

Daniel Haines

INDUS DIVIDED

INDIA, PAKISTAN AND
THE RIVER BASIN DISPUTE





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PENGUIN BOOKS

CONTENTS

Notes on Terminology and Spelling

List of Abbreviations

Introduction

Water in international relations

Territory and sovereignty

Chapters, scope and sources

1. The Problem of Territory

Territory in nationalist thought

Divided lands, divided rivers

Kashmir

Conclusion

2. Territorial Hydro-Logics

The development imperative

Towards a water dispute

India's hydro-logic: absolute sovereignty

Pakistan's hydro-logic: territorial integrity

Conclusion

3. Sovereignty Entanglements in Kashmir

Legal arguments and sovereign realities

Sovereignty, water and Kashmir

The Mangla Dam

Kashmir and the Indus Waters Treaty

Conclusion

4. Punjab's Riverine Borderlands

Making places national

Islands and river geography

1960 and beyond

Conclusion

5. Spaces of Cooperation

'A Punjab powder keg'

The 'natural' object of development

Jumping scales

The failure of cooperation

Conclusion

6. Negotiating International Politics

Playing politics

Moments of opportunity

Paying for geopolitics

Conclusion

7. The Phantom of Cooperation

Two river disputes in divided Bengal

The Indus precedent

Sovereignty redux

Conclusion

Conclusion

Notes

Select Bibliography

Acknowledgements

Follow Penguin

Copyright

Notes on Terminology and Spelling

South Asia is usually defined as India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan and sometimes Afghanistan.

‘Kashmir’ refers to the territories that Maharaja Hari Singh governed up to September 1947, including the Valley of Kashmir, Jammu, Gilgit, Baltistan, Hunza and Ladakh, which India and Pakistan later disputed. ‘Jammu & Kashmir’ means the Indian State of Jammu & Kashmir. ‘Pakistan Administered Kashmir’ means the area under Pakistani control.

I use ‘State’ with an initial capital where I refer to semi-autonomous Princely States (such as the State of Jammu & Kashmir) or to States in the federal Indian Union (the Pakistani equivalent is the province). In lower case, I use ‘state’ to mean ‘the state’ as in governing agencies within a country, or in the sense of a sovereign power in international relations.

I use common modern spellings except in direct quotations—hence ‘Firozpur’ instead of ‘Ferozepore’, ‘Kolkata’ instead of ‘Calcutta’, and so on.

List of Abbreviations

CRO	Commonwealth Relations Office
ILA	International Law Association
NAI	National Archives of India, New Delhi
NARA	National Archives and Records Administration, Maryland, MD
NDC	National Documentation Centre, Islamabad
PEPSU	Patiala and East Punjab States Union
RG	Record Group
TAMS	Tippetts, Abbett, McCarthy and Stratton
TVA	Tennessee Valley Authority
UKNA	United Kingdom National Archives, Kew
UP	United Provinces
UN	United Nations
WAPDA	Water and Power Development Authority

Introduction

‘As a blazing sun poured itself over the dry and parched lands of Montgomery and Lahore, anxious and overwrought people of the province asked, “When will the canal water come?”’¹ So reported the Karachi *Dawn*, one of Pakistan’s leading national newspapers, in May 1948. The people of Pakistan’s West Punjab province had good reason to be troubled. They relied heavily on artificial canals to water their farmland on the broad, fertile floodplain of the River Indus and its tributaries. Several headworks, the places where engineers could divert river water into canals, lay just across the international border, in Indian East Punjab. That gave Indian engineers a dangerous level of control over Pakistani canals. The previous month, they had used it, and shut off water supplies into several important Pakistani canals. Perhaps a million acres of Pakistani land faced drought.²

A few days before *Dawn*’s article was published, an Indian national daily had given a very different impression of the canal waters problem. ‘The Punjab canals dispute has been amicably settled,’ reported the *Times of India*. Indian and Pakistani politicians, bureaucrats and engineers had concluded a hurried round of negotiations in New Delhi. The delegations had discussed international law relating to transboundary rivers, the needs of the two Punjabs, and possible financial arrangements. Eventually they struck an agreement that caused water to flow again. ‘It is understood’, the *Times* continued, ‘that a realistic approach on either side, in refreshing contrast with past negotiations on the subject, facilitated the agreement today.’³ Why was the tone of the two newspaper reports so different?

Indian and Pakistani perspectives on the canal waters dispute were virtually irreconcilable. India's leaders claimed that India fully owned all the water of every river that flowed through Indian territory. By that logic, Indian engineers could do what they liked with the River Sutlej, which fed canals in both Punjabs, even if its actions reduced the water available in downstream Pakistan. Pakistan, by contrast, claimed that it had pre-existing rights to Sutlej water. In fact, the Pakistani argument continued, Indian engineers had no right to do anything that would reduce water levels downstream. The New Delhi agreement of May 1948 represented India's point of view. Pakistan repudiated it within a year. The *Times of India's* report of an 'amicable' settlement proved mistaken.

The dispute quickly grew to encompass all the major rivers of the Indus Basin: the Indus itself, the Jhelum, the Chenab, the Ravi and the Beas, as well as the Sutlej.⁴ When India and Pakistan achieved independence from Britain in 1947, a new international border had divided the river basin's northern mountainous regions, where the rivers collect the majority of their water, from the southern delta. Divided between nation-states, the rivers became a potential source of conflict. For both countries, national pride and economic security were at stake. In time, the dispute drew the attention of powerful foreign actors such as the International Bank for Reconstruction and Development (the World Bank) and the United States (US) government. This book is about the politics of the Indus dispute: how and why it arose, the impact that it had on state-building in the newly independent states of India and Pakistan, its effect on their relationship to the international community, and the dispute's apparent resolution in the Indus Waters Treaty of 1960.

The core of my argument is that the Indus dispute became so heated, and proved so intractable, because the Indian and Pakistani governments both associated control over water with

control over territory. Access to water resources became a symbol of their sovereignty as independent nation-states. Water was necessary to statecraft in practice, too. Developing water resources—through irrigation projects and hydroelectric dams—was a key tool for promoting economic growth. It helped define a powerful role for national and local government officials in rural life. The story of the Indus dispute therefore encompasses water both as a wet, flowing material substance that engineers could divert and farmers could use, and the relationship between rivers, territory and state space.

Tensions over the Indus system still persist, and the stakes in the basin are high. In 2011, 145 million Pakistanis and 83 million Indians lived in the basin.⁵ Roughly 61 per cent of the basin's irrigated area lies in Pakistan, constituting 90 per cent of Pakistan's agricultural land.⁶ In India, a huge country with numerous major river basins, the Indus system is of lesser national weight.⁷ Within north-western India, however, the basin's water resources are crucial.⁸ The regional economy on both sides of the international border depends on the Indus system. International disputes over the basin's water resources have the potential to do huge damage today, just as they did during the 1940s–1950s. The effects of climate change could exacerbate matters even further.⁹

Given the basin's importance, it is fitting that the Indus dispute appears frequently in existing literature. There is, however, little serious engagement with its complex history. Recent discussion of the treaty, particularly in the pages of the Indian journal *Economic and Political Weekly*, has dealt primarily with the treaty's legacy in contemporary South Asia, particularly Pakistan's recent complaints that India's construction of hydropower projects in Kashmir breaches the terms of the treaty.¹⁰ Popular and media writing on India and Pakistan's hydraulic relationship focuses on geopolitical

dangers and practical measures such as better data-sharing.¹¹ While performing valuable work, such writing has neither the scope nor the research base to draw conclusions about the origins of the dispute.

Those origins are important. An online reader's comment on one mass media article reads:

[the] Indus Water[s] Treaty is an example of cooperation and proved itself a conflict prevention mechanism successfully in the past, but is facing new emerging challenges such as climatic variations, population [growth], [water] scarcity, energy demands and other actors (China, Afghanistan, Kashmir), therefore there is a need to revisit the treaty according to new circumstances.¹²

Such a view represents much of today's discourse on the treaty, both in scholarship and the media. I heard variants of it many times in India and Pakistan. I also heard the contrary view that either Pakistan or India (depending on the speaker's orientation) had 'sacrificed' its rightful share of water in order to appease the other. Written works, including those presented as research-based analysis rather than advocacy, take similar lines.¹³ None of these viewpoints is entirely unreasonable. But the nature of cooperation in the treaty, the circumstances that brought it about, and its actual effectiveness in preventing conflict are all poorly understood.

