

Mathias Albert, Heidi Tworek, Tobias Werron (eds.)

WORLDMAKING PROJECTS AND THE INFRA- STRUCTURAL NEXUS

An Interdisciplinary Exploration

[transcript] PoliticalScience

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Worldmaking Projects and the Infrastructural Nexus

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1 Introduction

Mathias Albert, Heidi Tworek, Tobias Werron

This book seeks to introduce a fresh perspective on the dynamics underlying the transformations of world politics. We initially developed this perspective through four months of interdisciplinary dialogue at the Centre for Interdisciplinary Research (Zentrum für interdisziplinäre Forschung, ZiF) at Bielefeld University, Germany, in summer 2024. The group of international relations scholars (Mathias Albert, Christian Bueger, Heikki Patomäki), historians (Diana Lemberg, Heidi Tworek), and sociologists (Bettina Mahler, Ralf Rapior, Tobias Werron) discussed and debated how best to understand changes in world politics in the nineteenth and twentieth centuries. In so doing, we found it most productive to approach the topic with a new term and concept: worldmaking projects (WMPs).

In this short introduction, we explain briefly what observations and processes led us to the idea of worldmaking projects before providing an overview of the chapters in this volume. We hope that the fruits of this interdisciplinary exploration will be the start of a conversation with a broader range of scholars about both how to foster productive interdisciplinarity and how to build upon our conceptual framework.

While much social science scholarship focuses on the concepts of order and ordering, we suggest that it may also be productive to use *worldmaking projects* (WMPs) as a heuristic to explore programs and practices that seek to advance specific forms of order in world politics. To make our exploration more manageable and concrete, we focus on how such worldmaking projects rely on communications infrastructures. We chose communications infrastructures because they are all too often

neglected in discussions of world order, although they are crucial to the conception, creation, and maintenance of global relations. Indeed, focusing on communications infrastructures opens up the possibility of rethinking the history of global political orders: It encourages us to reconsider the relationship between idealistic projects for shaping the world and the actual political organization of world politics, and to ask how both have been influenced by changes in communications infrastructures. Historically, this draws our attention to a period that began in the mid-nineteenth century with the introduction of numerous new communication technologies and continues to this day.

In order to pursue this idea consistently and fully exploit the potential of our interdisciplinary cooperation, we do not rely on or advance any particular theory. Rather, this book draws on a wider range of theories and *theorizes* in constant interplay with empirical foci – but it does not build ‘a’ theory. This understanding reflects one of the three initial observations which inspired us to undertake the intellectual journey documented here.

The *first observation* was a lack of interdisciplinary engagement between disciplines interested in similar global problems. There is little interaction between different theoretical approaches in the discipline of International Relations (IR) to world politics. There is even less interaction between IR and other disciplines with considerable scholarship on world politics, namely History and Sociology. There are vanishingly few, if any, conversations between historians, sociologists, and IR scholars on how to study similar phenomena across disciplinary and theoretical boundaries.

The discussions that led to the concept of WMPs thus included scholars from History, Sociology, and IR who approached communications infrastructures and world politics with very different theoretical and intellectual approaches. While this project only encompassed a particular subset of the diverse approaches and scholarly trajectories within these three disciplines, it was a first attempt to bring them together. As we developed and discussed ideas around WMPs, we also tried to be reflexive about the many perspectives missing or underrepresented. This included questions of Eurocentrism, the standpoint of academics all based

in Europe and North America, as well as other questions of power, violence and the struggle for hegemony. The power relations in world politics play into the construction of standpoints and theories of world politics, just as these conversely underpin and legitimize power relations. From a sociological perspective, theories about world order are part of world order, orienting and legitimizing (or delegitimizing) action.

The *second observation* was that contemporary *political discourse*, but also, to a somewhat lesser extent, academic debates, tend towards a mono-narrative regarding contemporary and future transformations of world order, centering around the figure of a (possibly now past) U.S.-led (or a 'liberal international') versus a Sino-centric order, or an ongoing great power/imperial competition between these orders. World politics often was and is described using one evolutionary dynamic or distinction (e.g., from a world of empires to a world of nation-states, or colonial/post-colonial), or the primacy of one ordering principle or structuring logic (e.g. anarchy or balance of power). Such a tendency towards mono-narratives however tends to obscure that from its inception as an (Eurocentric) identifiable realm of the social world during the nineteenth century, world politics was always characterized by a multiplicity of orders, ordering principles, subsystems etc.

The reaction to the second observation was to inquire into the multiplicity of world orders and ordering principles (connecting to a range of debates about multiplicity in IR¹). However, as we will explain further in the conceptual chapter following this introduction, despite its wide usage, the conceptual and theoretical apparatus that comes with seeking to understand world politics in terms of 'order' became more inhibiting than revealing when studying the transformations of world politics in their real-world complexity. Broadly speaking, we found that understanding transformations requires looking into *how specifically, in concrete historical settings, 'world orders' are constituted through being made*. Within the extant research on this issue, our specific take is to develop the concept of worldmaking projects to understand dynamics of change. As we

1 See, for example: Rosenberg/Kurki 2023; Rosenberg 2016: 127–153; Albert 2019: 132–141.

detail in chapter 2, we draw on myriad literatures on ‘world’ and ‘worlding’ to develop WMPs as a heuristic for understanding transformations in world politics, without drawing on the statism that remains indelibly embedded in the concept of ‘order.’

Briefly, we came to define WMPs as discursive-practical formations that: (a) are planetary in scale and articulate universalizing aspirations; (b) conceptualize and work towards realizing visions for the future (‘projects:’); (c) are (world) *political* projects as they relate their visions to some form of statehood, particularly by imagining characteristics of and relations between states and by addressing states as accountable actors. WMPs can vary widely in character, scope, scale, and impact. We seek to illustrate this variety in the following chapters. Analyzing single WMPs does not take us very far, however. Only by studying how they emerge, disappear, and interact with each other can we elucidate how WMPs ‘make’ world politics. We describe the concept of WMPs and how we came to these three criteria in much more detail in the following chapter.

The *third observation* was that ‘orders’ are often approached as mental and linguistic constructs, and infrequently as very material and physical endeavors. Infrastructures more specifically are often written out of debates on historical and contemporary world politics. Yet, infrastructure is an essential component of connecting the world as well as establishing and cementing power relations.

The reaction to the third observation was to use communications infrastructures in particular to study WMPs. This enabled us to move beyond examining world politics as actions and words. Rather, the focus of communications infrastructures ensured that we considered how WMPs also leave material traces in the world, and vice versa: communications infrastructures are often overlooked facilitators, inhibitors, or otherwise important foundations for the emergence of any kind of ‘order’ and, in our case, WMPs. We certainly do not suggest that all communications infrastructures are products of WMPs or that WMPs can explained solely by studying communications infrastructures. But we suggest that they present crucial conditions of possibility for WMPs to emerge, realize their progenitors’ ambitions, or shape the world. Be-

cause of that, infrastructures are often important sites of contestation and battlegrounds between WMPs, while at times also enabling people to coordinate or cohere their plans and ambitions.

We arrived at the concept of WMPs during our meetings as a residence group at the Centre for Interdisciplinary Research (ZiF) in summer 2024. These discussions took multiple directions in the first few weeks, as we sought to establish a common understanding of how we saw historical developments at the level of world or global politics. As anyone who has participated in interdisciplinary exchanges will know, such meetings quickly surface fundamental differences or disagreements on even basic definitions and methodologies. We sought to explore and discuss such differences through multiple routes: common readings; specific examples; conceptual debates. As these discussions progressed, we slowly developed the concept of WMPs and sharpened the definition as something that everyone in the group found productive, although we all took different routes to using the concept.

Different members of the group then worked on developing and operationalizing the concept in different ways, whether developing its theoretical foundations or exploring its practical ramifications. We then fed those explorations back into our initial theoretical work and developed a concept paper that we road-tested at a workshop in July 2024. We invited outside guests from all three disciplines to critique our work thus far. We are deeply grateful to all participants for their enthusiastic and trenchant interventions, which fundamentally shaped both our conceptual apparatus and our approach to this volume. At the workshop, Vincent Kuitenbrouwer and Simon Potter provided historical insights and reflected on their own experiences co-authoring a major publication on the history of international broadcasting (Potter et al. 2022). Ayşe Zarakol suggested how to deepen the examination of the rhetoric around WMPs versus reality, also drawing on her own interdisciplinary experience with historians (Toynbee Prize Foundation 2023). Andrew Dougall (2024) drew on his framework connecting communications technologies to world ordering in British and American history to suggest how to embed the examination of infrastructures within a broader theoretical landscape. Iver Neumann supplied helpful reflections on chronology and on taxonomy as a

tool. Finally, Peter Haldén pushed the group pragmatically towards crucial decisions.

Throughout our time as a group in Bielefeld, we also tried to be reflexive about the perspectives missing from our group. Inspired particularly by Ralf Rapior (2020), we considered the Eurocentrism of all three academic disciplines. Christian Bueger brought a rigorous approach to infrastructures and imaginative creativity in considering how to write about WMP (Bueger et al., 2023). As the time in Bielefeld progressed, we also turned to discussing potential written outputs from the project. As we ultimately had multiple different approaches and writing styles, we decided upon the format of this volume. Each person would contribute a chapter taking different approaches to the concept of WMPs with a first conceptual chapter that laid out the stakes of our jointly-developed concept. We also held several Zoom meetings in 2024–25 to discuss draft chapters and coordinate as far as possible between them. What has resulted here then is more than a conventional edited collection, but less than a jointly-authored monograph.

The volume proceeds as follows. The second chapter by Mathias Albert, Diana Lemberg, Heidi Tworek, and Tobias Werron explores the ideas underpinning the concept of WMPs and why the concept might be helpful for interdisciplinary conversations about transformations in world politics over time. It explains the idea of an infrastructural nexus, or why communications infrastructures are such a crucial space for understanding worldmaking projects as intellectual ideas and practices. We unpack the different types of worldmaking projects as well as the many ways that infrastructures relate those projects to each other. We also explore the different forms of relations, suggesting that these go far beyond the antagonistic or competitive, which is the most traditional conception of interaction between world orders. Overall, this chapter lays the conceptual groundwork for the other pieces of the volume.

The next chapter by Tobias Werron delves into the interaction between a specific set of worldmaking projects and communications infrastructures in the nineteenth and early twentieth centuries. Werron shows how nationalism and imperialism became imaginaries that envision the world political sphere in specific ways and seek to change it

according to their respective vision. He argues that the communications infrastructure of telegraphy in particular enabled the transformation of nationalism and imperialism into WMPs. Rather than competing ideologies, nationalism and imperialism were deeply intertwined: they became WMPs simultaneously and both strove for global legitimacy as a mode of political ordering. Werron ends by reflecting on how this analysis can inform today's discussions around 'new imperialism.' He suggests that what's new about current forms of imperialism is the relationships between informal imperial practices and the rhetoric and practices of nationalism.

The next three chapters showcase how the concept of WMPs enables scholars to examine different spaces, particularly those less explored like islands, the air, and the polar regions. These geographical foci emerged through the group's discussions of the relationship between WMPs and communications infrastructures. They suggest that the concept of WMPs can point to new geographical spaces for scholarly study as well as how to integrate them into broader global works.

In chapter 4, Diana Lemberg uses islands as a lens to understand how communications infrastructures shaped world politics, particularly imperial worldmaking projects. Lemberg points out that while world-making had long occurred phenomenologically, it only became spatially global with expanding communications infrastructures, especially across the Pacific, that incorporated islands and previously independent places into empires and economic relations of capitalism. The focus on islands enables her to elucidate interimperial visions and aims for ordering the world that developed even as those same empires competed for territory. She then traces the continuities and discontinuities of the pre-1914 period up to the present.

In the following chapter, Mathias Albert suggests that the polar regions offer a useful avenue to explore the reaches of WMPs. Despite little research interest, polar regions were fundamental for contemporaries projecting the future of the world from the nineteenth century to the present, where the polar regions serve as a paradigmatic example of climactic collapse. Albert examines two main questions. First, he considers how WMPs overlapped in the polar regions. Second, he reflects

on whether ‘polar WMPs’ ever existed, providing a critical reflection on how scholars can determine what does or does not rise to the level of a WMP. Overall, Albert shows the utility of exploring the constituent parts of worldmaking and projects from regions not conventionally understood as central to such endeavors.

Meanwhile, in chapter 6, Diana Lemberg and Heidi Tworek explore WMPs’ interaction through new communications infrastructures in the air and space. They trace intellectual visions for WMPs alongside practical attempts to instantiate them through two examples: interwar wireless/radio as an illustration of WMPs cooperating, as well as satellite communications as an instance of competing WMPs in the 1960s and 1970s. These examples delve into different modes of interaction between WMPs as well as actors attempting to uphold or contest WMPs. Both collaboration and contestation could happen, with communications infrastructures as key sites for those interactions.

In chapter 7, Bettina Mahlert zooms into the micro-level of WMPs, analyzing specific ‘worldmaking activities’ (WMAs). Using examples from Africa, she considers how human actors sought to create spaces for realizing what was important to them under the conditions created by WMPs. She traces how these efforts involved attempts to resist, or, more broadly, to change the order created by WMPs. The examples analyzed pertain to questions of access to land and citizenship as well as the saving and storing of money

Finally, in chapter 8, Heikki Patomäki explores how competing worldmaking projects of the twentieth and early twenty-first centuries related to ideas of world statehood, though he points out the ambiguity of this relationship too. He first provides a conceptual evaluation of how WMPs emerged before examining how twentieth-century history could be told through the lens of WMPs and their intra- and interactions. The idea of WMPs enables him to illustrate continuities after the end of the Cold War and to bolster the idea of history as evolutionary.

Overall, this volume aims to open up the scholarly conversation about how we can use interdisciplinary methods to trace change in world politics over time. We hope that other researchers are similarly inspired to experiment with bringing together theory and empirical

work from different disciplines in ways that make the whole greater than the sum of its parts.

2 The Infrastructural Nexus: Conceptualizing Worldmaking Projects and Their Infrastructures

Mathias Albert, Diana Lemberg, Heidi Tworek, Tobias Werron

2.1 Introduction

Our interest in the concept of worldmaking projects (WMPs) was sparked by observing a historical connection between new forms of worldmaking and new communications technologies in the mid- to late nineteenth century. The electric telegraph illustrates this nicely. Invented in the early nineteenth century and widely established in the decades thereafter, the electric telegraph was the first communication technology that managed to decouple reliably and broadly the speed of communication from the speed of transporting goods and people (even if optical telegraphy was an important forerunner) (Wenzlhuemer 2010). Electrical telegraphy might be understood as an accelerated and limited version of postal service: it decreased the time needed to exchange information between actors around the world – including political elites and military leaders – while also limiting the kind and amount of information that could be exchanged (for technological and financial reasons).

Perhaps unsurprisingly, telegraphy became an enabler of the self-consciously imperialist WMP which blossomed in Britain in the late nineteenth century and culminated in the formulation of numerous ‘world imperial doctrines’ at the end of the nineteenth and beginning

of the twentieth centuries (Neitzel 2000).¹ This rising imperial self-confidence was explicitly based on the availability and control of new communication technologies. As one member of Parliament put it in 1887, 'Now it is often gloomily predicted by purblind students of history that this tremendous agglomeration [the British Empire] must inevitably break up and dissolve, like its predecessors. [...] I venture to reply, that in the postal and telegraph services of the Empire our Queen possesses a cohesive force which was utterly lacking in former cases.' (Koebner/Schmidt 1964: 56). The name of one of the chief metropolitan organs of this proudly imperialist sentiment was suggestive – the *Daily Telegraph* (Koebner/Schmidt 1964: 127).

But telegraphy was not only a tool of empire. Alongside the roughly contemporaneous infrastructures of news agencies and inexpensive mass media, telegraphic networks helped to establish a new understanding of the world as a source of 'news' and, on this basis, helped foster a 'global public' for newsworthy events (Müller/Tworek 2015; Rantanen 1997; Werron 2020). The notion of a 'public' points us to non-official actors (including journalists, ordinary citizens, and colonial subjects) who used those infrastructures – even when elites did not anticipate their involvement – and whose agency cannot be subsumed to high politics (Asseraf 2018). While the British mobilized telegraphy to reinforce imperial control in Asia and Africa, the very same technology also galvanized anticolonial nationalism. In India, it helped spread news of the Japanese victory over Russia in 1905, which the nationalist press interpreted as a victory of an Asian power over a European one and as a promising sign for their own political aspirations. Historian Daniel Headrick (2010) has described this dialectic as a 'double-edged sword'.

Infrastructures, then, can be seen as the structures that enable the formulation and realization of WMPs. Since infrastructures are conditions of possibility, transformations of infrastructures also imply that

1 We will return to this point below but want to explain here that with imperial WMPs, we refer to the idea that empires should be the regular form of political organization ordering the world. An imperial WMP cannot be reduced to a single empire (unless, possibly, its goal is solitary world dominance).

WMPs have to adjust and adapt. The power, efficacy, and scale of a WMP might be fundamentally defined by its capacity to adapt and use infrastructures. New infrastructures might also enable the formation of new WMPs, including grassroots political and social movements.

This enablement can also work in the opposite direction, when communications infrastructures become part of how actors try to project WMPs' influence across space and time. For example, in the 1960s, the United States spearheaded the construction of a far-flung infrastructure of communications satellites and satellite ground stations under the liberal auspices of enhancing the 'free flow of information' across borders, particularly in the global South, where it implied that populations had suffered from colonial neglect of infrastructures (Lemberg 2019: 128–151). While satellites were also a focus of Cold War U.S. defense policy, in its public diplomacy Washington tended to emphasize their role in the framework of international development and post-1945 liberal internationalism.

These brief examples illustrate how communications infrastructures have nurtured diverse and even oppositional WMPs. And they show the different relations between communications infrastructures and WMPs over time. All this suggests potential scholarly gains from examining the relationship between WMPs and infrastructures, or what we call the 'infrastructural nexus'.

In this chapter, we delve into how we conceptualize WMPs and the infrastructural nexus. In section 2, we define and explore the main elements of WMPs and discuss how they interact with each other, noting the crucial element of force and violence often involved in worldmaking projects as well as highlighting differences between different types of WMPs. In section 3, we consider how WMPs interact with communications infrastructures, which we analyze in terms of the infrastructural nexus, emphasizing the capacity to create relations through struggle and contestation, but also through other, more cooperative relationships. Overall, we hope that introducing this new heuristic will prove productive for further interdisciplinary conversations.

2.2 Conceptualizing worldmaking projects

Every form of order needs to be made and constantly remade, and thereby transformed. Every form of order, including ‘world order’ (in its different guises) is always but a snapshot of ongoing *ordering*. While ordering can entail very different things, ranging from purposive practices to the ‘mere’ progression of social evolution (Albert et al., 2023), we here argue that understanding world ordering requires paying attention to worldmaking projects (WMPs) that combine purposive design with the subsequent, or concurrent, unfolding of evolutionary dynamics. We argue that worldmaking projects are central motors for the driving of world ordering processes, forming, so to speak, converging patterns in the evolutionary pathways of these processes.

We understand worldmaking projects as discursive-practical formations that:

- are planetary in scale and articulate universal aspirations (‘world-making’),
- conceptualize and work towards realizing visions for the future (‘project’),
- are (world-)political projects as they relate their visions to some form of statehood – with ‘statehood’ broadly conceived, including forms of world statehood –, particularly by imagining characteristics of and relations between states and by addressing states as accountable actors.

We find this tripartite understanding of WMPs a useful handle for analyzing transformations of world politics, particularly combined with the study of communications infrastructure. We fully acknowledge that we operate in a rich extant semantic and conceptual field. Our conceptualization draws on scholars as diverse as Adom Getachew (2019) (on ‘world-making’), Gayatri Spivak (1985) (on ‘worlding’), Hayward Alker (1981) (and colleagues) (on ‘world order models’), Ayesha Ramachandran (2015) (on ‘worldmakers’), or Markus Krajewski (2014) (on ‘world projects’). These works suggest that imagining the world in planetary and universal terms

has been an important force in the history of world politics particularly since the mid-nineteenth century.

In addition, we use a wide range of literatures to specify each of the three elements in our definition of WMPs. Given the diversity and interdisciplinary composition of our group, we saw this conceptualization primarily as a *heuristic device*. It is meant to guide the inquiries of the individual chapters of this volume, without restricting them to a narrow analytical corset. What this heuristic device enables all chapters to do, however, is to share an empirical focus on dynamics of ordering and change in world politics, *without* subscribing to a particular theory of world politics, be it from IR or other strands of theorizing in our fields. It also enables identifying issues and sites of what we call the ‘infrastructural nexus,’ that is, historical connections between world political processes and infrastructures of communication from the mid-nineteenth century until today.

To explain the direction this conceptualization aims to provide, Mark Mazower’s (2012) *Governing the World: The History of an Idea* is a useful comparative reference. What we share with Mazower (2012: xiii) is the interest in the history of ideas about governing the world and envisioning its future. Mazower assumes that this story is ‘in its essentials a Western one’ and focuses on ‘why first the British, at the height of their world power, and then the Americans should have invested time and political capital in building up international institutions at all.’ (ibid: xv). By contrast, we suggest that such ideas can originate anywhere, are not necessarily bound to the notion of Western world hegemony, and do not have to involve international institutions. There were multiple extensive systems of non-Western states prior to colonization in the nineteenth century, for example (Butcher/Griffiths 2025). Hence, we suggest that the concept of WMPs can enable scholars to identify and study a broad range of projects and the various relations they establish with each other over time. While Mazower mainly focuses on the content of ideas and the activities of individual actors and international organizations, we wish to draw attention to communications infrastructures as a historical condition for the emergence of and interaction between ideas, actors, and organizations.

To explore how the concept of WMPs is best suited for these purposes, this section describes (a) the three defining dimensions of WMPs in more detail before (b) discussing further distinctions that enable us to study on-the-ground effects of WMPs.

2.2.1 The Three Dimensions of WMPs

Human beings have had many conceptions of ‘the world’ or ‘the globe’ over time. Scholars have also understood these conceptions in different ways and have recently become more interested in thinking about pre-modern periods through a global lens, such as a Global Middle Ages or early modern globalization (Heng 2021; Yun-Casalilla 2022). Others have shown Indigenous peoples’ global ideas before 1492 (Dodds Pennock/Power 2018). However, our interest in worldmaking suggests that we focus on the period after 1800. There are several reasons for this. The first is our interest in the concept of ‘worldmaking’ as proposed by Adom Getachew several years ago. We take up Getachew’s suggestion to extend the above-mentioned interest in ideas for ‘governing the world’ to non-Western projects and at the same time to recontextualize them historically.

Getachew uses the term ‘worldmaking’ to argue that anticolonial nationalism did not just mimic existing forms of (Western) nationalism nor simply adopt ‘the language of self-determination from the liberal internationalist tradition of Woodrow Wilson.’ (Getachew 2019: 14). Instead, anticolonial nationalists formulated their own ideas of national self-determination, articulated in opposition to formal conceptions of self-determination and associated with more substantial claims for political and economic equality, informed by the social context and situations of the colonized and enslaved. These efforts were not just organized on a global scale as part of a ‘world movement against colonialism’ (Getachew 2019: 6). They were also universal in scope. Most notably, they led to alternative visions of world order such as regional federation (like Pan-Africanism) and the New International Economic Order (NIEO) in the 1960s. Anticolonial nationalists thus engaged in projects of worldmaking based on ‘universal aspirations’ (Getachew 2019: 28). The articu-

lation of universal aspirations was not just a Western endeavor; in fact, non-Western actors pursued some of the most ambitiously egalitarian projects of worldmaking in the spirit of decolonization and racial equality.

We build on such arguments by arguing for a broad understanding of universal aspirations. Universal aspirations do not have to be ‘universalist’ or ‘universalistic’ in a philosophical-normative sense of the word. Universal aspirations can take on various and often ambiguous forms. For instance, we are also interested in an imperialist WMP that articulated visions of dividing the world into imperial spheres of control and influence, as well as a nationalist WMP that imagines the world as consisting of ‘sovereign’ nations and/or nation-states. In some of these cases, actors attempted to universalize particularist visions, but did so in distinct ways depending upon the WMP that they were trying to globalize. Some of these projects, which could be described as ‘geopolitical WMPs’, in fact seek to undermine ideas of the common good and instead aim to establish an ‘anarchic’ (non-)order based on particular ideas of sovereignty.² In other cases, these worldviews implied an internal hierarchy, as was the case with the fascist WMP of the 1930s and early 1940s based upon suppression, violence, and even genocide against particular groups. We still think of such projects as WMPs, as long as they conceptualize the whole world as being divided into particularistic organizational forms – for instance, a number of grand-scale empires based on racial hierarchies or a large number of culturally or ethnically defined nation-states. Such projects, too, have and pursue universal aspirations. Tobias Werron’s chapter delves into more depth about the

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- 2 This implies a view of sovereignty as a social construction subject to historical change; for a brief overview of notions of sovereignty see Krasner (2001), who distinguishes four dimensions: (a) the ability to control movements across borders (interdependence sovereignty), (b) effectively regulate behavior (domestic sovereignty), (c) exclusion of external sources of authority (Westphalian/Vattelien sovereignty) and (d) mutual recognition (international legal sovereignty).

relationship between universalizing ambitions and particularist visions of global order.

As universalizing aspirations of worldmaking projects often produce or imply notions of 'the world', we are also interested in the conceptual history of 'world', understood as a term that takes on specific meaning in different worldmaking projects.

The second aspect of WMPs is their distinction as projects. What makes WMPs 'projects' is their future orientation and determination to form and change the future. WMPs include plans for changing and ordering the world according to their protagonists' own worldmaking ideas, which then encounter – clash, cooperate, are being combined with – the plans of other WMPs. The world is never quite like the plan imagines, partly because WMPs exist in a world of multiple WMPs. We consider both the rhetoric of WMPs and their realities, including the many unintended consequences.

This suggests two further reasons for focusing on the period from the nineteenth century to the present day. First, we hypothesize that this period saw more universalizing, future-oriented worldmaking projects than prior periods. The proliferation and large-scale institutionalization of plans for the world appears to be a largely modern phenomenon. It might find a range of precursors (e.g. thinking about the future as open in Greek mythology, or defining future spheres of domination between powers, as most notably in the Treaty of Tordesillas 1494). However, the more general phenomenon of relating to the future in form of a 'project' became more widespread and feasible in the historical context of a time revolution in some parts of the world in the latter part of the eighteenth century. As Reinhardt Koselleck (1976) argued with regard to transformations of the German political language, in the eighteenth century the overall conceptual framework was redefined in terms of progressive time, replacing the prior prevalent circular natural conception of time: The future became something that can be purposefully formed based on an evaluation of past experiences ('Erfahrungsraum und Erwartungshorizont' ['space of experience and horizon of expectation'; our translation]). WMPs in our understanding presuppose the idea of a future that can be actively imagined and changed, while also urging us

to consider how perceptions of past, present, and future were affected by new communications infrastructures that emerged in the nineteenth and twentieth centuries.

Second, we suggest that the rapid spread of communications infrastructures affected perceptions of past, present, and future. We suspect that a particular type of project that combines future orientation with universal aspirations proliferated partly due to what we call the 'infrastructural nexus'. Communication technologies and other infrastructures established since the mid-to-late nineteenth century – such as the electric telegraph network (Müller/Tworek 2015), news agencies and the formation of a 'global media system' (Winseck/Pike 2017), the institutionalization of a global (though contested) language of news (Rantanen 1997), standard times and times zones (Ogle 2015), radio and television, satellite and digital technologies – enabled and accelerated mutual observation of all kinds of actors and made it appear more plausible and urgent to imagine the world as a place that could be actively transformed according to some universal vision. The globalization literature has captured similar observations in terms of 'time-space distancing' (Giddens 1990) and 'time-space compression' (Harvey 1990), associating them with general transformations of institutional dimensions such as reflexivity and global capitalism. Our goal is to develop a more sophisticated and empirically-grounded approach to the historical impact of communications technologies, one that can do justice to the specificities of infrastructures, to the historical role of imperialism, and to the impact of different WMPs emerging at the time.

Finally, 'the political' is crucial for our work on WMPs. Worldmaking projects do not carry (world) politics in their name, yet we argue that for historically specific reasons they are political at the core. Worldmaking through projects since the mid- to late-nineteenth century took place in a social environment that consolidated a specific realm of 'world politics' (Albert 2016). Put differently: while there could be WMPs that were not primarily constructed as political projects, a successful ordering function of such projects was strongly tied to their fitting within, and co-constituting of, the emergence of world politics. Examining the historical

emergence and function of (a system of) world politics thus provides important background for understanding worldmaking projects.

When thinking about world politics, two approaches to defining the term are of less help than it might at first appear: the study of historical semantics (1); and the study of the academic discipline seemingly primarily founded to deal with the subject, i.e. 'International Relations' (2).

(1) While there are no systematic studies of the historical semantics of world politics, the literature on the emergence of 'world'-composite terms in the nineteenth century indicates that world politics only reached widespread use quite late, though it emerged around the same time as other 'world' words. It appears that the notion of 'world politics' emerged in the same European semantic context as the increasing reference to 'great powers' as 'world powers', mostly in the 1840s up to the Crimean War³ and then became increasingly associated with the idea that 'a new politics is starting to develop which can be termed world politics. Those states which appear to be primarily called to participate and capable of participating in such politics may be called world powers because of that' (Frantz 1968 [1859]: 83). This usage, referring to the global aspirations of 'world powers', arguably only carries within it the idea of a systemically-bounded, distinct realm of world politics in *statu nascendi*. For the remainder of the nineteenth century, there are no indications that it became a widely-used term.

(2) Irrespective of specific uses, the term 'world politics' did not have a career similar to the term 'international politics', which was most notably driven through its institutionalization as an academic field/discipline/sub-discipline since after World War I. 'International politics', on the one hand, expanded into a fuzzier set of 'international relations.' On the other hand, 'the international' became quasi-naturalized as a collective singular which was then applied irrespective of historical context (see Bartelson 2023; Albert 2026). 'World politics' in this context arguably retains, however, a reference to an empirical relevance of some global

3 The probably most in-depth treatment of the subject is in a chapter in which one would not necessarily expect to find it (if judged by its title, that is): Groh (1988).

system or realm of politics. The difference might often be minuscule or even non-existent, but not always. Semantically, for example, while political relations between neighboring states will always count as ‘international politics’, ‘world politics’ would mostly sound odd for, say, describing issues in contemporary Spanish-Portuguese affairs.

World politics only exists on a specific scale and when embedded in a broadly global(izing) environment, whether called a ‘world system’, a ‘world society’, or some other name. Practically, during the nineteenth century ‘world politics’ starts to become a realm defined by what (world) ‘powers’ do and where systematically all the powers understood in that sense are related to each other, but can also be addressed, challenged, and possibly transformed as political actors.

This brief semantic history of ‘world politics’ suggests why our focus begins with the nineteenth century. It also suggests a minimalist understanding of what is ‘political’ about WMPs. Since the mid-nineteenth century, universalist aspirations had to be articulated in a world increasingly populated by forms of political organization (states) that govern some territory of the world (particularly, states, empires, and increasingly, ‘nation-states’) (Wimmer/Min 2006; Wimmer/Feinstein 2010). Visions of the world in WMPs are all related to such forms of organization in various ways: (a) by attempting to (re)define and shape the characteristics of these forms (e.g. ideas of internal sovereignty, rule of law, civil rights, national policies, etc.); (b) by conceptualizing relationships between them (e.g. ideas of external sovereignty, anticolonial resistance and self-determination, international rule of law, global/international (in) equality, international cooperation and association etc.); (c) by ascribing actorhood, rights and responsibilities to them (e.g. protection of human rights, sustainable development, global equality, health, environment, combating climate change); (d) by arguing for transcending territorial statehood through some form of world governance or world statehood; (e) but also by denying the necessity of state-structures, such as ‘communists, free-market capitalists, and anarchists [who] have all sought to get beyond the state completely and imagined a kind of post-political mingling of peoples.’ (Mazower 2012: xii).

As WMPs include different visions for the future related to forms of statehood, we also expect them to include visions of what world political ‘power’ is or should be, and how world-political power should be organized, constituting ‘world politics’. Hence, we address issues of world political power from a constructivist perspective that does not take the meaning of any terms for granted and sees them as social constructs subject to continuous change: what power ‘is’, how it should be defined, how measured, how compared (in order to ascertain a ‘balance of power’), what accordingly ‘a power’ is, or who or what is deemed to be ‘powerful’ – all that can and does change over time, as part of the visions and as the result of interaction of WMPs. WMPs can contain very general or broad ideas of ordering, or be built around a rather large number of principles, or they can be defined as oriented more towards limited agendas or a small number of principles. They can overlap, conflicting with or complementing each other. They can pursue different goals and work on different timescales. They can emerge following a more central ideational/ideological design, or emerge from a formation of practices that only gain common ideational traction along the road. And they can be more or less ‘successful’ in terms of resulting institutionalization.

2.2.2 WMPs as Empirical Objects of Study

As WMPs are practical-discursive formations that articulate universal aspirations to shape (world-)political orders, we are interested not only in how such projects emerge but also in their ‘on the ground impact’: how and why they succeed or fail, how their protagonists try to enforce and promote their project, as well as resistance to those projects. These concerns appear close to what Hayward R. Alker describes as the ‘penetrative strength, endurance, and pervasiveness’ of what he calls ‘world-order systems’ (Alker 1981: 85).⁴ In sociological language, one might also describe this in terms of different degrees of institutionalization.

4 At the time, Alker identified and distinguished four such systems: capitalist power-balancing; socialism; collective self-reliance; corporatist authoritarianism.

Further, notions of 'worlding' (Spivak) and 'worldmaking activities' (Getachew) hint that understanding WMPs requires an analysis of resistance, pointing to connections and tensions between universal aspirations of WMPs and more local instances of worldmaking. The concept of 'worlding' explains how colonizers enforced a relationship with the colonized that Spivak describes as relationships between Subjects and subjects (Spivak 1985). Worlding describes how colonizers transformed indigenous spaces (often represented as empty, uninscribed, or uninhabited, 'terra nullius') and people/s into colonized spaces and subjects.

Getachew, in turn, highlights possibilities for 'worldmaking activities', even as the 'concentrated power of masters delimited the range of worldmaking activities that the enslaved could participate in' before and during the Haitian revolution (Getachew 2016: 829). Yet, unfree people meaningfully engaged in everyday resistance ('early projects of freedom', *ibid.*: 832) and sought collective autonomy to achieve individual autonomy. This finally developed into in a large-scale political project, 'another universalism linked to individual and collective autonomy' (*ibid.*: 823).

This example shows how worldmaking activities can occur in situations of extreme powerlessness. This suggests that local worldmaking activities can never be fully suppressed and that they contain the seeds of *resistance* against other WMPs, for instance, by insisting on the particularity of local collective identities and undermining myriad universal aspirations. They also might develop into new WMPs, based in different social contexts and local experiences. Local worldmaking activities may show the limits of the 'penetrative strengths' of WMPs, illustrate the legacies of WMPs such as imperialism, and, finally, suggest how new WMPs form from local worldmaking activities.

While imperial-colonial worldmaking has been a particularly influential, powerful, and violent historical force, we suggest that the concept of WMPs enables us to explore the exercise of power and its consequences in the context of other WMPs. All WMPs, not just imperial ones, can use power – from 'hard' military and economic power to 'softer' forms of cultural, discursive, and symbolic power – to try to force, urge, and push their worldmaking plans onto others. So too can those resisting or attempting to coopt WMPs. For our purposes, this line

of questioning also draws attention to ‘infrastructures of power’ – from weapons to transport and communications technologies. This includes what Michael Mann describes as ‘infrastructural power’ – the capacity of a state to enforce policy throughout its entire territory (Mann 1984: 185–213) – but also the ability to use infrastructures to fight *against* and thus limit the infrastructural power of states. Infrastructures, in fact, often appear to have strengthened both the power of states and their adversaries at the same time. Raising such questions is particularly important when analyzing historical relations between WMPs since the mid-nineteenth century, because structural transformation on a global scale occurs due to several WMPs interacting and competing, rather than just one WMP shaping the world.

We suspect that WMPs can be distinguished using general criteria that further increase the concept’s heuristic value. These criteria include the historically variable ‘aggregate states’ of WMPs, which we capture, first and foremost, by distinguishing between latent and manifest WMPs. WMPs might be more ‘latent’, meaning that they are incipient, but arguably have not yet started to exert structuring effects; or they might be latent in the sense of (allegedly) being a thing of the past, but still lingering. The most prominent example is imperialism (see the chapters by Lemberg/Tworek, Werron). For many decades, the imperialist WMP appears to have led an underground existence rhetorically, i.e., it was kept alive in certain milieus but could not claim much legitimacy and influence beyond small right-wing circles, even as imperial legacies continued to structure the world. But this has clearly changed in recent years. In 2023, even a Western European political theorist like Herfried Münkler (2023) seemed to suggest that dividing the world into zones of great power influence could be a promising way forward. The relegitimization of the imperialist WMP seems to have only accelerated since then. Alongside the full-scale Russian invasion of Ukraine in 2022, U.S. President Donald Trump’s assertions around annexing Canada, Greenland, or Panama point to a renewed and now manifest commitment to an imperialist world order. Looking back, we may realize that in 2025 a threshold was crossed: beyond some world-political actors openly declaring imperialist ambitions in public arenas to a broader

assertion that the world should be divided up between empires. We will only know in many years' time whether this will actually be the case. In the meantime, the idea that WMPs can assume different aggregate states can help us to better understand the current processes.

Historical case studies are key for revealing the latent forms of WMPs and for explaining when and how they take on more manifest forms. Part of what makes such studies challenging is that world political actors often pursue the opposite of what they communicate openly. Lack of legitimacy can constrain the power of latent WMPs. But this should not elide that actors can talk and act differently, and that this can also strengthen WMPs or ensure their survival, as long as actors reproduce them in discursive niches or find ways to pursue their ambitions in secret. It is thus important to remember that the aggregate states of WMPs can change: they can temporarily lose visibility and influence, but then regain influence. In drawing our attention to such changes, the distinction latent vs. manifest highlights that once WMPs have been formulated and propagated, they do not simply disappear. Rather, their discourses and practices can be revived at any time, regaining legitimacy and influence.

Meanwhile, 'manifest' WMPs might be articulations of ideas ranging from nationalism to communism, from racism to global civil society movements, from religions to cosmopolitanism. In between, various articulations might combine elements from latent and manifest WMPs (see, for example, Albert's chapter on 'polar' WMPs). The distinction between latent and manifest WMPs might thus focus on more ideational and semantic dimensions, meaning the explication of underlying ideas as well as their proliferation into semantic and intellectual spaces.

The importance of latency also pushes us to critically examine assumptions about what the most 'important' or 'major' WMPs of world politics are, and to stay alert to surprising developments and dialectical changes 'from below,' which don't necessarily follow the more familiar timelines of, for example, intellectual or diplomatic history. To take two very general examples, Western elites predicted neither political decolonization nor the transnational resurgence of feminism in the mid-to-late twentieth century. Yet they have fundamentally reshaped the scope of politics and who counts as a political actor. Each could also be stud-

ied from the perspective of communications infrastructures that carried ideas, however unevenly, across borders.

Our focus on the aggregate states of WMPs also helps us remain alert to the possibility that manifest WMPs may have more systemic effects at certain times. WMPs interact and complement each other, but they can also push each other into the background, for example when the rise of a new WMP weakens the legitimacy of an older one. As with the distinction between latent and manifest, the distinction between more or less influential WMPs does not refer to a clear-cut binary, but rather to a spectrum. Think, for example, of the idea of a Global Caliphate and more broadly the global Jihadist movement, which as a worldmaking project for some time directly challenged the idea of national-territorial rule and evoked global responses.

2.3 The infrastructural nexus of WMPs

To summarize so far: our conception of WMPs takes into account historical processes of imperial expansion that fostered connections between distant regions, as well as the growing bureaucratic capacity and will of political entities to envision large-scale projects. By roughly the late nineteenth century, these conditions enabled WMPs to proliferate. Some WMPs, such as liberal internationalism, were institutionalized on a global scale. Others, like the communist WMP, have receded, while leaving important legacies. We also consider WMPs to encompass non-hegemonic and oppositional movements, such as the New International Economic Order and queer liberation.⁵

But how have WMPs surfaced in the designs of ruling elites, and how have they become legible to global publics, who were increasingly – though highly unevenly – drawn into the realm of participatory politics over the same period? And how have WMPs related to each other to

5 On worldmaking in oppositional terms, see Getachew 2019, on how ‘worldmaking’ emerged as distinct from and potentially in tension with empire-making, see Ramachandran 2015: 17.

provoke changes in world politics? We approach these questions by first outlining our understanding of infrastructures and then examining in more detail how communications infrastructures enable and shape relationships between WMPs.

2.3.1 A Minimalist Conceptualization of Communications Infrastructures

The historical profusion of WMPs starting in the late nineteenth century, we contend, has been closely intertwined with the profusion of *communications infrastructures* over the same period. These infrastructures have ranged from the universal postal system and electric telegraphy (nineteenth century) through terrestrial and satellite broadcasting (early to mid-twentieth century) to digital networking (late twentieth century).

While we do not prescribe any particular definition of infrastructure, we use insights from the multiple disciplines involved in infrastructure studies to suggest a number of minimum commitments to use the concept meaningfully:⁶

1. **Materiality:** Any infrastructure is materially grounded. As Brian Larkin (2013: 327) puts it: ‘Infrastructures are material forms that allow for the possibility of exchange over space. They are the physical networks through which goods, ideas, waste, power, people, and finance are trafficked.’
2. **Situatedness:** an infrastructure is situated in space and time. In this sense, even large infrastructures are also local.
3. **Users and agency:** any infrastructure involves users, but also actors who design, plan, build, maintain, or repair infrastructure. Infrastructures are about people, too. Environmental and animal historians would point to the agency of animals and the natural environment too. This reminds us of the important point that infrastructures are used very differently than planned or intended. Sometimes,

6 On infrastructure studies, see Bueger et al. 2023.

imagined uses can even determine the development of future infrastructures and communications technologies (Müller/Tworek 2016).

4. Longevity: infrastructures are designed and built to last for a particular length of time and hence have a specific duration linked to their purpose. They hence have a distinct temporality. While the visions for how long infrastructures should last have changed over time, they are generally seen as more than temporary and short-lived.
5. Standardization: infrastructures, in one way or another, involve standardization. For example, telegraphy involved standardizing across borders both in terms of the physical technology and the codes.
6. Rationale: infrastructures are designed, built, maintained, repaired, or replaced with a particular purpose or imagination in mind (although they might be infrastructures that arise out of practice in an unintended/random way).

Communications, too, can be defined in various ways. One classic, though contested, distinction was suggested by James Carey, who divided communication into two categories. The first was communication as a type of transportation, an elite-driven top-down phenomenon. The second was to view communication as a means to consolidate community and support common beliefs, for example in religious congregations (Carey 1989: ch. 8). However, ‘as a field of study – in research or in classes – communication really is wildly heterogeneous,’ noted Craig Calhoun (2011: 1480).

Within this field, feminist and post-colonial theorists have pointed out that definitions of communication have long focused on white, male forms of information exchange, but emphasize that media are crucial for ‘understanding the postcolonial condition’ (Llamas-Rodriguez/Saglier 2021: 1). Wendy Willems (2023: 17), meanwhile, has noted that ‘centering “marginal” perspectives [...] is crucial but insufficient as it risks leaving the canon untouched.’ In other words, the concept of WMPs might help scholars both to interrogate anew ‘canonical’ projects like imperialism and to explore other worldmaking projects. Finally, other definitions emphasize the importance of non-human communication, for instance

between trees and fungi. Here, we discuss communications in the plural to acknowledge the many approaches to this topic (Tworek 2025). By integrating this capacious understanding of communications with our materially attuned definition of infrastructures, we aim to shed new light on seemingly familiar technologies such as telegraphy, satellites, and so on.

Infrastructures of communications have formed the underlying connective tissue between WMPs and, at times, an explicit, politicized site of encounter between them: a ‘nexus’ in both senses of the word, as in (a) a linkage or set of linkages, and (b) a focus of attention.⁷

Or, to borrow from a reflection in 2018 on the role of infrastructures in the contemporary political moment, infrastructures have been ‘critical locations through which sociality, governance and politics, accumulation and disposition, and institutions and aspirations are formed, reformed and performed.’ (Appel et al. 2018: 3). They can thus be seen as sites where the relations between WMPs are organized and coordinated, whether through contestation, cooperation, or some other kind of relation. We turn to these various forms of relation below.

2.3.2 ‘Negative’ relations: Communications infrastructures as a nexus of conflict, competition, and other kinds of struggle

One common way of looking at international relations has been in terms of struggle or contestation. Agonistic metaphors have marked works stretching from Alfred Thayer Mahan’s classic writings on naval strategy through Samuel Huntington’s ‘Clash of Civilizations?’. Mahan wrote in 1890: ‘All around us now is strife; “the struggle of life,” “the race of life,” are phrases so familiar that we do not feel their significance till we stop to think about them. Everywhere nation is arrayed against nation; our own no less than others.’ (Thayer Mahan 1890). Compare to

7 This conceptualization is inspired in part by Winkler (2008). Winkler foregrounds conflict, arguing that WW1 awakened the U.S. government to the strategic importance of international communications.

Huntington, roughly a century later (1993: 22): 'Conflict between civilizations will be the latest phase in the evolution of conflict in the modern world.' Mahan's and Huntington's precise units of analysis differ, but the conflictual framework remains.

Among the specious prophecies littering Huntington's essay was the prediction that a shared cultural heritage meant that Russia could never invade Ukraine. Clearly, conflict is basic to the field of world politics – though it does not always cut along lines predicted by academic experts. In fact, students of world politics ignore infrastructure at their own peril; Huntington is illustrative here in abstracting self-contained cultural units as the motor of conflict, thereby obscuring structural dependencies and empirical relations.

