2 The Infrastructural Nexus: Conceptualizing Worldmaking Projects and Their Infrastructures

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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; Rantanten 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 ('worldmaking'),
- 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 'worldmaking'), 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 premodern 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

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/Vattelian 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 distanciation' (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 War[3] 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.