future Migration: The Groundswell Reports and Their Reception in German Media Discourse

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Abstract

Over the past decade, international organizations have sought to raise awareness about climate migration and secure its place on national political agendas. Scholars have critically examined how these organizations frame climate migration and what assumptions inform their efforts to set the agenda. Yet, little attention has been paid to the temporal logic and futurity underpinning this discourse: It treats climate migration as an anticipated threat, rather than an observable phenomenon. We address this research gap by exploring how climate migration is established as a social problem of the future and examining this process at the intersection of international expertise and national public discourse. Drawing on the sociology of imagined futures, we conceptualize the discourse on climate migration as "politics of the future," a symbolic struggle over how the future is imagined, evaluated, and rendered consequential for the present. We distinguish two key dimensions in this politics: the credibility of projected futures and their societal relevance. Empirically, the article combines a close reading of the World Bank's Groundswell reports with a qualitative analysis of their reception in the German media. The findings reveal both the potential and the pitfalls of framing climate migration as a social problem of the future: As projections are translated, contested, and misinterpreted in ways that serve divergent political agendas, climate migration becomes both a stake and an instrument in the broader politics of the future.

Keywords

climate crisis; climate mobility; imagined futures; media analysis; politics of the future

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1. Introduction

When António Guterres, Secretary-General of the United Nations, spoke of the consequences of climate change at the Security Council's open debate on sea-level rise in February 2023, he offered a stark vision of the future, saying: "We would witness a mass exodus of entire populations on a biblical scale."

Concern about the potential for climate change to increase migration is widespread among international organizations. Agencies such as the UN High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), the World Health Organization (WHO), and the World Bank have established specialized units that publish reports and seek to mobilize political action at both international and national levels. Yet, unlike other social problems these organizations address—poverty, racism, or public health—climate migration remains largely a problem of the future. Guterres' use of the conditional in this statement is telling. Although climate change already affects decisions around (im)mobility, climate migration is primarily addressed as an anticipated development, projected through scenarios, forecasts, and models, and remains a potential risk rather than an observable emergency. But how does a projected future become politically consequential in the present?

Over the past decade, the social sciences have contributed to establishing climate migration as a future problem by documenting current climate (im)mobilities, identifying key drivers, and projecting future movements (Ghosh & Orchiston, 2022). Yet we know little about how the specific temporality of climate migration—namely its reliance on projections—affects its ability to mobilize public concern. More constructivist perspectives on the futurity of climate migration, focusing on how climate migration is given meaning and framed in discourse, are rare (Baldwin et al., 2014). Yet such perspectives would seem to be warranted—not least because, despite sustained efforts by international organizations to raise the profile of climate migration, it continues to receive limited attention in national public discourse.

Our study addresses this gap by approaching climate migration as a discursive frame at the intersection of international expertise and national public discourse. Focusing on the World Bank's Groundswell reports with their projections of internal climate migration and the reception of these reports in the German media, we analyze how climate migration is constructed and contested as a future problem requiring political action.

Our analysis draws on perspectives from the sociology of imagined futures. We propose a framework that conceptualizes climate migration discourse as politics of the future: a symbolic struggle over how the future is imagined, evaluated, and made relevant in the present. This perspective highlights how imagined futures reorient attention, mobilize resources, and are therefore inherently contested.

We distinguish two analytical dimensions in this politics of the future. First, salient imagined futures must establish credibility—actors need to be convinced that projections depict plausible developments. Second, salient imagined futures must establish societal relevance—it must become clear why these developments matter on a broader social scale. Establishing (and contesting) climate migration as a recognized future problem thus requires discursive work along both dimensions.

Based on this framework, we combine an in-depth document analysis of the two Groundswell reports with a qualitative discourse analysis of 30 German media articles that traces how the media cover these reports in

a national context in which both climate change and migration have become highly politicized over the last decade. Our findings reveal the pitfalls of framing climate migration as a social problem of the future. They show how international organizations and national media employ different strategies to establish credibility and relevance, while meanings shift and become distorted across these spheres. Projections of climate migration serve different interests, political ideologies, and migration policies. Strategically invoked to advance divergent agendas, climate migration thus becomes both a stake and an instrument in the broader politics of the future.

2. The Emergence of Climate Migration as a Social Problem

The link between environmental conditions and migration is not new. Ravenstein's seminal "laws of migration" already identified migration as a consequence of "bad or oppressive laws, heavy taxation, *an unattractive climate*, uncongenial social surroundings" (1889, p. 286, emphasis added). Yet, climate change—understood as long-term temperature changes and increasing weather-related hazards, mainly attributable to anthropogenic greenhouse gas emissions since industrialization (IPCC, 2022)—is recognized as affecting mobility patterns at an accelerated pace, contributing to more severe and geographically diverse forms of movement (McLeman & Smit, 2006).

In this article, we adopt the term climate migration for the discourse we study and for the phenomenon itself, reflecting its widespread use in public debates and policy contexts, which constitute the empirical focus of our analysis. At the same time, building on critical migration studies (Scheel & Tazzioli, 2022), scholarship has increasingly moved away from climate migration in favor of concepts such as climate-induced human mobility. This shift reflects an effort to capture a broader spectrum of responses beyond migration, including displacement, planned relocation, and forms of voluntary or involuntary immobility (Black et al., 2011; Gemenne & Blocher, 2017).

Since the early 2000s, interdisciplinary research spanning geography, anthropology, political science, and data science has developed increasingly refined frameworks to capture these dynamics (De Sherbinin et al., 2022; Hoffmann et al., 2021). A key focus of this research has been identifying and theorizing the multiple drivers of migration. Building on the influential model proposed by Black et al. (2011), recent work has examined how climatic factors shape mobility, including through impacts on livelihoods, income stability, food security, health, water availability, and broader ecological systems (Cattaneo et al., 2019; Gemenne & Blocher, 2017; Moore & Wesselbaum, 2023). Scholars have also argued that climate change may increase the likelihood of geopolitical conflict, indirectly influencing mobility patterns (Abel et al., 2019).