A handful of scholarly works have critically analysed the dispute's history. Aloys Arthur Michel, an American geographer, wrote a lengthy and authoritative study of the impact of Partition on the Indus Basin rivers in 1967.¹⁴ While Michel was able to interview many of the actors in the Indus settlement, he wrote long before confidential sources became available, or the long-term trends in India's and Pakistan's political and environmental development became clear. Undala Alam's doctoral thesis offers a detailed account of the World Bank-sponsored negotiations of 1952–60, and concludes that Indian and Pakistani leaders compromised because it was

‘water rational’ for them to do so. Both countries gained greater water resources than they would have done without an agreement, due to the substantial funding for additional development that the World Bank arranged.¹⁵ Alam’s work usefully highlights the World Bank’s role, and the mediation strategy that its officers adopted in order to cajole the Indian and Pakistani delegations into compromise. She deliberately does not, however, engage extensively with the broader political circumstances that either produced the conflict or made the treaty possible.

Rivers Divided does not seek to displace Michel’s work as a comprehensive, blow-by-blow account of the negotiations. Nor do I wish to theorise the bank as a mediator. Instead, I draw out the water dispute’s broader importance to the process of state-making in South Asia after independence. Like Majed Akhter’s recent dissertation and published articles, it seeks answers in the relationship between politics and water control. Akhter emphasises the bureaucratic management of a complex technical system, which masks highly politicised questions of winners and losers in water control.¹⁶ This book, by contrast, looks beyond the river system itself to argue that politicians and bureaucrats in India and Pakistan placed water at the heart of the way that they imagined their countries to be territorial entities.

This is the first book on the subject based on extensive archival research in India and Pakistan, as well as in the United States and United Kingdom. It represents an original attempt to situate the Indus dispute as part of the concurrent processes of South Asian state-building, global decolonisation, and shifting Western intervention in the region after independence. It is also the first published book to interpret the dispute in the light of conceptual advances in recent political geography and international relations scholarship. Doing so enables me to identify and draw out the dispute’s importance

to emerging notions of sovereignty, territory and statehood in South Asia.

My aim is to reassess and expand the context of the history of the dispute, including but not limited to the negotiation of the 1960 Indus Waters Treaty. By doing so, I will show that the dispute was not simply an engineering question with a technical answer. At the core of the turbulent relationship between upstream and downstream people was a basic question: who owns a river? The very different answers that local, provincial and national governments in the two countries put forward determined the shape of basin politics. I argue that controlling water flows was important to the ideology and practice of state sovereignty in India and Pakistan. Access to, and the ability to manipulate, river water formed a key plank of state power in the region. After independence, water's political importance intensified as the new nationalist governments used river control to reshape the basin's landscape. The Indus Waters Treaty, I argue, failed to resolve the tensions between the countries that state-building produced.

Water in international relations

Existing understanding of India's and Pakistan's international engagement emphasises the importance of the Kashmir conflict, nuclearisation, the role of South Asian political systems, and the impact of global geopolitics.¹⁷ Intangibles such as culture and identity are also a factor in the relationship between the two states, which share much in the way of language and social practices.¹⁸ Given their size, economic importance and military power, India–Pakistan relations have even helped set the tone for regional politics more generally. Their rivalry helped shape both countries' relationships with Bangladesh, for example, after it emerged as an independent state in 1971.¹⁹ A wealth of further studies consider the

complexities of India's and Pakistan's historical engagement with extra-regional powers such as the United States and Soviet Union.²⁰

For all their strengths, these studies barely mention the natural environment as an arena for international relations. This is surprising, since the domestic corollary—scholarship on environmental politics within each country—is broad and sophisticated. Scholars have written about topics as varied as conflicts between governments and indigenous forest communities, agricultural policy and coal exploitation. Such work has demonstrated that colonial and postcolonial South Asian states have relied on the control of nature to assert power, while environmental politics have been a key arena for marginalised groups to resist the hegemonies of state and capitalism.²¹ Not only is the environment important; studying the way that humans have interacted with it, and come into conflict about it, reveals the power relations that structure South Asian society.

Similarly, environmental diplomacy can offer a lens on international politics. Studying water diplomacy, in particular, can show how 'domestic' politics within India and Pakistan have interacted with their bilateral relationship and their engagement with the broader international community. Rivers make fluvial connections between upstream and downstream. In the Indus Basin, they tie the mountains of Kashmir and northern India to the plains of Punjab and the river delta in Sindh, Pakistan. As the beginnings of the Indus waters dispute in 1948 demonstrated, a localised disagreement over the operation of a canal headworks can have major national and international ramifications. In fact, water management is one aspect of the relationship between international relations and the natural environment on which South Asia scholars have written extensively. India and Pakistan's sharing of the Indus Basin has drawn the greatest attention, but most scholars have

missed the opportunity to reflect on the interconnectedness of different scales of politics. I have already explained how my work differs from that of Akhter, who also recognises the context of postcolonial state-building.

The remaining literature on the Indus dispute falls into two main strands, both of which neglect the political context of its origins. First, the dispute frequently warrants a mention in general histories of India–Pakistan negotiations. It usually appears as an example of successful international mediation, which serves as a counterpoint to the failure of intervention in the Kashmir dispute by the United Nations, United States, Soviet Union and others.²² The story that such studies tell is consistent enough to form virtually a standard narrative of the dispute and the treaty. The narrative runs like this: Partition severed a canal system in Punjab that colonial engineers had designed to operate as a single unit. Following a dispute over the legal arrangements for continuing water supplies from East into West Punjab in 1948, Indian engineers shut off water supplies into important West Punjabi canals. The dispute quickly scaled up to encompass the whole river system. Political negotiations achieved little until David E. Lilienthal, an American water management expert, suggested that the World Bank lead trilateral negotiations to secure a technical resolution of the dispute. The Indian and Pakistani governments agreed. After years of hard bargaining, in which politics frequently interrupted the efforts of engineers to reach an agreement, the two governments signed a water treaty in 1960.²³

The standard narrative is not inaccurate, but it is incomplete. It neglects the continuing importance of ‘political’ considerations, which arguably counted for more than the ‘technical’ question of efficient water usage. The division of one domain of water development (colonial Punjab) into two (partitioned Punjab) is the heart of the Indus problem. Yet

these works do little to highlight the uncertainties about what constituted water rights, and how they related to the ‘national’ territories that Partition produced. As a result, the antagonism between India and Pakistan seems natural and inevitable. I will show that to understand the Indus dispute, we need a much more nuanced understanding of water politics.

The second strand of scholarship theorises conflict and cooperation as outcomes of transboundary water-sharing. The Indus Basin literature is part of a broader conversation, so a brief diversion to the general literature on water-sharing is necessary. During the 1990s a school of thought emerged which argued that increasing population pressure and relative water scarcity would push states into conflict to secure water access. Perhaps the most important work in popularising this view was John Bulloch and Adel Darwish’s *Water Wars* (1993), which predicted a spate of violent conflicts over water resources in the Middle East. The water wars school of thought still retains adherents.²⁴ Other scholars have contested the thesis. They assert that states are more likely to cooperate and produce more efficient water development regimes in the process. All participants benefit. Aaron T. Wolf is the leading light of this school, whose proposition might be summed up as ‘water peace’. Following in his wake, scholars have argued that cooperation is a more likely response to increasing demands on transboundary rivers, or at least have noted that the assumption that increasing scarcity leads to increased conflict lacks empirical evidence.²⁵

Recent scholarship has already moved towards more sophisticated readings of the meaning of conflict, cooperation and the many shades of grey in-between.²⁶ Kai Wegerich and Jeroen Warner, and Neda Zawahri, have noted that our definition of cooperation should mean more than the absence of conflict.²⁷ But scholarship on the Indus Waters Treaty remains divided on the issue of cooperation and conflict.