Communications infrastructures, we posit, have been central to struggles between WMPs because of their heightened importance in a world of global information and news traffic. They can render the personal world-political and the Mondial mundane – as the use of social media in recent wars in Ukraine, Gaza, and elsewhere has shown. At certain moments, struggles over infrastructure are entangled with broader and longer conflicts. Britain's prompt cutting of Germany's undersea cables at the start of World War I reflects how communications infrastructures formed an integral part of war planning from at least the late nineteenth century onwards. Another way of framing 1914 is that it revealed how the nationalist WMP, for so long in productive dialogue with the International Telegraph Union's internationalist mission to standardize and smooth cross-border information traffic, suddenly came into conflict with internationalism. In fact, as the chapter on 'islands' explores, while communications infrastructures did not start World War I, they helped globalize it, as wartime sabotage extended to such places as Fanning Island, in the Pacific, and the Cocos Islands in the Indian Ocean (both sites of German attacks on Allied cables) – to say nothing of the Zimmerman Telegram, the interception of which prompted the U.S. entry into the war (Tworek 2016; Paull Nickles 2003).

In other cases, communications infrastructures themselves were engines of tension between WMPs. Moments when communications infrastructures first appear are often particularly thick with strug-

gle. As the media anthropologist Brian Larkin (2008: 3) has written, 'Debates about what media are, and what they might do, are particularly intense at moments when these technologies are introduced and when the semiotic economies that accompany them are not stable.' This was the case with satellite communications in the 1960s and 1970s, which fueled a number of visions for how the world of extraterrestrial broadcasting should be organized, ranging from an increasingly anti-regulatory/neoliberal model promoted by the American policy elite; to various multilateral proposals emanating from Europe, Latin America, and elsewhere; to efforts to protect national cultural autonomy, for instance by some New World Information and Communication Order (NWICO) proponents.

Finally, engaging with the history of communications infrastructures can reveal how political conflicts that appear to be attached to a particular technology have in fact recurred across technologies. Digital disputes often have analog roots. For instance, some scholars have blamed the erosion of the liberal international order (LIO) on the rise of the internet, which boosted cross-border information traffic at the expense of national regulations – paving the way for commercial actors to profit from fake news and for illiberal regimes to pursue disinformation campaigns globally. In '[shifting] governance structures from multilateral bodies such as the ITU to private actors such as the Internet Corporation for Assigned Names and Numbers (ICANN),' Henry Farrell and Abraham Newman (2021: 336) assert, U.S. policymakers in the 1990s paradoxically opened a Pandora's box of challenges to American hegemony. But this is misleading. Genuine one-country, one-vote multilateralism was never a given at the institutions regulating cross-border communications, not even at the ITU (Farrell/Newman's model of multilateralism), much less at organizations like Intelsat, the formally private but de facto U.S.-dominated consortium for commercial satellite traffic established in 1964 expressly outside UN/ITU auspices in order to insulate it from multilateral governance. Voting in Intelsat was not on the one-country-one-vote basis of the UN General Assembly; rather, as at the World Bank and the International Monetary Fund, it depended on participants' investments in the system. Examining these recurring

struggles over the management of communications infrastructures thus reveals surprising continuities between the late-colonial period and the post-1945 era of multilateral governance (Tworek 2020; Lemberg 2019: 130–131, 178–202).

2.3.3 'Positive' relations: Negotiation, collaboration, and metaphors of political relationality

Yet struggle or conflict is not the only form of relationship between WMPs. Viewing international relations through the lens of struggle alone risks naturalizing our conceptual containers – glaring in the case of Huntington's retrogressive invocation of clashing 'civilizations' (and in pre-1945 discourses of racial conflict), but also true when we speak of clashing empires, or blocs, or nation-states.⁸ The struggle fallacy is real.

Discourses of struggle and negative comparison in fact have often formed part of how dominant political actors have sought to mask their stakes in the status quo, obscuring collaboration and convergence between them.⁹ For instance, in the early 1920s, the British colonial administrator Frederick Lugard promoted the distinction of 'indirect' versus 'direct' imperial rule to criticize France – at the same moment when both empires had ballooned after the Versailles carve-up of German colonies and Ottoman territory (Pedersen 2015: 134–140; Dimier 2002). After 1945, the United States sought to portray itself as a kinder, gentler hegemon than its European counterparts, even as its bid for global military and communications power rested on foundations of imperial violence and the dispossession of nonwhite peoples at home and in insular 'sacrifice zones.' (Oldenziel 2011; Immerwahr 2019; Vine 2011). Turning away from a purely comparative framework, scholars of

8 On how IR has naturalized the nation-state as a unit of analysis, see, e.g., Seth 2011; Vitalis 2015; Lentz-Smith 2021. Angela Zimmerman (2006) has meanwhile traced the colonial-imperial roots of more recent discourses of cultural difference, including Huntington's clash of civilizations.

9 On the politics of comparison, see *inter alia* Stoler 2001; Müller et al. 2022.

inter-imperial relations have recently argued that imperialism was as rooted in complicity as it was in competition.¹⁰

Communications infrastructures often reveal non-agonistic relations between WMPs. One example is the Euro-American news-agency oligopoly that dominated global news distribution in the late nineteenth and early twentieth centuries: Havas (France), the Associated Press (United States), Wolff (Germany), and Reuters (UK) operated and cooperated as tools of the same imperialist WMP that carved up Africa and punished China in the international response to the Boxer Rebellion (Müller/Tworek 2015: 269; for Germany see Tworek 2019a). The news-agency oligopoly and the global media system it helped form also shaped the nationalist WMP. Sharing the same 'news world' enabled nationalists to observe each other and find and connect to like-minded others – for instance, to discuss and define ideas of national economic development (Bayly 2004: 300–302).

A focus on communications infrastructures during the Cold War similarly allows us to see beyond familiar, conflictual frameworks, in this case that of bipolar struggle. These infrastructures, for one, *enabled* superpower cooperation over nuclear weapons, which relied on rapid communications between Moscow and Washington (the famous 'red telephone'). They were also the *subject* of cooperation, for instance when the Soviet Union and the United States together opposed an Egyptian proposal at the United Nations to restrict direct broadcasting via satellite (Schwoch 2009: 74).

Because of their materiality, temporal longevity, and interface with ordinary users, communications infrastructures provide a particularly interesting nexus for seeing these other, less purely agonistic, forms of relation between WMPs. These include negotiated cooperation (the red telephone), as well as more active forms of collaboration in terms of the sharing of practices and knowledge (e.g., in international projects to 'develop' infrastructures in the global South).

10 On 'competitive collaboration' between the British and French empires, see Fichter 2019.

The history of infrastructural development is a particularly rich area for examining collaboration between WMPs including imperialism and internationalism, and internationalism and nationalism. Initially conceived to buttress imperialism, development drew together imperialist actors and international institutions such as the League of Nations Permanent Mandates Commission, which was tasked with monitoring social progress in the post-World War I mandate territories. The shared goal was to improve, not to undermine, imperial rule by ushering colonial subjects into the age of modernity, as Brian Larkin's work on Britain's introduction of radio into colonial Nigeria suggests (Larkin 2008; see also Cooper 2004; Morgan Hodge 2007).

In a later era, cooperation around the development of communications infrastructures drew together the WMPs of nationalism and internationalism (and, arguably, imperialism). As Richard Nixon put it in a 1969 address to the U.N. General Assembly, American satellites that could sense the Earth's natural resources remotely would 'produce information not only for the U.S., but also for the world community' (Maher 2019: 206). While Nixon's words should always be interpreted with a grain of salt – or, in this instance, with a large deposit of the mineral NaCl – his conception would find some takers: Even as tensions between anticolonialism and neoliberalism sharpened in the 1970s, the United States managed to partially assuage postcolonial and developing-world suspicions of remote sensing by sponsoring training workshops for foreign scientists and officials, at times in collaboration with international institutions such as the United Nations and the World Bank (Maher 2019).¹¹

It is worth noting, finally, that our alertness to some forms of relation might be piqued by engaging with a broader spectrum of WMPs such as feminism, environmentalism, and anticolonialism. In her study of 1989 as a moment of heightened contingency in world politics, historian Penny Von Eschen uses feminist theories of interdependence to challenge neoliberalism and its ideology of atomized market competi-

11 See also Thornton 2023.

tion between individuals (the late twentieth/early twenty-first century version of ‘survival of the fittest’). Von Eschen (2022: 303) writes:

[Humans] are born completely dependent on others. The social organization whereby helpless infants/young are kept alive for an extraordinarily long period – long enough for a critical mass to reproduce the species – is historically contingent. But our extended period of dependence makes us fundamentally interdependent, fundamentally social beings. ... This fundamental relationality is denied in the neoliberal project and its assertion of *homo economicus*, positing a timeless human nature as inherently entrepreneurial, narrowly self-interested, and profit maximizing.¹²

For Von Eschen, denaturalizing neoliberal competition through engagement with feminist theory in turn enables a recovery of the multilateralist, environmentalist, and antiracist visions of 1989, prior to their foreclosure by neoliberalism. Or in our terms: denaturalizing the struggle metaphor enables a recovery of multilateralist, environmentalist, and antiracist WMPs.

Recent environmentalist thought has also challenged the Darwinian struggle paradigm. Some ecologists and nature writers have borrowed imagery from communications technologies to speak of a ‘wood wide web’ of mutually beneficial interconnection among trees, and between trees and fungi.¹³ While the science behind this infrastructural metaphor is controversial (Immerwahr 2024), we might also note that concepts derived from ecology have also shaped recent understandings of communications infrastructures: Technology governance experts Maria Farrell and Robin Benjon have deployed ecological metaphors in an argument to ‘rewild the internet’ and break up Silicon Valley’s

12 For a related critique of neoliberalism through the lens of non-agonistic forms of relation, see Lowenhaupt Tsing 2015: 28–29, 137–144. On linkages between Darwinist thought and Friedrich Hayek’s celebration of market competition, see Ibled 2023.

13 See, e.g., Wohlleben 2016. Wohlleben draws on research by the Canadian forest ecologist Suzanne Simard.

‘plantation’-style oligopoly on platform creation and information traffic. Their political vision suggests how communications infrastructures might underpin a (potentially harmonious) multiplicity of WMPs: ‘Everything we collectively make that’s worthwhile is complex and thereby a little [messy]. The cracks are where new people and ideas get in. ... [The] unpredictability [of internet infrastructure] makes it generative, worthwhile and deeply human.’ (Farrell/Benjon 2024).

This is not necessarily to say non-agonistic forms of relation are always positive or emancipatory. Rather, it is to highlight alternative possibilities of relation between WMPs. For instance, the interwar collaboration of the imperialist WMP with international institutions might be characterized by certain shared or overlapping infrastructures and standards, even as political discourses tilted towards the oppositional over the course of the 1930s.

2.4 Conclusion

Overall, this chapter explicates and offers the idea of WMPs as a starting point for interdisciplinary dialogue. We also suggest the idea of an ‘infrastructural nexus’ to describe how communications infrastructures enable different forms of relations between WMPs. The concept of an ‘infrastructural nexus’ takes us beyond the classic antagonistic portrayals of interactions, suggesting that the concrete nature of communications infrastructures open up new possibilities for understanding the non-agonistic forms of interactions, whether positive or not.

We do not aim to provide a full stock-taking of WMPs nor to define WMPs rigidly based on how far each fulfills the three main criteria that we identified: ‘worldmaking’ – ‘project’ – ‘political’. Instead, the authors in this book each have decided which WMPs to examine, and how to work with the concept as a heuristic device. By showcasing that wide range of approaches, the following chapters offer a foundation to develop the concepts of WMPs and the infrastructural nexus.

3 Are We Living in a 'New Age of Imperialism'? Studying the History of Interaction between Nationalist and Imperialist Worldmaking

Tobias Werron

3.1 Introduction

Is imperialism on the rise again? It certainly can seem that way. Many observers of today's world politics regard Russia's expansionist ambitions, particularly its full-scale invasion of Ukraine, similar developments in China, Turkey, Iran and, more recently, in the United States as signs of the beginning of a 'new age of imperialism' (e.g. Novo 2022). While at least in the Western world, many still raise the alarm about this trend and write about what might counter it (e.g. Harari 2024), others already argue with a sense of resignation and from an accepting or even supporting perspective (e.g. Münkler 2023; Kimmage 2025). These observations seem to imply that the dominance of other WMPs is coming to an end and that imperialism is making a triumphant comeback on the world stage, re-establishing the *animus dominandi* (Hans Morgenthau) of the 'great powers' and the sweeping dynamics of nineteenth-century great power competition.

But there is also a contrasting story to be told. If we consider nationalism and imperialism as competing worldviews and study them in historical perspective, nationalism may appear as the ultimate winner. Given the institutionalization of international law after 1945 and the legal and political support for the right to self-determination and national sovereignty within the framework of the United Nations, it can be ar-

gued that it is nationalism – or a certain kind of nationalism – that has been widely accepted as the guideline for building the international order. Nationalism also helped delegitimize colonialism and imperialism, thus enabling the founding of numerous new nation-states, large, mid-sized, and small (Manela 2007; Wimmer/Feinstein 2010). Officially today, all states represent nations. As a consequence, ‘according to the formal-legal underpinnings of the contemporary state system, empires are not supposed to exist anymore’ (Beissinger 2005: 14). According to this story, the existing nation-state system is ‘empire’s nemesis’ (Lieven 2000: xvi). People may talk about imperialism, but what we are really seeing is power politics between nation-states, legitimized by modern nationalism and legally protected by international law.

This chapter argues that both of these scenarios are misleading. They do not sufficiently take into account that nationalism and imperialism have a long and complex historical relationship that is still ongoing, and they neglect to consider that the two are not only political endeavors pursued by individual nationalist movements, states or empires. Rather, in the late nineteenth and first half of the twentieth century, both managed to establish themselves as worldmaking projects in the terms discussed in this volume (WMPs): as imaginaries that envision the world political sphere in specific ways and seek to change it according to their respective vision. With the help of what is referred to here as the infrastructural nexus, imperialism and nationalism were transformed into WMPs – and are still with us today.

The focus on WMPs draws attention to a level of analysis that is often neglected in research on nationalism and imperialism: the question of how *global legitimacy* is produced and assigned. WMPs aim at legitimizing certain political endeavors by making them part of imaginaries of global order, thus helping determine their acceptance and ultimately their chances of shaping international institutions. Studying nationalism and imperialism in these terms therefore promises to deepen our understanding of how and how far power politics depends on global legitimacy. This implies questions such as: which political practices benefit from the legitimacy provided by well-articulated and

widely-accepted WMPs? How do political practices adapt, and which new practices emerge, when such legitimacy is missing or diminishing?

Nationalism and imperialism are particularly promising objects of study in this regard, as they were transformed into WMPs largely simultaneously in the era of so-called 'new internationalism' in the late nineteenth and early twentieth centuries. This suggests, first of all, that they formed in close relation with each other and other WMPs. What makes them stand out among other WMPs, however, is that they are usually perceived in terms of *particularist* power politics. 'Nations' and 'empires' are usually imagined as defining their own identities and pursuing their own interests, and ascribing global legitimacy to the pursuit of these interests is what nationalism and imperialism – as WMPs – are all about. This explicit 'particularism' might suggest that they are less dependent on discursive legitimation than, for example, liberal-cosmopolitan or socialist-communist politics defined by their focus on 'universalist' norms and values. Yet, this is one of the major implications of analyzing world politics in terms of WMPs: in a political world populated and shaped by WMPs, the chances of enforcing nationalist and imperialist policies also increasingly depended on being able to wrap oneself in WMPs and thereby justify oneself. If legitimacy is a valuable asset, then it also makes sense for proponents of particularist identities and interests to strive for it. This is not only reflected in the history of nationalism and imperialism; it could also help us develop more informed scenarios about the future of imperialism.

Historically, this view suggests a focus on the period between the mid-to-late nineteenth century and the early-to-mid-twentieth century, which has been characterized in the literature as the 'age of empire' (Hobsbawm 1987), as well as the age of 'mass-producing traditions' (Hobsbawm 1983), such as nationalism, in Europe and beyond (Goswami 2002). As mentioned before, this was also the time described by contemporaries and historians as the period of the 'new internationalism', which we reinterpret here as a period when WMPs emerged and proliferated. Finally, as Diana Lemberg and Heidi Tworek show in their chapter, this was when the infrastructural conditions for the emergence of worldmaking projects were established, creating what we

call the 'infrastructural nexus'. All of this suggests that an examination of encounters between nationalism, imperialism and other WMPs in the late nineteenth to early twentieth centuries might help us gain additional insights into the links between these worldmaking projects and the infrastructural nexus, while also preparing us for an analysis of how and in what form these WMPs are still with us today.

The chapter starts with conceptual considerations that explain how far nationalism and imperialism can be characterized as WMPs, the qualities that distinguish them, what they have in common, and how they differ. The following section then focuses on the historical emergence of both WMPs from the mid-nineteenth to mid-twentieth centuries. I argue that the formation of both WMPs was enabled by communications infrastructures, particularly by what I call the telegraph-news alliance, and a complex interplay of imperial/nationalist political practices and imperialist/nationalist thought enabled by these infrastructures. These observations suggest the more general point that we can understand the emergence, interplay, and impact of WMPs in new ways by paying attention to the 'global media system' forming since the nineteenth century. Against this background, the final section offers some preliminary thoughts on what conclusions can be drawn for an analysis of today's discussion on a 'new imperialism'. It suggests studying this trend in terms of *nationalist informal imperialism*. This term highlights the distinction between formal and informal imperial politics and proposes my view that to understand what's new about current forms of imperialism, we should focus on the relationships between informal imperial practices and the rhetoric and practices of nationalism.

3.2 Nationalism and imperialism as WMPs: Conceptual remarks

In line with the first chapter, worldmaking projects in the realm of world politics are defined here by three characteristics: the articulation of (a) universal aspirations ('worldmaking') and (b) normative visions for the future ('project'), and (c) the fact that these articulations relate or refer

to an emergent world of states or of world statehood ('world politics'). I will discuss the first and second elements in more detail below. The third element is merely intended to clarify that the focus here is on worldmaking that aims at a (re)ordering of the properties of relationships between political entities or polities, both as an end in and of itself and as a means to other ends (such as global equality, human rights, self-determination, etc.). It is in this sense that we can speak of WMPs specifically as world-political projects. This reflects the historical fact that such worldmaking projects since the nineteenth century have had to relate to the world being increasingly governed by or colonized by states, particularly self-described empires and nation-states.

To examine the emergence and interplay of WMPs, it is also important to distinguish between the formation of WMPs on the one hand and practical policies that pursue the goals of individual states or collective identities on the other. For example, the fact that the British Empire pursued imperialist goals (by laying cables, financing news agencies, waging colonialist wars, etc.) does not per se mean that there is an 'imperialist WMP'. WMPs require that such policies be couched in terms of universal aspirations (e.g., 'the whole world is/will/should be ruled by empires'), and a forward-looking vision (e.g. 'we should remake the world so that it is effectively ruled by empires'). Not all political action takes place within the horizon of worldmaking projects, nor do all worldmaking projects necessarily lead to corresponding political action. These distinctions are essential when it comes to examining, on the one hand, how WMPs emerge, develop, and relate to one another, and, on the other, how the formation of WMPs is related to political practices of all kinds, including nationalist and imperialist power politics.

As already indicated above, what makes nationalism and imperialism particularly interesting cases for studying WMPs is that their 'universal aspirations' are distinct from most other WMPs. WMPs tend to center around norms, values and visions that transcend the identities and interests of particular polities, arguing, for instance, for a rule-based order based on international law or for goals such as human rights irrespective of national belonging, race, or gender. It is not by accident that the terms 'universalism' and 'universalist' are usually associated with the

pursuit of such ‘anti-particularist’ ideas of worldmaking. But universal aspirations are not necessarily linked to such norms and visions. Rather, *aspirations are universal if they refer to the whole world and address humankind in generalist terms*. This also applies to variants of nationalism and imperialism that articulate ideas on how to govern the world to support their notions of nations and empires. Embedding particularistic ideas into an imaginary of global reach can add ideological power and, ultimately, global legitimacy to such notions. Proponents of nationalism and imperialism therefore often universalize their particularist notions, but they do so in distinct ways.

Nationalism conceives of the world as consisting of national collective identities with their own political interests and equal rights to political self-determination (cf. Calhoun 1997; Werron 2021). The core ideas of modern nationalism have been around at least since the late eighteenth and early nineteenth centuries (e.g. Anderson 1983; Getachew 2016), and perhaps earlier, as so-called anti-modernists in the study of nationalism argue (e.g. Gorski 2000). By the mid-nineteenth century, we find various nationalist movements and nationalist policies, as well as an emerging discourse on ‘national self-determination,’ mainly among European leaders of nationalist movements (e.g., Giuseppe Mazzini). These, however, were aimed at a European audience, did not think of nations as a global phenomenon and were part of a largely European understanding of international politics (see, for example, Case 2018). In other words, they did not yet articulate *universal* aspirations. This began to change in the mid-to-late nineteenth century, due in part to the increasing influence of anticolonial nationalism (Goswami 2002). From now on, self-determination was increasingly embraced as a universal idea, as evidenced in the global debate over Wilson’s Fourteen Points in 1918 (Manela 2007), in the ensuing debates over the League of Nations, and in the legal institutionalization of the right to national self-determination in the context of the United Nations (in particular, the UN Charter 1945; the ‘Declaration on the Granting of Independence to Colonial Countries and Peoples’, 1960). Article 1 (2) of the UN charter, in particular, officially sets out the goal ‘to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of people’. Interna-

tional law thus attributes the right to self-determination to *all* nations, not only to existing nation-states, articulating a universalist vision for the present and future political order of the world. This is how nationalism was transformed into a WMP.

Imperialism, on the other hand, imagines the world as divided into large-scale metropole-periphery structures, i.e. empires and their respective spheres of control (e.g. Go 2011). Empires and imperial politics had existed for millennia, dividing the world into independent 'imperial worlds' (Hall 2024). However, ideas explicitly advocating a (re)ordering of world politics in terms of imperial control and power relations only seem to have gained ground in the age of 'high imperialism' from the mid-to-late nineteenth century to the mid-twentieth century. The articulation of such ideas as a WMP was the result of a long and gradual development, which took place in different discursive circles and languages. Neitzel (2000) analyzes these discourses in terms of a 'world imperial doctrine' [*Weltreichslehre*], which developed in Germany, Great Britain, the USA, and France between the early nineteenth century and World War I. This lengthy process eventually led to more sophisticated variants with clear universalist aspirations, produced in the 1930s by representatives of the German political right.

Carl Schmitt, in 'Völkerrechtliche Großraumordnung' (1939a), proposed dividing the world into a small number of 'great spaces' ['Großräume', sometimes also translated as 'greater spaces' or 'large spaces'], each ruled by a great power and supported by a 'prohibition of interference by external powers' ['Interventionsverbot für raumfremde Mächte']. He explicitly contrasted this thinking with 'universalism', i.e. the liberal universalism that the British Empire, in his view, propagated only for the purpose of disguising its own political expansion and economic interests (Schmitt 1939b). Schmitt's contemporary Ferdinand Fried developed a similar view, but with a stronger economic focus (e.g. Fried 1932). He argued that economic globalization and nationalism were only temporary phases and that 'a dialectical movement was sweeping all the nations of the world, liberal, communist, and fascist, towards the same destination: a world order composed of largely self-sufficient blocs, prone to violence along their peripheries, but ultimately

capable of coexistence and mutually beneficial exchange' (Derman 2021: 765). Just as the UN Charter articulates the universal aspirations of modern nationalism, such theories, and similar views today, give expression to the universal aspirations of imperialist thought. They thus illustrate that by the mid-twentieth century, the imperial practices of past centuries had effectively been transformed into a social imaginary that aimed to justify and legitimize attempts to establish a division of the world into 'great spaces', in short: an imperialist WMP.

Described in this way, nationalist and imperialist WMPs show significant similarities. Most importantly, both combine universal aspirations with the support of particularist identities and interests: in the case of nationalism, national collective identities and their claim to self-determination and sovereign statehood; in the case of imperialism, great political powers and their control of 'great spaces'. And although they were rhetorically pitted against (liberal) 'universalism', they in fact espouse their own brand of universalism, given that they promote the establishment of *world* orders that conform to their respective particularist principles. This explains why nations easily can be 'imperialized', in terms of worldmaking, just as empires can be 'nationalized'. You only have to think of empires at the same time as nations that establish their spheres of influence over other nations, or, vice versa, of nations as empires in competition with other nation-empires. The result of such a combination is a vision of what could be called 'imperial nationalism' (Kumar 2010) or 'the marriage of empire and nationalism' (Hall 2024: 3). Focusing on such articulations, it may appear as if both are not two different WMPs, but one and the same.

However, nationalist and imperialist WMPs also differ in important ways. The first major difference concerns the *imagined relationships between the political entities* for which they develop their ideas of order; the second concerns their *discursive legitimacy* and the support they receive from international law. Nationalist worldmaking is based on the premise that all nations are formally and legally equal – the UN Charter, after all, calls for respect 'for the principle of *equal* rights and self-determination of people'. Imperialist WMPs, on the other hand, presuppose *inequality* between the imperial centers (metropolises) and the political entities (pe-

ripheries) they are supposed to dominate. Despite nationalism's inherent 'particularism' and the undeniable problems associated with its aggressive forms, the assumption of formal equality of all nations makes nationalist worldmaking more compatible with other WMPs for which ideas of equality are central – particularly liberal-cosmopolitan or socialist-communist ones that start from the assumption that all human beings are equal.

By contrast, imperialist WMPs are not easily aligned with most other WMPs. This can also be seen from the fact, as mentioned at the beginning, that 'imperialism' and associated concepts such as 'empire' were largely delegitimized after 1945, with its traces more or less thoroughly eradicated from the international legal system in a succession of international treaties (even across the line of conflict in the Cold War, cf. Beissinger 2005). This does not mean, of course, that imperial power politics has disappeared (more on that at the end of this chapter). What it does mean is that at the formal-legal level, imperialist ideas for shaping the world are in conflict with nationalist ones. There are fundamental overlaps *and* tensions between the two, rooted in their respective ways of worldmaking, which deserve to be explored in more detail.

3.3 The infrastructural nexus: Observing the emergence of and the interplay between nationalist and imperialist WMPs

Such insights into convergences and tensions between nationalist and imperialist WMPs raise questions relevant with regard to all the WMPs analyzed here, but especially these two: Why and how did they emerge in the late nineteenth and early twentieth centuries? Which developments during this period were conducive to the formation of WMPs that combined particularist ideas with universalist aspirations? And how do these developments continue to have an impact today? To deal with these questions, we have to examine in more detail how their emergence is related to the 'infrastructural nexus' and take a closer look at relations with other WMPs forming in the same period.

3.3.1 Setting the stage: internationalisms in the late nineteenth to mid-twentieth century

The late nineteenth and early twentieth century has often been described as a period of increasing global awareness that suggested to political actors of all kind to imagine the world and their specific projects in universalist terms. As other WMPs that emerged during this period, imperialism and nationalism also recast the world in explicitly global terms. However, their explicit particularism makes them stand out among most of the 'internationalisms' emerging at the time (see the corresponding chapters in Sluga/Clavin 2017): religious internationalism; socialist internationalism; feminist internationalism; liberal economic internationalism; internationalism of human rights – all these internationalist movements are universalist in the sense that they assume the equality of all human beings and base their ideas on how to transform world politics, if any, on these universalist assumptions.

There are exceptions, however, in this catalogue that suggest the possibility of 'particularistic universalisms' emerging in the late nineteenth to early twentieth century. Take, for instance, the case of 'fascist internationalism' discussed by Herren (2017), who shows how fascist movements and states made use of internationalist strategies and penetrated liberal-internationalist networks to further 'the construction of fascist world orders spanning the world from Berlin to Tokyo', 'aimed at creating spheres of influence beyond territorial control' (Herren 2017: 192). In Herren's interpretation, fascists infiltrated international organizations not only to implement thinking in terms of great powers and their 'spheres of influence' but also to promote 'a state-driven strategy of global governance' (Herren 2017: 196). This points to the existence of fascist internationalists who had universal aspirations and placed themselves in the service of imperialist worldmaking. At the same time, it is also an extreme example of nationalist worldmaking, given that fascism can be understood as a 'paligenetic form of populist ultranationalism' (Griffin 2006: 26). With these connotations 'fascist internationalism', as controversial as the term may be, perfectly captures the tension between particularist and univer-

sal aspirations that is characteristic of both imperialist and nationalist WMPs.

Nationalism makes another interesting appearance in research on the 'new internationalism' in Liang Pan's (2017) analysis of what he calls 'national internationalism' in Japan and China in the first half of the twentieth century. Pan describes the formation, rise, and fall of a kind of nationalist thought that emerged as the result of 'interactions between liberal internationalist and nationalist considerations' (Pan 2017: 170). It was based on outspoken criticism of cosmopolitanism, which 'ignores nationalism', as Chou Keng-shen, a leading figure of Chinese cooperation with the League of Nations, argued in 1924, while also looking for new ways to reconcile nationalism and internationalism. Some of its proponents even thought of a nation-based world only as a phase in the long-term development to a cosmopolitan one. What makes these thinkers 'internationalists' is that they were all interested in exploring how international disputes might be prevented or resolved 'via the pacifist principles promoted by international organizations'. At the same time, they were keenly aware of power asymmetries within international organizations dominated by Western powers, 'which, in their views, tended to ignore the interests of non-Western states' (Pan 2017: 171). The resulting view is perhaps best summarized by Nitobe Inazo, former deputy secretary general of the League of Nations, who opined in May 1933 (after Japan had exited the League of Nations): 'A good internationalist must be a good nationalist and vice versa. . . . One can serve best the cause of internationalism by serving his country. On the other hand, a nationalist can best advance the interests and honour of his country by being internationally minded.' (Pan 2017: 171–172; Inazo 1972: 471).

This view perfectly summarizes what I understand to be the core ideas of nationalism as WMP: it insists on the legitimacy of serving *particular* national interests; and it *universalizes* this idea by arguing that it is the task of every nationalist to reconcile the pursuit of these interests and international exchange and cooperation. And the fact that such views were articulated by Chinese and Japanese scholars and officials in the 1920s (many similar quotes from other authors could be given)

suggests that we are dealing with a WMP that from early on was not only based in Western thinking but also in opposition against Western dominance. It was global not just in scope but also in its discursive practice.

3.3.2 Immersion in the telegraph-news-alliance: How nationalism and imperialism became part of the infrastructural nexus

While the emergence of nationalist and imperialist thought in the late nineteenth to early twentieth century points to the possibility that they developed universalist aspirations mainly to avoid being left behind in a rapidly internationalizing world, it also hints at how nationalism and imperialism were able to establish themselves as WMPs in their own right. They managed to do so by adapting to the technological and institutional change of the time and aligning themselves effectively with the infrastructural nexus. More specifically, I would like to argue that the transformation of nationalism and imperialism into WMPs was made possible by the formation of a global media system and infrastructurally based on what I would like to describe as the ‘telegraph-news-alliance’. The particularism-universalism-connex typical of both WMPs was inscribed into the global media system, both in terms of power constellations and cultural-institutional conditions of its emergence, and the rise of nationalist and imperialist WMPs both reflected this development and helped bring it about.

The fundamental historical significance of telecommunication technologies – from the telegraph, telephone, wireless in the nineteenth and early twentieth centuries, to mobile phone and digital communication in the early twenty-first century – lies in the fact that they have decoupled the speed of communication from the speed of the transportation of goods and people (cf. Wenzlhuemer 2010). Such technologies can enable mutual observation without direct interaction and information exchange. However, for this purpose, they were also integrated with other communications infrastructures such as news agencies, newspapers, radio and other mass media into a ‘global media system’ (Winseck/Pike 2007).

In the late nineteenth century, it was the electric telegraph that paved the way for alliances between telecommunications technologies and other infrastructures. The historical focus on the telegraph suggests that a distinction should be made between two general effects of telecommunications technologies: (a) *direct effects*: they enable and accelerate the direct exchange of information across spatial differences. In this respect, it could be understood as an accelerated and localized version of the postal service: shortening the time it took for information to be exchanged between actors around the world (including leaders and bureaucrats, diplomats, cosmopolitan activists, nationalists and others), while also limiting the types and amounts of information that could be exchanged (for both technological and financial reasons). (b) *indirect effects*: Telecommunication technologies can enable mutual observation without direct interaction and information exchange. However, to do so, they benefit from cooperation with other communications infrastructures such as news agencies, newspapers, radio and other mass media. As the literature about the 'global media system' of the mid-nineteenth to mid-twentieth century shows, the telegraph not only helped to accelerate communication, but also pioneered the interconnection of telecommunication technologies and other infrastructures (Müller/Tworek 2015: 266–267). The structural effects can be described with a term suggested by Bruno Latour: The telegraph network worked with news agencies and newsrooms to create 'centers of calculation' (Latour 1987) that collected and published information from around the world. By constantly producing 'newsworthy' events, they established a new understanding of the world as a source of 'news' (Rantanen 1997) and, on this basis, helped to see and address the whole of humanity as a 'global public' for newsworthy events (Werron 2020).

Seeing the whole world as a source for daily news and everyone as a recipient of news suggests seeing the world as a place where any world event can be compared with any other world event, and where everyone is connected to everyone else as a member of the news audience. In such a world, it was almost inevitable that attentive observers would come up with the idea of developing new concepts for the formation of a world political order that reflected this new type of interconnectedness (cf. Ma-

zower 2012). For this reason, while both effects are important, the indirect effects – and the telegraph-news alliance that produced it – merit special attention when it comes to the historical analysis of WMPs.

The telegraph-news alliance was formed during the period of ‘high imperialism’ in the late nineteenth and early twentieth centuries, when modern forms of nationalism also emerged and spread worldwide (e.g. Wimmer/Feinstein 2010). However, this was never an either-or relationship from the start. Rather, imperialist states such as Britain, France, Germany or the United States were increasingly ‘nationalized’ in the metropolises and often campaigned for political support by claiming that their imperialist expansion was in the national interest. It likely was this particular combination, rather than imperial competition or nationalist zeal per se, that led to the First and Second World Wars – as John A. Hall (2024) rightly emphasizes.

The emergence of imperialist WMPs between 1850 and 1950 was accompanied by a division of the news space among a small number of news agencies, namely Havas (France, 1835), Associated Press (USA, 1846), Wolff (Germany, 1849), Reuters (Great Britain, 1851). These news agencies were regulated by states and partly functioned as ‘instruments of empire’ (Müller/Tworek 2015: 269; for Germany, see Tworek 2019a), but they also were commercial enterprises, pooled their resources, co-operated, and exchanged information across imperial borders. Havas, for example, covered not only the French Empire but also South America, while Wolff’s territory included Russia and Scandinavia, and both exchanged messages with each other. In summary, the news agencies formed a global oligopoly and cartel that could (and did) serve various agendas, including, in particular, imperial policy, private business interests and often neglected internationalist agendas.

Yet, the cartel not only served imperial agendas and the commercial interests of empires, but was also closely linked to internationalist modernization projects (Winseck/Pike 2008), such as the founding of the International Telegraph Union (ITU, 1865), the Universal Postal Union (UPU, 1874), and other forms of global cooperation. On the one hand, it was divided along the boundaries of the spheres of influence of Western imperial metropolises and very much part of inter-imperial

competition. On the other, it was also dependent on collaboration on multiple levels – inter-imperial, commercial, transnational. It appears, therefore, that the rise of an 'imperial news space' in the late nineteenth to early twentieth centuries made the formation of imperialist WMPs more plausible and likely, but that its emergence must also be analyzed in terms of the *relations* it established with liberal-internationalist infrastructure projects. Both were closely, even inextricably, intertwined.

Nationalist WMPs also co-evolved together with the global media system of the mid-to-late nineteenth to early twentieth century. The shared 'news world' described above was not just a product and instrument of empires, it also helped nationalists worldwide to observe and communicate with each other, for instance, to discuss and define ideas for national economic development (cf. Bayly 2004: 300–302) or organize resistance against imperial rule. As Benedict Anderson (1998) notes in his perceptive analysis of the news language forming around 1900, this was accompanied by the emergence of a 'serial' vocabulary for the production of news, i.e. categories that allowed journalists to describe political figures around the world in similar terms ('leader,' 'president,' etc.), even when using different languages and explicitly addressing national audiences. The result was (and still is), that 'news-papers everywhere take "this world of mankind" as their domain no matter how partially they read it', while this 'universality has been profoundly reinforced – everywhere – by an unself-conscious standardization of vocabulary which radically overrides any formal division in the newspaper between local and foreign news' (Anderson 1998: 33). On this basis, global news have been incorporated into an ongoing conversation between national news outlets and their respective national audiences. This paved the way for the development of the core ontological idea of nationalist WMPs: seeing the whole world as consisting of nations, each imagined as 'a people' governed by 'a president' (or similar kind of 'leader').

The formation of nationalist WMPs also needs to be understood in light of the rise of inter-national organizations and international conferences in the late nineteenth and early twentieth centuries, as these helped normalize the idea of nations as the primary units and nation-

states as the primary legitimate actors of world politics. Therefore, even more so than in the case of imperialist WMPs, there is a clear affinity between nationalist and other WMPs forming during the same period. For the sake of illustration, just remember Nitobe Inazo's formulation from 1933 mentioned above that 'a good internationalist must be a good nationalist and vice versa'. Nitobe was not only one of the Under-Secretaries General of the League of Nations from its start in 1920 until Japan's exit in 1933 but also a self-described 'good nationalist', who was deeply disappointed by his country's withdrawal from the League. He used this wording to express his commitment to a rule-based 'nationalist internationalism' at a time when a more aggressive kind of 'nationalist imperialism' took hold in Japan (Pan 2017).

Such different ideas on how to adopt and interpret nationalism were discussed at a time when both nationalist and imperialist WMPs seem to have reached their peak. They were also combined on a broad ideological spectrum, as the liberal variants just described and the 'fascist-internationalist' versions discussed in the preceding section illustrate. All of these forms consolidated in the early to mid-twentieth century in what could be called a 'co-colonial' constellation, where nationalism was mobilized on both sides of the colonial divide: as part of expansionist world views and to legitimize colonial expansion ('imperial nationalism'; Kumar 2010: 128), but also as an element of the anti-colonial struggle, which was primarily directed at an audience in the colonies or periphery (see Go/Watson 2019).

Through this lens, it becomes evident that nationalist worldmaking could serve both imperial and anti-imperial purposes, and it did so in multiple forms. Just as nationalism took on many faces, 'empires changed character when facing the nationalist principle within the competitive state system' (Hall 2024: 2). Both imperial and the anti-imperial kinds of nationalism drew on the same basic ideas of how to organize the world, while inspiring conflicting visions of what 'nations' are, what their purpose is, and what role they should play in world politics. In addition, both were also in constant interaction and similarly closely connected through the infrastructural nexus. Daniel Headrick (2010) highlights the latter in his analysis of the British Empire's attempts to

use the telegraph as a means of exercising imperial control over British India – and of Indian nationalists using the same technology to resist that very same colonial control. In this context, the older and largely isolated 'imperial worlds' (Hall 2024) were integrated into a common world in which imperialist and nationalist ideas of world order confront and constantly interact with each other.

The interaction between these different kinds of nationalism is often neglected, which can lead to a limited and Eurocentric understanding of the history of nationalism. As Adom Getachew (2016) has shown, standard narratives of anticolonial nationalism tend to follow a script that she calls the 'narrative of realization': by describing anti-colonial struggles (only) in terms of inclusion and exclusion into Western conceptions of nationalism, they largely reduce the role of these struggles to the realization of the promises of inclusion as introduced during the French Revolution and in particular by the 1789 Declaration of the Rights of Man and of the Citizen. Thus, they overlook what Getachew calls the genuine *worldmaking capacities of anticolonial movements*: their ability to advance their own universal aspirations, including conceptions of national autonomy and self-determination invented specifically for the purpose of anticolonial struggle. It was this tradition, not just the adoption of Western ideas, that fueled the struggles for national self-determination in the twentieth century, often linked to ambitious universal aspirations based on more substantial ideas of global equality (Getachew 2019). Despite these differences, these and other forms of nationalism belong to the same nationalist WMP: an imaginary that divides the world into national collective identities and supports their legitimate right to pursue particularist interests.

The analysis of relationships between imperialism and nationalism is further complicated by the fact that they tend to draw on similar organizing principles. After all, these are closely related projects that emerged at the same time in an 'internationalizing' environment and support both particularist and universalist aspirations. Among the principles they tend to share are the support of 'sovereignty' (for all nation-states in the nationalist view, from an imperialist perspective, mainly reserved for the imperial powers), for ideas of 'balance of power' (equally

conceivable between empires or nation-states; cf. Albert 2016), and the goal to establish order to contain violence and war (with both presenting themselves as the superior means of doing so). These overlaps suggest that, despite of their differences, they can work together quite effectively on many levels. On the whole, their relationship can perhaps best be described as a kind of love-hate relationship: they were created together, are closely linked by both attraction and repulsion, and will probably remain so for the foreseeable future.

3.4 Conclusion and outlook: Studying 'nationalist informal imperialism'

How might this analysis inform the ongoing discussion about a 'new age of imperialism'? In contrast to the either-or scenarios outlined at the beginning, it suggests that imperialist and nationalist WMPs entertain a longstanding and complicated relationship that is likely to persist with new twists and turns in the future. Rather than seeing this as a race that only one of them can win, we should try to understand in more detail the current state of their relationship and on this basis develop more nuanced future scenarios. For this purpose, we can build on the insight explained in the introduction to this volume that WMPs do not only matter if they are advanced in a systematic way and propagated in a public manner. Once formed and articulated, they can reproduce themselves in more subtle ways, in particular by motivating and legitimizing all kinds of *informal* political practices. 'Informal' practices, in my understanding, draw their specific meaning and impact from the *distinction* between the formal and the informal; they are practiced informally under circumstances where they cannot easily be formalized (cf. Holzer 2015).

Given the institutionalization of the nationalist WMP in international law and its political support within and beyond the UN system, it appears unlikely that imperialism will be able to officially reshape world politics according to its own imaginary of 'great spaces' anytime soon. This is true even in light of the apparent ascendancy of imperialist politics today. There are too many international institutions and too many

nation-states dependent on the legal language of equality for imperialist worldmaking to be widely accepted. The more likely scenario is that it will retain this delegitimized status for the foreseeable future, but that *informal* imperial practices will increase. The imaginary of a division of the world into 'great spaces', in particular, can remain present and influential, even if it can only be expressed indirectly and informally for the time being – which, however, in the long run might lead to the resurgence of imperialist WMPs also on a formal level. Informal imperialism could foreshadow formal imperialism. In light of the historical relationship between imperialism and nationalism explained above, it can also be assumed that this will happen in close connection with nationalism and in reference to nationalist WMPs. This amounts to a scenario that might best be described as *nationalist informal imperialism*: a scenario where the *language* of imperialism would be largely continued to be avoided, while many of its *practices* are adopted – and *combined* with the language of nationalism.

With this scenario in mind, the analytical task is to identify the practices that characterize this nationalist informal imperialism, both by drawing conclusions from the history of imperial politics and paying attention to how imperial politics are invested with nationalist thought, rhetoric and activism. To identify issues that deserve particular attention, in my estimation, I am drawing on the historical record of forms of 'informal empire' (e.g. Go 2008; Attard 2022; Hecke 2022) and, to a lesser degree, on the discussion on related ideas such as 'neocolonialism' (coined by Nkrumah 1965) and 'neoimperialism' (Sasse 2022). It should be noted that terms such as 'informal empire' and 'informal imperialism' should be used with caution, as Sedgewick (2015) rightly points out, since the focus on the 'informal' tends to obscure the very formal prerequisites of liberal market economies – and their political implications. I will first discuss variants of informal imperial practices, then their interplay with nationalism.

3.4.1 Informal imperial practices

On a *discursive level*, subtle shifts in the use of political language may indicate a change towards informal imperial practices. For example, we seem to be witnessing an increase in attitudes towards international affairs that base the ‘authority’ of particular states and the hierarchical relations between them (Lake 2009) on sheer size, economic weight, and military might rather than on other, ‘softer’ criteria. The increasing popularity of distinctions such as those between ‘strong’ and ‘weak’ or ‘superior’ and ‘inferior’ states would point in a similar direction. In this context, we might also observe an increasing use of terms such as ‘sphere of interest’ and ‘sphere of influence’ (Hast 2014; Hecke 2022), which serve to describe informal forms of control (e.g. Allison 2020), as well as an increasing obsession with ‘balance of power’ (Albert/Müller 2021) and comparative practices that reinforce thinking in terms of power (un)equilibria (Müller/Albert/Langer 2022). Such and other phrases could increasingly normalize the aspiration of a small number of states to informally control ‘great(er) spaces’ beyond their own territory, creating a worldview consistent with imperialist WMPs.

In the *economic sphere*, an increase in informal imperialism would be characterized by practices to create economic dependencies and hierarchical economic relations (much in line with the original meaning of the term ‘informal empire’, which was introduced in the historiographical discussion of the British Empire, cf. Attard 2022). In the history of imperialism, we find various practices of this kind that could become even more frequent in the coming years. For example, we could see more attempts to enter into ‘unequal treaties’, i.e. treaties between formally equal parties that informally aim to cement inequalities and dependencies (such treaties were already discussed at length in the legal context of the League of Nations and criticized by the League against Imperialism in the 1920s; cf. Hecke/Stafford 2024). At the time of writing, the ‘negotiations’ between the U.S. and Ukraine, as well as other goals formulated by US President Donald Trump (Greenland, Canada), point in this direction. Other informal imperial practices that come to mind in this context are the introduction of high tariffs designed to structurally

weaken smaller economies or the conditioning of development aid on compliant behavior (e.g. voting in the UN General Assembly and other international organizations).

On the *practical political level*, we could see an increase in practices aimed at forcing other states to accept foreign influence of any kind, including attempts to influence elections (e.g. representatives of the US government in Germany in February 2025). Perhaps even more importantly, we could see an increase in activities aimed at strengthening relations between the 'great powers' in order to establish and mutually protect their respective 'spheres of influence' (e.g. in March 2025, when the US government unilaterally lifted sanctions against Russia). If such practices were to be applied on a larger scale, relations between these powers would come closer to an informal version of the 'prohibition of interference by external powers' suggested by Carl Schmitt in the 1930s as a major principle of imperialist worldmaking. As has been observed for some time, Russian foreign policy, while perhaps not based on a reading of Schmitt's writings, has been in line with this way of thinking at least since the 2000s (see Auer 2015; Drozdova and Robinson 2019). Other heads of state and government could follow. At some point, this could lead to legally recognized arrangements aimed at creating a multipolar world with spheres of regional unipolarity – at which point it would no longer be an exaggeration to say that 'Schmitt is back as an actor and observer' (Auer 2015: 954).