Despite these advances, establishing direct causal links between climate change and human mobility remains challenging. Migration studies emphasize the inherently multifactorial and context-dependent nature of migration (Bivand Erdal et al., 2024; Carling & Schewel, 2018). Decisions about whether, when, where, and how to move depend on a complex interplay of social, economic, demographic, cultural, and political factors (Zickgraf, 2021). Scholars have argued that research should move beyond a narrow focus on environmental hazards and instead examine the decision-making processes that shape climate-related mobility (Sakdapolrak et al., 2024; Van Praag, 2021; Wiegel et al., 2019).

As a result of these complexities projections of future climate-related mobility remain both limited and highly uncertain. Such projections rely on different baseline assumptions about technological change, adaptive capacity, the economic resources available to potential migrants, migration regimes, and asylum systems (Schutte et al., 2021).

Critical scholarship on climate migration has highlighted the absence of a common methodological approach and criticized influential projections for being based on outdated models (Gemenne, 2011). Scholars such as Carol Farbotko warn against inflated, scientifically unsubstantiated projections depicting a "specter of mass climate migration" (Farbotko, 2022), which can have unintended political consequences and may even be distorted or instrumentalized in political, media, and scientific discourses (see also Boas et al., 2019).

Although research on climate mobility is rapidly expanding, Baldwin (2022) argues that this is driven less by migration scholarship itself than by the sustained agenda-setting efforts of international organizations (see also Sim-Sarka, 2025).

The IPCC's 1990 First Assessment Report, which warned of "millions of people displaced by shoreline erosion, coastal flooding, and severe drought," is often identified as an important starting point for the emergence of climate migration as a policy issue (Hall, 2023). Building on this early framing, the IOM played a pivotal role in bringing the issue onto the international agenda during the 2000s. Under Director General Brunson McKinley, it actively promoted climate migration through conferences, reports, and sustained engagement with supportive governments—and positioned itself as a central authority in this emerging field. Notably, the IOM framed climate migration not primarily as a threat, but as a potentially legitimate adaptation strategy (Hall, 2023; Schriever, 2025). The IOM was also instrumental in establishing the Climate Change, Environment and Migration Alliance (CCEMA), which sought to consolidate a transnational network of actors engaged in the issue. From the 2010s, climate migration gained prominence beyond migration-focused organizations, entering broader climate policy debates. The 2010 Cancun Adaptation Framework marked the first formal recognition of human mobility in international climate policy, while the 2015 Paris Agreement further acknowledged the risks of climate-related displacement.

The World Bank, which is the focus of this study, is a comparatively late entrant to this field, its engagement beginning in the late 2010s. Yet, with the publication of its Groundswell report Part 1 (Rigaud et al., 2018), it quickly established itself as a central actor by providing model-based projections of future climate migration. This first report modeled internal migration in Latin America, Sub-Saharan Africa, and South Asia driven by factors such as water stress, declining agricultural productivity, and sea-level rise (Rigaud et al., 2018). Its successor, Groundswell Part 2 (Clement et al., 2021), extended this modeling approach to additional regions, including East Asia and the Pacific, North Africa, Eastern Europe, and Central Asia.

As the work of Hall (2023) and Schriever (2025) shows, scholars have critically engaged with the prominent role of international organizations in shaping the agenda around climate mobility. Particularly, critical climate migration research (Sim-Sarka, 2025) has examined the implications of dominant climate migration framings within the field. Scholars have problematized the passivity implied in the concept of the "climate refugee" and its associated racialized sentiments (Malkki, 1996), as well as the shift toward "climate migrant" and the IOM's framing of "migration as adaptation," which obscures responsibilities for climate change (Baldwin et al., 2014; Bettini et al., 2017; Felli, 2013).

Our study contributes to these critical debates on climate migration, adopting a distinct analytical perspective centered on the temporal dimensions of these discourses and on how they construct and contest the future.

3. Climate Migration as a Politics of the Future

How, then, can we understand these interpretative struggles around climate migration? We argue that the sociology of imagined futures provides a useful framework for analyzing how climate migration is constructed as a social problem of the future and constituted as a problem requiring political intervention.

The sociology of imagined futures examines how societies make sense of the future and how their perceptions shape social reality (Suckert, 2022). While sociology has traditionally highlighted the enduring influence of the past, through norms, institutions, and networks, this perspective foregrounds the future. Reflecting broader constructivist and cultural turns in sociology, the field has expanded since the 1990s across diverse subdisciplines, from economic sociology to gender studies (Beckert & Suckert, 2021). Different types of imagined futures, including expectations, aspirations, fears, and forecasts, are understood as central to the constitution of the social world.

Imagined futures have been taken up in scholarship on both climate change and migration research. In climate change studies, for instance, scholars have examined how societies understand future impacts of climate change through scenario modelling, visualizations, and metaphors—and how such projections shape debates over appropriate responses (e.g., Adloff & Neckel, 2019; Elliott, 2021; Marquardt & Nasiritousi, 2022). Migration studies, for its part, have often explored the extent to which migrants' aspirations influence their identities and motivation to move (e.g., Gonzales, 2011; Kandel & Massey, 2002). How imagined futures can also shape receiving societies' responses to migration has, for now, received less attention (e.g., Mica et al., 2021; Yilmaz, 2012). Yet, as this thematic issue argues, whether migration is perceived as an opportunity or a threat and whether it can be politically mobilized depends largely on the imaginaries associated with migration.

The sociology of imagined futures provides a useful point of departure for studying climate migration. It allows us to build on existing research on the temporal dimensions of climate change and migration, while shifting the focus toward the processes through which climate migration is politicized and constructed as a future concern.

A central tenet of the sociology of imagined futures is that the (imagined) future shapes the present. Imagined futures motivate action by defining desirable outcomes; they enable coordination along shared expectations; they serve to legitimize or contest decisions by anticipating consequences; and they foster collective identities through shared visions.