Authors such as Undala Alam, S.H. Ali, John Briscoe, Mary Miner and her co-authors, and R. Chakraborty and S. Nasir have argued that the Indus Treaty is a key example of productive bilateral cooperation in the subcontinent.²⁸ Neda Zawahri has praised the work of the Permanent Indus Commission, a binational body instituted by the Indus Waters Treaty to act as a conduit for communication between the two national governments, as a strong example of ‘active cooperation’.²⁹ Outside of university academia, some think-tank papers also highlight the treaty’s strengths. Stephen Cohen, for example, in a shortened version of a report produced in 2004 for the Asia Foundation, a US-based international non-governmental organisation, calls it ‘a model for future regional cooperation, especially on energy, environmental concerns, and even the management of the region’s impressive water resources’.³⁰

Other scholars, by contrast, point to the fact that the treaty partitions the rivers between India and Pakistan, and therefore represents a mechanism for avoiding either conflict or cooperation.³¹ In the words of James Wescoat, Jr., the Indus Waters Treaty’s ‘allocation of entire rivers rather than partial flows reflects an international situation which requires independent, rather than cooperative, river management’.³² In other words, while the six Indus system rivers still flow through both India and Pakistan, the water flows of three rivers apiece are assigned to each country. Pakistan literally takes its water from the western rivers, while India draws from the eastern streams. This arrangement enables each state’s engineering service to operate its irrigation and hydropower systems with the minimum possible cross-border coordination.

Some think-tank analysts are also critical of the treaty. A report by Robert Wirsing and Christopher Jasparro for a US Department of Defense-managed policy institute argues that ‘one reason for dissatisfaction with the Indus Waters Treaty is

that, as presently constructed, it offers very thin support to the integrated or joint development of the Indus river basin'.³³ One oft-cited 2005 report by the Mumbai-based think tank Strategic Foresight Group goes so far as to warn that a 'water war' might well be looming on the Indus.³⁴

Many more authors have called for broader and closer cooperation. Sundeep Waslekar argues that the existing treaty does not represent true cooperation. He calls for integrated watershed development, with World Bank agencies taking the lead.³⁵ Douglas Hill maintains that the relative calm of India–Pakistan relations on the Indus rivers between 1960 and the late 1990s was deceptive, and only existed because India was not then building hydro-projects upstream on the western rivers. India is now undoubtedly doing so—as Pakistan's recent international arbitration battles against India's Baglihar dam and Kishanganga diversion scheme demonstrated. Hill recommends a new river governance regime based on multilateral regional cooperation, widening the consultation process to a range of stakeholders, not only in India and Pakistan but also in China and Afghanistan.³⁶ Mary Miner and her co-authors suggest that India and Pakistan could reinterpret the treaty to enable India to divert further water resources (not presently allowed) and compensate Pakistan financially. At the very least, they argue, the two powers should create wider-ranging institutions for coordinating their unilateral development programmes.³⁷ Haris Gazdar, writing from a Pakistani point of view, notes that the prevailing technical discourses surrounding the treaty obscure unresolved political issues. He argues that Pakistan should robustly defend its interests as lower riparian.³⁸ Similarly, Ramaswamy Iyer has argued that the treaty's partitioning logic makes it difficult to build on, and that a fuller understanding of what cooperation really means is necessary for future progress.³⁹

Models of cooperation and conflict can perhaps explain the trajectory of the dispute in general terms, particularly by connecting the Indus example to global trends. But the literature does relatively little to help us understand the specifics of the dispute's history, or to consider how water disputes relate to broader politics in the region. The field of critical hydropolitics offers a possible corrective. Hailing from geography and international relations perspectives, the field's key element is usually an emphasis on political discourses (ways of thinking and talking about the world), which actively shape geopolitical realities rather than merely reflecting them.⁴⁰ Through attention to discourse, critical hydropolitics scholars can more closely interrogate the power relations that make water management a matter of sovereignty. Such work has shown that states engaged in water governance deal differently with, on the one hand, internal property rights and, on the other, sovereignty in relations with other nation-states.

One study of Israeli water policy found that discourses and ideology play a large role in subnational water politics, while realpolitik is more important at the international scale.⁴¹ This lends some support to, but significantly refines and complicates, realist assumptions that riparian states will seek to maximise their interests against those of their neighbours. Similarly, competing discourses of scarcity and sufficiency have characterised the disconnection between Israeli and Palestinian positions on shared water resources.⁴² The Indian government, meanwhile, has successfully used its possession of technical and institutional expertise to frame a discourse of flooding as a shared threat with Nepal, securing the latter's compliance in the construction of a dam on the Mahakali River, on Nepali soil. By contrast, policymakers and think tanks in New Delhi tend to view water relations with China through a security lens.⁴³

Critical hydropolitics literature often has a historical focus, even when explaining present circumstances. Kathryn Furlong explicitly recognises that, in Southern Africa, ‘the management of international watercourses is not simply about the water that flows through them today, but the particular histories of how the water within them and the local human and environmental relationships to them have been produced’.⁴⁴ A glance at the case of the Nile, shared mainly between Egypt, North and South Sudan, Ethiopia and Uganda, illustrates the point. Concepts of water-sharing and water shortage were formed and used politically as early as the colonial period. British officials, governing both Egypt and Sudan, prioritised Egypt’s water requirements over Sudan’s. After independence from Britain, Egypt was long the strongest state in the basin. Yet owing to the growth and increasing complexity of its irrigation system, Egypt became more vulnerable to fluctuations in river levels and unstable relations with upstream powers.⁴⁵ Understanding this development helps make sense of Nile riparians’ tendency towards bilateral and unilateral, rather than multilateral, action. Egypt’s leaders have little to gain and everything to lose from a situation in which the many upper riparians could collectively apply pressure to reduce Egypt’s historically generous share of those waters.⁴⁶ Cooperation exists on the Nile, but understanding the form it takes requires a critical reading of regional history. I aim to provide a nuanced reading of the historical politics of the Indus waters dispute, connecting the problems of water-sharing and state-building by paying closer attention to the landscapes through which rivers flow, and the political arrangements for governing those lands.

Territory and sovereignty

To understand international politics in the Indus Basin, I turn to the role of territorial sovereignty. Territory is at the heart of transboundary river disputes. For a start, two governments

competing to dam or divert water need somewhere to build the dam or dig the canal. These material objects exist as part of real terrain. Secondly, modern states tend to exist in discrete, bounded spaces. Where one state's territory ends, another's begins. In theory, at least, a government has sovereignty over the territory in its domain.

Territoriality, the process through which states assert control over particular geographical spaces, is therefore embedded within water disputes. Some writers on India–Pakistan relations have thought explicitly about territory. Christian Fair and Sumit Ganguly, for example, have both argued that Pakistan's military and political elites have never accepted the territorial consequences of the 1947 Partition. Its 'relentless efforts to alter the territorial status quo', Ganguly argues, make Pakistan a 'revisionist power'.⁴⁷ These works recognise that state territory is mutable, subject to expansion and contraction. Fair argues that a legacy of Partition, Pakistan's weak control over its frontiers, has contributed to strategic insecurity and the military's dominance over politics.⁴⁸ Yet Ganguly and Fair both assume that each state simply exists in a political space that should, theoretically, extend up to its geographical borders. They do not problematise territoriality itself.

Other scholarship has shown that the relationship between states, territory and sovereignty is more complex. Two landmark articles in the early 1990s, by John Agnew and John Gerard Ruggie, attacked the fundamental assumptions underlying conventional international relations analysis. Standard interpretations, they argued, treated nation-states as a natural phenomenon, rather than a historically constructed one.⁴⁹ A wealth of literature has since examined alternative understandings of the relationship between space and place, on one hand, and political, social and economic processes, on the other. Often focusing on contemporary events in connection with globalisation, such work has undermined the former

assumption that nation-states exist as discrete units, extending their authority over a given area.⁵⁰ Powerful countries, with highly integrated economies, tend to share sovereignty on the basis of equality. The free movement of goods and people in the European Union is one example.⁵¹ At the same time, they project their collective power into developing countries in order to erode the latter's sovereignty. Gaining privileged access to natural resources is frequently the goal, as in the case of oil in Chad and Sudan.⁵² Sometimes one particularly powerful state can even act alone. As Simon Dalby has argued of the United States' present-day hegemony in the global order, one state's assertion of a right to intervene in another's affairs implies an ideology that supersedes sovereignty.⁵³

State sovereignty, in other words, is not a given. States—more precisely, the institutions that run them—must acquire and enact authority. That they typically do so in discrete blocks of territory that we call 'nation-states' is a modern phenomenon. It has had specific implications in the 'third world' where, as Mohammed Ayoob has argued, the principal concern of postcolonial states has been 'to move toward the ideal of the effective and legitimate state that can become the true repository of sovereign power'.⁵⁴ In other words, the international system is not made up of sovereign powers that reign supreme within their domains and treat with one another as peers in an international system, the system frequently described as 'Westphalian' (after the seventeenth-century Peace of Westphalia, which formally legitimated the right of sovereigns to govern their domains free of outside interference).⁵⁵ Ayoob calls for a theory of the international system that 'makes the process of state-making and the building of political communities its centrepiece'.⁵⁶ States must actively attain and retain power.