All these practices will not go unnoticed, however, and many of them will face fierce opposition, both formally and informally. In contrast to informal imperialism, this *resistance* can also be based on the formal, institutionalized procedures of international law, on arbitration proceedings (e.g. WTO), on appeals to international courts, as well as on international alliances or the power and procedures of supranational institutions (e.g. EU). It can also draw on various informal practices that seek to establish bilateral and multilateral cooperation between 'smaller' nation-states, including diplomatic activities, arms and defense cooperation, and trade agreements. All of this could effectively help to protect the current system of nation-states, which is based on the principle of

the equal right to self-determination, from an attempt to transform it into a Schmittian system of 'great spaces'.

3.4.2 Relationship with nationalism

Equally important as the examination of informal imperial practices and forms of political resistance against them is the study of the relation of these practices to nationalist thinking and rhetoric. In fact, I would argue that this is where the greatest dangers of the current trends and perhaps also their main novelty could lie. As discussed above, nationalism has been used since the nineteenth century both in the imperial metropolises and in the peripheries, both to establish imperial structures and to resist expansion, to protect existing nation states or to found new ones. On the basis of the infrastructural nexus and in mutual interaction, imperialism and nationalism emerged as WMPs. Likewise, in the current situation, it is to be expected that nationalist rhetoric and practices will be used both in the service of the 'great powers' and of states that risk becoming victims of imperial practices. Nationalism is also effective in the peripheral areas of the imagined 'great spaces'. Wherever nationalist empires go, counter-nationalisms will react. And as humanity has repeatedly experienced, especially in World War I and II, conflicts fueled by both imperialist ambition and nationalist zeal are particularly likely to escalate and difficult to stop. Last but not least, this combination could also endanger democratic structures and accelerate the transition from democratic to autocratic regimes on both sides, imperial and anti-imperial. In conclusion to this chapter, let me briefly describe and illustrate each of these points.

The *instrumentalization of nationalism for informal imperial practices* is already in full swing. It is to be expected that informal imperialism will increasingly be accompanied by nationalist rhetoric and practice in order to legitimize expansive power politics as being in the national interest. In Russia, China, Turkey, and Iran, such discourses have been developing and expanding for decades. What has been said about China, namely that it is characterized by an 'elitist nationalism of an expropriated and humiliated great power' (Cabestan 2005: 2), could just as easily

be said about Turkey, Iran, and Russia. This refines the view of imperial power politics in important ways. Against the background of insights into discourses of national humiliation, it can be argued, for example, that 'Putin's Russia has not only regained its old territory but also its national dignity through the recent annexation of Crimea' (Auer 2015: 957). Donald Trump's 'America First' movement apparently serves a similar purpose, both lamenting the decline of the US and celebrating its revival. The unifying motif seems to be the reliance on claims about national history to buttress a claim to 'national greatness' and future expansion of spheres of influence – including, most recently, Trump's invocation of the 'frontier' as a symbol of the enterprising, inventive, and expansionist United States and the basis for his pledge to forge 'the most dominant civilization ever to exist on the face of this earth' (Trump's March 4, 2025 address to a joint session of Congress; Associated Press 2025). In this sense, all these imperialist aspirations benefit from the language of nationalism. What we see, then, is not just 'great powers' pursuing their 'rational' political interests, but rather informal imperialist agendas intertwined with and reinforced by fervently nationalist rhetoric.

However, nationalist informal imperialism is certain to meet with *nationalist resistance*, and the formation of such counter-nationalisms is already well underway. Perhaps the most obvious example to date is Ukraine, where nationalist mobilization goes a long way of explaining the resistance of the Ukraine military and population against the Russian invasion in 2022 – the latter of which, of course, was also justified in nationalist terms (amounting to 'existential nationalism' on both sides, as Knott 2022 observes; for 'eschatological-cataclysmic' explanations on the Russian side Pynnöniemi/Parppei 2024). At the time of writing in March 2025, politicians and the public debate in Canada and Mexico are already showing similar nationalist reactions in their united opposition to the tariffs imposed by the Trump administration. These examples demonstrate once again that among the consequences of increasing nationalist sentiments is more willingness to engage in conflict and, if necessary, to endure the consequences of conflicts and to see them through (Hutchinson 2017).

Now, what exactly is new about this? Imperialist-nationalist agendas, nationalist resistance, and struggles for national self-determination have all been with us for a long time, and both sides today can draw on scripts that have been developed over centuries. Nevertheless, I would argue that there is at least one genuine novelty in the current developments, as compared with nineteenth-century ‘high imperialism’, that draws our attention to the level of domestic politics: all this is taking place in a world in which, for the first time in history, about a slim majority of states are democracies. This may give additional cause for pessimism and fears, but also hope:

If conflicts between nationalist informal empires and nationalist resistance continue and intensify, they could further accelerate the *backsliding of democracies* (e.g. Przeworski 2019; Haggard/Kaufman 2021) and the rise of new types of autocratic regimes. These regimes have been termed ‘electoral authoritarianism’ (Schedler 2006), ‘competitive authoritarianism’ (Levitsky/Way 2012), ‘illiberal democracies’ (Zakaria 1997) and ‘democratorships’ (‘Demokraturren’, Karolewski/Leggewie 2022), among others. What is new about them is that they do not attempt to establish an overt dictatorship and instead adhere to minimal democratic procedures such as largely free and fair elections, yet they still manage to disrupt the actual functioning of democratic institutions and the rule of law to such an extent that changes of government become virtually impossible.

Based on the experience of recent cases, notably Hungary under Victor Orbán or Turkey under Recep Tayyip Erdoğan, the establishment of such regimes depends heavily on the mobilization of (ultra-)nationalism, including the aggressive state-led organization of nationalist-minded ‘civil societies’ (Karolewski/Leggewie 2022). Backsliding of democracies and the resurgence of nationalism, particular of the ethnic-identitarian kind, apparently go hand in hand. If nationalist forces are further strengthened by the interaction between informal imperialism and the resistance to it, then the risk of democratic backsliding is likely to increase further – both in the ‘great powers’ that cannot yet be clearly classified as autocracies (such as the U.S., possibly India) and in

the states in their imagined 'sphere of influence' such as Canada or in Western Europe.

Conversely, however, halting the rise of informal imperialism before it spirals out of control would also be a means of protecting democracy, just as the existence of electoral democracies, the rule of law, and popular support for democratic institutions could be important weapons in the fight against imperialism. In other words, the fact that today's (informal) imperialism often collides with democracies and democratic politics brings with it both additional dangers and new opportunities. It is this broader landscape of domestic politics, alongside the existing formal international order, that so strikingly distinguishes the current situation from the 'high imperialism' of the late nineteenth and early twentieth century. It could therefore be more difficult to bring back these past times than today's proponents of imperialist worldmaking imagine or hope.

If all this is an indication of the future, then talk of 'a new age of imperialism' would have to be qualified to suggest that we are entering a period of *nationalist informal imperialism* that carries with it the possibility of a vicious circle of imperial ambitions, nationalist zeal, and de-democratization. In the long term, these developments could also shake the structure of the international institutions we have grown accustomed to, and lead to the articulation of new – and this time perhaps even more influential – imperialist WMPs. But they could also trigger resistance that revitalizes democratic institutions and, together with the existing international institutions, help preserve the foundations of the international order built after World War II. It follows that we need to examine more closely how informal imperialism, nationalist mobilization, and domestic political processes interact – both to understand what is going on and to help develop political counter-strategies in support of democratic resistance.

4 The (Non-)Insular History of Imperialist Worldmaking

Diana Lemberg

4.1 Introduction

In late summer of 1914, thousands of miles from the western front, world war was taking shape in the Pacific. On 29 August, British and New Zealand troops captured Telefunken's radiotelegraphy station in Apia, German Samoa (Droessler 2022: 157). On 7 September, Germany attacked the British telegraphy installation on Fanning Island. A few days later, the Allies struck back, as Australian soldiers captured the German wireless installation at Bitapaka, on the island of Neupommern (later, New Britain). Then, Japanese troops seized Yap from Germany, which had turned it into an important cable communications site. In November, Germany attacked the British cable relay on the Cocos Islands, in the Indian Ocean.

Apia, Bitapaka, Fanning Island, Yap, and the Cocos Islands are not the usual places we think of when we study World War I. But they point to how communications infrastructures were helping reshape world politics in the decades leading up to 1914. Telegraphy and wireless or radio telegraphy formed the first truly global high-speed communications systems. Telegraphy had also inspired the institutionalization of international cooperation in the form the International Telegraph Union, founded in 1865. But instead of heralding peace between states, by 1914 this connectivity had relayed a conflict begun in Southeast Europe into the Pacific and Indian oceans.

How did the spread of communications infrastructures like telegraphy and radiotelegraphy entail projections of capital and power far from imperial metropolises? What ramifications did this have on spaces and societies enmeshed in imperial communications structures? This chapter uses these islands as sites for eavesdropping on empires and their impact on world politics in the late nineteenth century and early twentieth century.

Conflicts had spanned oceans before, notably during the Seven Years' War; and modern warfare had arguably been inaugurated a century earlier, in Napoleon's mass-conscription armies (Baugh 2011; Bell 2007). Yet the simultaneity and scope of conflict across disparate spaces in World War I – both enabled by and encompassing communications infrastructures – revealed how important these seemingly remote islands had become to imperial metropolises. In contradistinction to earlier phases of imperialism, they had begun to matter not only as sites for exploiting labor and resources (as in longstanding plantation colonies in the Caribbean, e.g.), but also as infrastructurally dense nodes integral to metropolitan security (as Caribbean colonies would also become during the world wars, with British authorities intensifying the push to introduce wireless telegraphy there during World War I, and taking over fledgling voice broadcasting in Jamaica during World War II) (on the Caribbean, see Dunn 2014). Moreover, as historian Frances Steel has recently observed, globalization was not truly global until communications and transportation infrastructures made their fitful way across the Pacific in the mid- to late nineteenth century (Steel 2022: 514). Another way of saying this is that while worldmaking had happened phenomenologically or imaginatively since premodern times, worldmaking only became global, topographically speaking, through the expansion of infrastructures that drew previously independent regions and communities into political relation and economic interdependence. In this sense, places like the cable landing on Fanning Island (annexed by Britain in 1888) and the radio installation at Bitapaka (annexed by Germany in the mid-1880s) were not margins of world politics but were rather central to a broader transformation. This transformation was also felt in places like Midway (a previously uninhabited island annexed

by the United States in 1867, which became a crucial landing site for the first American transpacific cable) and Yap (annexed by Germany in 1899).

This chapter posits that in the entanglement of islands and communications infrastructures in the late nineteenth and early twentieth centuries, we can discern visions and aims for ordering the world that were shared across empires, despite competition between them: in other words, an imperialist worldmaking project (WMP). First, I situate the chapter in relation to existing scholarship on empire and communications. Then, the chapter discusses an emerging inter-imperial consensus around race and the deployment of racialized labor to construct and operate far-flung communications infrastructures. Next, the chapter considers how these developments entailed the exploitation of colonial natural resources as well as labor, bridging histories of ecological change with communications. Finally, I connect the imperial history of island communications to post-1945 and contemporary developments.

A focus on infrastructures – materially exigent and geographically situated – helps illuminate how empires, even as they competed, converged to bring about vast social and environmental transformations in the late nineteenth and early twentieth centuries. Massive numbers of laborers were mustered to harvest newly valorized tropical products, often under coercive or unfree conditions; these included products essential to communications and media such as gutta percha, a natural latex native to Southeast Asia used in undersea telegraphy, and camphor, a resin essential to the production of celluloid film derived from the camphor tree, found most abundantly in Taiwan. Roads and railroads were constructed to bring these commodities to ports and trading centers. Telegraphic and radiotelegraphy installations were built to provide administrators, planters, and traders with information about markets and security.¹ Increasingly, connectivity was becoming a matter of state, reflecting a ‘general shift from economic to imperial

1 Besides gutta percha and camphor, other newly important tropical products included rubber, copra, shellac, chicle, and cinchona (Pretel 2023; Droessler 2022).

considerations in the building of communication lines at the turn of the twentieth century' (Droessler 2022: 150; Tworek 2016). Around 1900, the construction of insular communications infrastructures was bound up with imperial interventions that reached deeper than ever before into the world's landscapes and populations, seeding resistance to empires – as well as a mounting impulse to justify imperial power.

These infrastructurally marked and mediated transformations form key illustrations of what we have termed, in this volume, the 'infrastructural nexus': the thickening communications infrastructures that have both enabled and formed an object of interacting worldmaking projects since the late nineteenth century. The chapter suggests how a focus on insular communications infrastructures might offer fresh understandings of the past, present, and future of imperialism.

One, if empires (and anti-imperial struggle) long predated the emergence of the infrastructural nexus, the chapter argues that the globalization of communications infrastructures helped make imperial control an explicit, trans-imperially shared guiding principle of international governance after World War I, as victorious imperial powers collaborated in unprecedented ways to construct a world order divided by empires. As Werron emphasizes elsewhere in this volume, by the late nineteenth century-early twentieth century, legitimacy had become an increasingly important political *bona fide*, even for particularist and inegalitarian forms of governance such as empire. Thus when imperialism was institutionalized in the League of Nations Permanent Mandates Commission (PMC) after the war, it was wrapped in elaborate civilizational justifications.² The Pacific islands fell under the lowest, 'Class C mandate' categorization. In a comment characteristic of the racialized hierarchies of the mandates system, one high-ranking New Zealand official called Samoans a 'a simple and loveable race' that was unready for sovereignty or democracy, while another referred to them

2 The PMC was designed to oversee the administration of colonial territories stripped from Germany and the Ottoman Empire, with these territories handed over to victorious "mandatory powers," chiefly Britain and France but also Belgium, Japan, Australia, New Zealand, and South Africa.

as ‘children’ – deceptive claims, given that complex Indigenous systems of representative governance had survived colonization and the 1899 partition of the islands (Pedersen 2015: 170, 180).

Two, this moment represented not only the mature expression of an imperialist WMP. It also represented its temporary capture of the adjacent, but distinct, WMP of internationalism (an intersection explored further in Tworek and Lemberg’s chapter). This volume postulates that world politics are not singular but are rather always constituted by the interaction of multiple WMPs, and that this dynamic multiplicity drives historical change. As historians including Erez Manela, Susan Pedersen, Matthew Connolly, and Mark Mazower have suggested, high imperialism was dialectically undone by its internationalization. League fora including the PMC, and, slightly later, UN institutions, provided openings for competing WMPs, notably anticolonialism and socialism, to internationalize their calls for global justice (Manela 2007; Pedersen 2015; Connolly 2002; Mazower 2009). Samoans, for instance, wasted little time in protesting their mandate status. Throughout the 1920s, they persistently appealed to the League for independence (Pedersen 2015: 3).³

Finally, the infrastructural histories of these islands might also point forward, to the continuation of imperial politics under another name after 1945. In her analysis of interwar Samoan politics, Pedersen includes an important caveat: ‘[The] Samoan islands had no great economic importance and were of strategic interest only to the United States Navy, which administered American Samoa next door’ (Pedersen 2015: 169). Even after the discrediting of the imperialist WMP through anticolonial mobilization – and even after chemists had synthesized substitutes for tropical commodities like rubber and camphor – islands remained on the radar of powerful actors, if not always their publics, in part due to their significance for communications infrastructures. Historians of the United States after 1945, for instance, have referred to it as a ‘pointillist empire’ composed of military and communications hubs in the Pacific

3 On the pre-1919 emergence of cross-cultural solidarities among Samoan and other workers building communications infrastructures in Samoa and American Samoa, see Droessler 2022: chapter 4.

and elsewhere (Rankin 2016; Immerwahr 2019).⁴ Samoa gained independence from New Zealand in 1962, but American Samoa remained American Samoa, a node in 1960s U.S. satellite mapping efforts. As Ruth Oldenziel notes, changing technologies did not necessarily '[result] in abandonment or restoration of sovereignty' (Oldenziel 2011: 31, see also 26–29 on 1960s satellite mapping efforts). Moreover, Donald Trump's recent comments regarding another island – Greenland – indicate how the persistence of this pointillist empire, which has had a node at the Thule/Pituffik base since the early Cold War, may have undergirded a resurgence of openly imperialist talk (Tekeli/Gettleman 2025). The conclusion of the chapter considers how the history of these islands might relate to the contemporary governance and exploitation of other putatively remote spaces, such as the polar regions and outer space (explored in more detail, respectively, in the chapters by Albert and by Tworek and Lemberg).

4.2 Communications infrastructures and the emergence of an imperialist WMP

Over four decades ago, media scholar James Carey identified the spread of long-distance telegraphic communications as marking a transition between colonialism and imperialism, defining the latter as 'a system in which the center of an empire could dictate rather than merely respond to the margin.' Similarly, around the same moment, historian Daniel Headrick numbered telegraphy among the 'tools of empire' that enabled western domination of the world in the age of high imperialism (Carey 1983: 312; Headrick 1981).

But if these arguments suggest the role played by technologies in the imperial globalization of the late nineteenth and early twentieth centuries, what can they tell us about empire as a self-conscious form of

4 On U.S. insular empire after 1945, see also Vine 2011; Oldenziel 2011. On the development of synthetic substitutes for tropical products in the United States and Germany, see Immerwahr 2019: chapter 16; Haid 2023.

governance over much of the world's population during the same period? Was the reach of communications infrastructures into the Pacific and Indian oceans chiefly the product of chaotic diplomatic and commercial competition, or did it reflect a common design? Were imperial states locked in a state of perpetual improvisation as they sought to capture resources, land, and labor, or is it possible to speak of a shared imperialist WMP by which these powers together sought to order the world? Our answers to these questions might vary based not only on the time and place we are looking at but also on our own methodological lenses.

An influential strand of scholarship has pushed back against center-periphery models of imperial power, emphasizing instead empires' decentralized and ad hoc qualities. British rule over vast areas of the world was not the product of top-down decision-making from London, as John Darwin (2009) argued in *The Empire Project*, but was rather a flexible 'world-system' shaped in the colonies and also by contingencies external to the empire itself. Nineteenth-century states were tiny compared to their twentieth century and twenty-first century descendants; worldmaking was always imaginatively possible, but the projection of influence from imperial centers proved more tenuous and scattershot, even after the advent of telegraphy and undersea telegraphy in the mid-nineteenth century. To wit: for over a century, London left one of its nationals and his descendants in charge of their own private state on the island of Borneo, the Brooke Raj of Sarawak (1841–1946), from which gutta percha became an important export. Similarly, from German unification until roughly the turn of the twentieth century, Berlin invested little in communications improvements in its own expanding empire, preferring to leave these to private capital (see Tworek 2016).

Looking at imperial rule from the perspective of human mobility or environmental change, however, might bring more than its eclecticism into focus. As Duncan Bell (2015: 989) comments regarding Darwin's *Empire Project*: 'The danger of placing so much explanatory weight on the contingency, heterogeneity, and chaotic pluralism of the empire – vitally important as these are – is that the visceral reality of its formation and functioning can be obscured.' In spite of the diversity of imperial governing forms, what had driven a great deal of state and commercial

expansionism since the early modern period was a common quest for resources and the labor required to extract or harvest them. In this regard the Brooke Raj in Borneo, however eccentric its form of government, looked a lot like other places (more on that momentarily).

The 'labor question,' to use a common nineteenth century formulation, was more than domestic or regional. It was colonial and global. Over time, it fueled a common Euro-American sensibility about work and workers – about who would administer and who would get their hands dirty, and about who was suitable for different kinds of labor – that entailed the sharing of formulations of race as well as class and gender across imperial and national lines. These ideas were both diffused by communications infrastructures and integral to the lumpy development of these infrastructures. In the intertwined production of race and the 'transformation of the global countryside' in the late nineteenth century and early twentieth century, we might see the seeds of a shared imperialist worldmaking project (Droessler 2022: 12; Pretel 2023).

4.3 Racialization

The history of imperial racialization may be most familiar in an Atlantic World context. In the Americas, colonizers' inability to consistently capture Indigenous labor encouraged the expansion of the transatlantic slave trade and, in the United States, the legal codification of hereditary Black slavery. This system marked a departure from systems of slavery common in the ancient world in that it was based on race; and from indentured servitude in that it was hereditary rather than contractual (Gordon-Reed 2018). Racial categories were not naturally occurring, but once institutionalized they had profound material and political consequences, feeding the imperial accumulation of wealth through Black enslaved labor and shaping who could access full citizenship in the emerging world of nation-states.⁵

5 On enslaved labor as a crucial component in the rise of industrial capitalism, see, *inter alia*, Baptist 2014; Beckert 2014; Johnson 2013.

After slavery was abolished in the United States (1865), Cuba (1886), and Brazil (1888), processes of racialization continued apace, both within national confines and across states and empires. The race laws erected in the post-Reconstruction United States included Jim Crow segregation in the South but also broader anti-miscegenation and racialized citizenship laws. These laws were models that traveled. Angela Zimmerman has shown how officials in German colonial Togo sought to import agricultural expertise from the segregated U.S. South on the grounds that Black people were uniquely capable of cotton cultivation, thereby mapping a North American racial identifier ('Negro') onto multiethnic and multilingual African populations (Zimmerman 2010: introduction; see also Whitman 2017).

Imperial racialization was not limited to the Atlantic World. By the early twentieth century, actors of many political stripes were commenting on the global purchase of what American sociologist W. E. B. Du Bois termed 'the color line.' Du Bois (1903: 13) suggested its oceanic reach when he wrote in *The Souls of Black Folk* that the color line encompassed 'the relation of the darker to the lighter races of men' not only 'in Asia and Africa, [and] in America' but also on 'the islands of the sea.' The United States had recently annexed the Philippines, Hawai'i, Guam, and American Samoa. Theodore Roosevelt likewise grasped the symbolism of race in international relations when he sent the U.S. Navy on a tour of the Pacific in 1905, a response to the Japanese victory in the Russo-Japanese War and a gesture of white brotherhood to distant Australians. Received in Sydney, U.S. Rear Admiral Sperry 'greeted his gratified hosts as a "white man to white men."' ⁶

This is not to say that race alone determined the working worlds of empire. In many settings, the politics of racial division clashed with colonial demand for educated intermediaries. During the Orientalist-Anglicist debate over education in early nineteenth century British India, for instance, the Anglicist camp argued that Indians could and

6 On Du Bois and Roosevelt, see Lake/Reynolds 2008: 2–3. On Roosevelt's racialized worldview, see also Gerstle 2017: 14–43.

should be taught 'European literature and science' in European languages: By their lights, Indians were not naturally inferior but rather culturally deprived. Euro-American discussions of other societies reflected the ambiguous ways in which the concept of race was understood for much of the nineteenth century, often as a proxy for culturally or linguistically defined 'nations' or 'civilizations' rather than biological groupings or phenotypes (Adas 1989: chapter 5).⁷ And although notions of immutable biological division – as opposed to cultural or environmental difference – were ascendant in the late nineteenth century, historian Chris Suh has recently pointed to relations between Tokyo and Washington as evidence of a countertrend: interracial collaboration between Japanese and U.S. elites in the service of a shared imperial order in the Pacific (Suh 2023). We might see in this collaboration evidence of an imperialist WMP, as well as of the pliability of western civilizational hierarchies, which accommodated Japanese power. (Interwar collaboration between Japan and other imperial powers at the League of Nations is further discussed in Tworek and Lemberg's chapter in this volume.)

Nor were empires the only scale at which race inflected turn-of-the-century politics. Racialization did not necessarily point towards imperial expansion. It could also point towards nationalist consolidation. What historians Marilyn Lake and Henry Reynolds call the 'project of whiteness' and international relations scholar Duncan Bell (citing Mark C. Jerng) 'racial worldmaking' was 'transnational in its inspiration' but often 'nationalist in its methods and goals' (Lake/Reynolds 2008). In the United States, Australia, and elsewhere, ideas about whiteness fed into highly restrictive immigration laws aimed at choking off flows of migrants from Asia in particular: These were Australia's 'White Australia' policy of 1901 and, in the United States, the restrictions beginning with the Chinese Exclusion Act of 1882 and culminating in the Johnson-Reed Act of 1924 (Lake/Reynolds 2008: 4; Bell 2020: 28).⁸ Meanwhile, pro-

7 For an argument that class hierarchies (not race) dominated British perceptions of their empire, see Cannadine 2001.

8 On the intersection between white supremacy and anti-imperialism in the United States, see also Jacobson 2000.

posals for a political union of Anglo-Saxon states – Bell’s ‘dreamworlds of race’ – ran aground over questions of sovereignty and how to treat colonies (Bell 2020: 2–3, 14–15, 17). As Werron’s chapter in this volume shows, nationalist worldmaking flourished in the imperial metropolises of the late nineteenth century and early twentieth century, at times underwriting imperial expansion as being in the national interest, but at times confounding straightforward expansionism.

The case of Japan demonstrates the pertinence not only of race but also of class and gender to inter-imperial relations at the turn of the century. Participant in the Boxer Protocol and the sole imperial power outside the Euro-American axis, Tokyo protested when its nationals (hundreds of thousands of whom participated in labor migrations around the Pacific world between 1868 and 1941) were treated as racial inferiors. But its protests did not necessarily happen under the banner of antiracism. While in 1919 Japan proposed to insert a nondiscrimination clause into the Versailles settlement, in other instances its interventions were framed not in terms of racial equality but rather on the hierarchical grounds of Japan’s civilizational accomplishments. Into the 1920s, Japanese immigrants to the United States protested their exclusion from citizenship by claiming whiteness. These episodes complicated, but did not destabilize, the racialized worldview of western governments. France wrote to Britain: Were Japanese people white? Meanwhile, Theodore Roosevelt, though a fervent advocate of Anglo-Saxon power, viewed Japan in terms of its imperial virility, as a kind of gendered exception to existing racial hierarchies (Lake/Reynolds 2008: 9–10; Merida 2020: 5).⁹ Roosevelt actually pushed back against certain hardcore forms of immigration restrictionism, anxious about the response from Tokyo (Hsu 2021: 424–426). Again, we might interpret these diplomatic practices in terms of an emergent imperialist WMP, which aimed to divvy up the globe among deserving civilizations.

9 Takao Ozawa, who petitioned the Supreme Court for U.S. citizenship in the early 1920s, ‘cited anthropology and ethnology that identified Japanese as Caucasian or white’ (Ngai 2014: chapter 1, quotation on 44). For statistics on Japanese migration, see Azuma 2023: table 6.1.

Labor migrations after the end of *de jure* slavery – including those from Japan, but also from China, India, and elsewhere – shaped racialization in both national and imperial contexts. The new regimes of unfree and coerced labor that emerged in slavery's place entailed growing human mobility around and from Asia, even as the diversification of industrial capitalism from cotton toward 'jungle commodities' such as gutta percha from roughly 1850 onward transformed the places that many of these migrants were coming from and circulating around (Jung 2006; Pretel 2023; Droessler 2022).

The expansion of communications infrastructures offers a fruitful site for examining these social and environmental transformations. Over the course of the nineteenth century, imperial capacities to plan and execute long-term infrastructural projects thickened. The need for workers who could construct, operate, and maintain these infrastructures did not lead imperial states or commercial actors to become antiracist *avant la lettre*. Rather, in order to secure labor, they mustered race differently than the immigration restrictionists.

Installing and repairing telegraph lines entailed physically demanding, often dangerous work. In the late 1880s and 1890s, the Indo-European Telegraph Department (the IETD, a department of the British colonial state that managed cable connections from the Persian Gulf to Tehran and Karachi) formally divided workers into 'Europeans' and 'non-Europeans' as a mechanism for 'preserving hierarchies of control over those who were the subjects of imperial rule,' Sebastian James Rose observes (Rose 2024). The British cable station on Fanning Island relied on Gilbertese Islanders and Chinese laborers; while on Midway (a link in the first American transpacific cable from 1903 on) Japanese and Chinese workers were collectively present, if not individually acknowledged in American journalism about the cable station (Steel 2022: 530; Starosielski 2015: chapter 3). The construction of the wireless station at Apia on German Samoa, meanwhile, was achieved primarily by local Samoans and Chinese laborers. German administrators' commentary on Samoan workers reflected a civilizational worldview shared with their British and American competitors in the Pacific: They '[represented] the strange

type of the gentleman savage; good manners, wonderful grandezza, and pyramidal laziness' (Droessler 2022: 155).

Commercial actors likewise engaged in an imperial politics of race in order to secure workers. The Eastern Extension Australasia and China Telegraph Company (Eastern Extension) telegraph line connecting Java to Port Darwin in northern Australia was completed in 1871, linking England and Australia for the first time. Its officers envisioned Darwin, and later the telegraph station at Broome (1889), as part of the colonial Indian Ocean world and argued that their enterprise should be excepted from Australian restrictions on Asian labor, as the regional climate on Australia's northern coast was more like the tropical Indian Ocean than the rest of the Australian continent. These arguments, reflecting theories of environmental racism which claimed that whites were unfit to work in tropical climates, clashed with the newer white nationalism that had emerged in Australia, which considered colonial reliance on Asian workers degrading to white labor and white racial vigor. After the passage of the White Australia policy in 1901, years of negotiations between Eastern Extension and the Australian state ensued, with Liberal-led governments more sympathetic to the company's requests for exemptions to Asian exclusion (Martínez 2017).¹⁰

Processes of racialization were debated not only among white elites and publics. They were also subject to contestation from below. What W. E. B. Du Bois conceptualized as the global color line was also perceived by the Pacific islanders who built communications infrastructures in places like American Samoa. As strikes uniting Samoan and non-Samoan workers demonstrated, these workers experimented with new forms of solidarity, even as their labor formed part of accelerating imperial incursions into the surrounding environment (Droessler 2022: 141–143).

10 On Darwin see also Starosielski 2015: chapter 3, esp. 104.

4.4 Environmental transformations

The globalization of communications infrastructures was a driver of environmental change in the colonized tropics. From the jungles of colonial Malaya and Borneo came a substance that was for decades essential to the insulation of undersea cables: gutta percha. Gutta percha is a natural plastic derived from the sap of certain kinds of trees native to South-east Asia. It was already used in a variety of tools and vessels there by the 1820s or 1830s, when an unnamed Malay worker showed its properties to a Scottish doctor named William Montgomerie, who soon began to publicize its medical applications. By the late 1840s, western scientists and engineers had realized gutta percha's potential to insulate telegraph wires from corrosive saltwater. It was gutta percha that protected the very first successful undersea telegraphic transmission, across the English Channel, in 1851 (Tully 2009: 566–567; Godfrey 2013: 150; also Godfrey 2018). The insular Pacific was materially present in the infrastructures of the Atlantic.

Yet metropolitan engineers, champions of empire, and titans of industry would have been unable to realize their vision of a world girdled by telegraphs without the knowledge and skill of Indigenous forest-dwellers in colonial Southeast Asia. The contribution of Montgomerie's unnamed Malay interlocutor illustrates a point made by historian of technology David Pretel: 'Tropical botany developments regarding tree taxonomies and planting procedures, such as for latic plants (rubber, chicle, and gutta-percha), relied on or were informed by local, [Indigenous] knowledge' (Pretel 2023: 207; see also Godfrey 2013).

The landscapes that produced gutta percha were not plantations but rather irregular patches of forest, often difficult to access, where trees were felled by axe and tapped for gutta percha, which was then washed, flattened, and compressed into blocks for shipping (Tully 2009: 566–567). The particulars of the substance shaped conditions for Indigenous gutta percha tappers, whose labor was unsupervised and uncoerced – like wild rubber tappers in the Amazon, and unlike coerced rubber workers slightly later in the Belgian Congo. Helen Godfrey indicates that, in the Sarawak region of Borneo, many Indigenous tappers

and communities actually enriched themselves during gutta percha's boom years in the mid- to late-nineteenth century: 'The *gutta percha* trade provided an entry for forest communities into the global economy, but to some extent on their terms' (Godfrey 2013: 170).

It was in transimperial efforts to rationalize commodity trades that we might see most clearly the workings of an imperialist WMP prior to World War I. Broadly speaking, the goal of these efforts was to incorporate forest-dwellers, shifting cultivators, and subsistence or noncash producers into cash crop production, thereby minimizing the leverage and capturing the labor of groups like the Sarawak. This process was not merely commercial; it entailed state-subsidized knowledge production and state-sanctioned coercion. In the nineteenth century, metropolitan botanical gardens such as the one at Kew became institutions of state, joined by tropical gardens and experiment stations in various colonies, including Buitenzorg in Dutch colonial Java. Despite inter-imperial competition for resources, knowledge tended to flow transimperially across research sites, helping to '[transform] tropical agriculture' not in one colony but across the global tropics more generally (Headrick 1996: 3; Wagner 2020).

By the turn of the twentieth century, massive exploitation had pushed the wild trees that produced gutta percha to the brink of extinction. European observers placed blame on local harvesting methods rather than on the pressures generated by Euro-American demand, which had intensified in the decade preceding the construction of two transpacific cables (the British 'All-Red Line' of 1902 and, the following year, the nominally American line, really underwritten by British capital). Imperial botanists and chemists pursued a variety of solutions to the shortage, eventually discovering a chemical treatment that enabled the extraction of gutta percha from the leaves of *Isonandra* bushes and trees, which could then be produced at scale on plantations (Tully 2009; Godfrey 2013: 155–156).¹¹

Similarly, on the island of Taiwan, seized as a colony by Japan from China in 1895, colonial resource exploitation 'penetrated beyond hilltops

11 On British backing for the U.S. transpacific line, see Droessler 2022: 150.

into the mountain and forest “fastnesses” [...] where tea and sugar did not go’ (Inkster 2018: 65). Global demand for camphor, driven partly by demand for celluloid film (invented in 1889), reshaped social relations and landscapes in Taiwan, source of a large share of the world’s camphor. In the late nineteenth century, Chinese authorities had attempted to wrest control of camphor forests from Indigenous Taiwanese, extracting their labor in camphor production under the menace of deadly punishment for disobeying the Qing monopoly. Japan was even more determined to make the camphor trade and the colony profitable and governable, and unleashed yet more violence, ‘culminating in systematic bombardments of [Indigenous] residential areas between 1917 and 1926’ (Haid 2023: 17; Adams 2022).

The so-called scientific management of resources and labor, coupled with the accelerating alienation of Indigenous land, were thus reaching deep into the world’s interiors at the turn of the twentieth century, spanning commodities from cotton and coffee to chicle, caoutchouc, and camphor, and regions from German Togo to nominally independent El Salvador to Japanese Taiwan (Zimmerman 2010; Sedgewick 2015; Pretzel 2023; Inkster 2018; Droessler 2022). Efforts to rationalize jungle production did not always work out as hoped: In the case of gutta percha, plantations had limited success, only ever serving a portion of world-wide demand (Tully 2009: 575, 578; n.a. 1920).¹² But western observers continued to associate progress with settled farming and cash cropping, viewing shifting cultivation and subsistence production as backwards. In Britain, interwar observers predicted that Sarawak workers would ultimately join the wage economy rather than continuing to exhaust wild gutta percha trees: The new ‘rubber, coconut, and tapioca’ plantations springing up in the region were ‘well regulated... [and] will, therefore, undoubtedly attract the native and coolie labour away from the jungle’, noted an article on gutta-percha in the *Journal of the Royal Society of Arts* (n.a. 1920).

12 Ultimately, substitutes (developed in the 1920s) helped dampen demand for gutta percha (Headrick 1996: 6–7).

If the racialization of labor and the commodification of the global countryside reflected shared imperial discourses and practices prior to World War I, the explosive global conflict of 1914–1918 points instead towards inter-imperial competition. In the war's immediate aftermath, another kind of struggle gained visibility, that between WMPs, as alternative visions for world politics gained visibility in the infrastructural nexus. Communications infrastructures served as channels for communicating anticolonial, socialist, and other ideas across borders, as in Sa'd Zaghlul's 1919 telegram to the British prime minister asserting Egyptian independence. These infrastructures also formed objects of these WMPs, as in subsequent anticolonial attacks on British telegraph lines in Egypt (Manela 2007: 141–142).

After the war, the victorious powers tried hard to reestablish an imperial status quo. Civilizational assumptions were baked into the operations of the League of Nations PMC, the creation of which reflected the incorporation of imperialist worldmaking into internationalism: Rather than granting the losing side's colonies independence, the victors instead placed them under the international supervision of the PMC (Pedersen 2015: introduction). Article 22 of the League Covenant described these territories as being 'inhabited by peoples not yet able to stand by themselves under the strenuous conditions of the modern world' and announced 'the principle that the well-being and development of such peoples form a sacred trust of civilisation.' The winning powers, in other words, responded to anticolonial and socialist calls for self-determination by reinforcing imperial control on the racialized grounds of civilization, envisioning the PMC as 'an organ of constructive co-operation on colonial matters' (in the words of one League official) (quoted in Pedersen 2015: 5).

Japan's mixed success at Versailles likewise points to the triumph of the imperialist WMP in 1919, as well as the significance of infrastructure to imperialist worldmaking. Tokyo had taken advantage of Europe's wartime distraction to wrest greater control of Japan's telegraphic communications from the European actors that had once monopolized cable traffic in Asia. Its demands to include a racial nondiscrimination clause in the peace treaty – which echoed the wishes of far-flung anticolonial

activists – were rejected. Instead, it received a seat at the negotiating table and major geopolitical concessions. Tokyo was recognized as controlling Shandong, where in 1914 it had seized an important cable landing site from Germany (Yang 2009; Manela 2007: 180–183). It also became the League's chosen mandatory power in Yap and the rest of Micronesia, where it would seek to profit from phosphate mines and sugar cultivation, paying little mind to how this impacted the local population (Pedersen 2015: 298, note 7).

Meanwhile, how did these events affect another one of the island locales where we began this chapter, Bitapaka in German Neupommern? An intervention that began there with communications infrastructure – the seizure of German wireless installations by Australian troops in the opening months of the war – segued into decades of Australian colonization. In 1920, Neupommern/New Britain became part of Australia's Class C mandate of New Guinea, and German possessions were expropriated. The radio equipment at Bitapaka was relocated to neighboring Papua and the western Australian mainland (Cahill 1997: 25).

The years surrounding the war featured continuities as well as ruptures, in other words. As with prior German merchants and administrators, a main concern of Australia's mandate administration in New Guinea was how to provision the colony's plantations and mines with indentured labor (at least initially, the Indigenous population had been considered too *uncivilized* to make reliable laborers; see Pedersen 2015: chapter 10; Biskup 1970). The interwar government also rewarded returning Australian soldiers with overseer posts: If domestically the White Australia policy aimed at national racial purity, in Australian New Guinea imperial racial hierarchies invited white migration. As the *Official Handbook of the Territory of New Guinea* put it in 1937, '[The] function of the white man in a tropical country [is] not to labour with his hands, but to direct and control a plentiful and efficient supply of native labour and assist in the government of the country, or to engage in opportunities for trade and commerce from an office desk in a bank or mercantile firm' (Cahill 1997; Riseman 2010: 167).

As Heidi Tworek (forthcoming 2026) observes, mandated territories were not only politically deprived of autonomy; they also had 'little to

no independence' when it came to the telegraphic news traveling across their borders, which continued to be in the hands of a small set of powerful foreign actors.¹³ Communications infrastructures in Australian New Guinea were intended for the benefit of white settlers. By the late 1930s, the capital of mandate New Guinea, Rabaul, was served by a pair of wireless telegraphy stations, and residents could listen in to international shortwave voice broadcasts (Johnson/Threlfall 2023: 71). At the same time, settlers were experimenting with other technologies. *Pacific Islands Monthly* enthusiastically reported on the use of portable wireless stations that used 'power supplied by a native, who sits on a thing like a bicycle frame, and pedals lustily' (cited in Nelson 2015). This Indigenous labor powered sets intended for use by 'planters and traders', wrote *Pacific Islands Monthly*, while '[settlers] bear united testimony to the value of being able at any time to speak to persons in the centres of civilisation' (n.a. 1936: 44; n.a. 1938: 46).

As much as anything else, these offhand statements in a regional periodical were symptomatic of the imperialist worldmaking project, reflecting how little the globe-spanning communications infrastructures of the late nineteenth century and early twentieth century were intended for the people whose labor they depended on.

4.5 The legacies of imperialist worldmaking

The world of colonial New Guinea is not the world of today. Rather than being carved up between European empires, the island is now part of two postcolonial states, Papua New Guinea and Indonesia. Many of the islands that we opened this chapter with are likewise politically independent: German Samoa is now just Samoa; Fanning is part of the sovereign state of Kiribati; Yap is part of independent Micronesia. A powerful synthesis of anticolonial and nationalist WMPs, backed by the socialist bloc, durably reshaped the international system in the middle decades of the

13 On institutionalized communications inequalities in the British Empire, see also Potter 2007.

twentieth century, such that it became unacceptable to deny self-government on the basis of race or civilization. Imperialism as a self-conscious worldmaking project was discredited. Communications infrastructures were part of the reason why, a ‘double-edged sword’ (Headrick 2010) that helped unite previously disconnected groups under the banner of anti-colonialism, even as imperial elites sought to use these same infrastructures to reinforce imperial control.

Many of these islands are independent – but not all. We could enumerate others (American Samoa, Guam, the Australian Cocos Islands, French New Caledonia, etcetera) that remain non-self-governing territories according to the U.N. definition: ‘territories whose people have not yet attained a full measure of self-government’ (“The United Nations and Decolonization” 2024). In fact, the contemporary U.N. list of non-self-governing territories contains mostly islands. Why is this so, and what can the persistence of territorial empire in these spaces *after* the fading of the imperialist WMP tell us about the present and future of world politics?

Why? Because, as before, these islands are not isolated spaces. They remain crucial nodes in globe-spanning communications and defense infrastructures. The United States’ contemporary ‘pointillist empire’ has already been mentioned. While Washington may be the biggest player, other former colonial powers have retained distant islands for similar reasons: France’s Armée de l’Air et de l’Espace has bases on Reunion, New Caledonia, and Tahiti; while in 2025 Britain arranged to retain the UK-U.S. military base on Diego Garcia even as it negotiated the handover of the Chagos Islands to Mauritius. The Diego Garcia base is considered crucial for satellite communications in the Indian Ocean (Girelli 2024; AFP 2025; Charpentreau 2025).¹⁴

Why does it matter? Because islands continue to shed light on broader efforts to circumvent democracy and sovereignty on the part of powerful states and actors – what Werron calls in his chapter the rise of ‘nationalist informal imperialism.’

14 On Diego Garcia, see also Vine 2011.

Islands are both sites of investigation and a metaphor for historian Vanessa Ogle, who has coined the term ‘archipelago capitalism’ to describe late twentieth century efforts to circumvent financial regulations through mechanisms such as ‘tax havens... flags of convenience registries... offshore financial markets and banking institutions... and foreign trade or special economic zones.’ Ogle argues that this archipelago of regulatory exception – which has encompassed islands ranging from the Cayman Islands in the Caribbean to Vanuatu in the South Pacific – ultimately reshaped global capitalism and welfare states from the outside in: ‘[The] offshore world contributed to the eventual demise of the mid-century state-based order’ (Ogle 2017: 1457). Beyond the evasion of fiscal regulations, these developments were also bound up with efforts to circumvent labor regulations in the global North. For instance, the growth of the textile industry in the Northern Mariana Islands (United States) in the 1980s and 1990s resulted from the territory’s lower wages coupled with its ‘Made in USA’ branding and importing advantages (Quimby 2013).

In other instances, islands are not metaphors or only nodes of otherwise dematerialized connection, but remain sites for extracting raw materials vital to infrastructures old and new. In the energy sector, many discern a renewal of imperial ambitions among the great powers. Donald Trump’s 2025 comments about incorporating Greenland into the United States – only the latest in a string of such propositions emanating from Washington, incidentally – came alongside renewed attention to the island’s mineral, oil, and gas deposits. French New Caledonia, with its strategically important nickel deposits, has been another recent site of contestation. The archipelago’s 270,000 inhabitants are politically and ethnically polarized, with pro-independence Indigenous groups clashing with non-Indigenous residents who wish to retain political ties to France (Le Monde with AP 2024).

But contemporary political relations in the infrastructural nexus are not wholly predetermined by race or history. Western elites remain as flexible and opportunistic as when they welcomed Japan into the civilizational club at the turn of the twentieth century. The contemporary resurgence of imperial politics has at times taken the form of an

alliance between western and island elites, battling international regulation from without and democratic input from within. Independent Nauru and Tonga, for instance, have signed on to Trump administration efforts to circumvent U.N. deep-sea mining regulations. The chair of one Pacific NGO has referred to this collaboration as a ‘recolonisation of our region’ (Fuatai 2025). Rare-earth minerals may prove to be the gutta percha and camphor of the twenty-first century: raw materials that enable so-called clean infrastructures, and the demand for which projects political competition and cooperation into far-flung spaces that in turn require the extension of these infrastructures.

In a final twist, these minerals may not be so earthly, after all. They are thought to exist in quantity in outer space. In ongoing state and commercial ambitions to exploit resource frontiers and circumvent democratic and multilateral oversight on Earth and beyond, we can see that imperialist worldmaking is not an island relegated to the past (see, e.g., Deberdt/Le Billon 2023; Kilgore 2003). It continues to imprint political designs for resource extraction and militarized expansion – bolstering, finally, this volume’s argument for a less insular relation between History, Sociology, and International Relations.

5 Where WMPs Meet 'up' and 'down': Exploration, Governance, and Infrastructures in the Polar Regions

Mathias Albert

5.1 Introduction

The vast majority of people on the planet – and that includes historians, sociologists, and IR scholars like the authors of this volume– are pretty certainly only dimly, if at all, aware of the existence, let alone the exact location of, Franz-Josef-Land, Neuschwabenland (New Swabia), or the Executive Committee Range.¹ That would be understandable if these names designated rather small geomorphological features, known only locally. However, Franz-Josef-Land is an archipelago with 192 islands visible on every world map, with the largest island (Prinz-Georg-Land) about the size of Samoa. Neuschwabenland is about the size of Ukraine. And the Executive Committee Range consists of five rather distinct mountains, with the tallest reaching an altitude of about 14000ft. Certainly, the lack of knowledge or attention has something to do with the fact that no human being has ever lived permanently in, or even very close to, these areas. Temporary residents include military personnel (in the case of Franz-Josef-Land), researchers, mountaineers, and

1 This chapter was also written in the context of the DFG-funded research project 'The worldviews of ice: constructions of the Arctic at the science-policy interface.'

tourists. No known designations of these places exist by any Indigenous population.

What all these places do share, however, is that they all form expressions of various aspects and phases of polar exploration which themselves can be seen to express distinct or overlapping worldmaking projects (WMPs).