Yet imagined futures structure not only expectations but also redistribute resources. Those at the center of a widely shared vision of the future may gain privileged access to social, political, and particularly economic resources. Control over dominant visions of the future thus constitutes a form of power.

Precisely because imagined futures are instruments of power, they are inherently contested (Brown et al., 2000). Actors seek to establish, modify, or challenge future imaginaries: They construct certain developments as opportunities or threats, present their own interests as aligned with desirable futures, and seek to legitimize

or delegitimize specific trajectories. This ongoing contestation can be conceptualized as the "politics of the future" (for "politics of expectations," see also Beckert, 2016). A wide range of actors—corporations, NGOs, unions, think tanks, political parties, forecasting institutions, the media, and scientific communities—actively engage in politics of the future, often investing substantial resources in doing so.

Climate migration discourse can be understood as a case of politics of the future. In seeking to establish climate migration as a pressing issue, actors such as the IOM and the World Bank shape particular visions of how the future may unfold. International organizations invest considerable resources to make their projections credible—while others devote time and money to challenging or relativizing them. Such efforts, while perhaps motivated by moral concerns, also serve to mobilize resources and redistribute authority. Narratives of future climate migration are therefore inherently political: enhancing the legitimacy of specific actors, facilitating access to funding, or advancing specific agendas. Schriever (2025), for instance, shows how the efforts to reframe migration as a form of climate adaptation were substantially intertwined with the interests of the IOM.

But what does it take to succeed in the politics of the future? How is an issue established as a veritable social problem of the future—and how can it be contested? In order to study how the Groundswell reports and their subsequent reception in German media establish climate migration as a discursive frame, we propose a framework that analytically distinguishes two dimensions: the credibility and the societal relevance of an imagined future. While these dimensions have rarely been the explicit focus of the sociology of imagined (Beckert, 2024), this perspective nevertheless provides several helpful insights, based on which we identify recurring strategies for each dimension.

On the dimension of credibility, the central question is whether a projected future appears plausible. A first strategy consists in drawing on the authority of established institutions and the symbolic capital of experts and scientific communities (Tavory & Wagner-Pacifici, 2022)—references to renowned international institutions, as well as extensive lists of academic sources and expert quotes. A second strategy is to mobilize devices such as scenarios, forecasts, or models that visualize or quantify possible developments (De Ville & Siles-Brügge, 2015). The UNDP's Human Climate Horizons platform is an impressive example: Its interactive virtual globe allows users to track how rising temperatures will (supposedly) impact sea levels, weather hazards, and food production and (supposedly) render large parts of planet Earth unlivable. However, the sociology of imagined futures has repeatedly shown that credibility depends less on the predictive accuracy of such devices than on their narrative coherence: Devices must be embedded in a convincing story (Beckert, 2016, pp. 217–240). Narratives of causality, around how the future is a result of the present, are crucial to making imagined futures credible. However, as Tavory and Wagner-Pacifici (2022) show, different social spheres are governed by different norms of credibility. In academia, for instance, acknowledging uncertainty, accounting for the complexity of a model and its presumed variance is a marker of credibility. In other areas, such as activism, certainty and simple, straightforward causalities are more likely to invoke credibility.

For projections of climate migration, establishing credibility is critical. As discussed above, climate change, migration patterns, and the complex mechanisms connecting them are notoriously difficult if not impossible to predict. Estimates diverge substantially, and numerical representations of climate mobility have been contested (Schewel et al., 2024).

On the dimension of relevance, actors must give projections normative meaning. Constructing an issue as a veritable social problem of the future requires a narrative of why it matters on a broader social scale. The first important strategy is to appeal to rational calculation and (seemingly) measurable costs and risks, quantified through numbers and estimates. The second strategy is to show who will be affected by a projected development by describing affected groups, mobilizing morality and affect, and appealing to values, identities, or emotions such as fear or empathy. Andrew Baldwin's findings that climate mobility is increasingly discursively linked to security concerns (Baldwin et al., 2014) while the figure of the climate migrant is racialized (Baldwin, 2013, 2022) surely relate to this strategy of portraying victims. Finally, relevance can be derived from past experience. References to (supposedly) problematic situations (e.g., previous migration crises) are projected onto the future.

Establishing the relevance of climate migration is challenging because it requires presenting future developments as socially threatening. This is further complicated by the fact that climate change and migration have been highly politicized in the current political debates, albeit in opposing directions. Actors who view climate change as an urgent threat are often reluctant to problematize migration, while those who frame migration as a problem often downplay climate change. The resulting discourse is shaped by conflicting perceptions of what matters, making it difficult to construct narratives that resonate broadly. It is therefore instructive to examine how climate migration discourse navigates these tensions.

4. Data and Methods

Various organizations shape how future climate mobility is imagined. Yet the Groundswell reports, published in 2018 and 2021, focus explicitly on such futures. With scenarios and projections at their core, they are particularly suitable for studying how imagined futures of climate migration are established and disseminated.

First, both authors closely read the reports, focusing on the key findings and arguments, as well as on how projections were presented and legitimized. The analytical framework of politics of the future—and particularly the dimensions of credibility and relevance—served as a heuristic. Our insights from this close reading were recorded in memos and critically discussed between us.

Second, a qualitative media analysis explored how the reports' findings were translated and transformed within national media discourse on climate migration. Germany provides an instructive case: while the country is (historically and currently) a major emitter of CO2, it prides itself on comparatively ambitious climate mitigation efforts, which feature prominently in national debates. At the same time, migration has become a contested topic over the past decade. Germany's role in the 2015 so-called "refugee crisis" and Angela Merkel's famous declaration—*Wir schaffen das* ("We can do this")—have given way to an extremely polarized discourse, fueled by the rise of the far-right. While Germany participates in international discussions on climate migration, its financial commitments remain relatively limited compared to the size of its economy.