Territoriality is essential to this process. As Stuart Elden has influentially written, 'today territory, politics and governance

interrelate in complicated ways, such that it is difficult to conceive of the latter two without some kind of territorial basis, extent or limit'. The concept of territory has a history: how did it embed itself so firmly in modern political imaginations? Elden finds the answer in seventeenth-century Germany, where intellectuals sought a way to come to terms with 'the fractured political geographies of the Holy Roman Empire'.⁵⁷ Others have pointed to the longer development of territoriality as the basis of state control over populations. By the mid-twelfth century, for example, the English had established a sense of community linked to the defined extent of a national territory, as well as unity under one monarch. The Scottish and Welsh similarly articulated trilateral bonds between people, land and (to a lesser extent) kings.⁵⁸ By the late nineteenth century, governing elites in western Europe, North America, Mexico, China and the Ottoman Empire, among others, considered the state to rest on a mapped territory and a quantifiable population that could be 'known' through sociological research.⁵⁹ My study contributes an original perspective to scholarship on territoriality by exploring the role of water management in how states have defined their relationship to territory.

It also adds a new perspective on histories of decolonisation.⁶⁰ Indian and Pakistani independence took place in the global context of the break-up of European empires, the emergence of successor states, and the continuing global role of Western power after the Second World War. Much has been written on the legacy of empire on South Asian constitutional and political systems.⁶¹ Quite apart from their fraught bilateral relationship, India and Pakistan hardly became free agents once the British government transferred power. Both became members of the (British) Commonwealth of Nations, through which British leaders tried—and failed—to exert continuing influence in the subcontinent. Despite the serious overreach of British ambitions, the Commonwealth

helped shape their relationships with each other and with the rest of the world.⁶² Between Partition in 1947 and the Indus Waters Treaty's 1960 signing, the United States assumed a leading role in Cold War geopolitics, with ambivalent policies towards the European empires.⁶³ I put the Indus waters dispute firmly, for the first time, into the global context of decolonisation and the emergence of the Cold War. Doing so will shed new light on the Indus Waters Treaty, the result of that engagement. It was a product of its time.

Conversely, I contribute a new perspective on decolonisation itself. Historians have had relatively little to say about the role that the natural environment played in the aftermath of empire. Energy politics and the scramble for oil in the Arabian Gulf are well known.⁶⁴ Many interstate water disputes and agreements have occurred in postcolonial regions. Notable examples include those between South Africa, Namibia, Botswana and Lesotho on the Orange-Senqu River basin, hydropolitics on the Nile, and tensions between Israel and Palestine (a legacy of the interwar British Mandate).⁶⁵ But, with the exception of Viviana d'Auria's work on the Volta river project in Ghana, scholars have not explored water's influence on postcolonial state-building.⁶⁶ The Indus dispute is perhaps an unusual case, since it stemmed from the division of a relatively unified irrigation system, previously in a single state. But it certainly acts as a prism through which to view the interactions between local, national and international politics in two postcolonial countries. I bring decolonisation history into conversation with scholarship on water, as well as the geography and international relations literature on territorial sovereignty. I thereby place environmental politics for the first time at the heart of a decolonisation story.

Chapters, scope and sources

This book's organisation is a mixture of the thematic and chronological. In [chapter 1](#), I take a closer look at the contested meanings of territoriality in decolonising South Asia. As the British colonial government prepared to withdraw, nationalists of various stripes put forward competing visions of what independence could bring. Many of these visions had a difficult relationship with the idea of a national territory. Most notably, the Indian National Congress sought a composite Indian national identity to hold together a vast and diverse region, while the Muslim League proposed a new entity called 'Pakistan', but with little clarity regarding the state's location, extent or constitutional relationship to India. When independence came, bringing with it the Partition of Punjab and Bengal, the spatial basis of the Indian and Pakistani nation-states was hardly stable. This territorial uncertainty provided the political context in which the water dispute became a matter of state sovereignty.

In [chapter 2](#), I explain the origins and progress of the Indus dispute itself in terms of the fragile Indian and Pakistani states' search for power and legitimacy. Both new governments framed their claims on Indus water not just as economic necessities, but as part of their respective nation-making projects. I contend that the Indus dispute helped Indian and Pakistani policy elites to formulate particular ideas about water resources and 'national' territory. India, upstream, asserted a sovereign right to use all water flowing within its borders. Pakistan, downstream, appealed to the idea that its own historical uses of Indus Basin water overrode India's right to autonomy. Controlling the flow of water out of, or into, a state's territory was a vital marker of its fitness to govern.

Building on the previous chapter's analysis, in [chapter 3](#) I show that competing Indian and Pakistani articulations of the link between water control and territorial sovereignty became even stronger in the context of the Kashmir dispute. Two Indus tributaries, the Chenab and Jhelum, rise in the disputed area.

The Indus itself rises in Tibet and runs through Kashmir on its way to Pakistan. Dominating Kashmir therefore means having early access to river water. I argue that Indian and Pakistani constructions of territorial sovereignty on the plains, heavily dependent on their positioning upstream or downstream, differed in the context of Kashmir. The Indus Waters Treaty, representing a very narrow settlement of the water dispute, did not address the geopolitical challenges that Kashmir posed. This is one reason why India–Pakistan water relationships remain controversial.

[Chapter 4](#) shifts focus to the relationship between water, territory and bilateral politics at the smallest scale, in divided Punjab. The international border cut through important canal headworks, making it difficult for either country's irrigation service to control them effectively. Further complicating matters, the River Sutlej seasonally exposed and covered shifting islands that both countries claimed. Tensions, and even minor armed conflicts, were common. Local correspondence reveals contradictory impulses. Officials both made pragmatic arrangements for 'no man's land' areas and demonstrated their determination to assert state sovereignty right up to the perceived limit of 'national' territory. The chapter attests to the interplay between geography, administrative policy and local agency in forging particular types of border space.

The final three chapters explain how territory, sovereignty and state-building in South Asia combined with the international politics of the Cold War era. In [chapter 5](#) I deconstruct the idea of international cooperation in the basin. How did the framework for accommodating competing Indian and Pakistani demands become discursively framed as 'cooperation', and how did the treaty acquire its positive reputation despite its severe limitations? Part of the treaty's mystique lies in the prominent role that engineers played in the India–Pakistan negotiations of 1952–60, held under the World

Bank's auspices. The chapter analyses an ambitious 1951 plan for unifying Indian and Pakistani management of the Indus system by David E. Lilienthal, a prominent American technocrat. I argue that cooperation, as a principle in bilateral and international politics, was as much a rhetorical device as a real relationship.

[Chapter 6](#) identifies the shift from supposedly 'technical' negotiations to talks that had an increasingly 'political' tenor. After 1954 the allocation of whole rivers to either India or Pakistan—equating a river's passage through national territory with sovereign ownership of the watercourse—became the key principle of the Indus settlement. During this period, Western diplomats became more closely involved. I contend that the confluence of Cold War geopolitics (Western financial support for a major works package in Pakistan) and a moment of historical opportunity in South Asia (where both countries had strong leaderships, willing to compromise) was critical to bringing about the treaty. I argue for the importance of understanding historical context, rather than relying on international relations models that predict the 'inevitability' of conflict or cooperation on international rivers.

Finally, in [chapter 7](#) I examine the Indus Waters Treaty's reputation for symbolising India–Pakistan cooperation. Even though the treaty failed signally to resolve broader tensions, the principle of river basin-scale negotiations reappeared in American proposals for resolving an India–Pakistan dispute over the River Ganges in divided Bengal during the later 1960s and 1970s. The spectacular failure of basin-scale negotiation in Bengal contrasted with its relative success in the Indus Basin, further demonstrating the historical peculiarity of the original Indus treaty.

This book explores the history of the Indus dispute. I will not, as people sometimes ask, conclude whether India or Pakistan was 'in the right'. My aim is not to apportion blame

but to understand why the Indus dispute proved intractable, and conversely why the 1960 treaty's partial solution came about. By focusing my analysis on the 1950s and 1960s, I also do not consider in depth the resurgence of formal disagreements over India's hydropower projects in Kashmir since 2005. Yet I hope this book will be useful to readers interested in recent problems, by setting out a slice of the past that has a direct bearing on the present.