Why turn to something as remote and seemingly marginal as the polar regions when studying worldmaking projects and the infrastructural nexus? Arguably the remoteness always translated, and continues to translate, into the polar regions being of rather marginal interest in the context of the disciplines involved in the present undertaking. However, this peripheral status has actually made these regions the object of quite a lot of interest when it comes to projecting the future of the world in the present – ranging from nineteenth century (and earlier) imaginations of what lies ‘beyond’ the ‘ice barrier’ to contemporary explorations of the role of those regions – as those globally most affected by it – in global warming.

The present chapter explores the intricate relation between the polar regions and WMPs in two related, if quite different directions:

First, it asks how WMPs overlap, particularly in their material-infrastructural manifestations, in the polar regions. This question is exploratory in the sense that polar regions probably have never played a central role in world politics (with the latter even broadly defined) – but nonetheless have never been completely exterior to it either, particularly when seen as part of completing the horizon of what the ‘world’ in geographical terms includes in the emerging world imaginaries of the nineteenth century.

Second, it asks whether there exists something like ‘polar WMPs’ in their own right. That question reflects that although the polar regions remain on the edges of world politics, they have definitely increased in importance. They certainly are on their way to center stage if considered through the prism of the importance of the (disappearing) cryosphere for living conditions on the planet.

In order address these questions, the next section will take a cursory look at the history of polar exploration and the associated dynamics of

naming places alluded to above (2.1). It will argue that the history of polar exploration from early on is also a history of infrastructural development that is inextricably intertwined with powerful imaginaries of pristine wilderness to be conquered (2.2). Such conquest takes place particularly in connection with, and under the name of, three specific worldmaking projects, namely the imperial, the nationalist/national-sovereign, and the internationalist-scientific/supranationalist (2.3). Another section will more extensively illustrate how this WMP/infrastructural nexus plays itself out in practical arrangements, challenges, and conflicts, using as examples Svalbard as well as Antarctic sovereignty/governance claims and infrastructural arrangements. The focus here will, however, be on Svalbard which –because of its very special status – serves as a prism through which this nexus can be observed (2.4.).

The next part will then explore the question of whether something like 'polar WMPs' exists. While the answer will be a tentative 'no', it is argued that it still is worthwhile asking this question, if only to explore possible dynamics and shapes of WMPs *in statu nascendi*, that is with a distinct look into the future. It will be argued that what can be witnessed in some discourses and practices that surround the Antarctic Treaty System (ATS) and the various framings and projections that go together with the notion of a 'Global Arctic' can at least partly be read as struggles for establishing – or at least increasing the influence over existing – WMPs. Exploring them might offer a glimpse to nascent WMPs shaping the future. Such nascent or possible WMPs do tend to refer to the particular status and associated infrastructures and infrastructural requirements as part of their rationale (3.1). In the Arctic, these references permeate discourses and become particularly visible when it comes to questions of port infrastructure, but also, for example, the challenges to the construction of buildings posed by permafrost thawing. In Antarctica they also appear in the shape of very concrete proposals of 'worldmaking' in the sense of ideas for effective geo-engineering, most notably to prevent the collapse of the West Antarctic Ice Sheet climatically or physically (e.g. installing underwater curtains to prevent ice loss) (3.2).

5.2 Overlapping at the poles? WMPs in the High North and Antarctica

5.2.1 On exploring and naming

Polar exploration, including the ‘scramble for the Poles’ in the Arctic and the Antarctic can certainly not be reduced to a facet of individual imperialist projects, or of a combined imperial WMP. With ideational predecessors in ancient mythology pertaining to the unknown North of known civilizations (‘Ultimate Thule’), and with a quite long history of (seen, from a contemporary perspective, sometimes remarkably obscure) ideas of what lies within and beyond the barriers formed by impenetrable ice, living in, as well as making economic use of, the Arctic has histories that go far beyond those of imperialism and associated colonialism. For thousands of years, various peoples have lived in the Arctic. Later, Western exploration often was not spearheaded by ‘real explorers’, but by people and companies pursuing primarily economic objectives (e.g. whaling, fur trade, etc.). Against this background, the ‘expedition’ became an interesting cultural form within the cultures and practices of empire (cf. Thomas 2015), and it came to play a dominant role in histories of the polar regions as told by essentially imperial writings of the polar regions’ history. Of course, expeditions always were only one part of that history, particularly when it comes to issues of colonial appropriation in the North American and Russian/Soviet Arctic. Nonetheless, much of the polar exploration organized as expeditions particularly in the nineteenth and early twentieth centuries in the name of empire and homeland never was simply about conquest and geopolitical interests, but many explorers invariably also were driven by a high degree of (scientific) curiosity. In that sense, as strange as this might sound, compared to many other places in the world, much of the colonial subjugation of Indigenous peoples in much of the Arctic seems to have happened not ‘by design’ under the primary aim to acquire exploitable, inhabited land, as it were, but as a kind of ‘by-product’ of polar exploration and territorial appropriation.

Needless to say, the story regarding the Antarctic is quite different, with the first confirmed sighting of the continent probably having oc-

curred only in 1820 and with no traces of any history of even temporal previous human habitation to be found there. Without an Indigenous settlement, whaling here as well went along with the exploration of the Antarctic continent at its fringes (the first person to set foot on the continent probably was a sealer shortly after it was first sighted; the only semi-permanent settlements before research stations on the mainland where whaling stations on islands, notably Grytviken on South Georgia (est. 1902).

Still, soon enough both the Arctic as well as Antarctica, despite their vastly different background – zone of human activity and inhabitation for millennia around a central, ice-covered ocean on the one hand, a massive ice-covered continent about which little to nothing is known until well into the nineteenth century, on the other hand – would find themselves as objects of overlapping worldmaking projects, namely an imperialist, a nationalist, but also an internationalist-scientific one (International Polar Years) (see 2.3 below).²

As everywhere else on the planet, naming places, as well as changing the names of places, is an ongoing cultural practice deeply interlaced with power relations. While basically most of these practices in the Arctic can be subsumed in a story in which many Indigenous denominations were replaced by ones given by explorers and geographers, often designating in the name of monarch, homeland, nation, empire, or a specific person (often the said explorers and geographers), the situation is remarkably different and unique in the Antarctic with no existing denominations by any Indigenous population.³

In Antarctica, the full spectrum of the types of designations mentioned can be found with, for example, the last German Emperor giving

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- 2 The term 'internationalist-scientific' here already refers to the specifics of the empirical case at hand. It is of course perfectly possible to have an internationalist WMP without any particular focus on science.
 - 3 Needless to say, the exceptions in the Arctic are those areas with no Indigenous population, notably Svalbard and Franz-Josef-Land. The reconstruction and collection of Indigenous place names comes under the name of 'toponymy' and there exist a range of projects in this respect; for the case of the Canadian Arctic, see Porter et al. 2024.

his name to Wilhelm II Coast; a part of Southwestern Germany god-fathering New Schwabenland; the discovering U.S. explorer Lincoln Ellsworth naming the American Highland after his homeland; the famous explorer Sir Ernest Shackleton giving his name to quite a number of geographically quite distant places: the Shackleton Coast, the Shackleton Range and the Shackleton Ice Shelf; the Executive Committee of the United States Antarctic Service giving its (admittedly not very inspiring name) to the Executive Committee Range.

What is remarkable in relation to the toponomy (the naming of places) in Antarctica, however, is the maze of naming and how this already directly reflects different overlapping episodes of exploring and naming Antarctica. As a rule, with many exceptions, naming in Antarctica reflects claims of control or sovereignty over Antarctic territory. Up to the present day, the claimant states reserve the right to name places in the territory over which they claim sovereignty (in the UK, for example, this is done by the Antarctic Place-names Committee for the British Antarctic Territory). The 'exceptions' here are varied, however. On the one hand, place names are kept for many places for which only historical claims exist (as in the case of Germany, cf. 'Neuschwabenland'). On the other hand, names are given to (already named or unnamed places) in languages other than those of the claimant states by countries with no sovereignty claims in Antarctica at all (e.g., by the Bulgarian Antarctic Place-names Commission) – or, as in the case of the U.S., by states that have a big role in Antarctica and share a language with one or more of the claimant states, but with no sovereignty claims of themselves.⁴

4 For a detailed reflection on the intricacies of Antarctic nomenclature, see Alberts 1995 – but with no reflection whatsoever about the possibility that naming could be anything but a national task. The Scientific Committee on Antarctic Research (SCAR) maintains a comprehensive compilation of about 40000 names that correspond to approximately half that number of features (The 'SCAR Composite Gazetteer of Antarctica'; <https://data.aad.gov.au/aadc/gaz/scar/>). Long-term international harmonization was one of the main rationales behind the establishment of SCAR's Geographical Information Committee (SCAGI), that was founded as recently as 2006.

These observations alone remind us that the naming of places is never a pure or 'value-free', scientific exercise. It is not even merely a reflection of competing claims over sovereignty, as in the case of the Antarctic. Rather, it is the result of a *mélange* of numerous political constellations, cultural practices, and scientific observations (for the Arctic see Wråkberg 2002).

5.2.2 Infrastructural conquest and imaginaries

This is not the place for developing the full story of the toponymy of the polar regions. The story needed to be addressed, however, in order to develop one specific part of the argument. While, in an historical empirical sense, the toponymy of most parts of the inhabited Arctic followed the conventional story of the colonial replacement of Indigenous toponymy (with some more recent re-replacements) and can thus be considered ingredient practices of an imperialist worldmaking project, the toponymy of Antarctica (and of some places in the Arctic with no Indigenous population, most notably Svalbard and Franz-Josef Land) lays open how different worldmaking projects overlap and interact through corresponding imaginaries. In this respect, naming places only forms the most obvious and visible, semantic level of such imaginaries. Fiction, narratives, visual representations (through maps, photos, films, paintings, etc.), form additional ingredients here (cf. Albert 2023 for the case of Svalbard). Imaginaries of what something 'is' are part and parcel of its making and remaking, as well as contesting that 'something' (cf. Steinberg et al. 2015).

While all of this is true for basically any region in the world, I would argue that physical infrastructures (as well as, to some degree, built environments – only think of the representational power of the igloo in children's books) play a particularly important role in the polar regions, mainly because of the stark and visible contrast to the imaginary of 'pristine wilderness'. In such an environment, the explorer explores, and sometimes 'conquers', but he (far more rarely: she – before, that is, some only historically fairly recent shifts in polar research in this

respect) – usually doesn't leave much behind, save possibly a flag, a cairn, a depot, or, for that matter, a shipwreck or a dead body.⁵

After their explorations have concluded, explorers tend to leave the imagined pristine wilderness, but infrastructures stay as a marked contrast. An introductory essay to a photographic art book that pictures a vast array of (military, commercial, research) sensing infrastructures in the Arctic (Sailer 2021) remarks:

'Sensing infrastructures installed in the Arctic join a long history of attempts at capturing the far north – from centuries-old myths and fantastical maps that encircled the region long before anyone set eyes on it, to fraught polar expeditions at the turn of the twentieth century that triggered an international race to conquer the North Pole. Where nations in these early days relied on planting flagpoles into the ice to mark their dominance over the region, today they rely on parabolic radar dishes, servers and data storage facilities, fields of antennas, automated surveillance systems, meteorological stations, floating research platforms, and unmanned aircraft to do the same' (Kirschner 2021: 27).

With the slight correction that in the 'early days' mentioned, the planting of flagpoles was often done more in the name of the monarch rather than in the name of the nation, the quote hints at the defining role of infrastructure for the characterization of the polar regions as places that are somehow not wilderness, but at least half-controlled by human presence mediated through infrastructures that come in the form of radar stations, research stations, meteorological stations, military bases, etc. The difference between the Arctic and the Antarctic is quite pronounced in this respect, with infrastructures in the latter case almost solely existing for research purposes. What is important to

5 That being said, probably little has captured people's imagination as part of the reproduction of polar imaginaries more than the Franklin and Shackleton expeditions: the whereabouts of Franklin's grave and the two ships of the Franklin expeditions that disappeared in 1848. While the former still remains to be found, the latter two were discovered (*HMS Erebus* in 2014 and *HMS Terror* in 2016; Shackleton's famed *Endurance* reappeared in 2022).

observe is that arguably infrastructures provide the most visible external representation of the infrastructural 'puncturing' of the pure and pristine wilderness and whiteness, and this is completely irrespective of whether these infrastructures have human beings present on a permanent or seasonal basis, or are visited for maintenance purposes only. Urban landscapes, settlements, or architectural aspects rarely feature in this respect. This is not to say that these were not important subjects, to which indeed quite a lot of study and discussion is being devoted to. Rather, it is to say that they rarely feature in what are more or less global representations of the polar regions. When, so the argument here, the polar regions are addressed by, and through infrastructures also 'marked' as integrated into worldmaking projects, then the 'worldmaking' is literally quite disinterested in the local and its infrastructures – be those power stations for local energy supply, be those (mostly missing) sewage systems.

5.2.3 Worldmaking projects at the poles: imperialism, nationalism, inter-/supranationalism

Imaginarities of the polar regions do not exist isolated from other imaginaries. Particularly in relation to nation-states they are interwoven with other imaginaries of nation, empire, the world, etc. This link is particularly visible in relation to a number of countries with traditionally strong narratives of being 'polar' nations (cf. Sörlin 2013), but possibly also embedded in geopolitical imaginaries of states that are, in terms of geographical distance, partly within, or adjacent to, the polar regions (cf. Wehrmann 2018), or states that are actually geographically quite far away (and, like China, define themselves as a 'near Arctic state' – cf. Dams et al. 2020; or states that play a seemingly outsize role in Antarctic politics, as for a long time for example Malaysia did).

In the case of the polar regions, and particularly the Arctic, imaginaries here come with quite a lot of historical baggage when it comes to projections and imaginations. These range from ancient projections of an 'ultimate Thule' in the North; to the idea, prominent even in the British Admiralty up until late in the nineteenth century, that beyond the

Northern ice barrier might lie a tropical sea (cf. Fleming 2000); to conspiracy theories that argue that the German Nazi elites survive in hiding in an underground base in Neuschwabenland in Antarctica (cf. Baldauf 2015). While few today think Greenland's shores ripe for the development of tropical beach resorts just yet,⁶ or maintain that Nazis hide near the South Pole, the polar regions resonate as regions upon which all kinds of things can be projected.⁷ This, I would argue, makes them ideal for being included in worldmaking projects as resonating projections, assuming, in line with our understanding of what constitutes such projects, that such projections form part and parcel of their worldwide extension.

The important thing here is that the polar regions are not isolated entities, in which then the logics of different worldmaking projects would somehow be 'applied' in an isolated fashion. Rather, given the global ambition and reach that defines worldmaking projects, the polar regions would need to be seen as forming part and parcel of these projects. They might not really ever have played a central role, but attest to the fact that worldmaking does include an image of '*Restlosigkeit*' (cf. Krajewski 2006), meaning no part of the world should be left as a 'rest' outside.

Worldmaking projects influence, are reflected in, and play themselves out in a range of such imaginaries. How imaginaries are created, reproduced, changed, and contested rests on a vast variety of different means – political, economic, artistic, mundane, etc. (cf. Albert et al. 2024). The practices involved will certainly never only be infrastructural – but infrastructures are required, and they certainly leave a

6 The exception possibly having been Donald Trump when in summer 2019 he proposed to purchase Greenland from Denmark. With his pressing the issue again in 2025 it became rather clear, however, that his motive for incorporating Greenland into the U.S. was, in that case, not driven primarily by plans on real estate development.

7 Asked about his most bizarre professional experiences in this respect, a guide in the Arctic once told me about a client who insisted to be taken to a latitude of 100 degrees North. Upon being pointed to the fact that it was impossible to venture north of the North Pole at 90° North, he maintained that this was indeed possible, but that unnamed forces took great effort to ensure that the remaining 10 degrees were carefully hidden from public view!

visible mark, even if the visible physical-technical manifestations are always only one, but indispensable, part of infrastructures, which, for example, also include provisions for their use, access, or even questions of preservation as technological heritage.

But why and how are the polar regions parts of worldmaking projects? Which projects? I would argue that the polar regions have been, and continue to be, included into an imperialist, a nationalist, and an internationalist worldmaking project respectively. They also are a showcase for how such different, and partially competing, worldmaking projects can overlap in their ordering function, and how this overlap, as well as the connections and competition entailed therein, is both expressed in, as well as enabled by, infrastructures.

The polar regions have been, and continue to be, shaped by three worldmaking projects which have addressed and included them in various ways and to varying degrees. There is, and continues to be at work:

(1) An *imperialist* worldmaking project. This is simply due to the fact that the initial 'discovery' and exploration of the polar regions, save for some preceding commercial activities (particularly whaling), by non-Indigenous actors (in the Arctic case, with no Indigenous population having existed in Antarctica) was mostly done by empires and in the name of imperial expansion, through claiming land, naming, and subjugating existing populations (although it remains debatable whether the claim to unpopulated territories really should be counted as 'colonialism'; cf. Mancilla and Roberts 2024).

(2) A nationalist/*nation-state sovereignty* worldmaking project. This is expressed in the practice of claiming all or parts of the polar regions as part of sovereign state territory, or at least as part of states' Exclusive Economic Zones (EEZ) under UNCLOS (with the sole exception of the relatively small area that would remain as High Seas in the Arctic Ocean if all filed continental shelf delimitation claims were accepted).

(3) An *internationalist* worldmaking project, which seeks to treat (parts of the) polar regions as expressions of international collaboration, spaces removed from global conflict dynamics (cf. the discourses on Arctic 'exceptionalism', e.g. Lackenbauer/Dean 2021). In legal terms, this internationalism is at least to some degrees expressed in both the

Antarctic Treaty with its 'freezing' of sovereignty claims, as well in the special usage rights granted to signatory states other than the sovereign in the Svalbard Treaty.

Needless to say, all these three worldmaking projects overlap to various degrees and in changing ways over time, and part of this variation is expressed in how they rely on, as well as underpin, infrastructural evolution.

5.2.4 The rift zones of the WMP/infrastructural nexus

The polar regions are full of all kinds of infrastructure, with a marked difference as to their number and variety. The Antarctic continent is relatively 'simple' in this respect. 'Old' infrastructure of archeological interest is sparse, limited to some huts/remnants of old expeditions (no old whaling infrastructure exists on the continent itself, the most prominent probably being Grytviken on South Georgia), whereas it is to be found scattered all around the Arctic (and that does not pertain to any kind of 'lived-in' infrastructure of Indigenous populations). Otherwise, almost all of infrastructure in Antarctica serves research, as well as to a limited (but increasing) degree touristic purposes. The only possible exception to this is the Chilean Presidente Eduardo Frei base on the Antarctic Peninsula, which exhibits all characteristics of a permanent small settlement (including school, hospital, and supermarket).

In contrast, there is nothing in terms of (technical and communications) infrastructure that does not exist in the Arctic (bearing in mind that much of the land is permanently inhabited state territory). There are research stations, ports, military installations, submarine cables, etc. Military infrastructure as well as port infrastructure probably are the most eye-catching features in this respect. In particular the sensory equipment for detecting missiles and aircraft that were erected during the Cold War (e.g. the North American Distant Early Warning Line) came to symbolize the importance of the Arctic in the East-West conflict in the past. Ports (in their present or envisaged states) being of a far less spectacular kind, but over the past years having featured very prominently in discourses on the future of Arctic shipping under the condition

of disappearing summer ice, particularly in the Northwestern Passage and along the Northern Sea Route.

How do these infrastructures connect to and how are they embedded in relation to the worldmaking projects mentioned? In one sense, the answer is quite easy, if one took legal ownership of infrastructures as a starting point: most infrastructures belong to someone – if not a state actor, then an actor legally registered in a sovereign state. Thus, at least in the Arctic, one could plausibly claim an almost absolute dominance by a nation-state worldmaking project. However, it is not the easy cases that are of interest here, but those where arguably rifts between the different worldmaking projects become visible at the infrastructural nexus.

The case and the politics of research presence on Svalbard are particularly pertinent when it comes to demonstrate how different worldmaking projects result, and overlay in, infrastructures. In order to illustrate this, it seems worthwhile to recall a few of the particularities of the place: First, Svalbard is covered by the Svalbard Treaty, signed in 1920 (coming into effect a few years later). While the Svalbard Treaty grants full sovereignty over the archipelago to Norway, it also grants a number of rights to the citizens of signatory states⁸. Briefly put, the main provision of relevance here is the beginning of Article 3 of the Treaty, which stipulates.

'The nationals of all the High Contracting Parties shall have equal liberty of access and entry for any reason or object whatever to the waters, fjords and ports of the territories specified in Article 1; subject to the observance of local laws and regulations, they may carry on there without impediment all maritime, industrial, mining and commercial operations on a footing of absolute equality.'

8 This point needs to be emphasized: Svalbard is a part of Norway and under full Norwegian sovereignty. However, this sovereignty is bestowed by other state through an international treaty. It is an open debate on whether this treaty remains the constitutive source of that sovereignty, or whether that has been superseded by both the UN Charter and customary international law; cf. Rossi 2015.

Research activities are not explicitly mentioned in the Treaty. However, they are obviously also not excluded, given the broad definition of 'whatever reason or object whatever'. The only limiting factor here are the 'local laws and regulations', meaning that some activities in some places can be prohibited or restricted notably for environmental or safety reasons.

To understand how WMPs and infrastructure connect and sometimes lead to frictions in Svalbard, Ny-Ålesund is a particularly interesting (and hotly debated) case in point. Ny-Ålesund is (or 'was') one of the few larger permanent settlements on Svalbard. In addition to the larger former mining (turned into tourism and research) town of Longyearbyen as the largest settlement (with a population of a little more than 2000 people, although without a few exceptions most only live there for a number of years), only Barentsburg remains as a small mining town (with a 2024 population somewhere in the region of 400 people). Ny-Ålesund also was a mining town, but mining activities ceased in 1963 (after a huge mining accident). However, it was not completely abandoned as a settlement, but slowly re-purposed as, and growing into, a research settlement. It is now a town that hosts numerous research facilities/stations, with a stable small (double-digit number) year-round population of technical, administrative and research staff, that significantly increases over the summer months (lower three-figure number).⁹ This re-purposing stands in distinct contrast to the Soviet/Russian-populated mining town of Pyramiden, with a peak population of around 1000 people, that was abandoned in 2000 as a permanent settlement (after mining ceased two years earlier), and that as a 'ghost town' tourist destination only has regained a very small number of permanent resi-

9 It should be noted that over the summer months there is also a significant amount of people visiting during the day by cruise ship or boat, but unlike in Longyearbyen there is no tourism infrastructure in Ny-Ålesund (i.e publicly accessible accommodation, shops, lodging, guiding services).

dents working in that sector for hosting day tourists over the past couple of years (but see below on Russia's initiative to re-settle).¹⁰

Because of the rights of use granted under the Svalbard Treaty, as well as because of the established transport, housing, and laboratory, Ny-Ålesund houses most of the Arctic research outfits of non-Arctic states (on Svalbard itself, there also exist a very small number of others that are not in Ny-Ålesund). The important point now, however, is that the Ny-Ålesund facilities are completely owned by Norway, and nowadays managed by the Norwegian Polar Research Institute.¹¹ This means that strictly speaking there exists no 'Chinese' station, no 'UK' station, and no 'French-German' station, etc., in the same sense as these do exist most notably in Antarctica. Rather, all these stations depend on leasing arrangements which national research outfits conclude with, and under the conditions set by, the 'landlord'. It is exactly this situation with research infrastructure which has led to, and continues to lead to, quite some commotion that directly expressed the clash of worldmaking projects.

Generally, cooperation in situ between the various institutions and projects runs smoothly. Practical coordination matters on the ground are handled by the Ny-Ålesund Science Managers Committee (NySMAC) committee, in which representatives of all national science missions conducting work in Ny-Ålesund are present. While thus there exist few conflicts in the daily running of scientific business, and the biggest pressure on the settlement is arguably overtourism by daytime visitors

10 Svea is a special case in this respect: a long-time mining settlement (although for quite some time without a permanent population but with daily or weekly 'commuters' from Longyearbyen), that actually hosted the most productive coal mine in Svalbard, Svea was closed in 2020. Over a course of three years *all* infrastructure was removed, which needs to be read at least partly not as an (extremely costly) exercise out of primary concern for the environment, but also as a proactive measure for preventing continued use of the site by other actors (perfectly permissible under the provisions of the Svalbard Treaty).

11 The land on which Ny-Ålesund stands is owned by Kings Bay AS, a 100% state-owned company, that organizes all practical issues, whereas the Norwegian Polar Institute oversees research activities.

(from cruise ships) over the summer, there have been repeated discussions on issues of *naming* that can be seen to express the very practical instantiation of a nationalist worldmaking project on the ground.

As alluded to above, basically everyone has a right to conduct research on Svalbard. It is worth noting, however, that clearly Article 1 of the Svalbard Treaty cited above does not convey this right to signatory states or their institutions, but to the ‘nationals’ of these states. This means that the right pertains to individual citizens, not states. This very clearly is a situation that cannot be reconciled with popular perceptions that Svalbard would somehow form some kind of ‘international’ space, where sovereignty would somehow be ‘shared’.¹² There exist many popular perceptions of this kind (see Østhagen 2024), but no serious legal interpretation that would dispute the very clear fact that the Svalbard Treaty fully acknowledges Norwegian sovereignty. That being said, the provisions of the Treaty that grant citizens of other states quite special rights on (a part of the) sovereign territory of another state (in addition to, most notably, human rights in principle held by everyone everywhere) *do* underpin what might seem like an ongoing ping pong game in which, so to speak, the extent of the ‘specialness’ and the ‘elasticity’ of sovereignty are tested, on the one hand, and in which, on the other hand, the Norwegian government is quite eager to factually and symbolically assert its sovereignty (and, in the case of Longyearbyen, the ‘Norwegianness’ of the place; cf. Pedersen 2017). As mentioned before, this does lead to little or no friction in the daily running of affairs in Ny-Ålesund. But it does lead to a range of ongoing disputes on *naming* the relevant infrastructures and associated symbols. Thus, there exists a regular exchange of (more or less formal) letters that bemoan the naming of certain research facilities partly operated (but always *within* the overall infrastructural premises of Kings Bay AS) by nationally based

12 One could argue that, in a sense, ‘internationalism’ falls somewhat short of what is being observed here, and that in fact what is going on is something that somehow transcends the international in the direction of transnational cosmopolitanism. I owe this point to Tobias Werron.

institutes as national research facilities:¹³ 'the entrance to a wooden barrack of cultural heritage status in Ny Ny-Ålesund, Svalbard, was decorated with two lions from solid marble. The building, previously known as *Ungkarshjemmen* ('the bachelor home'), had just been leased by the Chinese Arctic and Antarctic Administration (CAA) and was being transformed into the 'Chinese Yellow River Arctic Station' (Pedersen 2021: 1–2); or: 'A tiny hut, leased by the University of Groningen to support the monitoring of barnacle geese in the summer months, became "The Netherlands Arctic Station in Spitsbergen" decorated with wooden shoes, flags, and other symbols' (ibid.: 2). It would be easy to dismiss all of this as extremely uninteresting and marginal, no more or less important than, say, putting up a national flag or symbols of your country of origin or citizenship in your office even if you work for a university located in another country. And indeed, neither the Chinese, nor the Dutch, nor anyone else doing research in Ny-Ålesund has ever claimed ownership of parts of the land or even sovereignty rights. Thus, some Norwegian reactions might seem to exhibit uptightness more than anything else. However, it would be very wrong to easily dismiss these things, as they are played out quite seriously through adaptations of Norwegian policies and resulting reactions particularly from other national science organizations/managers (see Hansen/Moe 2024).¹⁴ Given that they are seemingly marginal and nonetheless frequently a subject of marking dissonances can also exactly be read in the opposite direction,

13 See <https://nyalesundresearch.no/nysmac/>.

14 The entire issue flared up in November 2024, demonstrating the fine line between disputes on principled issues (sovereignty) and very localized events: in order to celebrate the twentieth anniversary of the Chinese 'station' in Ny-Ålesund, a group of visitors turned up and posed in front of the entrance with its (in)famous two dragon statues, with one woman parading around in military camouflage uniform. The outrage duly followed and pertained to implicit Chinese claims represented through this action (and the violation of the provision not to have military personnel in Svalbard). But then, a neutral look at the picture showing the parading woman could also be seen to reveal nothing but an eccentric, nationalist-enthusiastic participant in the outing rather than a serious 'showing of flag'; cf. Eriksen et al. 2024.

namely that here a clash of far more general ordering principles within or between worldmaking projects show themselves. These are ongoing, real or imagined, contestations not about a lion figure or a wooden shoe in the snow, but about in which context a place is imagined to *exist*.¹⁵

These ‘rows’ about the naming of research infrastructure demonstrate, at a minimum, frictions that arise *within* the context of a nationalist worldmaking project, that entails open, or at least latent, conflicts over territorially defined sovereignty. At most, they signify a friction between a nationalist and an internationalist worldmaking project, when the latter is asserted in the name of international science collaboration that should simply not be too much concerned with sovereignty issues.

While such a diagnosis would seem to lack any reference to any kind of ‘imperialist’ worldmaking project, the argument can be made for this to be present in this context as well, particularly becoming visible in the aftermath of Russia’s invasion of Ukraine. Russia has no research presence in Ny-Ålesund, not requiring the local infrastructures that particularly non-Arctic states need, given its own vast swathes of Arctic territory. Even the Russian settlement of Barentsburg never has played any noteworthy research role. All that, at least rhetorically, changed, when in October 2023 (timed to coincide with the Svalbard Science Conference taking place in Oslo), Russia announced that it planned to re-activate Pyramiden and establish a science Center there (see Nilsen 2023). The intention, in this context, is however not merely to establish a Russian out-

15 An interesting ‘side show’ in all of this is the by now strict Norwegian policy of excluding anything but the natural sciences from Ny-Ålesund (the exception being research on local cultural heritage sites). Some critical voices suspect this is to prevent social scientists, known for asking critical questions, sniffing around the place. The Norwegian argument is that resources are scarce and social scientists need not be in place there (an argument which is a non-starter if the research was exactly *on* natural science and the conditions in the place). Funnily, quite some social scientists lurk around (but only if they find a national institute to assign them a natural science task in a natural science project) – and the only ones to officially complain about the situation are the Chinese, with their renowned Arctic social science research efforts (with apologies for the hint of sarcasm here).

fit with the accompanying infrastructure (neither much needed in the context of Russian polar research, nor probably financially much viable given the state of Russia's war-drained finances¹⁶). The announcement included an invitation to other states, particularly also China and India, to join in using the Russian infrastructure in Pyramiden for their own research purposes. On a practical level this might seem to be a measure to circumvent the Norwegian policies regarding the use of Ny-Ålesund (again: notably for other countries, not for Russia). However, on a quite more profound and fundamental level, it can only be read as an active assertion of geopolitical interests, drawing Svalbard further into what since the invasion of Ukraine openly appears as an imperialist project on the Russian side. This does, not least expressed in the idea to have China set up shop in Pyramiden, not only reflect a single imperialist project, but needs to be seen as part and parcel of an imperialist worldmaking project. Svalbard, of course, is only a microcosm in this respect. Although having a very peculiar status, it resides in the 'larger' geopolitical picture, a picture that depicts the overlap and clash between nationalist and imperialist worldmaking projects; a nationalist one, with not openly, but at least symbolically competing sovereignty claims and a remaining adherence to 'playing by the rules' (notably thus far in the highly contentious as well as consequential issue of continental shelf delimitation, where everyone still seems to abide by the authority of UNCLOS, duly filing claims with the Commission on the Limits of the Continental Shelf), and an imperialist one, in which the world should be divided up into imperial zones of influence, by taking specific measures such as the one described, by investing in port infrastructure along the Northwestern Passage and the Northern Route, or by proclaiming itself, in the case of China, a 'near-Arctic state'. And, indeed, on a more abstract level, one could also see imperial zones of influence logics to lie behind the Arctic Council's emphasis on international cooperation under the condition

16 At the point of writing, almost two years after Russia's announcement, anecdotal evidence thus far shows nothing in terms of activity on the ground in this respect in Pyramiden.

of deliberately excluding non-Arctic states from the inner circle of decision-making.

Obviously, the situation in Antarctica is quite different in many respects, comparable only in terms of the fact that worldmaking projects and their infrastructural underpinnings and manifestations overlap and compete here to various degrees. The most remarkable thing, however, is that probably nowhere else in the world does this overlap become so *visible*. Starting with a view on but a common map of the continent in any atlas, one will immediately be confronted with an imperialist worldmaking project, namely the territorial claims on large swathes of the continent by Argentina, Australia, Chile, France, New Zealand, Norway, and the United Kingdom – literally ‘frozen’ by the Antarctic Treaty, but also visibly existing, and even leading to contemporary episodes of conflict (such as when for example it is claimed that the ‘freezing’ of claims by the Antarctic Treaty might pertain to the land, but not the corresponding Exclusive Economic Zone).

Like the Svalbard Treaty, the Antarctic Treaty provides for a de-militarization. *Unlike* the Svalbard Treaty, the Antarctic Treaty does not convey any sovereignty to any state. Regarding the issue of research infrastructure, the picture then emerges as a little different in comparison to the Svalbard setting. There exists an important legal provision in the Antarctic Treaty with political-practical consequences for research infrastructure directly.

Article IX.2 stipulates that:

‘Each Contracting Party which has become a party to the present Treaty by accession under Article XIII shall be entitled to appoint representatives to participate in the meetings referred to in paragraph 1 of the present Article, during such time as that Contracting Party demonstrates its interest in Antarctica by conducting substantial scientific research activity there, such as the establishment of a scientific station or the dispatch of a scientific expedition.’

This basically means that participating in decision-making in the context of the Antarctic Treaty is dependent on conducting ‘substantial scientific

research activity' there. Although, obviously, what 'substantial' entails might be quite open for interpretation, the examples given then point in the direction of what is taken to count: it is not research 'on', but research 'there' (meaning extensive research relying solely on satellite imagery probably would not count, nor the establishment of a learned association dealing with Antarctica but located somewhere else). Given that sole expeditions for scientific purposes without any reliance on local infrastructure (i.e. stations and airfields) are nowadays rather impractical and basically non-existent, it is the 'establishment of a scientific station' that counts. Certainly, there exist no scientific stations in Antarctica that do not do scientific research. However, what the provision of the Treaty basically means is that research structures there to a significant degree also exist because of states' wish to participate in Antarctic Treaty decision-making (this has, incidentally, led to quite a second-hand market for Antarctic research stations, with less affluent countries taking over decommissioned ones from countries with a larger research funding and the capacity to build new stations).

In Antarctica, the underlying worldmaking project, represented through territorial claims (of Argentina, Australia, Chile, France, New Zealand, Norway, and the United Kingdom), is imperialist. However, a case could be made that at least the U.S. and Russia (or formerly the Soviet Union) have always also participated in Antarctic politics through the logics of an imperialist worldmaking project, even without putting forward sovereignty claims of their own.¹⁷ It particularly overlaps with a strong internationalist worldmaking project that, strongly intertwined with Cold War geopolitical constellations, was expressed in the International Geophysical Year 1957–8 that provided part of the *raison d'être* for the emergence of the Antarctic Treaty and that still strongly

17 A case could be made that the US has a particularly privileged and noteworthy position in this respect, given the fact that the only Antarctic Specially Managed Area under the Antarctic Treaty that contains research facilities is ASMA-5 Amundsen Scott South Pole Station, meaning an area of about 27000 square kilometers that is a specifically designated area of collective interest, but under the *de facto* control of but one country (i.e. the US).

permeates Antarctic research infrastructure: while the single-nation station remains the rule, there exist strong cooperative links between individual stations (most notably when it comes to the establishment, maintenance, and operation of airfields on the ice). However, and in quite notable contrast to Earth's orbit, unlike the International Space Station, there never existed an International Antarctic Research Station. (cf. Hemmings 2011). Looking at the current situation, there seems to exist an emerging dynamic of trying to push an internationalist logic with the, thus far, probably largest coordinated effort for establishing and linking research efforts and infrastructure for combining data collection and integration ('Antarctica International Science & Infrastructure for Synchronous Observation' cf. www.antarctic-insync.org). Such a dynamic could, in terms of it also serving as a counter-dynamic to an imperialist worldmaking project, also be seen to constitute one of the rationales behind the initiative to have another International Polar Year 2032–33 (see below).

5.3 Polar Worldmaking Projects?

The previous section has quite elaborately pointed out how different worldmaking projects play themselves out in the polar regions, zooming in on the rather particular – if not at all marginal – case of research infrastructures. One could, in short, argue that the subject of the argument has been the impact of worldmaking projects in specific regions, as well as in specific functional realms. Such a view would be to short-sighted, however. Worldmaking projects thrive on, and are reproduced (and in that process also affected) by their manifestations. They must not be understood as a fixed ideational and/or power-figural static ensemble that simply would be 'imposed' on something.

It is in this sense that the present section explores a related, but somewhat different question, namely, whether one could actually detect some worldmaking projects in the making that might take in relation to the poles. While this might appear to be a quite far-fetched question at first, it does take its inspiration from the observation that WMPs

not only exist in fully developed and structurally effective, but also in more aspirational forms. Such worldmaking projects *in statu nascendi* are obviously not directly en route to displacing those worldmaking projects with deep structural sediments in world politics, such as the imperialist, the nationalist, or the internationalist WMPs. However, and without allowing any prediction on the pathways of future evolution, they interact with those WMPs in various ways, establishing mutual – if asymmetric – pathways of influence. The present section will briefly explore these pathways: firstly, in relation to the discourse particularly on the 'Global Arctic'; secondly, in relation to some possible infrastructural manifestations in this respect.

5.3.1 Struggles for establishing WMPs at the poles

Why should one even start thinking that something like a 'polar' world-making project exists? Paraphrasing George Mallory's famous answer on why he wanted to climb Mt. Everest ('Because it is there'), one could say that the simple rationale for doing so is because it has repeatedly been uttered as a possibility.

The most visible utterances in relation to the Arctic in this respect pertain to the (often linked) notions of a 'Global Arctic' as well as some kind of 'Arctic Exceptionalism'. The latter is a narrative that could be seen to be directly aimed at (and against) the conflictive effects of imperialist and nationalist worldmaking projects: at its core, it is the claim that despite geopolitical tensions even among players involved in the Arctic, these players have been getting along pretty well and in a cooperating spirit in all matters pertaining to the Arctic. Cooperating in the Arctic aligns these players in a cooperative spirit, disentangles them from the logics of other worldmaking projects and could thus, in projection, be considered the nucleus of some kind of internationalist worldmaking project. While the narrative of Arctic exceptionalism is a little more complicated than this very simplifying depiction, it nonetheless gained overall traction in the years following the Russian annexation of Crimea in 2014, and was completely shattered with the Russian invasion of Ukraine in 2022. However, it would seem premature to write it off

completely, particularly if the Arctic, and particularly through the route of scientific collaboration, turned out to be one of the first areas of a possible re-launch of Russian-Western cooperation (see also below on the 2032–3 IPY).

While the discourse on the ‘Global Arctic’ is quite differentiated, it contains an acknowledgment that particularly in geo-strategic terms the Arctic always played an important role during the Cold War, but that since then it has moved from forming an important second stage to a global main stage both reflecting as well as influencing the evolution of planetary systems particularly in terms of climate change (cf. Finger/Rekvig 2022). The Arctic is the fastest-warming part of the planet, the disappearance of summer ice even in the central Arctic Ocean is only a couple of years away. Global feedback effects of warming and ice melt will be tremendous (e.g. in case of the breakdown of the North Atlantic Current/‘Gulf Stream’) and potentially catastrophic (release of methane bound in permafrost). That situation alone would seem to legitimate to see a *focus on* the Arctic as necessary for establishing a worldmaking project.

It seems that Antarctica maybe always have had this function of serving as something on which imaginaries (of pristine nature, an area ‘untouched’ by sovereignty, etc.) could be projected, presenting itself as an alternative to reigning global orders. However, the explicit discourse on this has never become as focused as the one on the ‘Global Arctic’. Indeed, the more scattered nature of that discourse might legitimately raise the question of whether such things as polar WMPs are really there, if only in a very marginal form, or whether all this is mainly about the Arctic, and much less about Antarctica?

The main argument for seeing polar WMPs as existing at least *in statu nascendi*, without any prospect of prediction of the ever moving beyond that state, simply lies in the fact that a discourse on them has been established. That is not a lot, but it is more than nothing. That it really is not a lot, and that the polar regions are prime addressees of other WMPs, is attested by the fact that during the writing of this chapter Greenland forcefully entered the arena of world politics with the elected US President not precluding to take it by force. The other ‘straw’ on which to pinch

polar WMPs is that one can see a focused concentration of infrastructure in this respect.

5.3.2 The infrastructural making of polar WMPs

The International Geophysical Year (IGY) of 1957–8 is often seen as providing a major boost for international research collaboration in the polar regions, and particularly in Antarctica. This boost pertains to both an increasing attention towards the polar regions in various research agendas, but also more generally to 'the emergence of a global sense of geoscience, embedded as it is in transnational scientific organizations and competing national interests' (Launius et al. 2010: 3). The latter part of that quote, however, already points towards an inherent tension in the 'internationalist' agenda of the IGY as well as in all subsequent International Polar Years (IPYs). While to a large extent indeed driven by scientific curiosity, it might be just one bit too much to describe the IGY purely as a '[t]riumph of "apolitical" science' (Belanger 2010) in Antarctica. Research primarily was filtered through and organized by national research bodies and funding agencies, and research stations were primarily national ones, despite all kinds of cooperation.

It remains to be seen, and skepticism is warranted in this respect, whether the planned IPY 2032–3 will lead to significant changes in either the channeling or even the coordination of research funding through national institutions. Nonetheless, already in the planning phase, one of the most remarkable things about the 2032–2 IPY is a remarkable focus on research infrastructures. It would be overdoing things to say that truly international structures are emerging in this respect, given their continued reliance on primarily national funding agencies, but the logistics as well as the coordinated operation seem to become more internationalized, with an awareness of the need to harmonize national and international funding and funding strategies (cf. IASC 2024: 44–45). Examples here include the major trans-Arctic communication cables that serve research purposes (ibid.: 31–32), or the major harmonized data collection effort of the Insync project in Antarctica already referred to above.

Trans-Arctic communication cables in this respect also highlight the importance of polar infrastructure for *global* purposes. This, on the one hand, refers to these very cables and related projects, as well as, on the other hand, to infrastructure related to shipping. In both respects, it needs to be noted that for a long time there has existed a noteworthy gap between imaginaries of polar worldmaking in the sense of drawing up plans for quite ambitious-sounding infrastructure projects, on the one side, and the realization of those plans, on the other side.

Regarding cables, there has been no lack of projects for Arctic (under-sea) cables, both for the purposes of increasing internet access for Arctic communities, as well as for purposes that are decidedly 'global', such as facilitating high-speed trading between North American and Asian financial markets through trans-Arctic cables. However, most of these projects thus far have dropped dead for various reasons, creating a noteworthy gap between ambition and realization thus far (see, for example, Middleton/Rønning 2022).

The situation seems to look quite different when it comes to another area of broadly Arctic global cyber infrastructure, namely the construction of large server farms in the context of the massive built-up of such infrastructures in the course of the massive increase of demand for server capacity worldwide. With 'Arctic' here conceived more broadly in terms of climate and temperature in order to include the Nordic countries, this area of infrastructure construction seems to flourish. Building large server farms in cooler environments is intended to bring down the energy consumption of server farms due to less demanding cooling requirements (see Upham et al. 2023). Constructing them in areas with a good availability of renewable energies contributes to the (at least partial) 'greening' of such extremely energy-consuming technologies (for a programmatic sales statement, see Christensen et al. 2018).

Despite a long and extensive discourse about the future of Arctic shipping due to the prospect of rapidly, and permanently, disappearing summer sea ice, the infrastructural consequences of anticipated dynamics regarding the polar re-routing of ship traffic seem to be more limited, if visible. For the time being, the possibility of annually, and

locally shifting ice/pack conditions seems to prohibit reliable planning regarding the use of the Northern route and the Northwest Passage, or require quite costly icebreaker assistance. Notable projects notwithstanding, such as the development of Nome into the U.S.'s first Arctic deep-water port, port infrastructure development seems more incremental, reflecting the thus far mostly regional relevance of trans-Arctic shipping. It is to be expected that significant change, while foreseeable, only will take place if the central Arctic Ocean becomes reliably ice-free during the summer months, presenting a significant alternative to the Panama Canal route. However, such a development would in turn not require significant (port) infrastructure development in the region itself.

While not 'big' in terms of actual visibility, there arguably also exist 'symbolic' infrastructures in the Arctic that underscore its global relevance: the prime example that comes to mind here would seem to be the Global Seed Vault in Svalbard. Built as a global archive for all kinds of seeds to be preserved under permanent freezing conditions (but plagued by permafrost thawing issues), the vault has become an iconic marker used in a variety of depictions (in spy movies, novels, etc.).

Antarctica is far more marginal in respect to actually existing infrastructure. However, things might be changing in this respect. On the one hand, there are now first serious discussions about linking Antarctica to the virtual world by laying an undersea cable. On the other hand, and far more important in its immediately visible global implications, are a range of massive geo-engineering proposals in order to, most notably, try to stem the collapse of the West Antarctic ice sheet (e.g. undersea 'curtains' to stem the flow of ice into the sea; cf. Naughten et al. 2023; also Flamm/Shibata 2025). Another notable development in terms of research infrastructure seems to be developing in the context of planning for a 2032 International Polar Year, which emphasizes the need for a wide-ranging integration of research infrastructures (not going so far as to propose, most notably, an international research station, however).

5.4 Conclusion

In the context of the present volume, the present chapter has had both an illustrative as well as an exploratory character. Its illustrative part demonstrated how WMPs play themselves out in the polar regions. The WMPs referred to here were the ‘classical’ ones competing for the formation of order in world politics, that is an internationalist, an imperialist, and a nationalist one. The more exploratory part follows the path of ‘nascent’ WMPs, asking how the regions in focus might themselves follow the nuclei of emerging WMPs. The purpose here, however, was not to postulate a sharp divide between ‘classical’ and ‘nascent’ WMPs, but to demonstrate how these are interwoven (and if a reminder of how they are was needed, it was provided by the new Greenland ambitions by the US president that were aired while this chapter was drafted). Most importantly, however, the chapter has sought to trace how WMPs interact through, and are in turn supported by, infrastructures and their development. In the polar regions, just as everywhere else, there is no ‘worldmaking’ in world politics that would not be expressed through infrastructures.