We selected six German news outlets based on their circulation and agenda-setting influence. Three of them are considered conservative (*Bild*, *Die Welt*, *Handelsblatt*) and three are more progressive (*Süddeutsche Zeitung*, *Der Spiegel*, *taz*). Using the Nexis database, we retrieved articles from these outlets' print, online, and weekend editions that included search terms related to the Groundswell reports and were published between the release of the first Groundswell report in 2018 and 2025. Out of the Initial search results (47), we manually identified a final sample of 30 articles that contained references to the reports.

This relatively small number already suggests that climate migration remains a marginal topic within German public discourse. Surprisingly, media coverage of the Groundswell reports is not confined to one side of the political spectrum. The sample contains an equal number of articles from left-leaning and right-leaning outlets, suggesting that the World Bank functions as an authoritative source across otherwise polarized media environments.

We analyzed the sample using qualitative content analysis supported by NVivo. An initial reading identified recurring narrative patterns and sections specifically relating to the Groundswell reports. The subsequent iterative coding process focused on these sections. Informed by the close reading, as well as the concepts of credibility and relevance, we inductively developed a hierarchical coding scheme with multiple layers of subcodes. For instance, we coded which components of the reports were highlighted (e.g., scenarios, internal vs. external migration), distinguished different types of causality (e.g., simple, complex), and coded how affected groups (e.g., migrants, receiving populations) were portrayed. The analysis was primarily conducted by one researcher. To strengthen analytical reliability and reflexivity, ambiguities arising during the successive rounds of coding were captured in memos and discussed with the second author. This approach enabled us to examine both how futures of climate migration were projected by the World Bank and then reinterpreted within national media discourse.

5. Projecting Global Futures: The Groundswell Report

When reading the 256 pages of the Groundswell report Part 1 and the 362 pages of its successor, Groundswell Part 2, one is immediately struck by their hybrid character. Both reports combine two very distinct modes of engaging with the future.

This duality is already evident in the reports' authorship, a collaboration between policy staff of the World Bank Group and academic researchers from universities and research institutes in the United States and Germany. The coexistence of these two worlds—and the different ways they engage with the future (Tavory & Wagner-Pacifici, 2022)—is evident throughout both reports.

In the press release accompanying Groundswell Part 2, the World Bank (2021) explicitly identifies its primary audience: "By deploying a scenario-based approach, the report explores potential future outcomes, which can help decision makers plan ahead." This orientation toward decision-makers is reflected in the policy-oriented, easily skimmable style of important sections: Key arguments are presented in concise paragraphs, summaries, and bullet points introduced by bold takeaway messages. Indeed, by 2026, Groundswell Part 2 had been viewed 139,312 times and downloaded 71,557 times.

That being said, the reports clearly address a second audience. Detailed descriptions of modeling techniques, extensive reference lists at the end of each chapter, and appendices containing supplementary analyses are unlikely to be accessible to nonacademic readers. These sections are written for an audience with the relevant expertise to evaluate the underlying assumptions, methods, and evidence.

This dual structure shapes both reports, which combine an introductory overview and recommendations intended for policymakers with more technical chapters in the main body and appendices directed at academic audiences. A closer look reveals how these two sections rely on distinct strategies for establishing credibility and relevance, while jointly constructing a particular imagined future of climate migration.

The academic sections are primarily concerned with establishing credibility. The extensive discussion of the underlying models performs scientific authority by presenting the reports as academic documents written by and for experts. Attention is devoted to explaining the shared socioeconomic pathways (SSPs) that structure the different scenarios and depict "plausible future worlds that underpin climate change research" (Part 1, p. x). The SSPs incorporate different emission trajectories as well as variations in economic and population growth, technological change, and the extent to which these developments occur unevenly across populations (Part 1, p. 55).

These scenarios are combined with models that project the impacts of climate change and their implications for migration. The reports detail how projections are operationalized through techniques such as gravity models (Part 1, p. 59) and exposure mapping (Part 1, p. 285). Throughout these sections, complexity itself becomes a marker of credibility. The reports repeatedly emphasize the breadth of factors incorporated into their models and the sophistication of their analyses. The future thus becomes a matter of expertise.

The reports' authors are nevertheless explicit about the limitations of their models, with several sections addressing underlying uncertainties. As the first report (p. 68) notes: "The model cannot forecast all future adaptation efforts or conflict, cultural, political, institutional, or technological changes. Discontinuities are likely to arise as a result of political events and upheavals that can heavily influence migration behavior." The credibility of projections is therefore not established through claims of predictive certainty, but through methodological transparency and the explicit acknowledgement of uncertainty.

Although the academic sections focus on credibility, they also contain subtle markers of relevance, conveyed by contextualizing the projected numbers. Most notably, both reports include detailed country cases—Ethiopia, Bangladesh, and Mexico in Part 1; Morocco, Vietnam, and the Kyrgyz Republic in Part 2. While these analyses show aggregate trends, they also illustrate the political significance of climate mobility. By providing detailed country backgrounds and discussing alternative policy responses, the case studies emphasize how climate-related mobility may compound existing development challenges and societal vulnerabilities.

The construction of credibility and relevance in the academic sections contrasts sharply with the more policy-oriented introductions, which do not merely summarize the findings but also simplify them. This difference is particularly evident at the start of Groundswell Part 1 (p. xiv), which opens with a black-and-white image of human infrastructure accompanied by the statement: "Internal climate migrants are rapidly becoming the human face of climate change. By 2050, in just three regions, climate change could force more than 143 million people to move within their countries" . The following page (p. xv) presents color portraits of individuals alongside regional projections: "Sub-Saharan Africa by 2050: 86 million internal climate migrants," "South Asia by 2050: 40 million internal climate migrants," and "Latin America by 2050: 17 million internal climate migrants."