Rivers Divided is not an environmental history of the Indus in the mould set by Richard White in his study of the River Columbia. White's work captured the complex interactions between water flows, ecology (particularly salmon), technology (from fish-traps to the Grand Coulee Dam), and competing groups of humans. He argued that the Columbia became, over the nineteenth and twentieth centuries, an 'organic machine': a product both of nature and of human intervention.⁶⁷ Another notable environmental historian of rivers is Peter Coates, who has demonstrated the varied cultural and political importance of the rivers Danube, Yukon, Los Angeles, Mersey, Po and Spree. Coates also offers a broad appreciation of how waterways and human societies have acted on each other, using sources ranging from travellers' accounts and newspaper articles to poetry and personal experiences of river landscapes.⁶⁸ For the Indus Basin, David Gilmartin's magisterial study of the role that the concept of 'community' has played here since the late nineteenth century brings to light the complexities and shifting impact of the relationship between water, people and politics in the region.⁶⁹

An aspect of the rivers' history that I barely engage with at all, but wish to acknowledge here, is their cultural importance. The rivers define regional nomenclature: the Indus lends its name to the province of Sindh. The Jhelum, Chenab, Ravi, Sutlej and Beas are collectively the source of the name Punjab: *panj* meaning five, and *ab* meaning water. In Sindh, the poet

Shah Abdul Latif Bhittai wrote eloquently during the eighteenth century about the river's place in the lives of Sindhi people: turbulent, treacherous in flood, and often full of crocodiles.⁷⁰ The nineteenth-century British explorer Alexander Burnes also commented on the Indus's importance in everyday life for the people of northern Sindh: 'The water of the Indus is considered superior, for every purpose of life,' he reported, 'to that drawn from the wells.'⁷¹ In Punjab, which until 1947 was one province, Punjabis understood the rivers Ravi, Sutlej and Beas as the foundation of life. The British colonial officer Malcolm Darling quoted a Punjabi proverb, '*darya da hamsaya, na bhukha na trihaya*'—'he who neighbours a river is neither hungry nor thirsty'. Darling also noted that the rivers' unpredictable seasonal flows posed dangers.⁷² Muslim, Hindu and Sikh traditions emphasise the close connection between the rivers' holy figures such as Guru Nanak (the founder of the Sikh religion) and Khwaja Khizr (a saint revered by Hindus and Muslims).⁷³ These perspectives are almost entirely missing from the type of techno-politics that I discuss.

By asking what impact sharing the Indus Basin had on India, Pakistan and the relationship between them, I turn away from a long-term or broadly cultural appreciation of the rivers' histories. By finding answers primarily in the rhetoric and practice of territorial sovereignty, I necessarily focus on the official realm: politicians, bureaucrats and diplomats.

I draw material from official collections in South Asia: the National Archives of India in New Delhi, Pakistan's National Documentation Centre in Islamabad and the Punjab Archives in Lahore. Unfortunately, much of the documentation that the Indian and Pakistani governments hold on the Indus waters dispute is still classified. This is partly because both states are reluctant to disclose information that has (in the context of ongoing disagreements between them about river usage)

potential security implications. Because of this limitation, I use many sources from diplomatic archives in the United States and United Kingdom. Both countries' foreign services kept a close eye on the Indus dispute. These collections are also essential for the international perspectives of [chapters 5, 6](#) and [7](#). I use private manuscripts in the British Library, London, especially for perspectives on the division of Punjab's canal system during Partition. Finally, I draw on historical newspapers in order to shed non-official light on Indian and Pakistani perspectives, while recognising the severe limitations of using press sources from this period. My source base is therefore more traditionally archival than those of White, Coates or other authors of holistic river histories. But, as I will show, a tight focus on the international politics of water can reveal a huge amount about South Asia's postcolonial history.

No existing study of the Indus waters issue has combined my archives. While other authors have used the World Bank archives, which replicate some of the documents available elsewhere, the majority of this book's source base is new to scholarship. While focusing on state archives necessarily leads to a somewhat statist tale, centred on elites, I am able to show how broad an impact the Indus dispute had on India's and Pakistan's political development between the 1940s and 1970s, and vice versa. Contests over the meaning of national sovereignty, and how it applies to transboundary natural resources, run like a thread throughout all aspects of the dispute.



THE PROBLEM OF TERRITORY

Modern statehood is a problem of geography. The classical nation-state has one government that exercises sovereignty within defined geographical borders. But in practice, as scholars have shown, state power is not evenly distributed across space. Some states have little practical authority over certain regions due to their inability to control sections of the population. The first independent government of Congo faced several regional separatist movements throughout the 1960s, for example.¹ Some states exercise significant practical or moral authority outside their own borders, such as Britain in the nineteenth century or the United States in the twentieth.² Even non-governmental entities, such as multinational corporations and transnational activist alliances, can to an extent transcend borders.³ Yet the idea of a sovereign, independent nation-state, rooted in a specific geographical area, remains an important aspect of the international order.

Finding geographical spaces for postcolonial states in South Asia was not straightforward. The British colonial authorities did not simply hand over power to one successor government in India in August 1947, as they would in Burma in 1948 or Ghana in 1957. Instead, they transferred power to two successors: India and Pakistan. The transfer of power entailed the Partition of British India into two new territorial states, alongside the integration of Princely States—areas where the British had not held formal sovereignty—into India and Pakistan. The year 1947 marked a huge turning point in the region's political geography.

My purpose in this chapter is twofold. First, to lay the groundwork for my main arguments by showing why territoriality would become a central problem for the postcolonial states. Indian and Pakistani nationalists and state officials attempted to enact a variety of conflicting ideas about how territory related to nations, states, and identity. These set the conditions in which the water dispute would play out. Second, my aim is to contextualise nationalism, Partition and the Kashmir crisis—three things that are important throughout the book.

I begin by outlining the place of territory in ‘composite’ Congress nationalism, Hindu particularism and Muslim separatism. I then give a state perspective on territory that emphasises practical governance and economic development. This was a rationale of statehood that both India and Pakistan had in common. I finally examine the division of territory, rivers and people in 1947, before highlighting the rather different trajectory of Kashmir. There a territorial division also occurred, in 1947–8. Through these examples, I show that several competing interpretations of the territorial basis of statehood circulated in South Asia by the time of the Indus waters dispute.

Territory in nationalist thought

Nationality and territory have been intimately connected in modern South Asian thinking. Political organisations founded in the late nineteenth and early twentieth centuries frequently invoked an all-India remit, operating across the territory that the colonial authorities governed. The Indian National Congress (founded 1885), the All-India Muslim League (founded 1906) and the All-India Hindu Mahasabha (founded 1915) were prominent examples. These organisations provided forums for transregional alliances to emerge. Primarily, they sought to articulate grievances and demands on the colonial

government, while lobbying for the authorities to treat them as legitimate representatives of all-India interests. The British encouraged such bids by increasing the political participation open to a select few Indians. Constitutional reforms in 1909 extended links between provincial councils, which had a non-official (Indian) component, and an expanded central legislative council. Special interests, including Muslims and landlords, could elect members to both provincial and central councils. The government devolved more significant powers to provincial legislative councils in 1919, and then even more to elected provincial assemblies in 1935. The structure of representative politics increasingly reflected the colonial government's hierarchy of centre, region and locality.

Throughout these reforms, the colonial government was careful to maintain strong control at the centre, while loosening its grip on the provinces. The logic was that elected provincial governments would manage their finances carefully while absorbing the energies of nationalist politicians, who would spend less of their time challenging colonial rule. But after the First World War, the political organiser and ideologue Mohandas K. 'Mahatma' Gandhi was prominent in increasing the tempo of anti-colonial agitation. Gandhi transformed the Congress from an elite urban organisation to a mass movement, with significant rural support. With influence across India, the Congress could make a reasonable claim to being a national organisation. In other words, it claimed to represent—and operated in—large sections of the territory of British India. Congress's structure also echoed that of the colonial government, with local and provincial branches under the loose command of a central authority, its Working Committee.