In case one follows the argument that something like ‘polar’ WMPs, even in nucleus form, might seem like an (albeit distant and literally remote) possibility, then a next step might be to wonder whether what we witness in the polar regions might not resemble something that at its core represents an anti-imperialist drive. As such, that would possibly offer a distinct imaginary of world ordering that leaves behind those that seek to re-ground contemporary world politics firmly in imaginaries of the nineteenth century.

6 The Infrastructural Nexus Aloft: Worldmaking Projects in the Air and Outer Space

Heidi Tworek and Diana Lemberg¹

6.1 Introduction

Both History and International Relations (IR) as disciplines have long taken information for granted. But that has started to change dramatically. In History, works like *Information: A Historical Companion* have shown how the concept shifted over time and space (Blair et al. 2021). Meanwhile, IR scholars like Jan Eijking are using historical material to explore how ‘information is not just an epistemic resource but a means of global ordering’ (Eijking 2025: 537). But information relied upon infrastructure that in and of itself offered global ordering. Or, as we describe it in this work, ‘worldmaking projects (WMPs)’.

Eijking focuses on the interwar period, examining Paul Otlet’s and H.G. Wells’ suggestions for global ordering of information. This examination showed that ‘promoting a world united by information was entirely compatible with infrastructurally reproducing an imperial division of the world by degrees of ignorance’ (Eijking 2025: 537). Eijking’s finding dovetails with questions fundamental to this project: how do worldmaking projects (WMPs) interact? How do intellectual visions of the world interact with infrastructure? And vice versa?

In this chapter, we explore the interaction of WMPs by examining infrastructures in the air and space. We do so, not because land-based

1 Heidi Tworek also acknowledges support from the Canada Research Chair programme (CRC 2020–00132).

infrastructure is not important. But as Kimberley Peters, Philip Steinberg, and Elaine Stratford point out, it is also crucial to contribute to 'challenging the land bias of our understanding of territory' (Peters/Steinberg/Stratford 2018: 2). Our attempts to understand WMPs led us to hypothesize that the air was a particularly interesting space to understand how and why WMPs interact, especially when new communications technologies opened up new ways to interact with the air. We also try to combine tracing intellectual visions for WMPs with practical attempts to instantiate them.

This chapter also answers the second aspect of the call by Peters, Steinberg, and Stratford for further exploration to study submarine cables and extra-planetary spaces, including satellites, as a way to explore 'territory beyond terra' (Peters/Steinberg/Stratford 2018: 10–11). Here, we examine extra-planetary spaces, particularly satellites and radio spectrum.

Looking at communications infrastructures at a particular moment in time enables us to explore the messy interactions between WMPs. This chapter examines two forms of interaction in the air with two different communications infrastructures. First, we examine wireless/radio as an example of cooperation to uphold WMPs. We investigate how an imperial WMP intersected with an internationalist WMP in the interwar period. In this arena, cooperation over wireless infrastructure brought together seemingly competing political visions of the world. This suggests that the usual political divisions, developments, and periodization don't necessarily make sense when viewed through the lens of communications infrastructure. Rather, WMPs such as imperialism may offer a more useful way of understanding some periods such as the 1920s and 1930s beyond concepts like (de)globalization, which, as Frederick Cooper has pointed out, are problematic in similar ways to modernization theory, because 'the key variables of transition did not vary together' (Cooper 2005: 97).

Second, we examine competition in the rise of satellite communications in the 1960s and 1970s. Satellites seemed to offer a new opportunity for worldmaking. This was particularly because their emergence occurred just as decolonization was really gaining steam in the 1960s. Anti-

colonial actors mobilized both nationalism and internationalism in a series of intertwined debates over how satellite communications should be pursued and regulated, helping to generate new ways of thinking about planetary and extra-planetary spaces and resources. Yet satellites also remind us of the stickiness of older WMPs and of how existing debates could still shape infrastructures. Even as the undemocratic aspects of an imperialist WMP seemed to fade on land, they continued in the air.

These examples offer a chance to delve into different modes of interaction between WMPs as well as actors attempting to uphold or contest WMPs. Both collaboration and contestation could happen, with communications infrastructures as key sites for those interactions.

6.2 The Interwar Wireless World

Wireless was still a comparatively new technology during the interwar period. Although it was developed over the late nineteenth and early twentieth centuries, it was mainly used by navies until the early 1910s. A few governments, particularly the German government prior to World War I, seized upon wireless as a way to counter what they saw as British-dominated submarine cable networks. Germany attempted to create the first ‘world wireless network,’ with those desires accelerating during World War I when Britain cut all but one of the submarine cables connecting Germany to the outside world (Tworek 2019a: chapter 2). Such history would seem to indicate that wireless infrastructure fit into an imperialist WMP, where this new communications technology served competitive expansionist goals.

However, at least one use of wireless in the interwar period suggests other modes of interaction within and between WMPs. Here, we examine the realm of health and the use of wireless to try to prevent pandemics. Wireless served as a site of cooperation within the imperialist WMP: different empires cooperated to provide wireless infrastructure that would inform them about possible epidemics. Simultaneously, this system was operated by the new League of Nations Health Organization (LNHO) and the LNHO saw this system as a flagship of demonstrating

its importance for internationalist aims. In this example, then, wireless infrastructure bolstered imperialist and internationalist WMPs simultaneously. There was no contradiction between them, but rather synergy.

During the 1920s, the LNHO created and coordinated a voluntary communications system that covered two-thirds of the world's population. This system elevated information to the center of epidemic management. Such a system did not exist during the influenza pandemic of 1918–20. Western states had tried to establish an information exchange since the mid-nineteenth century through multiple International Sanitary Conferences. But technical needs often did not result in agreement or institutions.

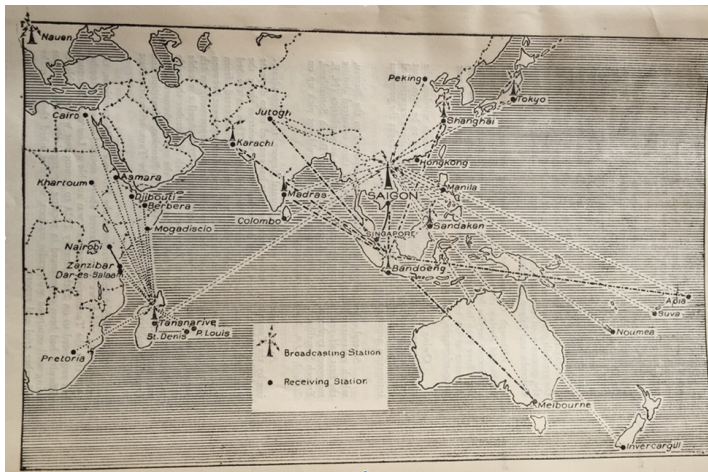
A world epidemiological information system only emerged through the League of Nations in the 1920s, in large part because of new wireless infrastructure. The crucial difference with wireless was its ability to reach ships on the sea: ships could thus provide information about potential infectious disease cases on board before they reached a port. The epidemiological information travelled more swiftly than humans across oceans and, at least theoretically, could enable those on land to prepare before infectious individuals arrived. The LNHO epidemiological information service formed the foundation for a communications infrastructure that the World Health Organization still uses today. Indeed, the origins of this system explain many of the current issues within pandemic management (but that's more of an aside for the purposes of this chapter).

Pandemics and epidemics such as cholera or influenza were a necessary, but not sufficient condition to facilitate the emergence of a global system. The further conditions were the existence of an international organization (the League of Nations) and new wireless communications infrastructure. Over the course of the 1920s, the LNHO fairly swiftly built a system that incorporated information from territories around the world, collated that information, and distributed it. The League pushed territories to standardize their reporting on infectious diseases and created a bureau in Singapore to facilitate swifter collation and distribution of material beyond European headquarters of the LNHO in Geneva.

The LNHO system is pertinent for three further reasons. First, the LNHO's annual reports included maps that we can examine to understand how communications infrastructure interacted with WMPs. Second, it shows how international organizations can be useful sites to explore WMPs. Finally, this infrastructure raises the central question of who is excluded.

For example, look at this map from an annual report on the LNHO system in 1928 (produced for the main funder, the Rockefeller Foundation) (League of Nations Archive (LONA) 1928). Similar maps appeared in most reports. They depict an infrastructure organized around port cities, colonial networks, the sea, and the air.

Figure 1: Map, *Annual Report on the LNHO System* (LONA 1928)



What we see in such maps is both international and imperialist WMPs at work. The LNHO coordinated between multiple empires to use their wireless towers to collect and distribute its weekly epidemiological bulletins. The international ideals of the LNHO were crucial to the creation of this system: 'The focus on empires and nations as political

units elides how international organizations like the LNHO could foster cooperation over information and infrastructure not created by the League itself' (Tworek 2019a: 815–816). This case also illustrates cooperation at a moment in time when studies on trade or migration would suggest disintegration.² Information infrastructure helps scholars to see interaction and the creation of global systems, where other arenas might have suggested disconnections.

But this infrastructure also highlights how the international WMP was intertwined with and dependent upon an imperialist WMP. What the League created was not so much an international system without regard to existing political units, but one where empires in particular worked together to provide infrastructure. The League fostered inter-imperial cooperation where each empire had different motives but all wanted to be included. For example, Japan remained in this system in the 1930s because it was interested in knowing about potential disease outbreaks in regions that it might want to invade. Despite such motives, note how the lines between towers on the map emphasize cooperation and links between imperial territories. Wireless towers based in British, French, and Dutch colonial territories along with Japan and China cooperated to broadcast material collected and collated at the Eastern Bureau of the LNHO based in Singapore. This created a communicative 'inter-colonialism' (Akami 2017).

Another example is Nazi Germany. Even after Nazi Germany had left the League of Nations in October 1933, it continued to provide wireless infrastructure for the LNHO system and to distribute epidemiological bulletins. Fascist countries could, and did, cooperate with empires and democracies over communications infrastructure long after political cooperation had appeared to cease. In fact, cooperation around this system continued outside Europe after 1939 and only fully broke down in 1942 after Japan invaded colonial territories in South-East Asia. Frank Boudreau, a former Health Organization official, proclaimed in 1940: 'it is one of to-day's paradoxes that the world which is destroying international co-operation by every means in its power is being saved from pos-

2 On the interwar world, see Denning/Tworek 2023.

sibly devastating epidemics by international co-operation in health matters' (Boudreau 1940: 17). Communications infrastructure enabled this cooperation, even if Boudreau over-estimated the LNHO system's ability to prevent pandemics. The larger point is that WMPs go beyond classic political divisions; communications infrastructures help scholars to see how WMPs can unite across more 'traditional' political divides like fascism or democracy.

The LNHO's own motivations stemmed from an internationalist vision that it could provide certain services beyond what any individual policy. These capabilities lay particularly in the realms of information collection, collation, and provision as described above as well as in the realm of comparison. The LNHO's director, Ludwik Rajchman, noted in 1932, for example: 'There is however one practical branch of Preventive Medicine in which the Health Organisation could render unique service and give information that is not only not available elsewhere but which only an international organization enjoying close contacts with the different national Health Services can provide. I refer to the comparative results in different countries of the practical application of various Public Health methods' (LONA 1932: 1).

Rajchman grounded these observations in the LNHO's experience with its epidemiological service, stating that 'The need for comparative information with reference to statistics is already shown by the very considerable number of requests for information constantly received by the Epidemiological Service of the Health Organisation' (ibid.: 2). Rajchman's internationalist vision for the world was one where comparison would lead to national legislation: the international would standardize national statistics and public health into comparability; the LNHO would collect and distribute that comparable material; then national legislations would enact policy accordingly. Rajchman thus believed in 'the value of a comparative knowledge for those administrators called upon to determine a policy of legislature and to draw up either national laws or local bye-laws in connection with public health' (ibid.: 2.).

Such empirical observations suggest that we might define WMPs based on the general characteristics and relations they ascribe to political entities. Competing empires can pursue the same imperialist

WMP under particular conditions. In this instance, they first shared the view that the political world should be divided into competing imperial spheres of power/ influence. Second, they cooperated in other arenas, here health, to try to ensure the maintenance of an imperial order. The collaboration between different empires (each to fulfil its own different interests) strengthened the imperial order in quite practical ways, at least for a time and with lasting consequences for the practices of global health.

At the same time, these illustrations and reports hid the hierarchies of access: colonized peoples could not participate in this system and they were subject to how colonial officials and public health elites decided to use communications infrastructures. Such maps also erase the colonial attitudes to disease origins that underpinned cooperation. Specifically, the focus on Asia drew on beliefs that pandemics were more likely to emerge there, with many nineteenth-century disease outbreaks labeled 'Asiatic cholera pandemics' in Europe and the United States (Harrison 2012: chapter 6; Downs 2023; McGovern/Wailoo 2023). More broadly, the maps suggest a tight relationship between an imperialist WMP and infrastructures designed for one-way transmission. In attempts to 'control' information, one-way transmission offered an illusion of restricting information exchange that could cement particular worldmaking projects. The asymmetries of who could send and receive information persisted into the early satellite era and beyond.

Of course, the much better-known story of international wireless communication in the 1920s and 1930s is that of competition, particularly between British and German radio propaganda. The BBC established an Empire Service in 1932, while the Nazis pursued global expansion of radio propaganda after they came to power in January 1933 (Potter 2012). The Nazis made radio a priority for retaining power at home and garnering support abroad. Such propaganda systems operated alongside attempts by major powers to erect barriers to international broadcasting, particularly through jamming wavelengths from other states. These attempts ramped up during World War II, for obvious reasons.

Even in competition, though, there was consensus that radio infrastructure offered an opportunity to influence politics. And there was surprising consensus on what tools to use: jamming others and broadcasting one's own material simultaneously.³ Communications infrastructure became a focal point of competition. But in so doing, it created consensus that communications mattered.

As Charles S. Maier wrote in a footnote in his work on territoriality, communications created a 'spatial domain that has never been bordered so rigidly, indeed that challenges the territorial limits that prevail at any moment' (Maier 2016: endnote 8, 301). But communications infrastructures were also clearly part of imperial repertoires, i.e. 'the multiple ways in which incorporation and difference were conjugated' (Burbank/Cooper 2010: 1). It seems clear that conventional political periodization and categories simply don't capture what was happening, who was cooperating/competing, and why. This case shows how communications infrastructures were part of the imperial WMP repertoire and how international organizations could facilitate the worldmaking of imperialism. Further, any suggestions of internationalist WMPs have to account for imperialism and how it intertwined with internationalism from the start.

Finally, the same infrastructural nexus also helped anticolonial nationalism to form as a separate WMP that worked against imperialist (including imperialist-nationalist) projects, while on some political levels also cooperating with them. By looking at this specific example, we try to describe these different kinds of relations as precisely as possible in order to show how complex and messy world politics really were (and are).

6.3 Early Satellite Communications

If the history of interwar health communications reveals surprising cooperation between diplomatic and ideological rivals, our second case

3 On international radio more broadly, see Potter et al. 2022.

study, early satellite communications, points to another form of relation between WMPs: contestation. As debates around early satellites whirled in the 1960s and 1970s, they illustrated clashes between a lingering imperialist WMP and overlapping anticolonial, nationalist, and internationalist visions for organizing the world. By examining several facets of these debates, we aim to tease out how efforts towards a more egalitarian political order could take on different forms depending on the context.

This case study also demonstrates how emphases on the novelty of a technology and its relation to time – the ‘*ageofism*’ of the ‘space age’ – can mask a certain conceptual stickiness, which becomes visible when we examine such contestations in a longer-term framework. Seemingly terrestrial concerns like scarcity and sovereignty remained pertinent even in the heavens (Fressoz 2022). This is not to deny the novelty of satellite technology itself. Rather, it is to point to one of the themes of this volume: the ways in which even new infrastructures are entangled with existing dynamics in world politics. While U.S. policymakers touted space as a ‘new frontier,’ Washington’s efforts to treat it as such were inscribed in existing patterns of thought and action, as suggested by that loaded word *frontier*.⁴ Real creativity at the intellectual and regulatory level was often happening elsewhere, as part of anticolonial and internationalist worldmaking.

Thirdly, though, contestation did not necessarily always assume the form of a binary struggle between East and West (as in Cold War discourses) or between North and South (as some contemporary scholarship would have it). Debates over space communications were also characterized by occasional synergy between the superpowers; concerns that bridged North-South divides; and surprising intra-bloc divergences, for instance. Attending to these moments of rupture and coalitional possibility may be crucial for figuring out how to combat resurgent imperialism in outer space in our contemporary moment.

4 On the successive frontiers animating U.S. terrestrial, maritime, and spatial expansionism, see Black 2018.

Early satellites (1960s–1970s) generated several overlapping but non-identical debates, four of which are schematized below. ‘Overlapping’ because many of the same principles recurred; ‘nonidentical’ because of the subject matter and also because the alignments of actors and WMPs varied. The debate revolved around:

1. The legal regulation of outer space qua space.
2. The division of frequencies and the problem of spectrum scarcity.
3. Direct broadcasting satellites and questions of cultural sovereignty.
4. Remote sensing and questions of data sovereignty.

First, (1) debates around the *legal regulation of outer space*:

Like the development of airspace law a half-century earlier, debates around the legal regulation of outer space in the 1960s at first centered on the question: what were the ‘vertical limits of sovereignty’? Airspace law had eventually crystallized, at the Paris Peace Conference in 1919, around the principle that each state enjoyed ‘complete and exclusive sovereignty over the air space above its territory.’ Overflights required consent (Hay 2012: 25; Collis 2012: 64–65).

But airspace precedents would be contested by alternative legal geographies that drew on other governing principles. One of these was a first-come-first-served, *res nullius* approach to the scarce geostationary orbit (GEO) space just above the equator, which quickly became the preferred placement for communications satellites. This approach favored the spacefaring powers, especially the United States.⁵

A third approach was more innovative. This was the ‘Common Heritage Principle’ (CHP), which proposed that material benefits from the global commons belonged to humankind and should be distributed among states as such. Cultural geographer Christy Collis calls the CHP a

5 For a variety of reasons, the Soviet Union opted for a non-geostationary (also called non-geosynchronous) system for its early satellites. For the Americans, on the other hand, the GEO retained its importance for decades, until the maturation of low-Earth-orbit (LEO) satellite technology in the 2020s (Evans/Lundgren 2023: 30–34; Kelvey 2025).

‘radical new legal geography’ that ‘proposed to supplant the dominance of the legal geography which had defined the Earth since the 1648 Peace of Westphalia’ (Collis 2012: 68). Advocates of world governance had proposed common ownership of ‘earth, water, air, [and] energy’ in the 1940s, amid intensifying concerns about how to equitably govern these resources (Meyer 2022: chapters 2–3). As early as the early 1960s, Latin American states proposed that outer space, too, should be treated as the common property of humankind (Durrani 2019). The CHP was formally announced in relation to the high seas in a 1967 speech at the United Nations by Maltese diplomat Arvid Pardo. It was applied the same year to outer space by the Argentine diplomat Aldo Armando Cocca. The application of the CHP to outer space illustrates a point made by IR scholars Adom Getachew and Patrick Quinton-Brown: anticolonial and developing-world actors (i.e., the anticolonial WMP) were not limited to making sovereignty claims against the global North. Their worldmaking could incorporate both self-determination and global justice, anticolonial and internationalist principles (Getachew 2019; Quinton-Brown: 2024: 6–12).

The United Nations entered the picture in the early 1960s. In 1963 the General Assembly passed a resolution stating that sovereignty claims were not valid in outer space. This actually suited the spacefaring powers: As Collis explains, ‘[By] 1967 the GEO was a space for the developed world, and particularly for the United States; at the end of 1966, only the United States and the Soviet Union had launched satellites, and all eleven of the satellites in the GEO were American.’ In 1967, Washington, Moscow, and others formalized space as being outside sovereignty claims – as well as agreeing on the principle that it should be used for peaceful purposes only – through the UN Outer Space Treaty (Collis 2012: 67).

But if there was widespread consensus on establishing a non-militarized outer space open to all, many were not happy with applying a first-come-first-served, *a posteriori* approach to the GEO. This time, though, concerns cut across North-South lines, spanning postcolonial states and historic heartlands of empire: Discontent came from European powers who relied, until 1983, on American launchers for their broadcasting

satellites, as well as from developing states that did not have their own satellites or launchers.⁶

Thus, the Outer Space Treaty of 1967 adopted a kind of hybrid philosophy for outer space: While not subject to state sovereignty claims, space was also not to be a purely commercial free-for-all. Article I declared that ‘the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries irrespective of their degree of economic development’ (cited in Collis 2012: 68). Subsequent negotiations at the International Telecommunication Union (ITU) and the UN have reinforced its status as a scarce resource. The ITU, however, lacks enforcement capacities, and this has led to recurring controversies, given that the capacity to develop and launch satellites was and remains asymmetric (Collis 2012: 69–77). The Outer Space Treaty is still in effect today, and these older questions—about the scope of international regulation as against national and commercial interests—still pertain in contemporary debates about space policy (Baiocchi/Welser IV 2015; Deudney 2020).

Meanwhile, the principle of sovereignty would recur in space debates in 1975, when Colombia claimed sovereignty over the GEO located above its territory. The next year, 1976, it joined forces with six other equatorial states – the Republic of the Congo, Ecuador, Indonesia, Kenya, Uganda, and Zaire – in what was known as the Bogotá Declaration, with Brazil taking part as an observer. In order to circumvent the Outer Space Treaty, the Bogotá signatories declared that the GEO was not part of outer space but was rather a natural resource created by the Earth’s gravitational field and was thus subject to state sovereignty (Collis 2012: 70–72; Beery 2016). This was a forceful, nationalist maneuver that received broader support from other developing states for a time. Eventually, that support waned; by the mid-1980s, Argentina, Chile, Brazil, and Mexico as well as Egypt and India had moved toward the view that the GEO formed part of outer space and was thus subject to the Outer

6 In the 1970s, NASA had used its launch capabilities to limit European satellites to noncommercial broadcasting (Lemberg 2019: 142–143; see also Collis 2012: 70).

Space Treaty (Roth 1992: 197–213). But despite the apparent failure of the Bogotá Declaration, some scholars have credited it with challenging global North geographies of space. As historian and international law scholar Haris Durrani points out, ‘Today, the Colombian Constitution still contains a provision claiming sovereignty over the orbital segment above the country’s territory’ (Durrani 2019; see also Beery 2016).

Second, (2) debates around *the divvying up of broadcasting frequencies*:

While the emergence of space law and the CHP approach constituted genuine innovations, the regulation of satellites’ frequencies was absorbed into existing governance structures in a more straightforward fashion. Interference between terrestrial radio signals had motivated international collaboration to manage the electromagnetic spectrum since the 1930s, when the ITU was formed as a merger of telegraphy and radio standard-setting bodies. In the 1940s, the UN absorbed the ITU. Through the mechanism of the World Administrative Radio Conference (WARC), the ITU adjudicated satellite frequency discussions, starting with the first Space-WARC in 1963.⁷

The reality of scarce broadcasting spectrum thus underwrote calls for multilateral governance of satellite frequencies. Over time, scarcity concerns became less acute, as advances in multiplexing enabled more signals to travel harmoniously on existing bandwidths (whether these signals came from terrestrial or satellite sources).⁸ But this issue nonetheless illustrates how international regulation tends to require, among other things, that multiple actors/WMPs perceive scarcities in common.⁹ To take a more contemporary example, the scarcity of the rare-earth minerals that go into cell phones and other gadgets has implications for governance of the seas as well as outer-space mining.

7 On the Space-WARCs, see Collis 2012, see esp. 66–67.

8 On scarcity as a historically contingent concept, see Stamm 2015.

9 It is worth noting that shared perceptions of scarcity do not necessarily lead to identical solutions. They shaped, e.g., the very different systems that the United States and Britain pursued in regulating their domestic airwaves (Stamm 2015: 57).

Third, (3) debates around *direct broadcasting via satellite*:

Direct-broadcasting satellites (DBS) are satellites that can broadcast directly to individual/home receivers. While the first DBS was launched in 1974 as part of a developmental collaboration between U.S. and Indian space authorities (the Satellite Instructional Television Experiment, or SITE), DBS was not commercially widespread until the 1980s (Krige/Callahan/Maharaj 2013: 235–246; Kaplan 1985: A1; Feder 2002). Before then, communications satellites typically broadcast to terrestrial ground stations, which then relayed their signal to end users. This need for earthbound relaying gave the national post, telegraph and telephone (PTT) monopolies that controlled receiving infrastructure in much of the world leverage over satellite content.

In the 1960s, Washington had attempted to quell fears around satellite broadcasting by promising to respect sovereignty: As Lyndon Johnson announced in a special message to Congress on communications policy in 1967, satellite broadcasting ‘does not mean that the United States – or any other nation – will give up vital sovereignty over domestic communications. The flow of satellite communications – both domestic and international – is to and from ground stations owned by the individual nation or its representatives’ (cited in Lemberg 2019: 135). But international actors were wise to question Washington’s good faith as the technology of DBS appeared on the horizon.

The anticipation of DBS provoked anxiety and intense debate over how spatial information traffic should be managed and regulated. We might consider the DBS debates part of a longer cycle of modern ‘technology panics,’ the flip side to recurrent techno-utopianism (Orben 2020).¹⁰ As early as 1963, ITU official Jean Persin was depicting DBS—still nearly two decades from commercial viability—as potentially destabilizing to international regulation and national sovereignty (cited in Lemberg 2019: 147). Before that, terrestrial radio communications had

10 Orben discusses technology panics primarily in relation to psychology (especially child psychology and concerns that new technologies will negatively affect child development) and domestic policy solutions.

produced similar concerns. Again, by studying communications infrastructures in a longer durée, patterns become visible that suggest how prior international contestations, mediated by existing infrastructures, can shape the reception of new technologies.

The controversies swirling around DBS at UNESCO and the UN from the mid-1960s through the 1970s are also interesting for the way alliances at times cut across East-West and North-South divides. The superpowers closed ranks in the 1967 Outer Space Treaty against calls to restrict direct broadcasting (Schwoch 2009: 74, 152–153). On the other hand, sovereignty was not exclusively the concern of Third World actors (in contrast to American efforts to tar it as such). France (1963) and Egypt (1966) both proposed international bans on direct broadcasting, while Argentina's Aldo Armando Cocca insisted on the need for multi-lateral regulation, approvingly citing both western European and Soviet criticisms of Intelsat, the U.S.-dominated consortium for commercial satellites (Lemberg 2019: 148; Quinton-Brown 2024: 178–179). In 1972, at the UN General Assembly, the United States was the sole 'no' vote against a proposal that international law should regulate DBS (Lemberg 2019: 149–150).

Americans tried to sell developing countries on DBS by highlighting how it would end the need for them to build costly terrestrial receiving infrastructure. The Stanford economist Ernest Wenrick praised its potential to 'open vast areas not now served to the benefits of the flows of information' (cited in Lemberg 2019: 144–145). But American promises not to undermine foreign regulations were ultimately abandoned. Contrast Lyndon Johnson's 1967 statement with the following 1980 prediction of sovereignty's obsolescence co-authored by Elie Abel, a Stanford journalism professor who had been active in UNESCO information debates (Power, Philip H. and Elie Abel, 21 September 1980. *Third World vs. the Media*. *New York Times Magazine*, cited in Lemberg 2019: 199):

'[The] pace of technology may well outrun the ability of international political institutions to catch up. For example, there is in force today an international treaty prohibiting direct broadcast of television signals from a satellite into a country without that country's permission.

The treaty is self-enforcing because current television sets cannot receive signals from satellites without an enormously expensive dish-shaped antenna. ... But both American and Japanese companies are in the process of developing dishes that may in time become so cheap that families who can afford a television set... will be able to afford a dish as well. Governments may struggle to control the flow of news and information across their borders, but satellites and the technology behind them may make such efforts futile'.

In this rather sanguine American dismissal of regulation, we can see the workings of another WMP, the neoliberal WMP, by which U.S. and other elites sought to circumvent democratic decision-making and multilateral oversight in a world of nation-states (i.e., a world where the possibilities for overtly imperial coercion had shrunk). The founding moment of neoliberalism can be debated, with Quinn Slobodian's recent work dating it as far back as the interwar era (Slobodian 2018). Regardless, it seems clear that satellite disputes between the United States and anticolonial and developing-world actors anticipated Washington's explicit hostility to regulation under the Reagan administration, when it quit UNESCO.¹¹

Neoliberalism as filtered through these debates was not wholly a case of old (imperial) wine in new (neoliberal) bottles: The neoliberal rendering of press and speech freedoms as global and unlimited differed significantly from past precedent – according to which racialized colonial subjects were unready for such freedoms – as well as legal reality. The First Amendment to the U.S. Constitution, contrary to what some American policy elites began to argue alongside the rise of satellite communications, represented less an unbroken tradition of unconstrained liberty than a contingent and domestically circumscribed arena of protected speech.¹² When neoliberal policy elites began to portray national and in-

11 See dissertation abstract for Durrani 2025.

12 The First Amendment did not apply to state laws until 1925, and to films until 1952.

ternational regulation of communications as a ‘global First Amendment war,’ they were up to something new (Lemberg 2019: chapter 7).

Fourth, (4) debates around *remote sensing*:

Remote sensing via satellite is the sensing of terrestrial resources through the reflection of electromagnetic radiation; it ‘[makes] the natural environment more legible by measuring the extremely slight temperature variations of the solar heat bouncing off rocks, trees, water, and even animals.’ The era of remote sensing began with NASA’s Landsat satellite, launched in 1972 (Maher 2019: 204–205).

One recurring phenomenon in the history of remote sensing is efforts to assert sovereignty against it. Like the Bogotá Declaration, these efforts have incorporated anticolonial and nationalist principles while also attempting to shape international law. In 1975, a group of Latin American states attempted to establish, at the UN, the principle of prior consent for remote sensing in a country’s territory. They were concerned that powerful countries and foreign corporations would take advantage of mineral, oil, and other data related to their territories. As with contemporaneous efforts to extend sovereignty to the GEO, this effort failed. Neil Maher suggests that, in the case of remote sensing, NASA ultimately won over objections through a sustained campaign of engagement with scientists and policymakers in the developing world (Maher 2019: 201–214, see particularly 207).

However, the story does not end there. Norms around remote sensing remain contested, for instance when it comes to remote sensing over Indigenous territories. In the United States, tribal authorities have worked with federal agencies for many decades on spatial mapping projects, using the data to oversee infrastructure, protect and manage forests and wildlife, monitor water resources, and protect burial sites, among other uses. However, tribes are not the only parties interested in this data: A 2001 Supreme Court decision ruled that data (encompassing spatial data) shared between tribes and the federal government could be requested by outsiders through the Freedom of Information Act. These outsiders include commercial actors interested in exploiting tribal resources (see, e.g., Shanley 2015: see particularly chapter 4).

In short, studying space infrastructures in terms of WMPs reveals how the debates of the first 'Space Age' prefigured those of the present-day 'Second Space Age.' The militarization and commercialization of space remain open questions, as do the ramifications of space communications for life on Earth. But even as the United States in the era of the second Trump administration seems to be reviving an openly imperialist WMP when it comes to space (among other geographies), other actors continue to offer alternative visions.

The anticolonial WMP encompasses contemporary intellectual, creative, and political projects aimed at the more equitable governance and use of space technologies. MIT's Danielle Wood has researched how satellite technologies can contribute to public health and environmental monitoring in the developing world, while artists and scholars like Nuotama Bodomo and Timiebi Aganaba-Jeanty have explored the past and future of African space programs (Wood/Weigel 2014; Kazansky/Wood/Sutherland 2016; Bodomo 2014; Aganaba-Jeanty 2013).¹³ Anticolonialism also encompasses contestations in and over the territoriality of space infrastructures. In 2017, ten thousand protesters gathered at the Guiana Space Center in French Guiana to express their anger over ongoing economic turmoil in the French overseas department (formerly a penal colony). The movement – 'Let French Guiana Lift Off' – brought launches at one of the world's busiest spaceports to a halt. Protesters pointed out that towns neighboring the space center lacked running water and electricity (D'Auria/Fernholz 2017).¹⁴

Anticolonialism has in turn shaped internationalism, peeling it away from its interwar embrace of imperialism. Contemporary calls for regulating space junk through international law acknowledge the asymmetries that continue to affect space infrastructures: 'Whose responsibility

13 Wood and Aganaba-Jeanty both participated in a Smithsonian symposium on Afrofuturism: "Claiming Space: A Symposium on Black Futures – Past, Present, and Potential," 27–29 Jan. 2022, at <https://airandspace.si.edu/afrofuturism/claiming-space-symposium#outer-space>.

14 On French colonialism and the Guiana Space Center, see Redfield 2000.

is it to remove debris? Who should pay? What rights do non-spacefaring nations have in discussions?’ (Freeland/Handmer 2021). Space junk is rapidly accumulating – and is as equal-opportunity in its territoriality as space capabilities still are not. In January 2025, a glowing metal ring weighing half a ton crash-landed near the village of Mukuku, in southwest Kenya. The Kenya Space Agency identified it as belonging to a launch rocket (Chutel 2025).

Finally, remote sensing via satellite is crucial to contemporary climate science. How are epistemologies of planetary change entangled with the politics of global communications? And how might this infrastructurally mediated knowledge of Anthropocene universals (as some might call our contemporary awareness of climate change) in turn inflect the WMPs of anticolonialism and internationalism? (Chakrabarty 2021). These questions, beyond the scope of this chapter to answer, point to the enduring ways in which the infrastructural nexus persists in the skies of the twenty-first century.

6.4 Conclusion

Over the past several years, many scholars and technologists have pointed to the challenges that digital communications pose to liberal democracies and international cooperation. Public intellectuals such as Evgeny Morozov (2011) and Nicholas Carr (2025) have offered trenchant critiques of digital networking, illuminating its antisocial and antidemocratic aspects. In the academy, IR scholars Henry Farrell and Abraham Newman have similarly emphasized the importance of studying information in political and international context. Farrell and Newman are particularly focused on the interaction between the so-called liberal international order (LIO) that emerged after 1945 and digital communications, which spread a few decades later. They use a historical institutionalist approach to argue that, in the era of the internet and social networks, the liberal principle of unregulated, freely flowing information has had ‘self-undermining feedback effects’ by encouraging flows of illiberal content and sabotage from those outside

the LIO consensus, thus threatening the LIO itself (Farrell/Newman 2021).

Seeing world politics through the lens of WMPs suggests a slightly different tack that focuses not on the rise or fall of the liberal order (or of any single, monolithic order), but instead on the multiplicity of political visions jostling at any historical moment. Moreover, by examining how WMPs interact from the perspective of infrastructures, we can see more than simply competition between WMPs (the liberal internet versus the authoritarian internet, e.g.). We can also see phenomena including collaboration between WMPs – as in the interwar synergy between imperialism and internationalism examined in our interwar health communications case study – and the persistence of infrastructural questions across seemingly disparate political moments – as in our case study on satellite communications.

Looking at infrastructures does not offer a neat world-historical timeline of successive WMPs, in other words. Instead, it showcases the messiness of relations between WMPs, which can include both competition and cooperation. Infrastructure has served both as a site of contestation between WMPs and as an enabler of them.

This approach ties our work into the broader impulse in infrastructure and media studies to understand the path dependences of current infrastructures like the cloud (Holt 2024). Unlike that body of literature, our work integrates a slightly different set of disciplines, especially IR, sociology, and history. And in so doing, we suggest more complex ways to characterize the path dependency of infrastructure. Beyond simply tracing how prior infrastructures influence the present, we show how infrastructures can enable cooperation and competition, how hard it could be for emerging WMPs like anticolonialism to instantiate their ideas in infrastructure, and how ideas for worldmaking can collide with material realities.

7 Worldmaking Activities after the Formal End of Empire: Examples from Africa

Bettina Mahlert

7.1 Introduction

Worldmaking projects (WMPs) not only formulate ideas and agendas for ordering relations between political entities. In defining these entities, they also articulate visions relating to people's lives and their relationships with each other. The idea of a global political sphere divided into imperial spheres of influence suggests that imperial centers should dominate or govern populations in peripheries. Nationalist WMPs specifically reject this notion by advocating self-determination of nations – 'peoples' – rather than equality between independent states only. Distinct nationalist WMPs offer more specific visions about what it should mean to be a citizen of a nation state, ranging from freedom of colonizer domination in anti-colonial WMPs to having individual rights, such as introduced during the French revolution (see the chapter by Werron for variants of nationalist and imperialist WMPs). This is in stark contrast to the inter-imperialist consensus that emerged in the late nineteenth to early twentieth centuries, as discussed in Lemberg's chapter in this volume. This consensus held that people should perform either superior or subordinate work depending on their race.

In line with the centrality of human lives in the imaginaries articulated in WMPs, the practical politics of implementing these imaginaries did not take place solely in the realm of 'high politics', detached from so-

cial processes within societies and states. WMPs both covered the globe and intervened massively in people's lives.

Inspired by Adom Getachew's (2016) article on the Haitian revolution and the system of enslavement in Haiti, this chapter will use the notion of worldmaking activities (WMAs) to zoom in on how local populations dealt with conditions created by the institutionalization of WMPs. How did they 'make' their own 'world'? 'World' here does not indicate global scope in a topographical sense, but it means lifeworld: the world as it is experienced. The lifeworld is predominantly the space where everyday engagements take place.¹ We use the notion of worldmaking activities to address engagements carried out to create and extend spaces for meaningful activity in one's everyday life.

Getachew shows that such engagements can develop into large-scale political projects. The revolutionary process in Haiti started with activities that aimed to enlarge slaves' scope of self-directed engagement: three days free from plantation work to cultivate their own gardens and prohibition of the whip, followed by running away from plantations to 'cultivate abandoned land on the basis of small-scale ownership' (Getachew 2016: 832), among others. Worldmaking activities developed into a large-scale political project when Haitians imagined that these and other forms of individual autonomy required collective autonomy. Transcending the immediate realm of the lifeworld, revolutionary leaders devised explicit imaginaries of relations between the colony and France, including one that claimed legislative autonomy while retaining connections with France. As this 'federal experiment' (ibid.: 833) failed when Napoleon sent troops to Haiti in 1802, collective autonomy was envisioned in the more radical form of independence. The whole process culminated in the declaration of independence (1804), which 'offered a radical account of black citizenship and envisioned a world order in which both slavery and colonial rule would be transcended' (ibid.: 822).

In emphasizing its suppressive dimension, Getachew's approach resonates with other critical analyses of colonial imperialism, such as provided by Gayatri Chakravorty Spivak (1986). Indeed, Spivak draws on

1 A classic reference in sociology is Berger and Luckmann (1966).

the same semantic field by introducing the notion of 'worlding'. While 'worlding' refers to the power of colonizers, capturing how they culturally transformed Indigenous people into colonial 'subjects', Getachew traces engagements of slaves who were subjected to the concentrated power of 'their' masters. Seen through the lens of WMAs, these engagements cannot be understood in terms of resistance alone. Rather, the image of slaves 'making their world' establishes links to the concrete life chances that they sought to create for themselves, such as cultivating a plot of land for subsistence.

Because it is broader than the concept of resistance, the notion of WMAs can help to uncover in an open-ended way how human actors seek to create spaces for realizing what is important to them under the conditions created by WMPs. Whether and why these efforts involve attempts to resist, or, more broadly, to change the order created by WMPs, is thus a relevant empirical question – as is the question of whether such attempts ever evolved into larger-scale political projects and ultimately into WMPs.

By using examples from Africa, this chapter offers tentative considerations on this topic. First, it addresses how the establishment of colonial states and their subsequent modification by postcolonial rulers created the central framework conditions for WMAs (2). Based on this, two sets of WMAs will be explored, the first of which relates to access to land and citizenship (3), and the second of which relates to saving and storing money (4). In both cases, some form of 'community' proved to be central. However, relevant international discourses that can be interpreted as part of larger WMPs either did not address these structures or only did so to a limited extent, as the chapter shows by taking a closer look at two development reports. Finally, the chapter uses the definition of collective rights for peasants in a UN declaration as a counterexample (5). The international movement *Via Campesina*, which initiated the declaration, provides an example where worldmaking activities successfully evolved into a larger-scale political project.

7.2 Land rights from imperialism to the establishment of nation states in Africa

Diana Lemberg's chapter in this volume highlights how the development of imperialism into a WMP during the late nineteenth and early twentieth centuries fostered massive social and environmental transformations in colonized spaces across the globe. One distinctive feature of colonialism in Africa was the 'containerization' of rural populations into ethnically defined 'tribes,' each under the custody of a state-appointed Native Authority (Mamdani 1996: 48–51). Britain had limited the scope of 'traditional' or 'customary' law to matters of personal law in India. However, in Africa, it extended customary law to include land – a practice that other European powers also followed. In order to exert effective political control and control the movement of populations, they defined land as a communal and customary possession and strengthened and reified the authority of 'chiefs' (ibid. 50). Through this, they created 'decentralized despotisms': as chiefs were given far-reaching prerogatives, including the right to define rules, their power was in effect arbitrary. Mamdani (ibid.: 53) cites Padmore (1936: 317) who wrote about the chief in Nigeria:

'The chief is the law, subject to only one higher authority, the white official stationed in his state as advisor. The chief hires his own police ... he is often the prosecutor and the judge combined and he employs the jailer to hold his victims in custody to his pleasure. No oriental despot ever had greater power than these black tyrants, thanks to the support which they receive from the white officials who quietly keep in the background.'

The institutionalization of the imperialist WMP in Africa for the rural population, according to this view, meant that they became 'subjects' of local chiefs. Rural people depended on the favor of 'their' chiefs in all important areas of life, ranging from marriage and conflict resolution to access to land and maintaining their status in their village when they were away earning money.

After independence, African rulers used the territorial administrative structures established by the colonial state as a framework for 'national integration' and for building the national economy, which was the primary goal of state developmentalism from the 1950s to the 1980s (Boone 2007: 62–65). They divided the 'national' population into groups and subgroups subject to administrative jurisdiction by different field agents of the center (Mamdani 1996). Through the nested structure of administrative units from regional to local levels (e.g. provinces, districts, municipalities, communities), governments could 'carry out local spending projects, social service delivery, market monitoring and regulation, and land tenure policy' (Boone 2007: 64). They also adopted the colonial practice of directly allocating and managing land rights, instead of authorizing a chief, including in the context of resettlement programs that were carried out on a large scale in virtually every postcolonial state for different purposes, such as relieving population pressure or developing new agrarian frontiers (Amin 1974). Direct management of rural land rights was also an important instrument for interregional redistribution of resources, which was an explicit part of the development agenda at that time (Boone 2007: 62; 2015: 175–176).

The nationalist vision of an integrated, regionally balanced and sectorally diversified economy differed from the imperialist WMP (Leys 1996). However, on the level of their institutionalization, imperialist and nationalist WMPs aligned at crucial points. The administrative structures established for imperial control could also be used to pursue diverse political goals and implement various policies in the context of newly independent developmentalist states. These administrative structures were maintained in the era of political and economic liberalization (1980s–1990s). According to an estimate by Deininger (2003), 2–10% of agrarian land in Africa was private property in 2003 (cf. Boone 2014: 22). The state owned all other agricultural land, which was predominantly cultivated by smallholder peasants. These figures underscore a fundamental difference between lifeworlds in Africa and liberal Western democracies. In liberal Western democracies, every citizen has the *abstract* right to possess and buy land (cf. Marshall 1950). The concrete allocation – who gets what – is not controlled by the state but takes place

within markets and, through inheritance, families. In contrast, across large parts of Africa, the state controls the allocation of land either directly or indirectly. The 'absence of formal or legal land property means that for the largest part of the population, the state is their landlord, or "overlord"' (Boone 2014: 24). People can be more easily politically controlled. Political relations, which imply hierarchies and dependencies, ramify into complex and extended familial relations which regulate access to land. As a consequence, land controlling authorities have political leverage over land users. But the opposite is also true: land tenure regimes may give land users political arguments against market forces that threaten their access to land (ibid. 25).

7.3 Access to land and debates around citizenship

When looking at literatures on land tenure in Sub-Saharan Africa, one is confronted with a puzzling variety and complexity of local institutional structures and practices. While acknowledging this basic feature of African land tenure, Catherine Boone (2014, 2015) offers a schematic model of only two basic types of land tenure regimes (LTRs). While each concrete LTR turns out to be an individual mixture of the two types and show other hybridities or ambiguities, the model is supposed to capture 'critical differences in the forms of authority and political identities that shape smallholders' access to land' (Boone 2015: 172). Moreover, Boone uses the model to explain in which ways and in what political arenas land-related conflict typically arises. Even though it focuses on conflict, Boone's contribution can be transferred to the topic given here. It offers insights into which land-related WMAs will emerge under the framework conditions created through the institutionalization of the nationalist WMP in Sub-Saharan Africa, and how and why WMAs might develop into more large-scale political projects or not.

Where the state authorizes a chief to allocate and manage land rights (neo-customary LTRs), activities intended to secure or extend access to land will play out on local levels. In situations of growing land pressure and ethnic homogeneity, autochthones may reclaim land from immi-

grants in order to pass it on to their children and grandchildren. As the local chief is authorized to make decisions, immigrants have few chances to successfully raise their claims and often leave for more favorable areas – even if this has devastating effects when they had lived in the area for several generations.

In ethnically homogenous regions, however, land-related interests can only be pursued through negotiation and the exercise of influence or power within the limited context of family or lineage. Intra-familial struggles are framed in interpersonal terms, such as betrayal/loyalty or dishonesty/honesty rather than collective grievances; and violence, if it occurs, remains at the interpersonal level, manifesting itself as (threats of) domestic violence or witchcraft. Subordinate family members such as women (especially single women, including widows), youth, and adoptees have little chance to protest through public or collective action. In the final instance, they have to choose between exit (out-migration) and loyalty ('hanging on, even in a worsened position'; Boone 2014: 189).

By contrast, where the central state directly allocates and manages land rights (statist LTRs), it also becomes the primary arena for claims and disputes. Smallholders may openly voice their grievances and may seek backing through competing political parties. Peasants or herders facing similar experiences of dispossession may unite into large ethnic coalitions in order to build effective pressure groups at the national level. Importantly, changes in political power on the national level can lead to massive land redistribution on the local level. Democratic elections can thus become an existential threat to certain groups and, as a result, to whole constituencies. For example, in 1990, in the then République Zaire, dictator Mobutu opened the national political system for multiparty competition (*ibid.*: 284–294). Elections were prepared during a conference in Kinshasa in 1991. As a consequence, smallholder farmers in the province of North Kivu anticipated that a new government might reallocate land rights. Political actors on local and national levels engaged in anticipatory worldmaking by mobilizing local and regional constituencies. This led to an outbreak of political violence related to elections and land, resulting in thousands of deaths and mass displacement from 1991 to 1994.