While these figures clearly correspond to the highest-emissions scenario, this is not mentioned in the opening pages. Later, illustrative graphs introduce the three scenarios and the underlying modeling approach, but the central logic of scenario-based projections is initially absent. A similar strategy is employed in Groundswell Part 2, which opens with a map of the world, silhouettes of migrants, and the following statement: "By 2050—without concrete climate and development action—climate change could lead more than 216 million people in 6 regions to migrate within their own countries" (p. xv). The precise figure of 216 million is highlighted in bold,

while the conditional nature of the projection is only conveyed indirectly with a reference to the implications of mitigation policies. The underlying model and alternative scenarios remain largely in the background.

Uncertainty is similarly downplayed. In the opening pages of Groundswell Part 1, the regional projections are presented as matter-of-fact statements rather than scenario-dependent estimates. More generally, both reports' introductions communicate a strong sense of certainty. In Groundswell Part 1 (p. xx), uncertainty is acknowledged only at the very end of the overview section: "The scenario-based results should be seen as a plausible range of outcomes rather than precise forecasts." In these introductory sections, credibility is thus established less through transparency about uncertainty than through the authority of large and precise numbers.

These examples similarly illustrate how relevance is established in the introductory sections. The portraits of individual migrants are accompanied by names, ages, countries of origin, and personal testimonies. Wolde Danse from Ethiopia, for instance, is quoted as saying:

> In the planting season, it wouldn't rain, but when we didn't want it, it would rain. This created drought and because of this I didn't want to suffer anymore. I wanted to try my luck in the city, so I came to Hawassa. (Part 1, p. xv)

Such accounts transform an abstract projection into a tangible human experience, making the projected impacts visible in terms of the people affected.

Throughout both reports—and especially in their opening sections—photographs depict potential climate migrants in everyday settings, often in rural environments. Remarkably, these images show people who are not suffering, but smiling, interacting with others, or working. In line with the World Bank's framing, migrants thus appear as active individuals rather than passive victims. At the same time, this imagery promotes a narrow idea of climate migrants, who are almost exclusively depicted performing physical labor in working-class occupations. In Groundswell Part 1, children and young people are particularly prominent.

Importantly, these personalized narratives are not directed primarily at migrants themselves. Rather, the experiences of those affected serve as a moral imperative for the reports' intended audience: policymakers. By translating projections into relatable human stories, the reports seek to create a sense of urgency and political action.

Finally, despite their differences, the academic and policy-oriented sections share a common framing of climate migration and the future.

First, both reports consistently emphasize their exclusive focus on internal rather than international migration. This is already reflected in their subheadings—"Preparing for internal climate migration" and "Acting on internal climate migration"—and reiterated throughout the reports. Particularly in the introductory sections, authors repeatedly stress that projections refer to climate mobility within national borders. Second, the reports deliberately avoid portraying migration as inherently problematic and instead emphasize the agency of those involved. As Groundswell Part 1 (p. 181) argues: "Internal climate migration will be a reality, but it does not have to become a crisis, if concerted and targeted action is taken now to better predict and

prepare for its likely effects and to harness its potential as an adaptation strategy." The presentation of multiple scenarios and extensive policy recommendations reinforce the message that future outcomes are contingent rather than predetermined and that migration can provide opportunities. Third, despite some oversimplification in the policy-oriented sections, the reports consistently portray climate migration decisions as complex processes shaped by environmental change, individual agency, and social and political context.

How these core perspectives and strategies of the report are taken up—or transformed—in the reports' reception within German media discourse is examined in the next section

6. Narrating the Future to the Nation: German Media Discourse

While most media coverage treats the reports as authoritative, a few articles—in outlets on both sides of the political spectrum—engage critically with the climate mobility projections. They describe the forecasts as "characterized by considerable arbitrariness" (*Bild*), "uncertain" (*taz*), or simply "dubious" (*Welt*). Right-leaning outlets occasionally go further by casting doubt not only on the projections but also on the existence of climate migration as a phenomenon. The notoriously populist *Bild*, for example, provocatively asks: "Is there such a thing as a climate refugee?" Elsewhere, it refers to them as "so-called 'climate refugees,' " with an emphasis on the quotation marks. Despite these critical voices, most coverage (and even some articles in *Bild*) do construct climate migration as a future social problem that requires political action in the present.

A first key observation is how selectively the Groundswell reports are used. Across outlets, references focus almost exclusively on what is perceived as the central takeaway: the projected number of climate migrants by 2050. With one single exception (*Welt*), every article mentions either the approximately 140 million people projected in the first report or, in later coverage, the revised estimate of 200 million people. These figures feature prominently in headlines or subheadings, putting them at the center of the debate.

The context surrounding these numbers is nevertheless largely absent. Very few articles—primarily those critical of climate migration projections—note that these figures correspond to a "worst-case" scenario. Just one article reports the full range of possible estimates "between 44 and 216 million people" (*Handelsblatt*), and only two explicitly mention different scenarios (*Handelsblatt*, *Welt*). Most articles present the numbers using terms such as "projected," "expected," "calculated," or "estimated," without further qualification. As a result, what the reports frame as a possible scenario is translated into a certain, determinate future.

Another striking finding is the systematic misrepresentation of the type of migration these projections describe. As outlined, the Groundswell reports focus explicitly on internal climate mobility within countries. Most articles, however, omit this distinction and implicitly frame the phenomenon as cross-border migration. This is facilitated by the German term *Heimat*, which can refer both to one's local home and one's homeland. Many articles state that hundreds of millions of people will "lose" or "leave behind" their *Heimat*. While not factually incorrect, without further specification, such wording can subtly alter the interpretation. Similarly, formulations such as "millions of migrants would get underway" (*Bild*) or a "stream of refugees" (*Handelsblatt*) leave unclear whether the mobility they refer to is internal or international.

Moreover, some articles actively relativize the reports' focus on internal migration: "Although the new World Bank study has only examined regional displacement, it is merely a matter of time before climate refugees, in search of a better life, also cross borders and seas" (*Handelsblatt*). And at times this (mis)interpretation is even evoked explicitly. In 2019, *Bild* asked: "Will millions of climate refugees soon come to Europe?" This was a headline that *taz* criticized in a dedicated article.