The administrative framework of British India also provided the largest scale at which Congress operated. It helped define the scope of the 'National' in the Congress Party's name. As the colonial state had expanded its reach into Indian

agricultural production in the later nineteenth century, it integrated the colony into the globalised imperial trade network. Late-nineteenth-century thinking took the boundaries of the territorial state to enclose an identifiable ‘national economy’. The colonial government created an internally unified market and an integrated administrative structure. It territorialised economic and political power by fixing them to the well-defined territory of British India. Early Congress criticisms of colonial rule reflected the economic conception of Indian nationhood by arguing that Britain drained wealth from a specifically Indian economy. The *swadeshi* (indigenous manufacture) movement of 1905–11 added nativism to this spatial idea, opening a path to cultural and political nationalism.⁴

By the time that South Asian independence drew near, Congress nationalists had long articulated the idea of India as a single, unified land. Nehru, imprisoned during the Second World War for his part in the anti-colonial Quit India movement, wrote a treatise on Indian history that endeavoured to prove that the roots of the modern Indian nation reached far back into antiquity. Taking India’s territory for granted, he asked, ‘What is this India, apart from her physical and geographical aspects?’⁵ Throughout the book, however, Nehru articulated the sense that history, culture and belonging were all interdependent. ‘The story of the Ganga, from her source to the sea, from old times to new, is the story of India’s civilization and culture,’ he wrote.⁶ Geography was central to Nehru’s national imagination, as it has been to national imaginations in other countries such as France, Britain and the United States.⁷

The wider importance of geography to Congress nationalism was manifest in metaphors. Twentieth-century political discourse deified the figure of Bharat Mata (Mother India), a personification of the nation. Gandhi, for example,

inaugurated a Bharat Mata temple in Varanasi in 1936. Inside the temple there were no statues, but a map of India raised on marble. The temple was ostensibly non-denominational, but in practice had heavy overtones of high-caste Hinduism.⁸ Other anthropomorphised maps of India during the late colonial period also invoked Hindu motifs.⁹ Hinduism centres on India's sacred geography, with implications for modern nationalism, whether ethno-religious or ostensibly secular.¹⁰ Interpretations of India's landscape as sacred, and specifically Hindu, circulated widely among Congress politicians in the United Provinces (UP). As William Gould has argued, UP Congressites deployed religious motifs as part of their political language, without self-consciously articulating 'communalist' positions. Their symbolic resources included the sense of UP as Aryavarta, the region of classical Aryan ('Hindu') life, and invocations of the Ganga and Yamuna rivers as deities.¹¹ The Hindus who formed the majority of the ostensibly secular Congress therefore deployed a range of religious tropes, deliberately or otherwise, which included imaginings of India's landscape in Hindu terms.

Hindu nationalist politicians, outside Congress, were more forthright. Vinayak Damodar Savarkar, a prominent ideologue, put forward an explicitly territorialised vision of Hindu-ness. Savarkar started his political career as a militant anti-colonial activist in London. The colonial authorities imprisoned him during the 1910s and 1920s on the Andaman Islands, then a penal colony. There he came to articulate the rejuvenation and politicisation of Hinduism as the key to India's freedom. He wrote an extended pamphlet, *Hindutva*, arguing that a culturally based 'Hindu nation' had always existed throughout India's history.

The importance of territory in *Hindutva* is apparent from the title page. A verse by Savarkar, in Sanskrit and English, read: 'A HINDU means a person who regards this land of

BHARATVARSHA, from the Indus to the Seas as his Father-Land as well as his Holy-Land that is the cradle land of his religion.’¹² This epigraph encapsulated the correlation between land, religion and belonging that Savarkar expressed throughout the book. He also asserted a racial affinity among Hindus because they all ‘own[ed] a common blood’.¹³ He used the idea of belonging to a specific sacred geography, and not actual religious beliefs or practices, to define a communal identity. For Savarkar, non-Hindus in India, such as Muslims, were denationalised because they owed religious allegiances outside the Hindu holy land. Savarkar went on to be president of the Hindu Mahasabha between 1937 and 1943, and his thinking influenced subsequent forms of Hindu nationalism.¹⁴ His ideas represented an important strand of territorial nationalism in South Asia.

Muslim visions of territory were more diverse. While some Muslims joined Congress and worked for a composite, all-India nationalism, the Muslim League challenged Congress and Hindu nationalist visions of India as one nation, with one territory. Apart from any cultural or spiritual distinctiveness, Muslim political consciousness coalesced around the separate representation that the colonial government granted to Muslim communities in councils and assemblies. During the 1930s, prominent Muslim League members articulated links between Muslims, Islam and nationhood in India. The Lahori poet Muhammad Iqbal, as president of the Muslim League in 1930, argued that Muslims in India should not be seen as part of an Indian nation, alongside Hindus and others. Indeed, he repudiated nationalism as inappropriate for Muslims since it subordinated spiritual, universal impulses to the material ones of land, race or language.¹⁵ Iqbal emphasised the commonality of the *ummah* (community of believers) in a world of internationalism.

By contrast, Mohammed Ali Jinnah, the League's president from 1937 to 1947 and its driving force during that time, rejected religion in the spiritual sense as the basis of Muslim community in India. Instead, he came to insist that India was not a nation but a geographical space where two nations lived. Hindus formed one nation. Muslims formed a separate nation, rather than being a mere minority with one-third of the total population. The idea enabled Jinnah to claim that each nation deserved equal political representation in any India-wide political settlement, rather than representation commensurate with their share of the total population.¹⁶ Since Muslims lived in all parts of the subcontinent, David Gilmartin has termed the two-nation theory a 'nonterritorial vision of nationality'.¹⁷

After the outbreak of the Second World War, the question of territory became increasingly important in the Muslim League's politics. In 1940, the League, under Jinnah's direction, passed a resolution calling for the creation of separate Muslim states. While the word did not appear in the resolution itself, this later became known as the 'Pakistan demand'. Yet in practical political terms it was not clear what the Pakistan demand actually meant. Was it an idea to rally Muslims behind a call for autonomous regions within an Indian federal framework, or a demand for one or more separate, sovereign nation-states? The resolution, after all, referred to states in the plural.

A single sovereign state is what transpired in 1947, with Partition and the British withdrawal. One of the apparent contradictions of Pakistan was the contrast between the location of its strongest supporters and the national geography that emerged. Muslims from UP and north India, where Hindus dominated numerically, had most consistently supported the League and the Pakistan demand. But the nation-state was wrought from north-western and north-eastern regions where Muslims formed the demographic

majority. The nature of Muslim nationalism, and the extent to which Muslim Leaguers intended the creation of a wholly new state, is therefore fiercely debated. Ayesha Jalal argued influentially in the 1980s that Jinnah kept the Pakistan demand deliberately vague, so that different Muslims could read what they liked into it. According to Jalal, Jinnah probably wanted a multi-tiered federal framework with substantial autonomy for Muslim regions, and parity in a weak central government for Muslims and non-Muslims. That way, the Pakistan areas would ensure the safety of Muslims where they were a minority. Circumstances in 1946–7, however, forced Jinnah to accept a complete Partition instead.¹⁸ In essence, Jinnah did not intend Pakistan to exist as the territorially defined space that emerged.

Two important recent works have reopened the debate over Muslim nationalism. Both have emphasised the peculiar place of territory in the Pakistan idea. First, Faisal Devji argues that Pakistan, as an idea and state, was based on the rejection of nationalisms that invoked blood and soil. Jinnah needed to claim the Muslim-majority regions on behalf of all Muslims, not just the ones who lived there. The diversity of Muslims in India, who practised their religion differently and spoke many different languages, had only a limited shared history. They frequently lived scattered among non-Muslims. The basis of traditional nationalism, rooted in territory and culture, was therefore unavailable. For Jinnah, Devji suggests, Muslim nationhood was a purely political category.¹⁹ It had nothing to do with cultural, ethnic or territorial belonging. Liaquat Ali Khan, Jinnah's lieutenant, said in 1945 that 'the principle of territorial nationalism is opposed to the Muslim view of nationalism which is based on a philosophy of society and outlook on life rather than allegiance to a piece of territory'.²⁰ Despite such statements, Jinnah's Pakistan was not an Islamic vision, either. By articulating the Muslim nation as a legal and political category, not a religious one, Jinnah dismissed the

need to thrash out the status of Islam in a future state. That meant that League leaders could invoke Muslim nationhood rather than Islam as a specific spiritual and legal system. Both religion and the actual geographical space that Pakistan came to occupy were therefore irrelevant.