The WMAs described thus far all pursue particularistic interests in securing or extending land rights. These activities occur within existing institutional structures, but do not aim to change them. However, in debates about land reform, citizenship reform itself can become the object of political debates in Africa: should existing structures be modified to align with Western-type individual and unified citizenship rights? If not, what alternative arrangements should be institutionalized? Debates about land reform are highly programmatic, widely participatory, and politically divisive (Boone 2014: 314–315; Boone 2018).

Such dynamics arise because the institutions created to exert colonial power have acquired intrinsic value. Colonizers had established the LTRs to control the movement of people and exert political authority; these in turn fostered communities of solidarity that are now up for debate. While these LTRs create massive inequalities, the principle of differentiated citizenship rights that they embody is inclusive in an important respect. However minor in comparison to others, every member of the ethnically defined community typically receives some entitlement to use land in order to satisfy their needs for food. Different groups hold different rights pertaining to the same plot of land. These stratified and overlapping rights create social cohesion. ‘Communities as a whole gained a collective interest in protecting a land endowment in which each member, by the principles of customary tenure, could claim an entitlement’ (Boone 2014: 315). The liberal ideal of unified citizenship rights directly challenges the political and economic integrity of ethnic homelands. Their dissolution would have massive redistributive consequences that are difficult to predict: ‘Will the state enforce land sales that have taken place as ‘informal transactions’ in the past? Will government protect customary and neo-customary entitlements? If the authorities will not uphold these economic rights, then what others will they offer?’ (ibid.: 314). As long as they are not embedded in a welfare state, liberal citizenship rights will not offer economic security. Resonating with this, Zeurn (2011) shows that local volunteers who supported the transition to democracy in South Africa advocated for the protection and enforcement of socioeconomic rights in addition to civil and political liberties.

It is important to note that these issues cannot be seen in a strictly local or regional context, but need to be reflected against the background that African states are the subject of international development discourses because they are considered 'developing countries.' They are massively exposed to interventions by multilateral and bilateral agencies and non-governmental organizations (NGOs). These discourses and interventions exert pressure and may have a determining influence on the scope of political reform in African states. Over decades, land reform and civil rights have been central topics in development debates, both with reference to Africa specifically and more generally with reference to development worldwide. The latter debates are particularly important in the given context because they can be interpreted as part of larger WMPs. (How) do these debates address the issues raised in African policy debates about citizenship reform? And can this be explained by locating them as part of specific WMPs addressed in this volume? While a systematic exploration is beyond the scope of this chapter, providing an example might offer initial insights.

The global report '*Human Security Now*' (Commission on Human Security, 2003) is an authoritative document in human security discourse commissioned by the UN Secretary-General. However, it does not recognize the intrinsic value of ethnic homelands. The report emphasizes that equal citizenship enhances human security. By contrast, differentiated citizenship rights are depicted as 'ineffective,' 'creating inequalities that lead to grievances and possibly to conflict,' and resulting 'from a willful exclusion of communities from political, social, and economic power' (Commission on Human Security 2003: 31–32). Many of these deficiencies 'can be resolved by revising legislation, correcting administrative procedures (issuing birth registration cards) and promoting a culture of respect. The problems are more complex when they relate to access to political, social and economic resources' (ibid.: 33). This latter sentence would logically lead to the issue of communal solidarities, such as those established by the local-level group rights in African ethnic homelands. However, the report does not spell out this implication. This could be because it defines human security in terms of the individualistic concept of human rights. This, in turn, could be explained by the fact that the

authors of the report are committed to an internationalism of human rights (see the chapter by Tobias Werron). Similarly, the report links human security with liberal democracy, which is individualistic as well. Thus, the report could be part of the neoliberal WMP, as described by Heikki Patomäki in his chapter. The report's disregard for the intrinsic value of ethnic homelands could also be explained by linking it to 'post-colonial developmentalism critical of Western neo-imperialism' (see Patomäki's chapter): The report not only sees the notion of human security as an operational tool for promoting human development. What is more, a centrally placed comment on security thinking argues that the shift in Africa from state security to human security evolved from the experience of colonialism: 'In Africa, for example, such shifts can be traced to the internal struggles of African people against colonial rule and occupation (...). Views on security were shaped by the experiences of colonialism and neocolonialism and by the complex processes through which internal and external forces combined to dominate and subjugate people' (ibid.: 3). The approach to colonial legacies here differs from how they are addressed by actors on the ground in Africa (cf. Boone 2018). The report portrays distancing oneself from colonialism as an unavoidable imperative and appears to deem political correctness more important than addressing the substantive issues raised by colonial legacies today.

7.4 Saving and storing money: Financial mutuals and the financial inclusion agenda

The institutionalization of an imperialist WMP and, later on, a nationalist WMP not only gave rural people specific identities – as members of lineages, linked to an ancestral territory and subject to chiefs and/or other central state authorities. For many Africans, colonialism also brought with it the introduction of money. Money changed existing social relations and led to the creation of new and innovative relations, such as financial mutuals (Bähre 2007: 23; Rodima-Taylor 2022).

While exerting effective political control and controlling the mobility of rural populations was a core goal of imperialism in Africa, exploit-

ing the labor of Africans to extract natural resources and to care for households, gardens, and children was also central. After the abolition of slavery, new forms of labor organization were introduced in many places to ensure the availability of the desired workforce. Rural populations' dependence on money can be key in this context, as it makes temporary migration to work on plantations, in mines, and in the cities attractive. In the context of settler colonies, displacement from fertile agricultural land and forced resettlement to infertile grounds created a need for money because it became impossible or difficult for smallholders to make their living based on subsistence agriculture alone. Other measures, such as the introduction of the 'hut tax' and of new consumer goods, as well as natural disasters like droughts and the spread of animal epidemics could create needs for money in areas with both statist and neo-customary land tenure (Bähre 2007: 24–27; Dewees 1993: chapter 2; Rodima-Taylor 2022: 421). For rural populations, temporarily migrating to cities while maintaining social ties to their home communities is one strategy to cope with financial needs. Beyond the need to earn money, precarious living conditions make saving and storing money challenging, thereby rendering it an important object of WMAs.

In order to highlight relevant characteristics of WMAs in the context of saving and storing money, a case study of financial mutuals founded in the early 2000s by female residents of a squatter camp in Cape Town, South Africa, will be used here (Bähre 2007). The term 'financial mutuals' typically refers to groups of three or more individuals who come together to save money, build a capital stock to provide insurance for members and/or meet other financial needs collectively. Financial mutuals vary considerably in terms of their size, degree of formality, specific purpose, organizational form, and practices (Miracle et al. 1980; van der Linden 1996). However, the principle of mutuality distinguishes them from commercial financial service providers, such as banks and insurance companies. Rather than using a service offered in the market, the members of financial mutuals save together or insure each other, setting their own

rules.² Engaging in financial mutuals has been a widespread practice across Africa from the colonial period up to today (Ardener 2010).

Living in a squatter camp, the women were exposed to physical insecurity, lack of money, and anonymity; it was a hostile environment where most neighbors were strangers. In this situation, they formed groups to save money together. This often was a creative process: one small group of about ten members called their mutual '*Masifunde*', which means 'Let Us Learn'. The women were expressing their intention to save money for their children so they could go to school. They also wanted their children to save and to learn about money, rather than only the mothers saving. Another, much larger mutual was named '*Zolani Club*', which means 'Those Who Remain Cool.' Men could also become members, but the majority were women. This circle created opportunities for giving and receiving within a context of fictitious kinship relations. When joining the association, each member had to choose another member as her or his mother. The repeated application of this principle over time gave rise to a network of kinship relationships. Marriages were not contracted within this network, thereby avoiding in-law relationships. Key events in the club were members' birthday celebrations, when gifts were handed over in a festive setting. These practices, as well as the exclusion of in-laws from the network, demonstrate that the women used their mutual to express and, wherever possible, live out their dreams and visions of a better world.

This also implied a depoliticization of these groups. The mutuals were designed to offer a protected space that, as far as possible, would provide security and trust. Any association with political actors was avoided, as it appeared dangerous in the environment of post-Apartheid squatter camps. In this respect, the situation of migrants in Cape Town was similar to that of subordinated kinship groups (women, youth) in the context of the ethnically homogeneous neocustomary LTRs: for both, turning to state actors was not a feasible strategy for expanding their scope for meaningful engagement in their lifeworlds.

2 See 'mutual benefit organizations' in Blau and Scott's (1962) classic typology of organizations.

Overall, the financial mutuals are a paradigmatic case of an inwardly-oriented, particularistic group.

One might be tempted to view the mutuals as a means for women to create a 'traditional' community in a 'modern' individualized context, which could compensate for their absence from home. However, Bähre highlights negative consequences of engaging in the mutuals. *Masifunde's* reciprocity norms could become an existential burden if members were unable to reciprocate gifts of the same value. Following the end of apartheid in 1994, South African insurance companies started selling microinsurance policies to the poor and lower middle classes. These policies included funeral insurance, endowment plans, retirement annuities, and coverage for school expenses (Bähre 2015). The companies opened offices in townships and hired local brokers who visited people in their homes and approached them at taxi ranks and train stations (ibid.: 1). Even if private insurance is ineffective and creates new challenges and problems, inhabitants of squatter camps typically preferred them to the collective insurance offered by mutuals. They would leave the latter as soon as they could afford to do so. In line with this, Dittrich and Schrader (2015) demonstrate that, in the 1990s, middle-class households in Central Asia coped with the transition to a free market economy by engaging in mutual economic support via their private social networks. However, those who became affluent withdrew from these systems of economic exchange, cultivating relationships with relatives, acquaintances and friends purely for leisure. In line with *Masifunde's* birthday celebrations, community seems to be welcomed for recreation, but not for necessities.

This suggests that, as a WMA, financial mutuals do not inherently have the potential or tendency to develop into large-scale political projects. Rather, people prefer to save and store money in more individualistic and/or formal ways, and there are external actors with motives to exploit this preference. These actors include not only insurance companies but also banks, fintech companies, and communication technology providers. Furthermore, political initiatives have emerged at the national and international levels since the mid-1990s. These initiatives can be seen as part of postcolonial developmentalism and

neoliberal nationalist WMPs, as addressed by Patomäki's chapter in this volume, with both WMPs interacting in recent efforts to include so-called 'unbanked' people into the global financial system.

Thus, after the end of apartheid, the African National Congress (ANC) in South Africa implemented regulations obliging private insurance companies to offer better services to the predominantly African population (Bähre 2015: 1–2). These regulations were part of the ANC's goal to overcome racial inequalities and make the financial sector racially inclusive. Furthermore, insurance companies played a pivotal role in the South African government's decision to join the BRIC in 2010, which then became the BRICS. After attracting millions of new clients in South Africa, insurance companies set out to sell their products in other African countries and emerging markets in BRIC countries. Taken together, we can view the South African government's engagement with private insurance as part of postcolonial developmentalism.

In the early 2000s, when mobile communication technology spread in Africa, telecommunications companies, banks, and fintech companies began offering new digital financial services. These include saving and storing money, as well as payment, borrowing, crowdfunding and investment. They were not only aimed at wealthier urban middle classes, but also at populations that had no previous access to commercial offerings due to limited financial resources or because they lived in remote areas (OECD 2024: 7–12; Pervez 2022). Many Africans have taken advantage of the opportunity to have a mobile bank account.³ In the wake of this development, digital borrowing appears to have increased (Langley/Leyshon 2022: 405–406; OECD 2024; World Bank 2025: 151–161).⁴ This

3 According to World Bank estimates, the percentage of adults with a mobile money account in sub-Saharan Africa more than doubled between 2011 and 2024, reaching 49%. However, there is significant variation across countries, ranging from 6% in Sudan to 56% in Senegal, 79% in Kenya, 85% in South Africa and 91% in Mauritius (World Bank 2024). Compared to other 'developing countries', mobile money account ownership is most widespread in sub-Saharan Africa (World Bank 2025: 158).

4 According to World Bank estimates, 'just 7 percent of adults borrowed from their mobile money providers' in 2024. However, because 'overall levels of for-

has resulted in high rates of late payment and default among the poorest individuals.⁵ Furthermore, the use of mobile money expands the informal networks that can be accessed for financial support⁶ and offers secure communication in environments with high rates of street crime or under violent conflict (Morawczynski 2009; Rodima-Taylor 2022: 429).

The following discussion will focus on the effects of communication technology on financial mutuals as social entities and as spaces for WMAs related to saving and storing money. Resonating with the aforementioned preference for commercial insurance, a 2004 South African survey found that only 2% of respondents reported that they would invest a 'fairly large sum' in a mutual fund compared to 79% who would invest in a bank (United Nations 2006: 32). Similarly, a 2002 survey found that African savers considered the formal sector to be significantly safer than the informal sector in terms of the likelihood of losing money and the amount lost relative to the amount saved. In line with this, Mbiti and Weil (2011: 17) estimate that the adoption of the

mal borrowing in Sub-Saharan Africa are low, borrowing from a mobile money provider constituted nearly 60 percent of all formal borrowing in the region in 2024' (World Bank 2025: 158). Digital borrowing refers to business models in which borrowers apply for loans via an online platform. These models include peer-to-peer (p2p) lending, in which individual investors are the lenders, and 'marketplace lending', in which institutional investors provide loans. Overall, data on the use of these services in Africa is limited and usually refers to individual countries, most often Kenya and South Africa.

- 5 Izaguirre et al. (2018) examined demand- and supply-side data from Kenya and Tanzania. They found that 50–85% of payments were delayed and 12–31% were in default. In Tanzania, these rates were highest in the poorest and most rural regions. According to an OECD report on fintech lending in sub-Saharan Africa, borrowers of small loans 'quickly accumulate debt due to high interest rates, late fees, and other hidden charges' (OECD 2024: 20).
- 6 Mobile money transfer enabled rural people to ask multiple relatives at the same time to give each 'something small', which they report in total led to higher sums of support. However, the rising demands on urban residents also created new tensions between them and their rural relatives (Morawczynski 2009: 501).

mobile money system *mPesa* in Kenya would reduce the prevalence of informal saving significantly (by 30% during 2006–2009).

However, there is also an opportunity to ‘formalize’ the financial mutuals themselves. Mobile phone providers and fintech platforms target financial mutuals with various products and services. These range from tools for organizing membership and depositing and transferring money to tools for enhancing financial literacy, borrowing and investing (Rodima-Taylor 2022).⁷ Komen and Ling (2022) discuss how married Kenyan women living under precarious economic conditions used the mobile money transfer service *mPesa* and its accompanying savings- and loan service, *mShwari*, within a financial mutual. They established the mutual in order to deposit money outside the household in order to protect it from being withdrawn by their husbands. *MPesa* was used to store and transfer money and for accounting purposes, but not for loans and investments. The study shows how the use of mobile communication technology can change the operations of financial mutuals. Using *mShwari* made economic transactions and bookkeeping more efficient and transparent, and it reduced the need to meet face-to-face. However, the authors also consider *chama*, the Kenyan mutuals, a source of ‘sororal solidarity’, which they believe is important in a polygynous society. Face-to-face meetings, during which financial transactions were negotiated, organized, and executed before the advent of *mShwari*, were important for this communal aspect. Not only did they provide opportunities ‘to gather, to enjoy one another’s company, to banter, and to chat’ (ibid.: 2087). They also generated the sense of mutual aid, obligation and collective responsibility that formed the basis for both the group’s economic success and for the ties of ‘sororal’ support. However, when economic transactions and accounting were outsourced to mobile communication, it became obvious that members had different views

7 See, for example, the South African provider StokFella: <https://www.stokfella.com/>; and the Kenyan provider mPesa: <https://www.safaricom.co.ke/media-center-landing/frequently-asked-questions/m-pesa-chama-account>. ‘Stokvel’ and ‘chama’ are the South African and Kenyan names for financial mutuals.

and needs regarding face-to-face meetings. While some women emphasized the importance of continued socializing events, another member said that she is 'a notorious absentee in face-to-face *chamas*. I usually see it as a waste of time and energy, So I send in my contributions and give an excuse' (ibid.: 2091). Therefore, when financial mutuals introduce digital tools, they will either consciously or tacitly redefine themselves. The forms and functions of face-to-face meetings will change. They will no longer be used for the collective, creative process of independently constructing and maintaining an accounting system. How will this affect the character of mutuals as communities of solidarity? Will they continue to provide spaces for cultivating solidarity, whether through face-to-face meetings or digitally mediated communication?⁸ In any way, if face-to-face meetings are discontinued altogether, some existing values will get lost, such as the 'warmth' and 'closeness' of 'physical togetherness' (ibid.: 2091) as well as oral exchange.

The ongoing international policy discourse ascribes a central role to mobile communication and digital platforms in enabling 'financial inclusion'. Again, (how) are financial mutuals addressed in this context? And can this be explained by locating the discourse as part of specific WMPs described in this volume? The 'financial inclusion' movement emerged in reaction to criticisms of the microfinance agenda in the early 2000s and is much broader. It refers to the inclusion of households and enterprises into the 'financial system' through increased access to financial services, and it includes several types of service providers, such as payday lenders, large banks, technology firms, mobile network operators, and credit card companies. However, it also assigns an active role to the state in enabling financial inclusion; and it explicitly addresses 'older' community-based programs and institutions (Dafe 2019; Johnson/Arnold 2012; Mader 2018: 464). Similar to the devaluation of differentiated citizenship in the aforementioned human security report, proponents of financial inclusion often depict informal

8 These questions touch on the ongoing debate about the relationship between face-to-face interaction and technology. For an overview see Johannessen (2023).

service providers, such as village-based savings groups, as inferior to commercial providers. For example, they are considered 'insufficient,' 'unreliable,' 'more susceptible to risk' and 'very expensive' (Mader 2018: 475).

By contrast, the UN report *Building Inclusive Financial Sectors for Development* (2006), an early and often-referenced document within the financial inclusion movement, takes a more nuanced position. It also observes deficits in financial mutuals, for example arguing that they offer only 'very specific services' and 'do not mobilize large enough resources to protect people against loss from a variety of frequent events' (e.g. sickness, crop failure, drought, and accidents). Taking a historical view, the report portrays financial mutuals as one of the informal mechanisms on which 'poor households have largely had to rely' (ibid.: 7). However, both in Europe and in developing countries, governments and religious and other civil society organizations have long sought to 'broaden access to formal financial services for poor and low-income people'. In Europe, Japan, and elsewhere, postal systems were central in this context from the nineteenth century on. Still, the report states, a large part of the population in developing countries continues to rely on informal providers of financial services such as financial mutuals until today (ibid.: 10–13). Furthermore, the report mentions that there is 'ample evidence' that 'poor and low-income people' combine informal and formal financial mechanisms even when they have access to the latter (ibid.: 23). It points out that the informal means on which these groups rely are diverse. For example, financial diaries revealed that South African households used 17 different financial instruments in the course of one year, 70% of which were informal (ibid.: 23). However, the report does not describe these instruments in detail, nor does it ask why people continue to use them despite their access to formal services. It also does not address how financial mutuals might change if formal services become available to their members.

These analytical choices might be explained by drawing on the concept of WMPs (for the conceptualization of WMPs, see chapter 2). The report considers the inclusion of previously 'unbanked' populations of developing countries into the formal financial sector as the main objective.

Therefore, it could be considered to be part of a developmentalist nationalist WMP that focuses on the value of equality. The report explicitly formulates a normative vision for the future that articulates universal aspirations: '[S]upported by a sound policy, legal and regulatory framework, *each developing country* should have a continuum of financial institutions that, together, offer appropriate products and services to *all segments of the population*.' (ibid.: 17; italics BM). Reading the report with the notion of WMPs in mind, it becomes obvious that it systematically locates financial mutuals as part of the past and the present. The present is supposed to be transformed into a world where all people will have access to adequate formal financial services. There is no reference to a future world in which everyone can combine formal and informal financial instruments (which many people obviously choose to do). This is not only because financial mutuals are considered to have weaknesses. Rather, it also seems important that the future vision is articulated in universalist terms. Thus, the second chapter of the report discusses the 'main factors that shape the market for financial services used by poor and low-income people' (ibid.: 24). Financial mutuals could be important here, given that most people in developing countries rely on them, and given that mutuals take many different forms and fulfill different functions for their members, as shown above. Why do people engage in them when they have access to formal services? What can be learned from this regarding the shaping of formal services? The report does not address such questions to understand the financial services market. Instead, it uses the following headings to discuss the contextual conditions of inclusion: 'Who you are and where you live matters'; 'How you make your living matters', as well as 'Trust' and 'the attractiveness of the product matters'. The 'factors' identified under these headings do not include membership in financial communities of solidarity. They are cast in abstract terms, ranging from cultural norms and gender to age, legal identity, knowledge, income level, and occupation type. Thus, the report sees people isolated from the context of their everyday lives in which these 'factors' are interconnected.

Resonating with this, Mader (2018) criticizes the financial inclusion discourse for failing to address how access to the financial sector will

change people's lives. He argues that promoters of financial inclusion merely claim that people will benefit without providing evidence. This is another way of avoiding addressing the concrete context of people's lifeworld. As an explanation, Mader locates the financial inclusion movement within financialization and rentier capitalism: It is fundamentally designed towards extracting rents from the previously 'excluded', assigning an instrumental role to the state. Combining this view with the reading of the UN report proposed here, one might see an imperialist economic WMP and a developmentalist-egalitarian nationalist WMP interacting within the financial inclusion movement. Despite their differences, both WMPs share a *universal* vision that directly relates to *people's lives*: everyone is supposed to use services offered by commercial financial institutions. This brings us to the fundamental theme of this chapter. While the chapter noted at the outset that WMPs typically formulate ideas related to people's lives, it now became obvious that their universal scope encourages formulating these ideas in abstract terms (cf. Mahlert 2021).

7.5 La Via Campesina and collective human rights

So far, two global development reports have been used to explore whether and how WMAs are addressed in relevant international discourses that connect to larger WMPs. One of these WMAs relates to citizenship, the other to saving and storing money. In both cases, social collectives that in important respects can be understood as communities turned out to be central. Neither of the reports imagines these collectives as a desirable or valuable entity in a future world-to-be-made. However, there are also counter-examples. The *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas*, adopted in 2018 and initiated by the international movement La Via Campesina, formulates collective rights for peasant communities. It gives 'peasant and other people working in rural areas' the right to 'engage freely, individually and/or collectively, in association with others or as a community, in traditional ways of farming (...) and to develop community-based

commercialization systems' (Article 16), and it states that 'peasants and other people living in rural areas have the right to land, individually and/or collectively, including the right to have access to, sustainably use and manage land' (Article 17). In formulating collective rights, the declaration builds on legal innovations established by the *United Nations Declaration on the Rights of Indigenous Peoples* in 2007 (Raghu 2018: 330). According to Nuila (2018), these rights were important for members of La Via Campesina when negotiating the declaration because they reflect the reality of peasant life. A purely individualistic conceptualization of human rights, in their view, 'disregards the essential role that community relationships play in their management and use of communal resources (...) as well as the preservation of the individual's and its group, subjectivity and identity' (ibid.: 1). The declaration obligates states to recognize customary land tenure rights. At the same time, its concept of community is shaped by principles of equality and participation, which challenge the authority of chiefs in African neo-customary land tenure regimes (LTRs). For example, states 'shall take appropriate measures to remove and prohibit all forms of discrimination relating to the right to land, including those resulting from change of marital status, lack of legal capacity or lack of access to economic resources' (Article 17). Therefore, it would be inaccurate to view the declaration as the result of a homogeneous group of peasants advocating at the United Nations. African groups and organizations in La Via Campesina are fewer in number than the more influential groups from Latin America and Western Europe. They are also heterogeneous in terms of their members' composition, ideological orientation, and relationship to the state and international organizations (Borras Jr., 2008).

7.6 Conclusion

This chapter used the concept of WMAs to explore how people cope with the conditions created through the institutionalization of WMPs, and the potential emergence of larger-scale political projects from these activities. Focusing on two sets of WMAs of global significance – ac-

cess to land and saving and storing money – , it applied the notion of WMAs to examples from Africa. (Comparative) case studies revealed that (post)colonial structures create different opportunities for different groups of peasants to pursue their interest in access to land. First, where opportunities for voice in political arenas are limited or nonexistent, WMAs range from reclaiming land from migrants to leaving for more favorable areas to exercising influence or power within the family context to making threats of domestic violence or witchcraft, to ‘hanging on in a worsened position’. Second, where the national states managed land rights, corresponding interests could be pursued through openly voicing one’s grievances on national levels, seeking backing through competing political parties and uniting into large ethnic coalitions, but also political violence. Third, interest in land sometimes also evolved into to larger scale political initiatives that aimed at citizenship reform. Many of these initiatives crucially aim to legally protect local communities defined in relation to ethnic homelands. On a fourth level, the transnational peasant movement *La Via Campesina* advocated at the United Nations in order to achieve improvements for peasant communities. The need to save and store money also led people to organize collectively. While the financial mutuals they created took on a wide variety of forms, no far-reaching political initiatives developed from them. However, if such arrangements fulfill positive functions for those involved, the newly created WMAs will be imitated elsewhere. Financial mutuals are not unique to Africa, but have spread globally since the nineteenth century. By reading the case studies through the lens of WMAs and relating them to WMPs, it is possible to understand the strengths and weaknesses of different social initiatives in terms of their conditions for success, regardless of whether or not they evolve into larger-scale political projects.

8 Worldmaking Projects, the Cunning of Reason, and the Evolution of World Statehood

Heikki Patomäki

8.1 Introduction: the rising planetary imaginary

The future-oriented concept of ‘project’ took shape in the context of the rise of sovereign states, global trade, colonialism, and capitalist market society in the late seventeenth century (Pincus 2008). A bit later, in the eighteenth century, the temporal-progressivist alterations of concepts (Koselleck 1997) paved the way for transformative political ideas (projects) and the American and French Revolutions. Both involved universalizing claims that were, in principle, applicable everywhere. The future became a realizable possibility.

When the subject of an ethical-political project comprises the Earth and everything on it, the globe, the question inevitably arises about the integration of this whole and its formation into a single system in one way or another. By the late nineteenth century, the conditions had evolved for world politics, world economy, world communications, world exhibitions, and also world order, where the term ‘world’ (which historically has combined ideas about temporality and humanity) is now understood mainly, or at least usually framed, in secular and planetary terms. However, the idea of a world state first appeared already in the late eighteenth century, even before the concept of ‘world’ had become common to cover large-scale phenomena.

The gradually emerging planetary imaginary (Patomäki/Steger 2010) did not come to being in a vacuum. Its contents were shaped

and mediated by pre-existing structures and processes. As Karl Marx famously put it, ‘men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past’. The first permanent international organizations coordinated global time and space, as well as communication and transportation in these spaces. They were established at the time of the second industrial revolution and the dawn of the era of new imperialism and competing imperial great powers, which resulted in World War I. These forces shaped their materialization. Although the term ‘First World War’ was coined after the war and became common in academic, historical, and public discourse only after World War II, it started discussions on and declarations of world orders, especially of *new* world orders.

In this chapter, I argue that the competing worldmaking projects of the twentieth and early twenty-first century have inadvertently co-created the conditions for further developing and empowering the existing layers of world statehood, albeit only in an ambiguous manner. First, I outline a summary of the emergence of worldmaking projects (WMPs). Next, I discuss the underpinnings of the concept, as it is not widely used by the actors or in social scientific literature, and also relate it to the concepts of the field that I have developed elsewhere (Patomäki 2022). Third, I indicate how the history of the twentieth century can be written in terms of WMPs and their intra- and interactions. Moreover, despite the end of the Cold War, there is continuity to the current situation in the 2020s characterized by the division of the world into two camps, securitization of issues, and weaponization of interdependence. In the main section, I argue that instead of the eternal struggle between idealism and political realism, or anything of that sort, we live in an evolutionary and historical world, where things become possible in phases through the intertwining of different conditions and possibilities. The cosmopolitan attempts to build elements of world statehood assume new meanings in new world-historical contexts. A short section with concluding remarks follows this discussion.

8.2 The emergence of worldmaking projects

Although the conditions for planetary world-thinking and projects could have also evolved elsewhere, for historically contingent reasons, these conditions came together in Europe in what is customarily called ‘early modernity’ (see Patomäki 2023, chapter 4). Already the first wave of Eurocentric expansion and globalization was premised on the idea that the Earth is a sphere. New global routes of trade necessitated and enabled the drawing of world maps. A new planetary imaginary emerged also through the Copernican revolution and the cultural impact of the new scientific theories and encounters with non-Europeans on social imaginaries. The revival of ancient philosophies – including Stoicism – and the Atlantic voyages widened the prevailing terrestrial horizons, preparing the ground for the new Copernican cosmology (Kuhn 1957) and planetary geography (Cosgrove 2003).

The Copernican cosmology, various scientific discoveries and innovations, and changes in the background (e.g. print capitalism, expansion of literacy, ability to read alone and silently, etc.) made it possible for an increasing number of people to imagine the Earth as a small totality and part of a much larger solar system and wider cosmos. Natural scientists like Giordano Bruno and Christiaan Huygens and Enlightenment philosophers such as Voltaire and Immanuel Kant went even further. They speculated about the place and origins of the solar system and envisaged intelligent life in other worlds, either similar or much more developed than that of their own society. These thinkers were opposed to particularistic framing of ethics and politics and critical of European colonialism.

From this perspective, it is unsurprising that the first programmatic visions of a world state emerged during the French Revolution and the Napoleonic Wars (by Baptiste ‘Anacharsis’ Cloots in France and Karl Krause in Germany). However, although several distinctive metaphors and framings of the planetary imaginary were available by the time of the French Revolution, the social conditions were unfavorable to their widespread distribution and adoption in any cosmopolitan form. Not only the limits of the available practical-administrative capacities

but also constant warfare – or at least the threat of war – favored the category of the nation and related framings, metaphors, and stories. The cosmopolitan planetary WMPs tentatively articulated by Cloots or Krause based on the idea of a modern state were neither widely known nor feasible. Politics was increasingly future-oriented but concerned first and foremost new institutions on a national (whatever that was taken to mean) scale, such as the central bank, parliament, taxes, or educational system.

A new round of Eurocentric expansion was facilitated by the mechanical-industrial revolution of the late eighteenth and early nineteenth century, generating a truly planetary economy (Polanyi 1957: 89). The industrial-mechanical world economy's growth and dynamism – at first based on steam engines and railways – created the material and infrastructural conditions for planetary WMPs. This marked a profound shift in global connectivity and economic integration. The steam engine, railways, and telegraph fundamentally compressed time and space – goods, people, and information could move faster and farther than ever before. This created not only the material infrastructure (railroads, factories, shipping routes) but also the organizational and bureaucratic systems necessary for planetary-scale cooperative projects as well as worldwide empire-building. Before the industrial-modern period, even vast empires (e.g., Mongol, Roman, Ottoman) had limits to their global reach and ambitions. They might dominate regions but did not typically claim a universal order for the entire globe. In contrast, the nineteenth century provided the material preconditions for planetary-scale ambitions.

Planetary-scale organizational and bureaucratic systems presuppose reliable and fast communication across space. In the eighteenth and nineteenth centuries, postal services were developed in many countries and internationally, making sending and receiving mail faster, simpler and cheaper. Also, during this time, European empires established postal systems in the colonies, connecting them to the metropolises. The Universal Postal Union (UPU) was founded in 1874. The electric telegraph started to replace the optical telegraph in the mid-nineteenth century. The Morse system was adopted as the international standard,

and the International Telegraph Union (ITU) was established in 1865. Radio was developed at the end of the nineteenth century. It was used first by seafarers, then by the military during World War I and finally, on a much larger scale, by civilians in the 1920s. In the interwar era, radio became the first medium capable of reaching millions simultaneously, transcending geographical barriers and literacy limitations and offering immediacy unmatched by newspapers.

The development of radio occurred in the context of the second industrial revolution and competing imperial great powers. The era of new imperialism may have started with the Indian Rebellion of 1857–1858. Still, even though the rebellion was suppressed violently and the authority of the East India Company was assumed directly by the British Crown, no one was openly talking about an empire. This only occurred in the 1870s and 1880s. An official turn came in 1876 when Prime Minister Benjamin Disraeli – following his landmark speech in the Crystal Palace in 1872 and the Conservative election success of 1874 – declared that Queen Victoria would take the title Empress of India, indicating that ‘empire’ and imperialism should, from then on, be seen also positively. Even though the British continued to practice free trade, the French were particularly quick to follow the newly declared British model. Other great powers followed suit, resulting, for instance, in the ‘scramble for Africa’. In 40 years, the dynamics of the resulting insecurity community – involving military alliances and arms race – led to World War I. There was something in the world system that had resulted in a total catastrophe. (Patomäki 2008: chapters 3 and 4)

This phase of world history involved much violence and exploitation in different parts of the world, and it caused a massive catastrophe, mainly within Europe. However, it also constituted a qualitative change in world history. The industrial-modern period introduced truly global integration (not just connectivity but mutual dependence), ideologically ambitious projects that framed themselves in global terms, and institutional permanence, such as international organizations or governance mechanisms. In this period, ‘world’-talk became more and more commonplace, accompanied by both cooperative and imperial practices of world governance. Woodrow Wilson’s 14 points can be taken as a

prototype of a project to reorganize the world in terms of certain values and principles. Such projects involve a promise of a good or progressive outcome, usually defined in terms such as equality, prosperity, or perpetual peace (for a discussion on recent interpretations of the limits and ambiguities of Wilson's project, Kennedy 2018; for a crushing early cosmopolitan criticism, Wells 1931: 1118–1121).

In connection with his 14 points, Wilson used the expression 'new world'. The term 'new world order' emerged in the ensuing discussions and debates, especially in the context of founding the League of Nations. The 14 points consisted of a handful of general principles that can be characterized as 'liberal', while most of the 14 points concern specific territorial rearrangements. In the next phase, the new liberal international order – including not only the League of Nations but also the International Labour Organisation (ILO) founded in 1921 – provided a platform for the anti-imperialists for their struggle against racism and colonialism and for socialists to imagine the remaking of the world economy (Helleiner 2023: chapters 6–7 and 11–13). Such anti-hegemonic aspirations were often interwoven.

This is how the conditions for 'world'-talk and future-oriented world politics developed, leading to competing claims about '(new) world order' (cf. Alker 1981; Alker, Biersteker and Inoguchi 1989). Worldmaking projects (WMPs) emerged in a world shaped by the dynamics of the world economy and divided into territorial formations, first states and empires and later 'nation-states'. Also, ideologies such as patriotism and later nationalism, liberalism, and socialism preceded the emergence of WMPs. The new, globally oriented science of 'geopolitics' emerged at around the same time. The twentieth-century WMPs were forged out of the pre-existing elements but involved a desire to reorganize the world as a whole in terms of universalizable values and global institutions. This talk became increasingly widespread in the twentieth century, yet the process has resulted in a gridlock of global governance in the early 21st century (Hale et.al 2013; Hale/Held 2017; Patomäki 2023: chapter 7).

8.3 Worldmaking projects as abstract reconstructions

At this point, I should note that the term worldmaking is not often used by lay actors or in social scientific literature. The term ‘world order’ is much more common, but it carries a heavy historical ballast. ‘Order’ tends to be hierarchical and indicates the absence of action, practice, process, and change. The concept of WMP is more active, processual, and change-oriented. It focuses on ideational rather than material interests and stresses the potential worldmaking powers of actors, even though a WMP in itself, or as such, does not involve agency. The concept implies that social realities are historically and socially constructed.

To be a worldmaking project in a world-political sense, the ethical and political aspirations must be sufficiently ambitious, universalizing, and global. At any given world-historical moment, these aspirations – embedded in a taken-for-granted background – may be largely realized, realized to some extent, or not at all. Claims of novelty tend to be exaggerated, and often, continuities dominate. Moreover, attempts to realize planetary worldmaking aspirations tend to have unintended consequences and effects of power (meaning existential and socially constitutive effects). To the extent that aspirations are realized, the primary understandings co-generate – in a context of power relations and previous geohistorical layers – constitutive and causal processes through which the forms and parts of the whole are determined. Also, when largely and successfully realized, the understandings and explanations underlying a WMP are prone to involve a partial and one-sided picture of the world. A corollary is that because WMP-related understandings and explanations can serve particular ideational and material interests, they can be subjected to ideology critique. For such purposes, the mode of existence of WMPs is that of political theories and ideologies and their philosophical underpinnings (ontology, epistemology, and axiology).

However, WMPs are not only concepts and ideas, but to the extent that they manage to constitute and generate agency and shape practices, institutions, and forces of production and destruction, they form vast entities that have the ability and power to shape the contexts in which they operate across the world. A possible way of thinking about

the causal impact and effects of WMPs is in terms of fields (Patomäki 2022). To the extent that WMPs succeed in shaping the world through re-organizing dispositions and relational positions of practices and institutions, involving a particular distribution of resources, they generate various causal outcomes that we can observe. Whereas the field theory of global political economy focuses on the liberal world economy and interstate practices as well as on the constitutive and causal consequences of geohistorical fields involving learning, WMPs are primarily identified through their ideational (ideological) contents and are presented as active makers. There may be tensions between the two concepts, yet they are best seen as complementary.

8.4 A brief history of the twentieth century in terms of WMPs

To reiterate, the 1918 declared Wilsonian ‘new world order’ can be taken as a prototype of a WMP. In terms of classification criteria, it existed as a declaration of ethical-political aspirations to organize some aspects of the world system as a whole in a particular way, and it was in significant part expressed in terms of principles. To the extent that such aspirations are realized, they may result in new institutions (sedimented practices with legal underpinnings) and organizations, such as the League or ILO. The post-WWI liberal international project was not the same as the nineteenth-century Eurocentric civilization that included liberal principles such as free trade and the gold standard. The emerging twentieth-century ‘new world order’ was a more explicit and self-conscious world-ordering project than the nineteenth-century system. Although it continued, in some ways, the Kantian-Cobdenian free trade-based peace project, it was in significant part defined against the power-political and imperial practices of the nineteenth century, while also trying to manage relational processes inherited from the past.

Table 1: Worldmaking projects that emerged 1918–1945

Name	Period	Aspirations	Institutions
Classical liberal (semi-Kantian)	1918–44	Wilson's 14 points: freedom of seas, free trade, public diplomacy, disarmament, adjustment of colonial claims, territorial adjustments, association of nations	League of Nations, International Labour Organisation (ILO)
Soviet socialism	1918–1945–1991	A world order contender, but at first 'socialism in one country'; later a mixture of great power status in international society and revolutionary state-level practices.	Post-WWII, supported UN & decolonization through the UN (+ Comecon, Warsaw Pact...)
Japanese 'New Order in East Asia'; the Italian 'Nuovo Ordine' and Nazi 'Neuordnung'	Early 1930s–1945 ('Ordine Nuovo' a terrorist organization in the 1970s)	Anti-globalist, turning nationalism and racialist-imperialist geopolitics into a WMP. A plurality of imperial great powers divides the world into their spheres of interest. Includes, however, the key pillar of the liberal order, namely political economy based on nations-capital in world economy.	The aim was an external, imperial, reorganization of the world, but explicit institutions mostly lacking. Mutual recognition of 'Monroe doctrines' for each imperial sphere and clearing unions for trade.
Embedded liberalism (Bretton Woods & UN)	1945–1973	Combined classical liberal order with 'embedded' elements (e.g. capital controls), facilitating the building of a democratic welfare state at home. During the Cold War, this WMP involved 'capitalist power-balancing'.	The United Nations, IMF, World Bank, and over time, hundreds of others, including GATT, NATO & Trilateral Commission

Table 1 summarizes the four WMPs that arose during the inter-war era and before the decolonization process. In the 1930s-40s, the Wilsonian liberal 'new world order' was contested not only by the anti-imperialists and socialists but also by the fascists and Nazis, who started to talk about their own 'new order' (the Japanese 'New Order in East Asia', the Italian 'Nuovo Ordine', and the Nazi 'Neuordnung'). This nationalist, geopolitical, and racist-imperialist WMP was opposed to the universalist, liberal order imposed through international law and emerging institutions. The idea seems to have been to create a concert of imperialist great powers, dividing the world into their spheres of interest, each with its own leader and laws. And yet, this WMP includes the key pillar of the liberal order, namely the capitalist world economy based on the interplay between nations and capital (as argued by Hofmann 2017). While the scope of the ambition was planetary, universalizing values and explicit world institutions were largely lacking, though it can be argued that for example Carl Schmitt's framework involved universalizing certain meta-values or principles such as plurality of *nomoi* and friend-enemy distinction. Arrangements would probably have consisted of just some sort of unstable mutual recognition of 'Monroe doctrines' for each imperial sphere and possibly bilateral clearing unions for their trade, following the German 1930s model and 1940 proposal (Patalano 2023: 304–305; Gross 2017). The defeat of this WMP in World War II discredited racism and imperialism and sped up decolonization (see Table 2).

World War I not only triggered but in an important sense also caused the Russian Revolution (e.g. Read 2013). After a period of external military interventions, civil war, experimentation, and hesitation, the characteristic features of the Soviet socialist WMP began to take hold, including centralized planning, state control ('dictatorship of the proletariat'), industrialization and technological advancement (to achieve economic self-sufficiency and military strength), internationalism and proletarian solidarity, and some social welfare at home. The Soviet Union was a world-order contender but had to settle for socialism in one country instead of a worldwide revolution, soon mixing a great power status in international society and support for revolutionary state practices and

expansion of the sphere of Soviet socialism. This led to power-balancing practices against the capitalist West. (Patomäki 1992: 212–214) In the post-1945 era, the Soviet Union supported the UN and decolonization through the UN and established organizations such as Comecon and the Warsaw Pact.

World War II set the stage for the reorganization of the liberal world order. The new version combined classical liberal order with ‘embedded’ elements (e.g. capital controls), facilitating the building of a social democratic welfare state at home (Ruggie 1982; cf. Helleiner 2014). New regional and global institutions were established: the UN, IMF, World Bank, and over time, hundreds of others, including GATT, NATO, G77, G7, UNDP, UNEP, WIPO, and the Trilateral Commission. During the Cold War, this WMP involved ‘capitalist’ power-balancing against the Soviet Union and, to a lesser extent, China. The post-1945 era that has been characterized by terms such as ‘embedded liberalism’ and ‘American hegemony’ was simultaneously also the era of the Cold War (as conventionally understood).

The opponents of Western imperialism and advocates of collective self-reliance became a visible political force immediately after World War I. In the decades after World War II, both American liberals and Soviet socialists opposed European colonialism and imperialism, facilitating the struggles of those professing racial equality, national-territorial self-determination, and radical redistribution of rights, obligations, and resources in the world economy (for an interpretation employing the concept of WMP, see Getachew 2019; for discussions, Bartelson and Jackson 2020). Following the decolonization process, the so-called third world dominated the General Assembly of the UN. The demands for the New International Economic Order reflected most closely the principles and ideas of collective self-reliance of the Gandhi-Mao-Nyerere era. Since the early 1980s, however, there has been a trend away from the local orientation of collectivist self-reliance and import-substitution strategies and toward world-market-oriented growth (Alker 1981: 75–76, 85–87; Fischer 2016).

Table 2: The main worldmaking projects that emerged in 1955–2025

Name	Period	Aspirations	Institutions
Collective self-reliance (anti-imperial)	1921–1989 (heyday 1955–1979)	Racial equality, 'Africa to be ruled by Africans' (soon to be generalized to 'national' [territorial] self-determination), radical redistribution of rights & obligations and resources in the world economy	The United Nations (after decolonization, third world dominated GA), The New International Economic Order (NIEO), which was defeated at the UN by the industrialized West and then by rising neoliberalism
Neoliberal	(Started to prevail gradually after 1973–	To extend and neo-constitutionally lock in the sphere of private property rights and competitive 'free' markets across the world. Rule-based international order involves norms of human rights and democracy imposed by the hegemon (the US), unilaterally if necessary.	Neo-constitutional institutional arrangements ensuring free trade, strengthening private property rights and imposing orthodox economic policies: BW-institutions advocating structural adjustments, WTO, the EU etc.
Post-colonial development-talism critical of Western neo-imperialism	1989– (BRICS 2009–)	Continuation of some of the aspirations of collective self-reliance, but active participation in globalization & competitive capitalist market economy. Aim: equal rights & obligations with the Western powers, including the US.	The UN, Non-Aligned Movement, BRICS (alternative institutions of governance of the world economy)
Nationalist populist authoritarianism (neo-'Neuordnung')	2008/9–	Anti-globalist, though involving political economy based on nations-capital in world economy (possibly libertarianism at home); aiming at pluralism led by great powers; this kind of 'order' consists of essentially different and in part incompatible national cultures and civilizations.	Apart from some anti-hegemonic countries such as Russia, the US under Trump is also verging on advocating such neo-'Neuordnung', albeit antagonistically vis-à-vis those challenging the US hegemony.

As an ideology, many elements of neoliberalism were articulated already in the interwar era (Slobodian 2018), but neoliberalism did not become a visible WMP before the 1970s and 1980s. Aided by globalization and the increasing discrepancy between territorial states and the liberal and financialized world economy, the rise of neoliberalism coincided with the era of jet passenger planes, transnational phone calls, satellites, and live TV news across the world. Neoliberals aspire to establish institutional arrangements that ensure free trade and liberal-orthodox economic policies, extending the sphere of private property rights and competitive 'free' markets across the world. Neoliberalism succeeded in transforming the Bretton Woods institutions, establishing the WTO and the EU, etc. (for a more detailed discussion, Patomäki 2021: 114–123). At the end of the Cold War, another new world order was proclaimed, apparently establishing a 'rule-based' international order based on the norms of human rights and democracy imposed by the US, unilaterally if necessary.

The (neo)liberal international order is contradictory and forms only part of the reality in the 2020s and 2030s (reflecting also the deep contradiction of international law, see Koskeniemi 2005; Patomäki 2023: chapter 12). Moreover, the liberal aspects of this 'order' ignore long-term continuities regarding sovereign states, power-balancing, state-reasoning, nationalism, and the UN Charter system (it continues to include a capitalist power-balancing system as the world in the 2000s has been increasingly divided into suspicious and hostile camps). In this context, the rising inequalities, especially within states and looming global problems have, among other things, eroded belief in the possibility of progress (more on this in the concluding section). There are many continuities from the Cold War era, such as militaristic political economy and tendencies toward limitation or end of democracy.