Across outlets, references to the Groundswell reports are used to convey credibility and establish the idea that climate migration constitutes a likely future. The World Bank is positioned as a trustworthy epistemic authority whose projections can be relied upon. However, it does not stand alone in this role: other organizations such as the IOM, the IPCC, or Oxfam, as well as prominent testimonials, are regularly cited. Interestingly, right-leaning outlets that are skeptical of the projections sometimes place the World Bank alongside actors that are considered to be politically biased, such as Greenpeace, the Green Party, or climate activist Greta Thunberg, presumably to undermine the institutional authority of the reports.

The figures 140 and 200 million themselves function as powerful rhetorical devices for establishing credibility. Their apparent precision signals scientific authority. Yet strikingly, the models that generate these projections—and the complexity they are designed to capture, including multiple drivers and layers of migration decisions—are almost entirely absent from media coverage. Multidimensional accounts of climate migration appear almost exclusively in articles that question the projections and their validity. Rather than conveying this complexity, the narratives analyzed rely on oversimplified causalities. Migration is portrayed as a direct and almost self-evident response to intensifying climate impacts: "Ever larger proportion of the global population are being forced to leave their increasingly uninhabitable homes [*Heimat*]" (*taz*).

A final strategy for establishing credibility is to link future projections to empirical developments in the present. Many articles complement the World Bank's long-term estimates with references to ongoing climate-related displacement, either through anecdotal accounts of individual cases or through additional quantitative data. Figures provided by the Internal Displacement Monitoring Centre on current displacement are frequently cited alongside the Groundswell projections. Such accounts combine the authority of expert institutions, the persuasive force of large numbers, and the plausibility of lived experience to turn climate migration into a credible future.

Numerous articles use the World Bank's headline figures not only to establish credibility, but also to invoke relevance. The sheer magnitude of these numbers dramatizes the potential scale and societal significance of climate migration. And yet, these figures are embedded in two distinct narrative frameworks that define why—and, crucially, for whom—future climate migration will be an issue.

The first narrative centers on climate migrants, portraying them as the primary subjects and victims of displacement. These accounts often personalize abstract figures by focusing on the individuals behind them, like "Ione from Kiribati," who is featured by *Spiegel* in her small fishing boat. Climate migration is thus depicted in emotionally charged and empathetic terms, emphasizing suffering, desperation, and the experience of loss.

Despite their empathetic framing, representations of climate migrants follow a distinctive pattern. Across the sample, migrants are depicted as poor populations from the Global South, often with particular emphasis

on the "exotic" nature of their places of origin. This selectivity is also evident in the way the three regions analyzed in the first Groundswell report (Latin America, South Asia, and Sub-Saharan Africa) are represented, with every article foregrounding Africa, either by mentioning it first or by omitting the other two regions. *Bild*, for instance, summarizes the report as a projection of "around 200 million climate refugees, particularly from states 'South of the Sahara.'" The sole reference to Africa and the quotation marks reinforce the notion of a diffuse, generalized origin, a distant elsewhere. Such framings risk reinforcing racialized imaginaries and existing migration anxieties (Baldwin, 2013).

In addition to climate migrants, most articles also construct a second group of affected actors: receiving societies in Germany and Europe. Climate migration is thus framed as relevant not only to those who are displaced, but also to the societies expected to receive them.

Once again, *Bild* offers the most explicit examples, asserting that "there is still a lot coming our way." A 2021 article further reinforces this association visually with a photograph of refugee accommodation in eastern Germany. Similar tendencies can also be found beyond right-leaning outlets. Even more sympathetic media translate climate migration into domestic concerns. In *taz*, for example, one expert argues in favor of more ambitious climate mitigation and warns, with respect to the report's figures: "Otherwise, the problem will end up on your doorstep."

Relevance is further amplified by linking future climate migration to German society's experience of past migration. References to the "refugee crisis" of 2015 and the Western Balkans route, as well as the reception of Ukrainian refugees, are common across outlets. An article in *Handelsblatt*, for instance, cites conservative politician Armin Laschet's warning that "2015 must not be repeated" and that major climate hotspots lie "right on our doorstep." Such references anchor future scenarios in familiar experiences (and anxieties), making them more tangible and politically salient.

To be clear, it appears evident that national media make climate migration relevant by linking global developments to national contexts. Such translations are a routine feature of mediated communication and not problematic in themselves. Nevertheless, the extent to which German and European societies are portrayed as central victims is striking—often rivaling or even exceeding the attention given to those directly affected by displacement.

As few as two articles (*Spiegel*, *taz*) engage with the policy implications outlined in the Groundswell reports. Otherwise, the reports' findings are appropriated to support divergent political agendas. Some articles invoke them to argue for more permissive migration policies, such as the introduction of "climate passports." Others, particularly on the political right, dismiss such ideas as "crazy" (*Welt*) and instead argue for a more restrictive migration policy. A few contributions adopt a developmentalist perspective, calling for increased support for climate adaptation in the Global South. Most articles, however, do not treat climate migration as an object of analysis in its own right, but deploy it to argue for climate mitigation. Climate migration is folded into a broader narrative of the adverse consequences of global warming and framed primarily in terms of the threat it might pose to European societies—a reasoning that stands in stark contrast to the narrative advanced in the Groundswell reports.

7. Conclusion

This article started from the observation that, unlike many other social problems addressed by international organizations, climate migration is primarily considered as a future issue. We therefore adopted a sociology of imagined futures perspective and conceptualized the discourse on climate migration as a case of politics of the future, a symbolic struggle over how the future is imagined, evaluated, and rendered consequential for the present. Focusing on the dimensions of credibility and relevance of imagined futures, our analysis of the World Bank's Groundswell reports and their reception in German media revealed how this politics of the future operates across both international and national arenas.