Second, Venkat Dhulipala has taken an opposite line. In his analysis, Muslim League activists did circulate ideas of Pakistan as a specific territory. Focusing on the League's high command and its relationship with *'ulama* (religious scholars) in UP, he argues that public debate over the Pakistan demand during the 1940s prompted League supporters to promote the idea of Pakistan as two sovereign independent states in the north-west and north-east of India. Many UP Muslims, writing in the Urdu public sphere, saw the Pakistani nation as residing in the subcontinent's Muslims rather than in any particular territory. From that premise, advocates of a territorial Pakistan, such as the obscure author Anis al Din Ahmad Rizvi, argued that Muslims must set up a state or states in the subcontinent in which to ground the nation. The nation would make the territory, rather than vice versa. Pakistan might not, however, be confined within its own borders. Prominent Muslim Leaguers, such as the raja of Mahmudabad and Chaudhry Khaliquzzaman, also thought of Pakistan in the context of Muslims' supranational brotherhood, sometimes as a stepping stone to a pan-Islamic political community.²¹

To a point, this echoes Devji's arguments, but Dhulipala differs from Devji in emphasising the specifically religious character of much Muslim League propaganda for Pakistan. Shabbir Ahmad Usmani, for example, was a senior Deobandi *'alim* and founder of the Jamiatul Ulema-e-Islam, which supported the Muslim League and the Pakistan demand. Usmani and associated *'ulama* played an important role in mobilising Muslim voters in UP to support the Muslim League. With their help, the League swept the Muslim vote at

the 1946 elections. Usmani portrayed Pakistan as a ‘New Medina’, named after the city to which the Prophet Muhammad and his followers migrated, which would be the first step towards forging a new Muslim society for the modern age.²²

Dhulipala also demonstrates that Jinnah and senior Muslim Leaguers did envisage a Pakistan embodied in a geo-body. In that he differs from Devji, who argues that Jinnah, Iqbal and others refused to countenance a firm relationship between nationhood and geography. Dhulipala cites the Punjabi journalist Mohammad Sharif Toosy, who produced a book in 1942, under Jinnah’s direction. In it, Toosy recognised that differences existed among Leaguers, some of whom advocated claiming Punjab and Bengal in full, and others who saw the separation of the Hindu majority areas as preferable. But either option revealed a territorial imagining of Pakistan. Toosy therefore ‘placed geography, maps and their alteration to create new sovereignties at the very centre of the public debates on Pakistan’.²³ He even claimed that the Indus Basin gifted Pakistan (at least the western wing) with a distinctive, ‘natural’ regional geography.²⁴ Dhulipala points to both Muslim Leaguers and others (such as the Dalit leader Dr B.R. Ambedkar) discussing the economic, defence and governance implications that would follow from Pakistan’s grounding in a distinct geography.²⁵ Jinnah himself, in public statements throughout the 1940s, expressed visions of Pakistan’s geography. During the 1945–6 elections, for instance, he noted: ‘[A] nation does not live in the air. It lives on land, it must govern land and it must have a territorial state.’²⁶ At stake was not just the idea of Pakistan, but its possible status as a territorial state.

It seems reasonable to conclude from such debates that in practice multiple ways of imagining Pakistan circulated in north India during the 1940s. With a host of actors involved,

we need not assume that these visions would be unified or even internally coherent. One more aspect of Pakistani territoriality, however, needs explaining. That is the perspective from the Muslim-majority areas of Punjab, Bengal, Sindh, Balochistan and the North-West Frontier Province.

For Bengal and Punjab, Pakistan eventually meant Partition. Both provinces were territorially divided between the successor states. Bengal had a complicated relationship to the Muslim League and Pakistan. Bengali Muslims such as Khawaja Nazimuddin and Chaudhry Khaliquzzaman played an important role in the League. The violent enthusiasm of Bengali Muslims in August 1946, when Jinnah declared a Direct Action Day in support of the Pakistan demand, led to severe communal riots. On the other hand, Bengali Muslims shared a strong regional identity with their Hindu compatriots. H.S. Suhrawardy, soon to be head of a League government in Bengal, told a delegation of British cabinet ministers in 1946 that the province was indivisible and must go into Pakistan whole.²⁷ Clearly, the territorial basis of Pakistan was viewed differently from Bengal than it was from UP.

For Punjabi Muslims, as well as Hindus and Sikhs, the correlation between identity, nationality and statehood was far from clear. As Ayesha Jalal has argued, the ambiguous relationship between 'nation' and region that characterised the Pakistan demand more generally also played out in 'the contested sovereignties struggling for state power' in Punjab.²⁸ Landlords of all religions formed a class alliance in the Unionist Party, for example, which dominated the province until 1946. The Unionists competed for power with Congress, the League and the Akali Dal, the major Sikh organisation. In nearby Sindh, which was overwhelmingly Muslim, provincial senses of cultural, linguistic and political distinctiveness emerged and sharpened during the early twentieth century. By

the mid-1940s most Sindhi Muslim politicians threw their weight behind the Muslim League and the Pakistan demand. Most assumed that there would be substantial scope for provincial autonomy, though the prominent leader G.M. Syed warned that ‘Pakistan’ would mean only Punjabi domination.²⁹ Meanwhile, in the North-West Frontier Province provincial politics were rooted in a regional culture in which tribal, patriarchal and Muslim identities coalesced, as demonstrated by the Congress-allied Khudai Khidmatgar party, which opposed Partition.³⁰ Muslims in all the majority provinces could draw on compelling regional identities, grounded in specific landscapes, histories and cultures, to formulate (or reject) their sense of Pakistan.

What becomes most clear is that Muslim nationalists, unlike Congress and Hindu nationalists, could not draw on a clear sense of a national relationship between people, history and territory. The differences between Muslims from the minority and majority provinces, and among the majority provinces themselves, meant that Pakistan had no fixed geographical underpinnings. As I will suggest in later chapters, this translated into somewhat shifting, unstable ideas about where the boundaries of independent Pakistan could and should lie.

Divided lands, divided rivers

After the Second World War, the new Labour government in London withdrew British rule from India. The war had ruined Britain’s previously favourable balance of trade with India, and forced London to borrow money from the Indian government. It had also pushed the colonial authorities into making promises about post-war decolonisation in order to gain Indian support for the war effort. In 1946–7, the British held negotiations with Congress and the Muslim League, the two ‘representative’ organisations in South Asia.

The negotiations resulted in Partition. New international borders cut through territory, leaving chaos and uncertainty in their wake.³¹ Drawing them was a fraught process. Sir Cyril Radcliffe, a British lawyer, headed the Boundary Commission that divided the provinces of Punjab and Bengal. The commission partitioned the provinces according to religious demography, with the aim of constituting West (Pakistani) Punjab with a Muslim majority, and East (Indian) Punjab with a primarily non-Muslim population.

Radcliffe completed the task in just three weeks. He considered factors such as communications and infrastructure, but interpreted the Boundary Commission's terms of reference as prioritising religious community. Oscar Spate, a British academic geographer who worked as a technical adviser for the Ahmadi community of Qadian in Gurdaspur district during the run-up to Partition, wryly remarked in 1947 that the Ahmadis 'alone [of all the parties interested in Partition] showed any appreciation of the fact that a geographer might have something of value to say'.³² When India and Pakistan attained independence at midnight on 15 August 1947, Pakistan had two wings. One, in the north-western part of the subcontinent, was composed of the provinces of Sindh, Balochistan, the North-West Frontier Province (now known as Khyber Pakhtunkhwa) and (the western part of) Punjab. On the other side of the subcontinent, the eastern part of Bengal also joined Pakistan. The other halves of Punjab and Bengal both remained in India.

With Pakistan now given a firm territorial grounding, the people and governments in Pakistan and India had to come to terms with South Asia's new political geography on a much wider scale. For Nehru and other senior Congress leaders, the division had been a necessary evil. By freeing themselves of the Muslim-majority areas in the north-west and north-east, they could assert stronger control over the remaining regions

and establish a relatively cohesive national state. Hindu nationalists felt differently about the division of Bharat Mata. A cartoon published in 1947 in a newspaper run by a Hindu nationalist organisation, the Rashtriya Swayamsevak Sangh, depicted India as a prostrate woman. One of her limbs, representing the 'lost' regions, was severed. Nehru sat next to her, wielding the bloody knife.³³

On the other side of the border, Pakistanis sought to make sense of the relationship between land and nation. How to reconcile the long-unclear meaning of Pakistan with its sudden geographical existence? R.E.M. Wheeler, archaeological adviser to the Pakistan government, sought insights into the 'historical process' that had produced modern Pakistan by 'turn[ing] first to geography and geology', and only then to culture in the form of architecture and ideology.³⁴ The mere idea of Pakistan was no longer enough.