Meanwhile, a WMP of post-colonial developmentalism critical of Western neo-imperialism has risen, involving the BRICS movement. There is a continuation of some of the aspirations of collective self-reliance, but also a commitment to actively participate in globalization and competitive capitalist market economy. A key demand is equal rights and obligations with the Western powers, including the US, and –

instead of double standards and hegemonic unilateralism – equal and consistent applicability of rules and principles. Moreover, the goal is to eliminate unilateral post-imperial privileges (for example, the position of the US dollar in the world economy) and to create real and fair conditions for economic development also among middle-income and poor countries.

What is remarkable about the situation in the early 21st century is that the three prevailing WMPs (neoliberal, postcolonial developmentalism, and neo-‘Neuordnung’) are all iterations of previous ideologies and WMPs, though including also novel combinations. They have grown in a context often characterized as ‘hyper-globalisation’ (referring to an extreme level of interconnectedness and integration among countries and economies on a global scale) or as its immediate aftermath (Rodrik 2011, 2022; Subramanian/Kessler 2013; Beattie 2023; Grynspan 2023). Securitization of world-economic issues and weaponization of interdependence have replaced pure economic liberalism, and these developments constitute generic tendencies toward neo-‘Neuordnung’ direction. Although this situation involves something analogical to the insecurity community of competing imperialisms and related security dynamics that led to World War I (in the highly integrated world economy of the very early twentieth century); in terms of ideologies and WMPs, the current situation looks like a rehash of the developments that led to World War II and were related to the struggles about how to organize the world economy, associated with a conflict between haves vs. have-nots.

8.5 WMPs during the early 21st-century regressive era

It is not possible to understand the dynamics of the whole without an account of the causal consequences of organizing parts of the world economy in a particular way (see Patomäki 2022, 2023). In other words, we cannot understand or explain world history only in terms of WMPs. For example, the enormous economic growth of the last hundred years (including the quadrupling of the world’s population and a similar

increase in per capita production) and its consequences have made the world increasingly interconnected. The development of technology and emergent infrastructures have enabled such forms of interaction and organization that very few could even have imagined in the interwar period, while it has also pushed the Earth to a new geological era, the Anthropocene. At the same time (here meaning ‘already since the industrial-mechanical revolution of the nineteenth century’), the capitalist market economy has generated increasing inequality both within countries and globally. The only period of temporary exception to this general rule occurred in 1940–1980 when inequalities decreased within most countries. In the neoliberal era since 1980, inequalities within countries have increased again (in some places to record highs), while global inequality has declined only slightly, mainly due to the economic growth of China and some other Asian countries (e.g. Piketty 2014; Milanovic 2016; Boushey et.al. 2017).

The 1940–1980 era associated with the era of embedded liberalism and Soviet socialism included world-historically exceptionally high rates of growth. Growth and its limitations and contradictions can be analyzed in terms of the fields that (de-)generate it. Processes of uneven growth in the world economy involve not only vicious but virtuous circles of cumulative causation (e.g. Kaldor 1996). For example, high levels of inequality can contribute to lowering rates of growth (e.g. Akyüz 2018), including through the ‘downward’ race to the lowest possible wage and cost level, thereby generating protectionist tendencies in the declining and deindustrializing part of the world economy (Podkaminer 2024; cf. discussions on convergence in Piketty 2016; Milanovic 2016). Fields function in the open and historically evolving global political economy, and together the fields, as well as the mechanisms and complexes that generate them constitute the world-historical movement of global political economy as a whole, resulting in real-world trends and oscillations in economic growth and distribution of incomes and wealth. The whole consists of the interacting fields and their inner ‘codes’, including those of the interstate field, involving WMPs and various forms of learning (including regressive and pathological), and conflicts. This dynamic generates not only cooperation but also conflicts. The latter can escalate to

wars, including world wars. Both the whole and its parts are in a constant movement – and in a process of becoming something different, while partial regress and various pathologies are common.

It is in such a context that the three dominant twenty-first-century WMPs (neoliberal, postcolonial developmental, and neo-‘Neuordnung’) have been (i) forged as responses to perceived societal problems, resulting in reiterations and contextual modifications of the early-to-mid twentieth-century ideologies, while they have also (ii) contributed to the movement of global political economy by shaping agency, policies, and institutions. For example, neoliberalism has succeeded in transforming social contexts through agency, practices and institutions, with far-reaching effects. Despite its reliance on the ideal of self-regulating competitive markets, somewhat paradoxically it has also established a project of large-scale transformation by means of deliberate social engineering (Patomäki 2021: 108–109). Putting (irrealist) theories into practice tends to produce negative unintended effects that can also be cumulative and self-reinforcing. Redefining and repositioning actors as (particular kinds of) entrepreneurs or customers change their rights and obligations and their self-perception. Constructing a risk-taking resilient subject – a subject that is presumed to be capable of adapting to changing circumstances, especially to unexpected hardship – is a possible response to the downsizing and erosion of public responsibilities and the continuing turmoil of capitalist market society, but can undermine trust in other people and common institutions and thereby make cooperation more difficult (e.g. Bowles 2008; Chandler/Reid 2016). The prevailing economic and social policies have also had various causal effects such as rising inequalities, progressively more insecure terms of employment, and recurring economic crises. These have led to discontent with globalization and various political responses, including those of nationalist and authoritarian populisms. (For an analysis, Patomäki 2021)

WMPs are not static but changing and they intra- and interact. For example, following negative experiences such as those of the shock therapy in the 1990s and various conflicts, actors may initially reject only some aspects of neoliberalism, but as developments diverge and

conflicts escalate, actors may take more distance from the (neo)liberal world order and its universalizing values and rules and principles. When regressive learnings start to dominate through policies and institutional rearrangements, including through de-democratization, the myopic and contradictory state perspectives on political-economic and security problems make state-actors increasingly inclined to the fallacy of composition and other contradictions. Moreover, protectionist tendencies may degenerate into a full-scale trade war affecting not only the world economy and its prospects but also states' security anxieties, threat perceptions, and enemy constructions. Preparations for war or actions of war make the security dilemma increasingly acute, prompting tit-for-tat responses and escalation. Through such processes – multiple combinations of action and reactions are possible – neo-Neuordnung may rise to become an increasingly dominant WMP, as it did in the 1930s and early 1940s. At a deeper level, the potential repetition of history indicates unlearning, regressive learning and/or pathological learning.

8.6 The cunning of world-historical reason and world statehood

To paraphrase Marx's famous remark to Hegel, when the tragedy of history repeats itself, the second time easily appears more like a farce than a tragedy. However, the enormous growth of the powers of production and destruction of the last hundred years, the related development of technology and infrastructure, and the further shrinking of the Earth have made the possibility of the tragedies of the twentieth century being repeated absurd (which does not mean that it cannot happen, but it would be utterly irrational).

The condensed account of the overall dynamics outlined above is also only partial. Several different WMPs have contributed to the huge growth of population, output, and human-technological causal powers and their societal and ecological consequences. Awareness of these powers and their consequences has prompted the spread of holoreflexivity (based on a planetary perspective) and the gradual development of

global governance powers and functions until the end of the twentieth century. However, the development of global governance has largely been gridlocked in the first decades of the twenty-first century.

My quasi-Hegelian point is that the WMPs of the twentieth and early twenty first century, and their intra- and interactions in the context of rapidly changing material context, have inadvertently created the conditions for further development of the world-layer of governance and government. So far, the development of these conditions – in part based on new interconnected, planetary-scale infrastructures of communication and movement – has occurred within a system of multi-spatial (meta)governance (Jessop 2012), while new kinds of functions and powers can emerge. One essential aspect is that modern ideologies and the process of decolonization have brought into being a world where people are equal. Although regressive, racist, and imperialist developments remain possible in some restrained and ambiguous sense, slavery, racism, and imperialism in all their explicit forms have been delegitimized. Moreover, although there are disputed territories and borders, the room for traditional imperial-territorial expansion is limited as recognized sovereign states cover all the space on Earth (though a shift toward neo-Neuordnung can involve neo-imperial territorial claims). Similarly, by and large, only tacit and nostalgic forms of racism remain conceivable. Morally and legally, the equality of all humans is a universally recognized principle in nearly all moral and legal systems at all scales. This can be and often is violated, but the norms and principles remain valid, and regression can only occur to some degree.

Even more important is the emergence and development of the notion that negative global dynamics can be not only mitigated but also steered toward cooperation and the common good at the level of the whole. This idea arose with the ‘world’ talk at the very beginning of the twentieth century, before World War I, and it became more common at the time and in the aftermath of Wilson’s fourteen points. For example, in his *Imperialism: A Study*, Hobson (1988 [originally 1902, this edition 1938]) discussed comprehensively different aspects of imperialism and wars. Although Hobson’s basic argument was in some regards in line with cosmopolitan liberalism, he also argued from a critical political

economy perspective that the new imperialism of the late nineteenth century and related tendencies for war were (co-)generated by the inner mechanisms of industrial-capitalist market society, especially inequality-related overproduction/underconsumption. Hobson advocated socialist-democratic reforms within states to strengthen domestic demand for goods and services. He also advocated global reforms: fair global regulation of trade combined with building elements of European and global federalism (for a summary and discussion, see Patomäki 2008: 44–58).

In the interwar era, there were related and parallel calls for ‘organized trade’ under the control of the League of Nations, as well as a ‘Collective International Economic Council’ that would ‘regulate consumption, international production, currency and transport relations, [and] raw material distribution’. For one, Rudolf Hilferding, an Austrian Marxist thinker, saw free trade as a force for peace in the era before monopoly capitalism and imperialism, envisioning a future world where trade would be guided by cooperation and mutual benefit rather than by the competitive logic of capital accumulation. He wrote: ‘Economic competition between nations for conquest of markets must be replaced by cooperation’. In 1931, he reiterated this point, calling for both ‘the removal of unhealthy protectionism’ and ‘international cooperation under the leadership of the League of Nations and the International Labour Organization ... to replace the chaos wrought by economic nationalism with a well-planned order of world-wide exchange’ (quotations from Helleiner 2023: 105–106)

A related set of ideas concerns the world’s monetary system. Proposals for multilateral clearing systems date back to the 1890s (suggesting a compensation mechanism on the model already implemented by the Universal Postal Union) and were widely discussed in the 1920s and 1930s. Moreover, during the early 1940s as war raged, there were several clearing union proposals on the table, including by Nazi Germany (for the original proposal, Funk 1940; for discussions, see Skidelsky 2001: 194–196; Patalano 2023: 307). John Maynard Keynes’s particular conception is the best known because it constituted the British position in the Bretton Woods negotiations. For him, an ICU involved an impartial

system for managing currencies and a world central bank governing a common currency, the *bancor*. Financial positions would be defined against the rest of the world, and obligations made systemic and equitable between debtors and creditors. The resultant plan was intended to achieve several aims. In principle, it would avoid problems associated with a dominant international currency belonging to one state, it would reduce and mitigate conflicts between states in trade and monetary matters, and insofar as it functioned effectively, it would enable the pursuit of rational economic policies for the mutual benefit of all states. The plan, of course, was not without its problems, several of which were quickly identified by E.F. Schumacher and then Michał Kalecki and Schumacher (for a detailed discussion of their contribution and the context, see Faudot 2021). New versions of the plan have been developed and several proposals made since then, also in the twenty-first century (Morgan and Patomäki, 2026).

Table 3 summarizes the basic idea of the cosmopolitan social/democratic WMP. This WMP is based on holoreflexivity and the possibility that better control – especially democratic control – of the whole may not only prevent conflicts between different parts but also promote co-operation and the common good. The same idea has been shared by those thinkers and movements that have advocated world statehood as such, from H.G. Wells's early works (Wells 1902) and 'open conspiracy' (Wells 1933) to the world federalist movement of the 1940s, via the World Order Models Project of the 1970s and 1980s, and to the rise (and subsequent partial decline) of global civil society and alter-globalization movement in the 1990s and 2000s. This WMP, with multiple variations, has aimed at transforming the existing global institutions and building new ones. Many of the proposals concern establishing state-like tasks, functions, and powers on the planetary scales under rubrics such as multispatial (meta)governance. It involves executing functional tasks in various areas through planetary-scale regulations, taxes, policies, and institution-building, and in terms of legitimate processes (not only output legitimacy but also participation, representation, etc.).

Table 3: *The cosmopolitan social democratic, or democratic-socialist, WMP*

Name	Period	Aspirations	Institutions
Democratic socialist and/or global-Keynesian cosmopolitanism	1918– (re-emerged in the 1980s)	Planning on a world scale and/or Keynesian policies and institutions applied globally. Global democracy and redistribution (justice). Combines developmentalism and responses to global problems (war, ecology, etc.).	International Clearing Union, global taxes, world economic policy, world parliament, planetary control of nuclear weapons, etc.

To reiterate, there is something at the heart of the world-historical process that is analogous to Hegel's cunning of reason (a term Hegel 1975: 89, mentions only once in the introduction to lectures on the philosophy of world history). Hegel's cunning of reason means that while actors may be pursuing their own limited material and ideational interests or goals, they can unknowingly contribute to the advancement of a broader rational purpose of spirit (reflexive consciousness) and freedom. Each stage of development can only be fully understood retrospectively. The process involves the dialectic of *Aufhebung* (overcoming) whereby the existing contradictions come to be unified in a higher principle or organization. Hegel's basic idea can be interpreted in a future-oriented way. There are developments and tendencies in world history that involve not only unintended consequences but also learning and the overcoming of contradictions that together lead history towards a direction that can be normatively assessed as rational. In other words, we can talk about the tendential rational direction of world history. Any claim about the tendential rational direction of world history is based on a dialectical argument within the meaningful human sphere (at a general and abstract level, Bhaskar 2008: 91, argues that dialectical rationality, truth, theory/practice consistency and dialectical universalizability impose a tendential directionality to the absencing of constraints on wellbeing and possibili-

ties – such a process is dialogical). Moreover, no endpoint is more than temporary; world history remains open. To the extent that a rational direction constitutes an explicit goal of action (itself never more than a part of processes that determine world history), it must be realized, at least in a significant part, through transformative praxis. Reason is not independent of actors and agency, nor does it operate only behind the backs of actors, as Hegel seems to have assumed.

Now, in the context of the dynamics of the whole in the early twenty first century, the tendential rational direction coincides approximately with the goals of the cosmopolitan social/democratic WMP (which can be specified in various ways). The idea of post-WWI socialists that an integrated global economy could be actively regulated, managed, and planned to serve cooperative and democratic goals has become more feasible by the 2020s than it was in the 1920s-1940s, not least due to technological and infrastructural developments. While in the 2020s, the prevailing negative dynamics seem to be taking the world towards a global military catastrophe, the multiple human-made global problems that have emerged in the twentieth and twenty first centuries have become more acute than ever – this is widely recognized for example in the context of climate change. On the positive (even if also ambiguous) side, the emergent possibilities include global civil society, the internet, and related infrastructures, paving the way for new forms of agency such as world parties.

Collective learning materializes in collective actions and common institutions. There is a further problem, however. While common institutions are part of the solution, they may sometimes also aggravate the problem of conflicts. This depends to a large degree on how they are built and what kinds of universalizing values they express (Patomäki 2023: chapter 13). Integration processes must be compatible with a security community in which there is trust and a mutual expectation that conflicts can be resolved through peaceful change. They also require institutional arrangements compatible with such processes. The era of states or WMPs will not come to an end with changed or new common global institutions. States and competing WMPs will continue to exist and evolve also in a world where the layer of world statehood has become more func-

tional and more capable of directing the dynamics of the whole toward a more cooperative direction.

8.7 The role of changing forms of temporality in WMPs

The dynamics of the whole also include changing forms of temporality. Therefore, it is necessary to say a few words about what the prevailing forms of temporality are in the 2020s and 2030s. Transformations of concepts in terms of time and temporality did not stop at the 18th-century secularization of Christian time and the emergence of the idea and expectation of progress (as discussed by Koselleck 1997). Already World War I problematized belief in inevitable, linear or dialectical progress. Following manifold twentieth-century twists and turns in the dominant conception of time, a techno-commercial version of the linear progressive time remains part of the common sense in many parts of the world, especially in the industrialized and subsequently deindustrialized West. This rather shallow belief in progress can be summarized as a sentiment like ‘new models of cars or computers are technically more advanced than the previous ones and thus better – as seen on TV’ (Patomäki 2009: 435).

Meanwhile, especially since 1980, Whiggish neoliberalism has succeeded in claiming the direction of such ‘progress’, as also witnessed by attempts to ‘modernize’ social democratic parties in the 1980s and 1990s. Although neoliberalism includes many and sometimes conflicting elements, in its mainstream form, its core content is based on neoclassical economics (Patomäki 2021: 104–109). When people are told that neoliberal globalization is the best possible world and the inevitable result of historical development, and when they are simultaneously informed that due to the prevailing situation and laws of economics, they must accept cuts, the threat of unemployment, worsening working conditions, increasing inequality, and reduced forms of democracy, it is not surprising that they turn against such globalization (Piketty 2020: 652). The emergent global problems and the cosmopolitan social/democratic WMP play a role in this new constellation. Global problems reinforce

the feeling of uncertainty or even danger about the future. Neoliberal elites have tended to be opposed to supranational regulation (cf. Harmes 2012). Gradually, a convergence occurs between those occupying privileged positions within the world, potentially threatened by trans- or supranational regulation and taxation and by new institutions, and those dominated groups who find that their conditions have changed, making life more insecure, and who anticipate that globalization requires them to make further sacrifices.

The rise of nationalist-populist movements and parties contributes to shaping the prevailing perception of time and temporality. Through a critique of the prevailing Whiggism and, as a generalization but selectively, of modernity, they turn to the glorification of a 'Golden Age' when the community – at this point understood conventionally as the nation – was strong, unified, and culturally or ethnically 'pure'. From this perspective, it seems that instead of progressing, society has been on a downward trajectory due to external forces such as global elites, immigrants, and international institutions – and also due to those domestic forces that have been undermining traditional institutions such as family, sexual division of labor, and private property. Reflection on the temporal form of such a situation leads to the old idea of the cyclical nature of history. Thus emerges the possibility of invoking a cyclical view of history, to instill hope, and to mobilize people around the idea of a national revival. The story of a 'golden age' and a return to a better past is often represented as compatible with neoliberal economic policies. The story encourages one to deny planetary-scale problems, such as climate change, which indicates the need for novel global responses. Such problems must thus be an invention of globalists; focusing on them is an obstacle to national revival (this understanding resonates with libertarian denial and neoliberal downplaying of the problem). In a more moderate form, one could as well argue, following the logic of neoclassical economics, that even if the problem is real, 'we' should let others take the main responsibility for handling it. 'Our' contribution is only a small part of the whole, and we can free-ride without worrying too much.

This is the context in which arguments about the cunning of reason and the tendential rational direction of world history can now be

presented. Such arguments are neither Whiggish nor anti-Whiggish. Rather, they are based on the idea that time, causation, emergence, and change are real. While agency and their reflective consciousness, will and intentions (what Hegel called the ‘spirit’) are made possible by – and can be seen as effects of – complex and evolving society, they are causally efficacious and capable of achieving changes (this is what Hegel meant by ‘freedom’ and he expected its area and scope to expand). World history is open-ended and involves contingency. The past should not be understood in terms of the present, or as inevitably leading to the present, and the present is in no way the best of possible worlds. The deeper constitutive meanings and principles of the global political economy emerge and evolve historically. This process is co-generated by collective human learning. However, this includes the possibility of regressive and pathological learning and various illusions and mystifications, as discussed above (e.g. stories about returning to the golden age). The future depends also on agency: our anticipations are reflexive, and self-altering predictions can move the world in a direction that may or may not be desirable.

8.8 Conclusions

In this chapter, I have argued that following the industrial-mechanical revolution of the early nineteenth century, the world economy’s growth and dynamism created the material and infrastructural conditions for planetary-scale WMPs. The nineteenth century developments marked a profound shift in global connectivity and economic integration. The steam engine, railways, and telegraph fundamentally compressed time and space; goods, people, and information could move faster and farther than ever before. In other words, this period laid down the material preconditions for the ‘world’ talk that emerged and spread in the second half of the century and planetary-scale ambitions that involved not only colonial empires and capitalist markets but also various international organizations and systems of global governance. Proper WMPs claim to represent a new vision for organizing the world as a whole, and indeed,

many of the WMPs have proclaimed a 'new world order' or 'new order' of some sort.

Categorizing worldmaking projects depends to a significant degree on one's theoretical perspective and concerns. I have identified eight different WMPs as they have evolved in the twentieth and twenty first centuries. These WMPs are not separate but interact and evolve; they are also part of the same dynamics of the global political economy and world history. In addition to the development of infrastructures and the struggles surrounding them, the overall dynamics have also concerned productive forces and relations as well as economic growth, which in turn has had massive impact on the planet's biosphere. In this era of the emergence and development of WMPs, nationalism can be seen as a metaproject or, perhaps more metaphorically and accurately, as the operating system beneath many other worldmaking projects. Many of the WMPs of this era have been associated with particular (multi)national states. In this and other ways, the universalizing aspirations tied with these WMPs have often been contradictory. The eight WMPs I have discussed include three liberal, two socialist, and two fascist ones. The WMP of post-colonial developmentalism critical of Western neo-imperialism is not easily categorizable in these terms. It is a mixture of elements of contemporary neoliberalism, embedded liberalism, and collective self-reliance of the era of 1955–1989. I have left aside 'religious-universalist projects' (their engagement with global issues tends to be reactive, moralistic, or strategically selective rather than systematic or integrative) and 'planetary-ecological projects' (I have subsumed such concerns under the category of the cosmopolitan social democratic, or democratic-socialist, WMP).

My basic point in this chapter has been that the twentieth century WMPs, together with economic and technological developments, have created conditions where learning, political struggles, crises and risks generate the possibility of new collective actions and institutions on a planetary scale. Instead of ending, world history proper is only about to begin. Nonetheless, to achieve any major changes in the rational and desired direction, the cosmopolitan social/democratic WMP would have to be able to redefine the prevailing notions of time and temporality.

Progress is not something that just happens or something that requires just adaptation. Progress is also not something we should resist (there is no golden era, and we cannot return to the past). Defining the direction of progress involves agency. Participation in the realization of rational and desirable developments indicates freedom as self-determination. However, the processes of determination are diverse and can involve explicit pluralism; all actions, policies, and institutions have unintended consequences, often negative, and progress in an open world history requires learning from past mistakes and tragedies. Despite these provisos, the rational tendential direction is toward the strengthening and qualitative development of the layer of world statehood.

References

- Adams, Chanelle 2022 (fall). *The Trail of the Camphor*. *Adi Magazine*, available at: <https://adimagazine.com/articles/trail-camphor/> [accessed 20 September 2025].
- Adas, Michael 1989. *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance*. Ithaca, NY: Cornell University Press.
- AFP 6 February 2025. *UK Says Satellite System Key to Chagos US Base Deal*, available at: <https://www.france24.com/en/live-news/20250206-uk-says-satellite-system-key-to-chagos-us-base-deal/> [accessed 20 September 2025].
- Aganaba-Jeanty, Timiebi 2013. Precursor to an African Space Agency. *Space Policy* 29 (3): 168–174.
- Akami, Tomoko 2017. Imperial Politics, Intercolonialism, and the Shaping of Global Governance Norms: Public Health Expert Networks in Asia and the League of Nations Health Organization, 1908–37. *Journal of Global History* 12 (1): 4–25.
- Akyüz, Yılmaz 2018. Inequality, Financialisation and Stagnation. *The Economic and Labour Relations Review* 29 (4): 428–445.
- Albert, Mathias 2016. *A Theory of World Politics*. Cambridge: Cambridge University Press.
- Albert, Mathias 2019. Von Ausbruchversuchen. Folgen und Schranken der Multiplizität. *Zeitschrift für Internationale Beziehungen* 26 (2): 132–141.
- Albert, Mathias 2026. The Big Picture as a Goodbye to International Relations? In: Rita Floyd and Laust Schouenborg (eds.) *The Big Picture as an*

- Approach to the Study of International Relations: Thinking with and beyond Barry Buzan*. Cambridge: Cambridge University Press (in print).
- Albert, Mathias and Thomas Müller 2021. Whose Balance? A Constructivist Approach to Balance of Power Politics. *European Journal of International Security* 6 (1): 109–128.
- Albert, Mathias 2023. Imaginaries of and in Svalbard: The ‘Making’ of an Archipelago, pp 1–16. In: Mathias Albert, Dina Brode-Roger and Lisbeth Iversen (eds.) *Svalbard Imaginaries: The Making of an Arctic Archipelago*. Cham: Palgrave Macmillan.
- Albert, Mathias, Dina Brode-Roger and Lisbeth Iversen (eds.) 2023. *Svalbard Imaginaries: The Making of an Arctic Archipelago*. Cham: Palgrave Macmillan.
- Albert, Mathias, Hauke Brunkhorst, Iver B. Neumann and Stephan Stetter 2023. *The Social Evolution of World Politics*. Bielefeld: transcript.
- Alberts, Fred G. (ed.) 1995. *Geographic Names of the Antarctic* (2nd ed.). Reston, VA: United States Geological Survey.
- Alker, Hayward R. 1981. Dialectical Foundations of Global Disparities. *International Studies Quarterly* 25 (1): 69–98.
- Alker, Hayward R., Thomas Biersteker and Takashi Inoguchi 1989. From Imperial Power Balancing to People’s Wars. Searching for Order in the Twentieth Century, pp 135–162. In: James Der Derian and Michael J. Shapiro (eds.) *International/Intertextual Relations. Postmodern Readings of World Politics*. Toronto: Lexington.
- Allison, Graham 2020. The New Spheres of Influence. Sharing the Globe with Other Great Powers. *Foreign Affairs* 99 (2): 30–40.
- Amin, Samir 1974. *Modern Migrations in Western Africa*. London: Oxford University Press.
- Anderson, Benedict 1983. *Imagined Communities. Reflections on the Origin and Spread of Nationalism*. London: Verso.
- Anderson, Benedict 1998. *The Spectre of Comparisons. Nationalism, Southeast Asia and the World*. London: Verso.
- Appel, Hannah, Nikhil Anand, and Akhil Gupta 2018. Temporality, Politics and the Promise of Infrastructure, pp 1–40. In: Nikhil Anand, Akhil Gupta, and Hannah Appel (eds.) *The Promise of Infrastructure*. Durham, NC: Duke University Press.

- Ardener, Shirley 2010. Microcredit, Money Transfers, Women, and the Cameroon Diaspora. *Afrika Focus* 23 (2): 11–24.
- Asseraf, Arthur 2018. Making Their Own Internationalism: Algerian Media and a Few Others the League of Nations Ignored, 1919–1943, pp 117–37. In: Jonas Brendebach, Martin Herzer, and Heidi Tworek (eds.) *International Organizations and the Media in the Nineteenth and Twentieth Centuries: Exorbitant Expectations*. Abingdon: Routledge.
- Associated Press 2025. *Transcript of President Donald Trump's speech to a joint session of Congress*, available at: <https://apnews.com/article/trump-speech-congress-transcript-751b5891a3265ffie5c1409c391fef7c> [accessed 2 October 2025].
- Auer, Stefan 2015. Carl Schmitt in the Kremlin: The Ukraine Crisis and the Return of Geopolitics. *International Affairs* 91 (5): 953–968.
- Azuma, Eiichiro 2023. Japanese Imperial Migrations, pp 139–159. In: Marcelo J. Borges and Madeline Y. Hsu (eds.) *Cambridge History of Global Migrations*, vol. 2. Cambridge: Cambridge University Press.
- Bähre, Erik 2007. *Money and Violence. Financial Self-Help Groups in a South African Township*. Leiden: Brill.
- Bähre, Erik 2020. *Ironies of Solidarity: Insurance and Financialization of Kinship in South Africa*. London: Zed Books.
- Baiocchi, Dave and William Welser IV 2015. The Democratization of Space. *Foreign Affairs* 94 (3): 98–104.
- Baldauf, Johannes 2015. *Jüdische Weltverschwörung, UFOs und das NSU-Phantom*. Bonn: Bundeszentrale für politische Bildung, available at: <https://www.bpb.de/themen/rechtsextremismus/dossier-rechtsextremismus/210327/juedische-weltverschwoerung-ufos-und-das-nsu-phantom/> [accessed 25 September 2025].
- Baptist, Edward E. 2014. *The Half that Has Never Been Told: Slavery and the Making of American Capitalism*. New York: Basic Books.
- Bartelson, Jens 2023. *Becoming International*. Cambridge: Cambridge University Press.
- Bartelson, Jens and Patrick Jackson 2020. Introduction: Forum on Adom Getachew's 'Worldmaking after Empire'. *Millennium: Journal of International Studies* 48 (3): 334–339, available at: <https://doi.org/10.1177/0305829820935173> [accessed 2 October 2025].

- Baugh, Daniel 2011. *The Global Seven Years War*. New York: Routledge.
- Bayly, Christopher A. 2004. *The Birth of the Modern World 1780–1914: Global Connections and Comparisons*. London: Blackwell.
- Beattie, Alan 2023. The Fading Era of Hyperglobalisation is a Study in Success. *Financial Times*, available at: <https://www.ft.com/content/2021d931-4cbb-4d72-bddf-6a55b33c150d> [accessed 2 October 2025].
- Beckert, Sven 2014. *Empire of Cotton: A Global History*. New York: Alfred A. Knopf.
- Beery, Jason 2016. Unearthing Global Natures: Outer Space and Scalar Politics. *Political Geography* 55: 92–101.
- Beissinger, Mark R. 2005. Rethinking Empire in the Wake of Soviet Collapse, pp 14–45. In: Zoltan Barany and Robert Moser (eds.) *Ethnic Politics After Communism*. Ithaca, NY: Cornell University Press.
- Belanger, Dian Olsen 2010. The International Geophysical Year in Antarctica: a Triumph of 'Apolitical' Science, Politics, and Peace, pp 265–278. In: Roger D. Launius, James Rodger Fleming and David H. DeVorkin (eds.) *Globalizing Polar Science. Reconsidering the International Polar and Geophysical Years*. London: Palgrave.
- Bell, David A. 2007. *The First Total War: Napoleon's Europe and the Birth of Warfare as We Know It*. Boston, MA: Houghton Mifflin.
- Bell, Duncan 2015. Comment: Desolation Goes before Us. *Journal of British Studies* 54 (4): 987–993.
- Bell, Duncan 2020. *Dreamworlds of Race: Empire and the Utopian Destiny of Anglo-America*. Princeton, NJ: Princeton University Press.
- Berger, Peter L. and Thomas Luckmann 1966. *The Social Construction of Reality. A Treatise in the Sociology of Knowledge*. London: Penguin Books.
- Bhaskar, Roy 2008. *Dialectic. The Pulse of Freedom. With a New Introduction*. London and New York: Routledge (originally published 1993).
- Biskup, Peter 1970. Foreign Coloured Labour in German New Guinea: A Study in Economic Development. *Journal of Pacific History* 5 (1): 85–107.
- Black, Megan 2018. *The Global Interior: Mineral Frontiers and American Power*. Cambridge, MA: Harvard University Press.

- Blair, Ann, Paul Duguid, Anja-Silvia Goeing and Anthony Grafton (eds.) 2021. *Information: A Historical Companion*. Princeton, NJ: Princeton University Press.
- Blau, Peter M. and Richard W. Scott 1962. *Formal Organizations: A Comparative Approach*. Stanford: Stanford University Press.
- Bodomo, Nuotama 2014. *Afronauts*, USA: Powder Room Films.
- Boone, Catherine 2007. Africa's new Territorial Politics: Regionalism and the Open Economy in Côte d'Ivoire. *African Studies Review* 50 (1): 59–81.
- Boone, Catherine 2014. *Property and Political Order in Africa: Land Rights and the Structure of Politics*. Cambridge: Cambridge University Press.
- Boone, Catherine 2015. Land Tenure Regimes and State Structure in Rural Africa: Implications for Forms of Resistance to Large-Scale Land Acquisitions by Outsiders. *Journal of Contemporary African Studies* 33 (2): 171–190.
- Boone, Catherine 2018. Legal Empowerment of the Poor through Property Rights Reform: Tensions and Trade-offs of Land Registration and Titling in Sub-Saharan Africa. *The Journal of Development Studies* 55 (3): 384–400.
- Borras Jr, Saturnino M. 2008. La Vía Campesina and its Global Campaign for Agrarian Reform. *Journal of Agrarian Change* 8 (2-3): 258–289.
- Boudreau, Frank. 1940. The Work of the Health Organization of the League of Nations. Special Supplement to the Monthly Summary of the League of Nations. The British Library, London, India Office Records M/3/178.
- Boushey, Heather, DeLong J. Bradford, and Marshall Steinbaum (eds.) 2017. *After Piketty: The Agenda for Economics and Inequality*. Cambridge, MA: Harvard University Press.
- Bowles, Samuel 2008. Policies Designed for Self-Interested Citizens may Undermine 'the Moral Sentiments': Evidence from Economic Experiments. *Science* 320 (5883): 1605–1609.
- Bravo, Michael 2000. *North Pole. Nature and Culture*. London: Reaktion Books.

- Bueger, Christian, Tobias Liebetrau and Jan Stockbruegger 2023. Theorizing Infrastructures in Global Politics. *International Studies Quarterly* 67 (4).
- Burbank, Jane, Frederick Cooper 2010. *Empire in World History: Power and the Politics of Difference*. Princeton: Princeton University Press.
- Burns, Scott 2015. *Mobile Money and Financial Development: The Case of M-PESA in Kenya*, available at: SSRN: <https://ssrn.com/abstract=2688585> or <http://dx.doi.org/10.2139/ssrn.2688585> [accessed 8 September 2025].
- Butcher, Charles R. and Ryan D. Griffiths 2025. *Before Colonization: Non-Western States and Systems in the Nineteenth Century*. New York: Columbia University Press.
- Cabestan, Jean-Pierre 2005. The Many Facets of Chinese Nationalism. *China Perspectives* 59, May-June.
- Cahill, Peter 1997. 'A Prodigy of Wastefulness, Corruption, Ignorance and Indolence': The Expropriation Board in New Guinea 1920–1927. *Journal of Pacific History* 32 (1): 3–28.
- Calhoun, Craig 1997. *Nationalism*. Minneapolis: University of Minnesota Press.
- Calhoun, Craig 2011. Communication as Social Science (and More). *International Journal of Communication* 5: 1479–1496.
- Cannadine David 2001. *Ornamentalism: How the British Saw Their Empire*. Oxford: Oxford University Press.
- Carey, James 1989. *Communication as Culture: Essays on Media and Society*. Boston: Unwin Hyman.
- Carey, James W. 1983. Technology and Ideology: The Case of the Telegraph. *Prospects* 8: 303–325.
- Carr, Nicholas 2025. *Superbloom: How Technologies of Connection Tear Us Apart*. New York: W. W. Norton.
- Case, Holly 2018. *The Age of Questions*. Princeton, NJ: Princeton University Press.
- Chakrabarty, Dipesh 2021. *The Climate of History in a Planetary Age*. Chicago, IL: University of Chicago Press.
- Chandler, David and Julian Reid 2016. *The Neoliberal Subject. Resilience, Adaptation and Vulnerability*. London: Rowman & Littlefield.

- Charpentreau, Clement 23 May 2025. UK Secures Diego Garcia Base with Mauritius in 99-Year Strategic Defense Deal. *AeroTime*, available at: <https://www.aerotime.aero/articles/uk-mauritius-diego-garcia-military-base-agreement> [accessed 20 September 2025].
- Christensen, Jakob Dybdal Jens Therkelsen, Ivo Georgiev and Hendrik Sand, 2018. *Data Centre Opportunities in the Nordics. An Analysis of the Competitive Advantage*. Copenhagen: Nordic Council of Ministers.
- Chutel, Lynsey 2 January 2025. A Half-Ton Piece of Space Junk Falls onto a Village in Kenya. *New York Times*.
- Collis, Christy 2012. The Geostationary Orbit: A Critical Legal Geography of Space's Most Valuable Real Estate, pp 61–81. In: Lisa Parks and James Schwoch (eds.) *Down to Earth: Satellite Technologies, Industries, and Cultures*. New Brunswick, NJ: Rutgers University Press.
- Commission on Human Security 2003. *Human Security Now*. New York: Commission on Human Security.
- Connelly, Matthew 2002. *A Diplomatic Revolution: Algeria's Fight for Independence and the Origins of the Post-Cold War Era*. Oxford: Oxford University Press.
- Cooper, Frederick 2004. Development, Modernization, and the Social Sciences in the Era of Decolonization: The Examples of British and French Africa. *Revue d'Histoire des Sciences Humaines* 10 (1): 9–38.
- Cooper, Frederick 2005. *Colonialism in Question: Theory, Knowledge, History*. Berkeley: University of California Press.
- Cosgrove, Denis 2003. Globalism and Tolerance in early Modern Geography. *Annals of the Association of American Geographers* 93 (4): 852–870.
- Dafe, Florence 2019. Ambiguity in International Finance and the Spread of Financial Norms: The Localization of Financial Inclusion in Kenya and Nigeria. *Review of International Political Economy* 27 (3): 500–524, available at: <https://doi.org/10.1080/09692290.2019.1650093> [accessed 25 September 2025].
- Darwin, John 2009. *The Empire Project: The Rise and Fall of the British World-system, 1830–1970*. Cambridge: Cambridge University Press.
- Deberdt, Raphael and Philippe Le Billon 2023. Outer Space Mining: Exploring Techno-Utopianism in a Time of Climate Crisis. *Annals of the American Association of Geographers* 113 (8): 1878–1899.

- Deininger, Klaus 2003. *Land Policies for Growth and Poverty Reduction*. Washington, DC: The World Bank, available at: <https://documents1.worldbank.org/curated/en/485171468309336484/pdf/multiopage.pdf> [accessed 08 September 2025].
- Denning, Andrew and Heidi Tworek (eds.) 2023. *The Interwar World*. Abingdon: Routledge.
- Derman, Joshua 2021. Prophet of a Partitioned World: Ferdinand Fried, 'Great Spaces,' and the Dialectics of Deglobalization, 1929–1950. *Modern Intellectual History* 18 (3): 757–781.
- Deudney, Daniel 2020. *Dark Skies: Space Expansionism, Planetary Geopolitics, and the Ends of Humanity*. New York: Oxford University Press.
- Deweese, Peter A. 1993. *Social and Economic Incentives for Smallholder Tree Growing: A Case Study from Murang'a District, Kenya*. FAO Community Forestry Case Studies. Rome: FAO.
- Dimier, Véronique 2002. Direct or Indirect Rule: Propaganda around a Scientific Controversy, pp 168–183. In: Tony Chafer and Amanda Sackur, (eds.) *Promoting the Colonial Idea: Propaganda and Visions of Empire in France*. London: Palgrave Macmillan.
- Dittrich, Eckhard, and Heiko Schrader (eds.) 2015. *'When Salary is Not Enough...': Private Households in Central Asia*. Münster: LIT Verlag.
- Dodds Pennock, Caroline and Amanda Power 2018. Globalizing Cosmologies. *Past & Present* 238, supp. 13: 88–115.
- Dougall, Andrew 2024. *Mediatizing the Nation, Ordering the World*. Oxford: Oxford University Press.
- Downes, Jim 2023. *Maladies of Empires: How Colonialism, Slavery, and War Transformed Medicine*. Cambridge, MA: Harvard University Press.
- Droessler, Holger 2022. *Coconut Colonialism: Workers and the Globalization of Samoa*. Cambridge, MA: Harvard University Press.
- Drozdzova, Oksana and Paul Robinson 2019. A Study of Vladimir Putin's Rhetoric. *Europe-Asia Studies* 71 (5): 805–823.
- Du Bois, W.E.B. 1903. *The Souls of Black Folk: Essays and Sketches*. Chicago, IL: A.C. McClurg & Co.
- Dunn, Hopeton 2014. Imperial Foundations of Twentieth-Century Media Systems in the Caribbean. *Critical Arts* 28 (6): 938–957.

- Durrani, Haris A. 19 July 2019. Is Spaceflight Colonialism? *The Nation*, available at: <https://www.thenation.com/article/world/apollo-space-lunar-rockets-colonialism/> [accessed 20 September 2025].
- Durrani, Haris A. 2025. *A Satellite for All: Law, Technology, and Empire in the Global Cold War, 1959–1973*, (PhD dissertation; Princeton University).
- D'Auria, Peter and Tim Fernholz 17 April 2017. How a Handful of South American Protestors took Europe's Space Program Hostage. *Quartz*, available at: <https://qz.com/960817/how-a-handful-of-south-american-protestors-in-french-guiana-took-arianespace-and-europes-space-program-hostage/> [accessed 20 September 2025].
- Eijking, Jan. 2025. Brain Worlds: Information Order and Interwar Intellectual Cooperation. *European Journal of International Relations* 31 (3): 537–560, available at: <https://doi.org/10.1177/13540661241279711> [accessed 26 September 2025].
- Eriksen, Inghild, Ingrid Hjellbakk Kvamstø, Håvard Gulldahl and Benjamin Fredriksen 2024. Poserte i kinesisk militær uniform på Svalbard: – provoserende, available at: <https://www.nrk.no/troms-og-finnmark/stilte-i-kinesisk-militaer-uniform-pa-svalbard-for-a-feire-kinas-forskning-i-arktis-1.17104089> [accessed 25 September 2025].
- Evans Christine E. and Lars Lundgren 2023. *No Heavenly Bodies: A History of Satellite Communications Infrastructure*. Cambridge, MA: MIT Press.
- Farrell, Henry and Abraham L. Newman 2021. The Janus Face of the Liberal International Information Order: When Global Institutions Are Self-Undermining. *International Organizations* 75 (2): 333–358.
- Farrell, Maria and Robin Benjon 16. April 2024. We Need to Rewild The Internet. *Noema*, available at: <https://www.noemamag.com/we-need-to-rewild-the-internet/> [accessed 2 October 2025].
- Faudot, Adrien 2021. The Keynes Plan and Bretton Woods Debates: the Early Radical Criticisms by Balogh, Schumacher and Kalecki. *Cambridge Journal of Economics* 45 (4): 751–69.
- Feder, Barnaby J. 15 November 2002. Taylor Howard, 70, Pioneer in Satellite TV for the Home. *New York Times*.

- Fichter, James 2019. *British and French Colonialism in Africa, Asia and the Middle East: Connected Empires across the Eighteenth to the Twentieth Centuries*. Basingstoke: Palgrave Macmillan.
- Finger, Matthias and Gunnar Rekvig 2022. Introduction, pp 1–17. In: Matthias Finger and Gunnar Rekvig (eds.) *The Global Arctic. An Introduction to the Multifaceted Dynamics of the Arctic*. Cham: Springer.
- Fischer, Karin 27 May 2016. *Collective Self-reliance: Failed Idea or still a Valuable Contribution worth Considering?* Paper presented at the CPERN conference (Conflicting) Political Ontologies and Implications for Transformative Action. Ljubljana.
- Flamm, Patrick and Akiho Shibata 2025. 'Ice Sheet Conservation' and International Discord: Governing (Potential) Glacial Geoengineering in Antarctica. *International Affairs* 101 (1): 309–320.
- Fleming, Fergus 2000. *Barrow's Boys. A Stirring Story of Daring Fortitude and Outright Lunacy*. New York: Grove Atlantic.
- Frantz, Constantin 1968. *Untersuchungen über das Europäische Gleichgewicht*. Reprint of the original 1859 edition. Osnabrück: Biblio-Verlag.
- Freeland, Steven and Annie Handmer 14 April 2021. It's Not How Big your Laser Is, It's How You Use It: Space Law is an Important Part of the Fight against Space Debris. *The Conversation*, available at: <https://theconversation.com/its-not-how-big-your-laser-is-its-how-you-use-it-space-law-is-an-important-part-of-the-fight-against-space-debris-158790/> [accessed 20 September 2025].
- Fressoz, Jean-Baptiste 2022. 'The age of' et ses problèmes. Du phasisme matériel dans l'écriture de l'histoire. *Revue d'Histoire du XIXe siècle* 64 (1): 173–188.
- Fried, Ferdinand 1932. *Autarkie*. Jena: Diederichs.
- Fuatai, Teuila 28 August 2025. The Metals Company Pushes ahead with Deep Sea Mining Plans in Pacific waters. RNZ, available at: <https://www.rnz.co.nz/international/pacific-news/571303/the-metals-company-pushes-ahead-with-deep-sea-mining-plans-in-pacific-waters> [accessed 20 September 2025].
- Funk, Walther 1940. *The Economic Reorganization of Europe*. A speech given on July 25, 1940 (original under: <https://inventio.bundesarchiv.de/in>

- venio/direktlink/a79cc676-f72b-4654-9dd8-cfbab9c6b487/ [accessed 10 December 2025]).
- Gerstle, Gary 2017. *American Crucible: Race and Nation in the Twentieth Century*. Princeton, NJ: Princeton University Press.
- Getachew, Adom 2016. Universalism After the Post-Colonial Turn: Interpreting the Haitian Revolution. *Political Theory* 44 (6): 821–845.
- Getachew, Adom 2019. *Worldmaking after Empire. The Rise and Fall of Self-Determination*. Princeton, NJ: Princeton University Press.
- Giddens, Anthony 1990. *The Consequences of Modernity*. Stanford: Stanford University Press.
- Girelli, Marvin 19 August 2024. *France's Underappreciated Air Power in the Indo-Pacific*. The Strategist, available at: <https://www.aspistrategist.org.au/frances-underappreciated-air-power-in-the-indo-pacific/> [accessed 20 September 2025].
- Godfrey, Helen L. 2013. Pulled by the Wire, Pushed by Desire: Submarine Telegraphy and the Gutta Percha Trade of Nineteenth-century Sarawak, an Indigenous Trade in the Global Economy. *Borneo Research Bulletin* 44: 150.
- Godfrey, Helen L. 2018. *Submarine Telegraphy and the Hunt for Gutta Percha: Challenge and Opportunity in a Global Trade*. Leiden: Brill.
- Gordon-Reed, Annette, 2018. America's Original Sin. *Foreign Affairs* 97 (1), available at: <https://www.foreignaffairs.com/articles/united-states/2017-12-12/americas-original-sin> [accessed 20 September 2025].
- Gorski, Philip S. 2000. The Mosaic Moment. An Early Modernist Critique of Modernist Theories of Nationalism. *American Journal of Sociology* 105 (5): 1428–1468.
- Go, Julian 2008. Global Fields and Imperial Forms: Field Theory and the British and American Empires. *Sociological Theory* 26 (3): 201–229.
- Go, Julian 2011. *Patterns of Empire. The British and American Empires, 1688 to present*. Cambridge: Cambridge University Press.
- Go, Julian and Jake Watson 2019. Anticolonial Nationalism: From Imagined Communities to Colonial Conflict. *European Journal of Sociology* 60 (1): 31–68.