First, we observed distinct strategies for portraying climate migration futures as credible. The reports' academic sections established credibility through methodological sophistication, complex causal models, and explicit acknowledgment of uncertainty. By contrast, the policy-oriented sections and the media coverage in particular relied on simple causal narratives of climate migration and a strong sense of certainty. These findings also qualify existing calls to foreground uncertainty in migration projections (van der Bles et al., 2020): While a marker for credibility in expert settings, uncertainty was largely marginalized in public discourse and even instrumentalized to generate skepticism.

Our analysis also revealed important differences in how relevance is established. The Groundswell reports primarily establish relevance through the experiences of those directly affected by climate mobility and by framing political intervention as a moral obligation for policymakers. In the German media, however, this focus often shifted toward receiving societies, with climate migration portrayed not only as a problem for those who move, but also, and especially, for those who receive migrants. While this may be attributed to the politicized collective memory of the German "migration crisis" of 2015, research on climate migration discourse in Flanders points to similar tendencies (Bonneux & Van Praag, 2024).

Finally, the study demonstrates how imagined futures are transformed as they move from international organizations into national public discourse. Central elements of the Groundswell framing—including the emphasis on internal migration, the complexity of migration decisions, and the understanding of migration as an adaptation strategy—are often lost or reinterpreted. Rather, climate migration becomes a threat that is linked to various, opposing agendas within the highly polarized German debate, serving as an argument for both more ambitious climate mitigation and more restrictive migration policies.

The scope of our study is limited: We focus on a single international organization, the World Bank, and its scenario models. Moreover, we cover the media discourse in a single national context, Germany. We therefore cannot account for the impact of diverse communication strategies, national policy contexts, or media systems. While our findings cannot be generalized, they clearly indicate that projections by international organizations do not simply become authoritative visions of what the future may hold. Rather, such estimates become part of a broader politics of the future. In line with concerns raised in critical climate migration scholarship (Farbotko, 2022), our study suggests that projections of future climate migration should be approached with caution. This is a reminder that such numbers are not merely predictive devices, but political resources that can be leveraged in the pursuit of competing and sometimes unintended agendas.

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Conflict of Interests

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References

Abel, G. J., Brottrager, M., Crespo Cuaresma, J., & Muttarak, R. (2019). Climate, conflict and forced migration. *Global Environmental Change*, *54*, 239–249.

Adloff, F., & Neckel, S. (2019). Futures of sustainability as modernization, transformation, and control: A conceptual framework. *Sustainability Science*, *14*(4), 1015–1025.

Baldwin, A. (2013). Racialisation and the figure of the climate-change migrant. *Environment and Planning A: Economy and Space*, *45*(6), 1474–1490.

Baldwin, A. (2022). *The other of climate change: Racial futurism, migration, humanism*. Bloomsbury Publishing PLC.

Baldwin, A., Methmann, C., & Rothe, D. (2014). Securitizing 'climate refugees': The futurology of climate-induced migration. *Critical Studies on Security*, *2*(2), 121–130.

Beckert, J. (2016). *Imagined futures: Fictional expectations and capitalist dynamics*. Harvard University Press.

Beckert, J. (2024). *What makes an imagined future credible?* (Working Paper No. 24/5). Max Planck Institute for the Study of Societies. https://www.econstor.eu/handle/10419/300664

Beckert, J., & Suckert, L. (2021). The future as a social fact. The analysis of perceptions of the future in sociology. *Poetics*, *84*, Article 101499.

Bettini, G., Nash, S. L., & Gioli, G. (2017). One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration. *The Geographical Journal*, *183*(4), 348–358.

Bivand Erdal, M., de Valk, H., Wahba, J., & Bijak, J. (2024). Migration drivers across time and space: Selected examples. In J. Bijak (Eds), *From uncertainty to policy: A guide to migration scenarios* (pp. 39–53). Elgar Publishing.

Black, R., Adger, W. N., Arnell, N. W., Dercon, S., Geddes, A., & Thomas, D. (2011). The effect of environmental change on human migration. *Global Environmental Change, Migration and Global Environmental Change—Review of Drivers of Migration*, *21*, S3–S11.

Boas, I., Farbotko, C., Adams, H., Sterly, H., Bush, S., van der Geest, K., Wiegel, H., Ashraf, H., Baldwin, A., Bettini, G., Blondin, S., de Bruijn, M., Durand-Delacre, D., Fröhlich, C., Gioli, G., Guaita, L., Hut, E., X. Jarawura, F., Lamers, M., . . . Hulme, M. (2019). Climate migration myths. *Nature Climate Change*, *9*, 901–903.

Bonneux, I., & Van Praag, L. (2024). 'Millions of climate refugees are coming!' A critical media discourse analysis on climate change-induced migrants in Flemish press. *Environmental Sociology*, *10*(4), 486–498.

Brown, N., Rappert, B., & Webster, A. (2000). *Contested futures: A sociology of prospective techno-science*. Ashgate.

Carling, J., & Schewel, K. (2018). Revisiting aspiration and ability in international migration. *Journal of Ethnic and Migration Studies*, *44*(6), 945–963.

Cattaneo, C., Beine, M., Fröhlich, C. J., Kniveton, D., Martinez-Zarzos, I., Mastrorillo, M., Millock, K., Piguet, E., & Schraven, B. (2019). Human MIGRATION IN THE ERA OF CLIMATE CHANGE. *Review of Environmental Economics and Policy*, *13*(2), 189–206.

Clement, V., Rigaud, K. K., De Sherbinin, A., Bryan, J., & Adamo, S. (2021). *Groundswell Part 2: Acting on internal climate migration*. World Bank Group.

De Sherbinin, A., Grace, K., McDermid, S., van der Geest, K., Puma, M. J., & Bell, A. (2022). Migration theory in climate mobility research. *Frontiers in Climate*, *4*, Article 882343.

De Ville, F., & Siles-Brügge, G. (2015). The transatlantic trade and investment partnership and the role of computable general equilibrium modelling: An exercise in 'managing fictional expectations.' *New Political Economy*, *20*(5), 653–678.

Elliott, R. (2021). Insurance and the temporality of climate ethics: Accounting for climate change in US flood insurance. *Economy and Society*, *50*(2), 173–195.

Farbotko, C. (2022). The specter of mass climate migration across international borders: Dismantling an unscientific expectation. *One Earth*, *5*(8), 841–844.

Felli, R. (2013). Managing climate insecurity by ensuring continuous capital accumulation: 'Climate refugees' and 'climate migrants.' *New Political Economy*, *18*(3), 337–363.

Gemenne, F. (2011). Why the numbers don't add up: a review of estimates and predictions of people displaced by environmental changes. *Global Environmental Change*, *21*, 41–49.

Gemenne, F., & Blocher, J. (2017). How can migration serve adaptation to climate change? Challenges to fleshing out a policy ideal. *Geographical Journal*, *183*(4), 336–347.

Ghosh, R. C., & Orchiston, C. (2022). A systematic review of climate migration research: Gaps in existing literature. *SN Social Sciences*, *2*(5), Article 47.

Gonzales, R. G. (2011). Learning to be illegal: Undocumented youth and shifting legal contexts in the transition to adulthood. *American Sociological Review*, *76*(4), 602–619.

Hall, N. (2023). How IOM reshaped its obligations on climate-related migration. In A. Sherwood, C. Costello, & M. Bradley (Eds.), *IOM unbound? Obligations and accountability of the international organization for migration in an era of expansion* (pp. 213–234). Cambridge University Press.

Hoffmann, R., Šedová, B., & Vinke, K. (2021). Improving the evidence base: A methodological review of the quantitative climate migration literature. *Global Environmental Change*, *71*(7), Article 102367.

IPCC. (2022). *Climate change 2022: Impacts, adaptation, and vulnerability*. https://www.ipcc.ch/report/ar6/wg2

Kandel, W., & Massey, D. S. (2002). The culture of Mexican migration: A theoretical and empirical analysis. *Social Forces*, *80*(3), 981–1004.

Malkki, L. H. (1996). Speechless emissaries: Refugees, humanitarianism, and dehistoricization. *Cultural Anthropology*, *11*(3), 377–404.

Marquardt, J., & Nasiritousi, N. (2022). Imaginary lock-ins in climate change politics: The challenge to envision a fossil-free future. *Environmental Politics*, *31*(4), 621–642.

McLeman, R., & Smit, B. (2006). Migration as an adaptation to climate change. *Climatic Change*, *76*(1/2), 31–53.

Mica, A., Horolets, A., Pawlak, M., & Kubicki, P. (2021). *Ignorance and change: Anticipatory knowledge and the European refugee crisis*. Routledge.

Moore, M., & Wesselbaum, D. (2023). Climatic factors as drivers of migration: A review. *Environment, Development and Sustainability*, *25*(4), 2955–2975.

Ravenstein, E. G. (1889). The laws of migration. *Journal of the Royal Statistical Society*, *52*(2), 241–305.

Rigaud, K., De Sherbinin, A., Jones, B., Clement, V., Ober, K., & Schewe, J. (2018). *Groundswell—Preparing for internal climate migration*. World Bank Group.

Sakdapolrak, P., Borderon, M., & Sterly, H. (2024). The limits of migration as adaptation. A conceptual approach towards the role of immobility, disconnectedness and simultaneous exposure in translocal livelihoods systems. *Climate and Development*, *16*(2), 87–96.

Scheel, S., & Tazzioli, M. (2022). Who is a migrant? Abandoning the nation-state point of view in the study of migration. *Migration Politics*, *1*(1), Article 002.

Schewel, K., Dickerson, S., Madson, B., & Nagle Alverio, G. (2024). How well can we predict climate migration? A review of forecasting models. *Frontiers in Climate*, *5*, Article 1189125.

Schriever, S. (2025). Framing migration as adaptation: IOM's aspirations to manage climate migration. *Geopolitics*, *30*(4), 1581–1609.

Schutte, S., Vestby, J., Carling, J., & Buhaug, H. (2021). Climatic conditions are weak predictors of asylum migration. *Nature Communications*, *12*(1), Article 2067.

Sim-Sarka, K. (2025). Contesting crisis narratives amidst climatic breakdown: Climate change, mobility, and state-centric approaches to migration. *Frontiers in Sociology*, *9*, Article 1411683.

Suckert, L. (2022). Back to the future. Sociological perspectives on expectations, aspirations and imagined futures. *European Journal of Sociology/Archives Européennes de Sociologie*, *63*(3), 393–428.

Tavory, I., & Wagner-Pacifici, R. (2022). Climate change as an event. *Poetics, Toward a Cultural Sociology of Disaster*, *93*, Article 101600.

van der Bles, M., van der Linden, S., Freeman, A., & Spiegelhalter, D. (2020). The effects of communicating uncertainty on public trust in facts and numbers. *PNAS*, *117*(14), 7672–7683.

Van Praag, L. (2021). Can I move or can I stay? Applying a life course perspective on immobility when facing gradual environmental changes in Morocco. *Climate Risk Management*, *31*, Article 100274.

Wiegel, H., Boas, I., & Warner, J. (2019). A mobilities perspective on migration in the context of environmental change. *Wiley Interdisciplinary Reviews: Climate Change*, *10*(6), 1–9.

World Bank. (2021, September 13). *Climate change could force 216 million people to migrate within their own countries by 2050* [Press Release]. https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050

Yilmaz, F. (2012). Right-wing hegemony and immigration: How the populist far-right achieved hegemony through the immigration debate in Europe. *Current Sociology*, *60*(3), 368–381.

Zickgraf, C. (2021). Climate change, slow onset events and human mobility: Reviewing the evidence. *Current Opinion in Environmental Sustainability*, *50*, 21–30.

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