- Goswami, Manu 2002. Rethinking the Modular Nation Form: Toward a Sociohistorical Conception of Nationalism. *Comparative Studies in Society and History* 44: 770–799.
- Griffin, Roger 2006. *The Nature of Fascism*. London and New York: Routledge.
- Groh, Dieter 1996. Rußland als Weltmacht: Eine begriffsgeschichtliche Studie, pp 399–413. In: Dieter Groh (ed.) *Russland im Blick Europas: 300 Jahre historische Perspektiven*. Frankfurt am Main: Suhrkamp.
- Gross, Stephen 2017. Gold, Debt and the Quest for Monetary Order: the Nazi Campaign to Integrate Europe in 1940. *Contemporary European History* 26 (2): 287–309.
- Grynspan, Rebeca 2 November 2023. *Globalization Disrupted: from Hyper-globalization to Poly-globalization*. A speech by Secretary-General of UNCTAD delivered at the University of International Business and Economics in Beijing, China.
- Haggard, Stephan, and Robert Kaufman 2021. *Backsliding: Democratic Regress in the Contemporary World*. Cambridge: Cambridge University Press.
- Haid, Jonathan 2023. The Raw Materials of Celluloid Film: Wartime Economy, Educational Animation, and Film's Plasticity. *Research in Film and History* 5: 1–43.
- Hale, Thomas, David Held and Kevin Young 2013. *Gridlock: Why Global Cooperation Is Failing When We Need It Most*. Cambridge, MA: Polity Press.
- Hale, Thomas and David Held (eds.) 2017. *Beyond Gridlock*. Cambridge, MA: Polity Press.
- Hall, John A. 2024. *Nations, States and Empires*. Cambridge, MA: Polity Press.
- Hansen, Tiril Vold 2024. Geopolitics, Diplomacy, or Idealistic Research? Framing the Research Community in Ny-Ålesund. *The Polar Journal* 14 (1): 212–228.
- Hansen, Tiril Vold and Arild Moe 2024. Norway's Research Policy for Svalbard: Intentions and Perceptions. *Polar Geography* 47 (3): 202–218.
- Harari, Yuval Noah 3 June 2024. Yuval Noah Harari on How to Prevent a New Age of Imperialism. *The Economist*, available at: <https://www.ec>

- onomist.com/by-invitation/2024/06/03/yuval-noah-harari-on-how-to-prevent-a-new-age-of-imperialism [accessed 2 October 2025].
- Harmes, Adam 2012. The Rise of Neoliberal Nationalism. *Review of International Political Economy* 19 (1): 59–86.
- Harrison, Mark 2012. *Contagion: How Commerce Has Spread Disease*. New Haven, CT: Yale University Press.
- Harvey, David 1990. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Cambridge, MA: Blackwell.
- Hast, Susanna 2014. *Spheres of Influence in International Relations: History, Theory and Politics*. London: Routledge.
- Hay, James 2012. The Invention of Airspace, Outer Space, and Cyberspace, pp 19–41. In: Lisa Parks and James Schwoch (eds.) *Down to Earth: Satellite Technologies, Industries, and Cultures*. New Brunswick, NJ: Rutgers University Press.
- Headrick, Daniel R. 1981. *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*. New York: Oxford University Press.
- Headrick, Daniel R. 1996. Botany, Chemistry, and Tropical Development. *Journal of Global History* 7 (1): 1–20.
- Headrick, Daniel R. 2010. A Double-Edged Sword: Communications and Imperial Control in British India. *Historical Social Research* 35 (1): 51–65.
- Hecke, Simon 30 November 2022. *Die Polarisierung der „Einflussssphären“. Zu Entstehung und Wandel einer imperialen Semantik*. Soziopolis.
- Hecke, Simon and James Stafford 2024. Unequal Treaties. Challenging International Order in the 1920s, pp 23–44. In: Alina Isakova, Malte Neuwinger, Robin Schulze-Waltrup, Oday Uraiqat (eds.) *Constructing Global Challenges in World Politics*. London: Routledge.
- Hegel, G.W.F. 1975. *Lectures on the Philosophy of World History. Introduction: Reason in History*. Trans. from the German edition of J. Hoffmeister by H. Nisbet. Cambridge: Cambridge University Press.
- Helleiner, Eric 2014. *Foundations of Bretton Woods. International Development and the Making of the Postwar Order*. Ithaca, NY: Cornell University Press.

- Helleiner, Eric 2023. *The Contested World Economy. The Deep and Global Roots of International Political Economy*. Cambridge: Cambridge University Press.
- Hemmings, Alan D. 2011. 'Why Did We get an International Space Station before an International Antarctic Station? *The Polar Journal* 1 (1): 5–16, available at: <https://doi.org/10.1080/2154896X.2011.569377> [accessed 25 September 2025].
- Heng, Geraldine 2021. *The Global Middle Ages: An Introduction*. Cambridge: Cambridge University Press.
- Herren, Madeleine 2017. Fascist Internationalism, pp 191–212. In: Glenda Sluga and Patricia Clavin (eds.) *Internationalisms. A Twentieth-Century History*. Cambridge: Cambridge University Press.
- Hobsbawm, Eric J. 1983. Mass Producing Traditions: Europe, 1870–1914, pp 263–308. In: Eric Hobsbawm and Terence Ranger (eds.) *The Invention of Tradition, ed. by Eric Hobsbawm and Terence Ranger*. Cambridge: Cambridge University Press.
- Hobsbawm, Eric J. 1987. *The Age of Empire, 1875–1914*. London: Weidenfeld & Nicolson.
- Hobson, John 1988. *Imperialism: A Study*. 3rd ed., with an Introduction by J. Townshend. London: Unwin Hyman (originally published 1902).
- Hofmann, Reto 2018. The Fascist New–Old Order. *Journal of Global History* 12 (2): 166–183.
- Holt, Jennifer 2024. *Cloud Policy: A History of Regulating Pipelines, Platforms, and Data*. Cambridge, MA: MIT Press.
- Holzer, Boris 2015. The Two Faces of World Society: Formal Structures and Institutionalized Informality, pp 37–60. In: Boris Holzer, Fatima Kastner and Tobias Werron (eds.) *From Globalization to World Society*. London: Routledge.
- Hsu, Madeline Y. 2021. Immigration Policy and International Relations before 1924, pp 412–432. In: Kristin Hoganson and Jay Sexton (eds.) *Cambridge History of America and the World*, vol. 2. Cambridge: Cambridge University Press.
- Huntington, Samuel P. 1993. The Clash of Civilizations? *Foreign Affairs* 72 (3): 22–49.

- Hutchinson, John 2017. *Nationalism and War*. Oxford: Oxford University Press.
- IASC [International Arctic Science Committee], 2024. *IASC State of Arctic Science*. Report 2024. Akureyri: IASC Secretariat.
- Ibled, Carla 2023. The 'Optimistic Cruelty' of Hayek's Market Order: Neoliberalism, Pain and Social Selection. *Theory, Culture, and Society* 40 (3): 81–101.
- Immerwahr, Daniel 23 April 2024. Mother Trees and Socialist Forests: is the 'Wood Wide Web' a Fantasy? *The Guardian*, available at <https://www.theguardian.com/environment/2024/apr/23/mother-trees-and-socialist-forests-is-the-wood-wide-web-a-fantasy> [accessed 27 October 2025].
- Immerwahr, Daniel 2019. *How To Hide an Empire: A History of the Greater United States*. New York: Farrar, Straus & Giroux.
- Inkster, Ian 2018. Indigenous Resistance and the Technological Imperative: From Chemistry in Birmingham to Camphor Wars in Formosa, 1860s–1914, pp 41–74. In: David Pretel and Lino Camprubí (eds.) *Technology and Globalisation: Networks of Experts in World History*. Cham: Palgrave Macmillan.
- Izaguirre, Juan Carlos, Michelle Kaffenberger and Rafe Mazer 2018. *It's Time to Slow Digital Credit's Growth in East Africa*. CGAP Blog Series 'Digital Credit: Borrower Experiences and Emerging Risks'. Washington, DC: CGAP.
- Jacobson, Matthew 2000. *Barbarian Virtues: The United States Encounters Foreign Peoples at Home and Abroad, 1876–1917*. New York: Hill and Wang.
- Jessop, Bob 2012. Obstacles to a World State in the Shadow of the World Market. *Cooperation and Conflict* 47 (2): 200–219.
- Johannessen, Lars E.F. 2023. Interaction Rituals and Technology: A review Essay. *Poetics* 98: 101765, available at: <https://doi.org/10.1016/j.poe.2023.101765> [accessed 25 September 2025].
- Johnson, R. Wally and Neville A. Threlfall 2023. *Return to Volcano Town: Reassessing the 1937–1943 Volcanic Eruptions at Rabaul*. Canberra: ANU Press.

- Johnson, Susan, and Stephen Arnold 2012. Inclusive Financial Markets: is Transformation under way in Kenya? *Development Policy Review* 30 (6): 719–748.
- Johnson, Walter 2013. *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom*. Cambridge, MA: Belknap Press of Harvard University Press.
- Jung, Moon-Ho 2006. *Coolies and Cane: Race, Labor, and Sugar in the Age of Emancipation*, Baltimore, MD: Johns Hopkins University Press.
- Kaldor, Nicholas 1996. *Causes of Growth and Stagnation in the World Economy*. Cambridge: Cambridge University Press.
- Kaplan, Peter W. 8 July 1985. Sales of TV Dish Antenna Raising Problems. *New York Times*, A1.
- Karolewski, Pawel and Claus Leggewie 2022. Die Demokraturen Mitteleuropas. *Merkur. Zeitschrift für Europäisches Denken* 76 (873): 74–81.
- Kazansky, Yaniv, Danielle Wood and Jacob Sutherlun 2016. The Current and Potential Role of Satellite Remote Sensing in the Campaign Against Malaria. *Acta Astronautica* 121: 292–305.
- Kelvey, Jon February/March 2025. Will Geostationary Satellites One Day Become Obsolete Given the Proliferation of Satellites in Low-Earth Orbit? *Aerospace America*, available at: <https://aerospaceamerica.aiaa.org/departments/will-geostationary-satellites-one-day-become-obsolete-given-the-proliferation-of-satellites-in-low-earth-orbit/> [accessed 26th September 2025].
- Kennedy, Ross 2018. Four New Takes on Wilson, World War I, and the Making of the Post-War Order. *Journal of Strategic Studies* 41 (7): 1058–1070.
- Kilgore, De Witt Douglas 2003. *Astrofuturism: Science, Race, and Visions of Utopia in Space*. Philadelphia: University of Pennsylvania Press.
- Kimmage, Michael 2025. The World Trump Wants. American Power in the New Age of Nationalism. *Foreign Affairs* 104 (2): 8–21.
- Kirschner, Carolyn 2021. ‘Sensor Landscape’, pp 24–27. In: Gregor Sailer (ed.) *The Polar Silk Road*. Heidelberg: Kehler.
- Koebner, Richard and Helmut Dan Schmidt 1964. *Imperialism: The Story and Significance of a Political Word*. Cambridge: Cambridge University Press.

- Komen, Leah Jerop and Richard Ling 2022. 'NO! We Don't Have a Joint Account': Mobile Telephony, mBanking, and Gender Inequality in the Lives of Married Women in Western Rural Kenya. *Information, Communication & Society* 25 (14): 2083–2100, available at: <https://doi.org/10.1080/1369118X.2021.1927137> [accessed 25 September 2025].
- Koselleck, Reinhart 1989 [1976]. „Erfahrungsraum“ und „Erwartungshorizont“ – zwei historische Kategorien, pp 349–375. In: *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten*. Frankfurt a.M.: Suhrkamp.
- Koselleck, Reinhardt 1997. The Temporalisation of Concepts, pp. 16–24. In: *Finnish Yearbook of Political Thought 1997* (vol. 1). Jyväskylä: University of Jyväskylä SoPhi, https://jyx.jyu.fi/bitstream/handle/123456789/48139/SoPhi10_978-951-39-6469-6.pdf.
- Koskenniemi, Martti 2005. *From Apology to Utopia. The Structure of International Legal Argument. Reissue With a New Epilogue*. Cambridge: Cambridge University Press.
- Krajewski, Markus 2006. *Restlosigkeit. Weltprojekte um 1900*. Frankfurt am Main: S. Fischer.
- Krajewski, Markus 2014. *World Projects: Global Information before World War I*. Minneapolis: University of Minnesota Press.
- Krasner, Stephen D. 2001. Abiding Sovereignty. *International Political Science Review* 22 (3): 229–251.
- Krige, John, Angelina Long Callahan, Ashok Maharaj 2013. *NASA in the World: Fifty Years of International Collaboration in Space*. New York: Palgrave Macmillan.
- Kuhn, Thomas 1957. *The Copernican Revolution. Planetary Astronomy in the Development of Western Thought*. Cambridge, MA: Harvard University Press.
- Kumar, Krishan 2010. Nation-States as Empires, Empires as Nation-States: Two Principles, One Practice? *Theory & Society* 39 (2): 119–143.
- Lackenbauer, Whitney and Dean Ryan 2021. Arctic Exceptionalisms, pp 327–356. In: Kristina Spohr (ed.) *The Arctic and World Order*. Washington, DC: Brookings Institution Press.
- Lake, David A. 2009. *Hierarchy in International Relations*. Ithaca, NY: Cornell University Press.

- Lake, Marilyn and Henry Reynolds 2008. *Drawing the Global Colour Line: White Men's Countries and the International Challenge of Racial Equality*. Cambridge: Cambridge University Press.
- Langley, Peter and Andrew Leyshon 2022. Neo-Colonial Credit: FinTech Platforms in Africa. *Journal of Cultural Economy* 15 (4): 401–415, available at: <https://doi.org/10.1080/17530350.2022.2028652> [accessed 25 September 2025].
- Larkin, Brian 2008. *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham, NC: Duke University Press.
- Larkin, Brian 2013. The Politics and Poetics of Infrastructure. *Annual Review of Anthropology* 42: 327–343.
- Latour, Bruno 1987. *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.
- Launius, Roger D., James Rodger Fleming and David H. Devorkin, 2010. Introduction: The Rise of Global Scientific Inquiry in the International Polar and Geophysical Years, pp 1–9. In: Roger D. Launius, James Rodger Fleming and David H. Devorkin (eds.) *Globalizing Polar Science. Reconsidering the International Polar and Geophysical Years*. London: Palgrave.
- Le Monde with AP. 22 May 2024. How is the Violent Unrest in New Caledonia Impacting Global Nickel Prices? Le Monde, available at: https://www.lemonde.fr/en/france/article/2024/05/22/how-is-the-violent-unrest-in-new-caledonia-impacting-global-nickel-prices_6672281_7.html [accessed 20 September 2025].
- League of Nations Archive (LONA) 1928. 8D/R5980/435, C.48.M.29.1929.III, Eastern Bureau Annual Report for 1928.
- League of Nations Archive (LONA) 1932. Minutes from meeting on April 15, 1932, LONA 8A/R5935/36646.
- Lemberg, Diana 2019. *Barriers Down: How American Power and Free-Flow Policies Shaped Global Media*. New York: Columbia University Press.
- Lentz Smith, Adriane 2021. The Unbearable Whiteness of Grand Strategy, pp 329–345. In: Elizabeth Borgwardt, Christopher McKnight Nichols and Andrew Preston (eds.) *Rethinking American Grand Strategy*. New York: Oxford University Press.

- Levitsky, Steven and Lucan A. Way 2012. The Rise of Competitive Authoritarianism. *Journal of Democracy* 13 (2): 51–65.
- Leys, Colin 1996. *The Rise and Fall of Development Theory*. London: James Currey.
- Lieven, Dominic 2000. *Empire: The Russian Empire and Its Rivals*. New Haven, CT: Yale University Press.
- Llamas-Rodriguez, Juan and Viviane Saglier 2021. Postcolonial Media Theory. *Oxford Research Encyclopedia of Communication*.
- Mader, Philip 2018. Contesting Financial Inclusion. *Development and Change* 49 (2): 461–483, available at: <https://doi.org/10.1111/dech.12368> [accessed 25 September 2025].
- Maher, Neil 2019. Bringing the Environment Back In: A Transnational History of Landsat, pp 201–224. In: John Krige (ed.) *How Knowledge Moves: Writing the Transnational History of Science and Technology*. Chicago, IL: University of Chicago Press.
- Mahlert, Bettina 2021. Needs and Satisfiers: A Tool for Dealing with Perspectivity in Policy Analysis. *The European Journal of Development Research* 33 (6): 1455–1474.
- Maier, Charles S. 2016. *Once within Borders: Territories of Power, Wealth, and Belonging since 1500*. Cambridge, MA: Harvard University Press.
- Mamdani, Mahmood 1996. *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. Princeton, NJ: Princeton University Press.
- Mancilla, Alejandra and Peder Roberts 2024. Introduction: What Colonialism Tells Us About Antarctica, and What Antarctica Tells Us About Colonialism, pp 1–29. In: Peder Roberts and Alejandra Mancillo (eds.) *Colonialism in Antarctica: Attitudes, Logics and Practices*. Manchester: Manchester University Press.
- Manela, Erez 2007. *The Wilsonian Moment: Self-Determination and the International Origins of Anticolonial Nationalism*. New York: Oxford University Press.
- Mann, Michael 1984. The Autonomous Power of the State: Its Origins, Mechanisms and Results. *European Journal of Sociology* 25 (2): 185–213.
- Marshall, Thomas 1950. *Citizenship and Social Class*. Cambridge: Cambridge University Press.

- Martínez, Julia 2017. Asian Servants for the Imperial Telegraph: Imagining North Australia as an Indian Ocean Colony before 1914. *Australian Historical Studies* 48 (2): 227–243.
- Mazower, Mark 2009. *No Enchanted Palace: The End of Empire and the Ideological Origins of the United Nations*. Princeton, NJ: Princeton University Press.
- Mazower, Mark 2012. *Governing the World: The History of an Idea*. London: Penguin.
- Mbiti, Isaac and David N. Weil 2015. Mobile Banking: The Impact of M-Pesa in Kenya, pp 247–293. In: Sebastian Edwards, Simon Johnson and David N. Weil (eds.) *African Successes, Volume III: Modernization and Development*. Chicago, IL: University of Chicago Press.
- McGovern, Michael F. and Keith A. Wailoo 2023. Epidemic Inequities: Social and Racial Inequality in the History of Pandemics. *Isis* 114 (S1): S206–S246.
- Merida, Tarik 2020. A Japanese Anomaly: Theodore Roosevelt and Japan's Racial Identity at the Turn of the Twentieth Century. *Asia-Pacific Journal* 18 (20/4): 1–15.
- Meyer, Tirza 2022. *Elisabeth Mann Borgese and the Law of the Sea*. Leiden: Brill.
- Middleton, Alexandra and Bjørn Rønning 2022. *Geopolitics of Subsea Cables in the Arctic*, available at: <https://www.thearcticinstitute.org/geopolitics-subsea-cables-arctic/> [accessed 25 September 2025].
- Milanovic, Branko 2016. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge MA: Harvard University Press.
- Miracle, Marvin P., Diane S. Miracle and Laurie Cohen 1980. Informal Savings Mobilization in Africa. *Economic Development and Cultural Change* 28 (4): 701–724.
- Morawczynski, Olga 2009. *Examining the Usage and Impact of Transformational M-banking in Kenya*. International Conference on Internationalization, Design and Global Development 5623: 495–504, available at: https://doi.org/10.1007/978-3-642-02767-3_55 [accessed 25 September 2025].

- Morgan Hodge, Joseph 2007. *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism*. Athens: Ohio University Press.
- Morgan, Jamie and Patomäki, Heikki (2026). Introduction: The Idea of an ICU and its Relevance in the 21st Century, pp 1–43. In: J. Morgan and H. Patomäki (eds.) *Deweaponising Interdependence: Bringing the Idea of International Clearing Union into the 21st Century*. London: Bloomsbury Academic.
- Morozov, Evgeny 2011. *The Net Delusion: The Dark Side of Internet Freedom*. New York: Public Affairs.
- Müller, Simone and Heidi Tworek 2015. The Telegraph and the Bank: on the Interdependence of Global Communications and Capitalism, 1866–1914. *Journal of Global History* 10 (2): 259–283.
- Müller, Simone and Heidi Tworek 2016. Imagined Use as a Category of Analysis: New Approaches to the History of Technology. *History and Technology* 32 (2): 105–119.
- Müller, Thomas, Mathias Albert and Kerrin Langer 2022. Practices of Comparison and the making of International Orders. *Journal of International Relations and Development* 25 (3): 834–859.
- Münkler, Herfried 2023. *Welt in Aufruhr. Die Ordnung der Mächte im 21. Jahrhundert*. Berlin: Rowohlt.
- n.a. 1920. The Gutta-Percha Industry. *Journal of the Royal Society of Arts* 68 (3545): 787–788.
- n.a. 1936. Pedal Radio Sets in N. Guinea and Papua. *Pacific Islands Monthly* 7 (1): 44. accessed via <https://nla.gov.au/nla.obj-312525093/view?partId=nla.obj-312535327#page/n45/mode/1up> [accessed 24 October 2025].
- n.a. 1938. Increasing Use of Tele-radio. *Pacific Islands Monthly* 8 (10): 46. accessed via <https://nla.gov.au/nla.obj-314409409/view?partId=nla.obj-314433118#page/n47/mode/1up> [accessed 24 October 2025].
- Naughten, Kaitlin A., Paul R. Holland and Jan De Rydt 2023. Unavoidable Future Increase in West Antarctic Ice-shelf Melting over the Twenty-first Century. *Nature Climate Change* 13: 1222–1228, available at: <https://doi.org/10.1038/s41558-023-01818-x> [accessed 25 September 2025].

- Neitzel, Sönke 2000. *Weltmacht oder Untergang. Die Weltreichslehre im Zeitalter des Imperialismus*. Paderborn: Schöningh.
- Nelson, Hank 2015. Bougainville in World War II. In: Anthony J. Regan and Helga M. Griffin (eds.) *Bougainville before the Conflict*. Canberra: ANU Press.
- Ngai, Mae 2014. *Impossible Subjects: Illegal Aliens and the Making of Modern America*. Princeton, NJ: Princeton University Press.
- Nickles, David Paull 2003. *Under the Wire: How the Telegraph Changed Diplomacy*. Cambridge, MA: Harvard University Press.
- Nilsen, Thomas 30. October 2023. Isolated Russia Invites Faraway Countries to Upcoming Svalbard Science Center in Pyramiden. *The Barents Observer*, available at: <https://www.thebarentsobserver.com/arctic/isolated-russia-invites-faraway-countries-to-upcoming-svalbard-science-center-in-pyramiden/118862> [accessed 25 September 2025].
- Nitobe, Inazo 1972. *The Works of Inazo Nitobe*, Volume V. Tokyo: University of Tokyo Press.
- Nkrumah, Kwame 1965. *Neo-Colonialism. The Last Stage of Imperialism*. London: Nelson.
- Novo, Andrew R. 29. August 2022. The Empires Strike Back: A New Age of Imperialism. *CEPA*, available at: <https://cepa.org/article/the-empires-strike-back-a-new-age-of-imperialism/> [last viewed: 1st March 2025].
- Nuila, Andrea H. 2018. Collective Rights in the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas. FIAN International Briefing Note. Brussels: FIAN Belgium, available at: [https://www.fian.org/files/is/htdocs/wp11102127_GNIAANVR7U/www/files/Collective_Rights_briefing_20180329_droits_collectifs_UK_web\(1\).pdf](https://www.fian.org/files/is/htdocs/wp11102127_GNIAANVR7U/www/files/Collective_Rights_briefing_20180329_droits_collectifs_UK_web(1).pdf) [accessed 12 September 2025].
- OECD 2024. *FinTech lending in Sub-Saharan Africa. Lessons from African economies*. Paris: OECD, available at: <https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/digital-finance/FinTech-lending-in-Sub-Saharan-Africa.pdf> [accessed on 12 September 2025].
- Ogle, Vanessa 2015. *The Global Transformation of Time 1870–1950*. Cambridge, MA: Harvard University Press.

- Ogle, Vanessa 2017. Archipelago Capitalism: Tax Havens, Offshore Money, and the State, 1950s-1970s. *American Historical Review* 122 (5): 1431-1458.
- Oldenziel, Ruth 2011. Islands: The United States as a Networked Empire, pp 13-42. In: Gabrielle Hecht (ed.) *Entangled Geographies: Empire and Technopolitics in the Global Cold War*. Cambridge, MA: MIT Press.
- Orben, Anna 2020. The Sisyphean Cycle of Technology Panics. *Perspectives on Psychology* 15 (5): 1143-1157.
- Østhagen, Andreas 2024. The Myths of Svalbard Geopolitics: An Arctic Case Study. *Marine Policy* 167: 106183.
- Padmore, George 1936. *How Britain Rules Africa*. London: Wishart Books.
- Pan, Liang 2017. National Internationalism in Japan and China, pp 170-190. In: Glenda Sluga and Patricia Clavin (eds.) *Internationalisms. A Twentieth-Century History*. Cambridge: Cambridge University Press.
- Patalano, Rosario 2023. International Clearing System as Alternative Monetary Order. *The European Journal of the History of Economic Thought* 30 (2): 299-331.
- Patomäki, Heikki 1992. What is It That Changed with the End of the Cold War? An Analysis of the Problem of Identifying and Explaining Change, pp 179-225. In: Pierre Allan and Kjell Goldmann (eds.) *The End of the Cold War. Evaluating Theories of International Relations*. Dordrecht: Martinus Nijhoff.
- Patomäki, Heikki 2008. *The Political Economy of Global Security. War, Future Crises and Changes in Global Governance*. London: Routledge.
- Patomäki, Heikki 2009. Neoliberalism and the Global Financial Crisis. *New Political Science* 31 (4): 431-442.
- Patomäki, Heikki 2021. Neoliberalism and Nationalist-Authoritarian Populism: Explaining their Constitutive and Causal Connections. *Protosociology. An International Journal of Interdisciplinary Research* 37: 101-151.
- Patomäki, Heikki 2022. *The Three Fields of Global Political Economy*. Abingdon: Routledge.
- Patomäki, Heikki 2023. *World Statehood: The Future of World Politics*. Cham: Springer.

- Patomäki, Heikki and Manfred Steger 2010. Social Imaginaries and Big History: towards a New Planetary Consciousness? *Futures* 42 (10): 1056–1063.
- Pedersen, Susan 2015. *The Guardians: The League of Nations and the Crisis of Empire*. Oxford: Oxford University Press.
- Pedersen, Torbjørn 2017. The Politics of Presence: The Longyearbyen Dilemma. *Arctic Review of Law and Politics* 8: 95–108.
- Pedersen, Torbjørn 2021. The Politics of Research Presence in Svalbard. *The Polar Journal* 11 (2): 413–426, available at: <https://doi.org/10.1080/2154896X.2021.1883900> [accessed 25 September 2025].
- Pervez, Omar 2022. The Fintech Landscape in India and Africa: A Primer, ORF Issue Brief No. 584. New Delhi: Observer Research Foundation, available at: <https://www.orfonline.org/research/the-fintech-landscape-in-india-and-africa-a-primer> [accessed 12 September 2025].
- Peters, Kimberley, Philip Steinberg and Elaine Stratford (eds.) 2018. *Territory beyond Terra*. New York: Rowman & Littlefield.
- Piketty, Thomas 2014. *Capital in the 21st Century*. Trans. by A. Goldhammer. Cambridge, MA: The Belknap Press of Harvard University Press.
- Piketty, Thomas 2020. *Capital and Ideology*. Transl. A. Goldhammer. Cambridge, MA: The Belknap Press of Harvard University Press.
- Pincus, Steven 2008. A Revolution in Political Economy?, pp 115–140. In: Maximillian E. Novak (ed.) *The Age of Projects*. Toronto: University of Toronto Press.
- Podkaminer, Leon 2024. From the Bretton Woods System to Global Stagnation. *Real-world Economics Review* no. 109: 29–35, available at: <http://www.paecon.net/PAERReview/issue109/Podkaminer109> [accessed 10 October 2025].
- Polanyi, Karl 1957. The Great Transformation. The Political and Economic Origins of Our Time. Boston MA: Beacon Press. (Originally published 1944). *Political Economy* 19 (1): 59–86.
- Porter, M. Cecilia, Alyssa Parker and Matthew Waltz 2024. Indigenous Place Names in Arctic Canada: A Publicly Accessible Inventory of Projects. *Polar Science* 39 (March), available at: <https://doi.org/10.1016/j.polar.2023.101002> [accessed 25 September 2025].

- Potter, Simon J. 2007. Webs, Networks, and Systems: Globalization and the Mass Media in the Nineteenth- and Twentieth-Century British Empire. *Journal of British Studies* 46 (3): 621–46.
- Potter, Simon J. 2012. *Broadcasting Empire: The BBC and the British World, 1922–1970*. Oxford: Oxford University Press.
- Potter, Simon J., et al. 2022. *The Wireless World: Global Histories of International Radio Broadcasting*. Oxford: Oxford University Press.
- Pretel, David 2023. Hidden Connections: The Global History of Jungle Commodities. *Technology and Culture* 64 (1): 202–219.
- Przeworski, Adam 2019. *Crises of Democracy*. Cambridge: Cambridge University Press.
- Pynnöniemi, Katri and Kati Parppei 2024. Understanding Russia's war against Ukraine: Political, Eschatological and Cataclysmic Dimensions. *Journal of Strategic Studies* 47 (6–7): 832–859.
- Quimby, Frank 2013. Americanised, Decolonised, Globalised and Federalised: The Northern Mariana Islands since 1978. *Journal of Pacific History* 48 (4): 464–483.
- Quinton-Brown, Patrick 2024. *Intervention before Interventionism: A Global Genealogy*. Oxford: Oxford University Press.
- Raghu, Pratik 2018. The Prism of Expanding Peasants' Rights: A Critical Investigation of Diverse Frames Applied to La Via Campesina's Human Rights Engagements. *Perspectives on Global Development and Technology* 17 (3): 327–340.
- Ramachandran, Ayesha 2015. *The Worldmakers: Global Imagining in Early Modern Europe*. Chicago, IL: Chicago University Press.
- Rantanen, Terhi 1997. The Globalization of Electronic News in the 19th Century. *Media, Culture & Society* 19 (4): 605–620.
- Rapier, Ralf 2020. Bringing the Empire (Back) In. Zur Überwindung des Eurozentrismus in der Weltgesellschaftsforschung, pp 35–78. In: Hannah Bennani, Martin Bühler, Sophia Cramer and Andrea Glauser (eds.) *Beobachtung und Vergleich. Soziologische Untersuchungen zur Weltgesellschaft*. Frankfurt am Main: Campus.
- Read, Christopher 2013. War and Revolution in Russia, 1914–22: *The Collapse of Tsarism and the Establishment of Soviet Power*. Basingstoke and New York: Palgrave Macmillan.

- Redfield, Peter 2000. *Space in the Tropics: From Convicts to Rockets in French Guiana*. Berkeley: University of California Press.
- Riseman, Noah 2010. Australian [Mis]treatment of Indigenous Labour in World War II Papua and New Guinea. *Labour History* 98: 163–182.
- Rodima-Taylor, Daivi 2022. Platformizing Ubuntu? FinTech, Inclusion, and Mutual Help in Africa. *Journal of Cultural Economy* 15 (4): 416–435.
- Rodrik, Dani 9 May 2022. A Better Globalization might Rise from Hyper-globalization's Ashes. *Project Syndicate*, available at: <https://www.project-syndicate.org/commentary/after-hyperglobalization-national-interests-open-economy-by-dani-rodrik-2022-05> [accessed 2 October 2025].
- Rodrik, Dani 2011. *The Globalization Paradox: Democracy and the Future of the World Economy*. New York: W. W. Norton & Co.
- Rose, Sebastian James 2024. The Telegraph from Below: Race, Labour and the Indo-European Telegraph Department 1862–1927. *History Workshop Journal* 97: 126–148.
- Rosenberg, Justin 2016. International Relations in the Prison of Political Science. *International Relations* 30 (2): 127–153.
- Rosenberg, Justin and Milja Kurki 2023. *Multiplicity: A New Common Ground for International Relations?* London: Routledge.
- Rossi, Christopher 2015. 'A Unique International Problem': The Svalbard Treaty, Equal Enjoyment, and terra nullius: Lessons of Territorial Temptation from History. *Washington University Global Studies Law Review* 15 (1): 93–136.
- Roth, Armand D. 1992. *La Prohibition de l'Appropriation et les Régimes d'Accès aux Espaces Extra-terrestres*. Geneva: Graduate Institute Publications.
- Ruggie, John 1982. International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. *International Organization* 36 (2): 379–415.
- Sailer, Gregor 2021. *The Polar Silk Road*. Heidelberg: Kehler.
- Sasse, Gwendolyn 2022. Russian Neo-Imperialism: Official Discourse and Domestic Legitimation. *Europe-Asia Studies* 1–4. <https://doi.org/10.1080/09668136.2022.2106698>.
- Schedler, Andreas (ed.) 2006. *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder, CO: Lynn Rienner.

- Schmitt, Carl 1939a. *Völkerrechtliche Großraumordnung mit Interventionsverbot für raumfremde Mächte: Ein Beitrag zum Reichsbegriff im Völkerrecht*. Berlin: Duncker & Humblot.
- Schmitt, Carl 1939b. Großraum gegen Universalismus: Der völkerrechtliche Kampf um die Monroedoktrin. *Zeitschrift der Akademie für Deutsches Recht* 6/7: 333–337.
- Schwach, James 2009. *Global TV: New Media and the Cold War 1946–69*. Urbana: University of Illinois Press.
- Sedgewick, Augustine 2015. What is Imperial about Coffee? Rethinking ‘Informal Empire’, pp 312–333. In: Daniel E. Bender and Jana K. Lipman (eds.) *Making the Empire Work. Labor and United States Imperialism*. New York: New York University Press.
- Seth, Sanjay 2011. Postcolonial Theory and the Critique of International Relations. *Millennium: Journal of International Studies* 40 (1): 167–183.
- Shanley, Lea A. 2015. *Spatial Data Sovereignty and Privacy in Indian Country*. Madison: University of Wisconsin-Madison.
- Skidelsky, Robert 2001. *John Maynard Keynes. Fighting for Britain 1937–1946*. London: Papermac (Macmillan).
- Slobodian, Quinn 2018. *The Globalists: The End of Empire and the Birth of Neoliberalism*. Cambridge, MA: Harvard University Press.
- Sluga, Glenda and Patricia Clavin 2017. *Internationalisms. A Twentieth-Century History*. Cambridge: Cambridge University Press.
- Sörlin, Sverker (ed.) 2013. *Science, Geopolitics and Culture in the Polar Regions. Norden Beyond Borders*. London: Routledge.
- Spivak, Gayatri Chakravorty 1985. The Rani of Sirmur: An Essay in Reading the Archives. *History and Theory* 24 (3): 247–272.
- Stamm, Michael 2015. The Space for News: Ether and Paper in the Business of Media. *Media History* 21 (1): 55–73.
- Starosielski, Nicole 2015. *The Undersea Network*. Durham, NC: Duke University Press.
- Steel, Frances 2022. The Pacific in the Age of Steam, Undersea Cables, and Wireless Telegraphy, 1860–1930, pp. 514–538. In: Anne Perez Hattori and Jane Samson (eds.) *Cambridge History of the Pacific Ocean*, vol. 2. Cambridge: Cambridge University Press.

- Steinberg, Philip E., Jeremy Tasch and Hannes Gerhardt with Adam Keul and Elizabeth A. Nyman 2015. *Contesting the Arctic. Politics and Imaginaries in the Circumpolar North*. London: I.B. Tauris.
- Stoler, Ann Laura 2011. Tense and Tender Ties: The Politics of Comparison in North American History and (Post) Colonial Studies. *Journal of American History* 88 (3): 829–865.
- Strouk, Mayline and Marion Maisonobe 2024. Field Science and Scientific Collaboration in the Svalbard Archipelago: Beyond Science Diplomacy. *Science and Public Policy*, available at: <https://doi.org/10.1093/scipol/scae012> [accessed 25 September 2025].
- Subramanian, Arvind and Martin Kessler 2013. *The Hyperglobalization of Trade and its Future*. Peterson Institute of International Economics, Working Papers 13–6.
- Suh, Chris 2023. *The Allure of Empire: American Encounters with Asians in the Age of Transpacific Expansion and Exclusion*. New York: Oxford University Press.
- Tekeli, Maya and Jeffrey Gettleman 25 March 2025. What's the American Base on Greenland? Here's What to Know. *New York Times*.
- Thayer Mahan, Alfred 1890. The United States Looking Outward. *Atlantic Monthly* 66 (398). <https://www.theatlantic.com/magazine/archive/1890/12/the-united-states-looking-outward/306348/>
- The United Nations and Decolonization: Non-Self-Governing Territories, available at: <https://www.un.org/dppa/decolonization/en/nsgt/> accessed 26th November 2024.
- Thomas, Martin (ed.) 2015. *Expedition into Empire. Exploratory Journeys and the Making of the Modern World*. New York: Routledge.
- Thornton, Christy 2023. Developmentalism as Internationalism: Toward a Global Historical Sociology of the Origins of the Development Project. *Sociology of Development* 9 (1) 33–55.
- Ties, Dams, Louise van Schaik and Adája Schoetman 2020. *Presence before Power. China's Arctic Strategy in Iceland and Greenland*. The Hague: The Clingendael Institute.
- Toynbee Prize Foundation 2023. *Global History and International Relations: A Discussion with Ayşe Zarakol, Glenda Sluga, and Heidi Twarek*, available at: Global History and International Relations: a discussion with

- Ayşe Zarakol, Glenda Sluga, and Heidi Tworek | Toynbee Prize Foundation [accessed 2 October 2025].
- Tsing, Anna Lowenhaupt 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.
- Tully, John 2009. A Victorian Ecological Disaster: Imperialism, the Telegraph, and Gutta-Percha. *Journal of World History* 20 (4): 559–579.
- Tworek, Heidi 2016. How Not to Build a World Wireless Network: German-British Rivalry and Visions of Global Communications in the Early Twentieth Century. *History and Technology: An International Journal* 32 (2): 178–200.
- Tworek, Heidi 2019a. *News from Germany: The Competition to Control World Communications, 1900–1945*. Cambridge, MA: Harvard University Press.
- Tworek, Heidi 2019b. Communicable Disease: Information, Health, and Globalization in the Interwar Period. *American Historical Review* 124 (3): 813–842, available at: <https://academic.oup.com/ahr/article/124/3/813/5509745> [accessed 26 September 2025].
- Tworek, Heidi 2020. A Union of Nations or Administrations? Voting Rights, Representation, and Sovereignty at the International Telecommunication Union in the 1930s, pp 243–264. In: Gabriele Balbi and Andreas Fickers (eds.) *History of the International Telecommunication Union (ITU): Transnational Techno-Diplomacy from the Telegraph to the Internet*. Berlin: De Gruyter Oldenbourg.
- Tworek, Heidi 2021. The Impact of Communications in Global History, pp 195–210. In: Mathias Albert and Tobias Werron (eds.) *What in the World? Understanding Global Social Change*. Bristol: Bristol University Press.
- Tworek, Heidi 2025. Communications Technologies, pp 67–72. In: Christopher Balme, Burcu Dogramaci, and Roland Wenzlhuemer (eds.), *Dis:connectivity and Globalisation: Concepts, Terms, Practices*. Berlin: De Gruyter Oldenbourg.
- Tworek, Heidi 2026 (forthcoming). *News Agencies between the World Wars, 1919–1939*. In: Oliver Boyd-Barrett, Pedro Aguiar and Christian

- Vukasovich (eds.). *The Routledge Handbook of News Agencies*. Abingdon: Routledge.
- United Nations 2006. *Building Inclusive Financial Sectors for Development*. Joint Report by the United Nations Department of Economic and Social Affairs and the United Nations Capital Development Fund. New York: United Nations.
- Upham, Paul, Benjamin K. Sovacool, Chukwuka G. Monyei 2023. Imaginaries on Ice: Sociotechnical Futures of Data Centre Development in Norway and Iceland. *Environment and Planning E: Nature and Space* 6 (3): 1905–1922.
- Van der Linden, Marcel (ed.) 1996. *Social Security Mutualism. The Comparative History of Mutual Benefit Societies*. Bern: Peter Lang.
- Vine, David 2011. *Island of Shame: The Secret History of the U.S. Military Base on Diego Garcia*, rev. edn. Princeton, NJ: Princeton University Press.
- Vitalis, Robert 2015. *White World Order, Black Power Politics: The Birth of American International Relations*. Ithaca, NY: Cornell University Press.
- Von Eschen, Penny 2022. Roads Not Taken: The Delhi Declaration, Nelson Mandela, Václav Havel, and the Lost Futures of 1989, pp 299–321. In: Christopher McKnight Nichols and David Milne (eds.) *Ideology in U.S. Foreign Relations: New Histories*. New York: Columbia University Press.
- Wagner, Florian 2020. Inventing Colonial Agronomy Buitenzorg and the Transition from the Western to the Eastern Model of Colonial Agriculture, 1880s–1930s, pp 103–128. In: Ulrike Kirchberger and Brett M. Bennett (eds.) *Environments of Empire: Networks and Agents of Ecological Change*. Durham, NC: University of North Carolina Press.
- Wehrmann, Dorothea 2018. *Critical Geopolitics of the Polar Regions. An Inter-American Perspective*. London: Routledge.
- Wells, H.G. 1902. *Anticipations of the Reaction of Mechanical and Scientific Progress Upon Human Life and Thought*. London: Chapman & Hall, Ltd.
- Wells, H.G. 1931. *(The New and Revised) Outline of History. Being a Plain History of Life and Mankind*. New York: Garden City Publishing Company.
- Wells, H.G. 1933. *The Open Conspiracy: Blue Prints for a World Revolution*. London: Gollancz.

- Wenzlhuemer, Roland 2010. Editorial – Telecommunication and Globalization in the Nineteenth Century. *Historical Social Research* 35: 7–18.
- Werron, Tobias 2020. Global Publics as Catalysts of Global Competition: A Sociological View, pp 343–366. In: Valeska Huber and Jürgen Osterhammel (eds.) *Global Publics: Their Power and their Limits, 1870–1990*. Oxford: Oxford University Press.
- Werron, Tobias 2021. Nationalism as a Global Institution: A Historical-Sociological View, pp 157–175. In: Mathias Albert, and Tobias Werron (eds.) *What in the World? Understanding Global Social Change*. Bristol: Bristol University Press.
- Whitman, James Q. 2017. *Hitler's American Model: The United States and the Making of Nazi Race Law*. Princeton, NJ: Princeton University Press.
- Willems, Wendy 2023. The Reproduction of Canonical Silences: re-reading Habermas in the Context of Slavery and the Slave Trade. *Communication, Culture and Critique* 16: 17–24.
- Wily, Liz Alden 2001. Reconstructing the African Commons. *Africa Today* 48 (1): 77–99.
- Wimmer, Andreas and Brian Min 2006. From Empire to Nation-State: Explaining Wars in the Modern World, 1816–2001. *American Sociological Review* 71 (6): 867–897.
- Wimmer, Andreas and Yuval Feinstein 2010. The Rise of the Nation-State across the World, 1816–2001. *American Sociological Review* 75 (5): 764–790.
- Winkler, Jonathan R. 2008. *Nexus: Strategic Communications and American Security in World War I*. Cambridge, MA: Harvard University Press.
- Winseck, Dwayne R. and Robert M. Pike 2007. *Communication and Empire. Media, Markets, and Globalization, 1860–1930*. Durham, NC: Duke University Press.
- Winseck, Dwayne R. and Robert M. Pike 2008. Communication and Empire. Media Markets, Power and Globalization, 1860–1910. *Global Media and Communication* 4 (1): 7–36.
- Wohlleben, Peter 2016. *The Hidden Life of Trees*. Vancouver: Greystone Books.
- Wood, Danielle and Annalisa Weigel 2014. Architectures of Small Satellite Programs in Developing Countries. *Acta Astronautica* 97: 109–121.

- World Bank 2024. *Financial Inclusion in Sub-Saharan Africa – Overview. The Global Financial Database* 2025. Washington, DC: World Bank, available at: <https://www.worldbank.org/en/publication/globalfinindex/brief/financial-inclusion-in-sub-saharan-africa-overview> [accessed 12 September 2025].
- World Bank 2025. *The Global Findex Database* 2025. Washington: World Bank, available at: <https://www.worldbank.org/en/publication/globalfindex> [accessed on 12 September 2025].
- Wråkberg, Urban 2002. The Politics of Naming. Contested Observations and the Shaping of Geographical Knowledge, pp 155–197. In: Michael Bravo and Sverker Sörlin (eds.) *Narrating the Arctic. A Cultural History of Nordic Scientific Practices*. Canton, MA: Watson Publishing International.
- Yang, Daqing 2009. Submarine Cables and the Two Japanese Empires, pp 227–254. In: Bernard Finn and Daqing Yang (eds.) *Communications under the Seas: The Evolving Cable Network and Its Implications*. Cambridge, MA: MIT Press.
- Yun-Casalilla 2022. Early Modern Iberian Empires, Global History, and the History of Early Globalization. *Journal of Global History* 17 (3): 539–561.
- Zakaria, Fareed 1997. The Rise of Illiberal Democracy. *Foreign Affairs* 76 (6): 22–43.
- Zeurn, Elke 2011. *The Politics of Necessity: Community Organizing and Democracy in South Africa*. Madison: University of Wisconsin Press.
- Zimmerman, Angela 2006. Decolonizing Weber. *Postcolonial Studies* 9 (1): 53–79.
- Zimmerman, Angela Elisabeth 2010. *Alabama in Africa: Booker T. Washington, the German Empire, and the Globalization of the New South*. Princeton: Princeton University Press.