Further uncertainties of Partition led to an incoherent sense of the relationship between land, people and states. In particular, the large refugee movements that accompanied the mass violence of the summer of 1947 in the north-west were not necessarily permanent. Hindus and Sikhs who fled areas that became Pakistan, and Muslims who fled areas that remained Indian, frequently left relatives and property on the wrong side of the border. Many intended to return once the tension cooled. But during the late 1940s and early 1950s, the Indian and Pakistani governments implemented progressively more restrictive controls on movement, so that citizens needed passports and visas to cross the international border by 1952. Vazira Zamindar has interpreted this process as the bordering of Indian and Pakistani territory. The national governments, she argues, insisted that location become the chief criterion of citizenship, regardless of one's religion or ancestral homeland. Joya Chatterji has demurred, highlighting the importance of Muslims in India and non-Muslims in Pakistan becoming

‘minority citizens’. Both states formally offered special protections to minority citizens, while also treating them with suspicion as potential fifth columnists, destabilising the presumed link between citizen and nation in liberal democracy.³⁵ In either case, the relationship between people, territory and states was fragmented.

Kashmir

Whether one viewed Partition as the amputation of limbs from India’s geo-body, or Pakistan’s birth in territorial nation-state form, another problem of territory confronted South Asian leaders at independence. Princely States, which remained in control of approximately one-third of the subcontinent, did not automatically accede to India or Pakistan. The Indian Independence Act, which the British parliament passed in July 1947, set out the new status of Princely States. Historically, the British government had made treaties with each individual State, putting itself into a position of paramount ‘suzerainty’. On independence, these treaties would lapse. It would be up to the princes to make new agreements with India or Pakistan, or choose to remain autonomous. British suzerainty over the States would not therefore translate into Indian or Pakistani sovereignty over them.

Most of India’s Princely States, which numbered more than 500, were tiny. Sardar Vallabhbhai Patel, the prominent Congress politician, took charge of the government of India’s new States Department in June 1947, shortly before the transfer of power. He set about bringing the princes into line. Ensuring the accession of Princely States was important for pragmatic reasons. They made up a third of the subcontinent, and a serious bid for independence on the part of the major princes would have significantly reduced the area that New Delhi inherited. It would also have seriously undermined the new country’s territorial contiguity.

With the aid of the civil servant V.P. Menon and Viceroy Mountbatten, Patel was able to cajole most of the princes into joining the Union. Most rulers agreed to accede quietly, without fuss.³⁶ Through these accessions, India gained roughly 835,000 square kilometres of territory and 89 million people. Only a handful of states acceded to Pakistan, though they tended to be large. Khairpur and Bahawalpur came to form significant proportions of Sindh and West Punjab, respectively. Other States constituted virtually the whole of Balochistan and the North-West Frontier (now known as FATA, the Federally Administered Tribal Areas), and part of the North-West Frontier Province.³⁷

A few proved recalcitrant. One was Hyderabad, located in the heart of South India and one of the largest Princely States. The nawab of Hyderabad, a Muslim who governed a largely Hindu population, tried to retain sole power within the State. His government responded to popular dissent with repression until, in September 1948, Indian troops occupied Hyderabad. The nawab quickly accepted integration into India. Jammu & Kashmir was another exception to the norm of quiet accession. A 135,000-square-kilometre territory on the Raj's north-western fringe (roughly the size of Greece), Kashmir's future was less clear-cut. Kashmir was contiguous to both India and Pakistan, with a Hindu ruler but a largely Muslim population. Since Kashmir also shared borders with China and Tibet and lay close to the Soviet Union, it was strategically important. From Pakistan's point of view, the Valley of Kashmir was near to the road and rail links between Lahore and the army headquarters at Rawalpindi, as well as Sialkot and Jhelum.³⁸

The history of sovereignty in Kashmir is complex. Since the State plays an important role in the Indus dispute story, it is worth explaining in more detail how the dispute arose and what implications it had for South Asian territoriality. For this, we need to go back to the late sixteenth century.

With the Mughal emperors' conquest of the Valley of Kashmir in 1586, it became an arena for the competing claims and ambitions of different rulers. Afghan conquerors followed in the mid-1700s, the Sikhs under Ranjit Singh in the early 1800s, and then the British in 1846. Britain finally sold Kashmir to Gulab Singh, the ruler of nearby Jammu. According to the terms of the subsequent Treaty of Amritsar, Gulab Singh entered into a tributary relationship with the British government and pledged not to change the limits of his territories without its consent. However, the treaty was vague on the limits of Kashmir's western borders. During the 1860s, Gulab Singh's successor, Maharaja Ranbir Singh, annexed Gilgit and made tributary States of Hunza and Nagar. From 1885 onwards, the British exerted greater control over Kashmir's affairs through a resident at Srinagar, but did not annex the State. Poonch, a district to the west of Srinagar, was ruled by a minor branch of Jammu & Kashmir's ruling Dogra family. Maharaja Hari Singh added it directly to his domains in 1935–6.

A web of tributary relationships therefore extended across the region, with local rulers maintaining degrees of formal as well as practical autonomy. Exactly who governed what in Kashmir and its surrounding areas was never straightforward.³⁹ Nor was it of great concern to people on the plains. Apart from the small Valley of Kashmir, the State was largely mountainous, with little agriculture and no major commerce or industry. Though the State bordered Tibet, it lacked the ease of passage that made nearby Afghanistan and the North-West Frontier the gateways between the subcontinent and Central Asia.

During the 1940s, as the British withdrawal from South Asia loomed, it was not clear whether Kashmir was likely to join India or Pakistan or try to remain independent. The internal political situation was complex, with the maharaja

attempting to preserve autocratic rule in the face of growing popular movements. The two main political parties, the National Conference and the Muslim Conference, had a common enemy in the Dogra rulers but were otherwise bitterly divided. Among the points of contention was Kashmir's future alignment. Sheikh Abdullah, the leader of the National Conference, had a good relationship with Nehru, but did not advocate actually joining India. His Naya Kashmir (New Kashmir) Manifesto of 1944 aimed at social reform and citizenship for Kashmiri peasants, who were mostly poor and had minimal political rights. It also seemed to assume Kashmiri autonomy from the plains, whatever happened when the British devolved power.⁴⁰ Later, however, Sheikh Abdullah's developing understanding with Nehru poised him to ally with the Congress government of an independent India.

The National Conference's rivals, the Muslim Conference, drew support from Dogri-speaking Muslims on the plains of Jammu. Its leaders argued that the National Conference was not really national at all, but promoted the interests of Muslims in the Valley at the expense of those in Jammu. In contrast with Abdullah's friendship with Nehru and Congress, the Muslim Conference claimed alignment with the Muslim League.⁴¹ But alignment did not necessarily mean unity. In September 1946, it proposed an independent Jammu & Kashmir, with a democratised government but still under the maharaja's sovereignty.⁴² By contrast, Prem Nath Bazaz, the Hindu leader of the secular, left-wing Kashmir Kisan Mazdoor Conference, argued that Kashmir ought to accede to Pakistan on geographical and demographic grounds.⁴³

The all-India parties did not give a strong lead either. Nehru seems to have assumed that Jammu & Kashmir's future was bound up with India's independence, and that it would eventually join India in some way. 'Kashmir has to become independent,' he said in a 1945 speech in Srinagar. 'But when?

The answer is when Hindustan attains independence. [...] Inevitably this *mulk* [country] will have to stay connected to Hindustan [India],’ he told the National Conference.⁴⁴ While Nehru spoke of a ‘connection’, he did not specify the outright absorption of Kashmir into India. Jinnah, cautious not to alienate rulers of Princely States, laid no explicit claim to Kashmir.⁴⁵

Meanwhile, Maharaja Hari Singh attempted to steer a path between Congress and the Muslim League, hoping to remain independent. Fearing that other rulers of Princely States might attempt to follow suit, the Congress leadership urged the maharaja to make a choice between India and Pakistan. But Kashmir remained independent for seventy-three days after the British ceded power. The maharaja signed a standstill agreement with Pakistan to ensure that Kashmir’s existing systems of trade, travel and communications, which largely ran through the now-Pakistani portions of Punjab, would remain open. The standstill agreement, and the existence of these routes, formed parts of later Pakistani claims on Kashmir.

The maharaja’s efforts foundered when a rebellion broke out in August 1947 among Muslims in Poonch, a region in western Kashmir that is now split between India and Pakistan. The rebels received help from the Pashtun tribesmen of Pakistan’s North-West Frontier. On 22 October, large numbers of tribesmen began entering Kashmir to fight against the maharaja’s forces, assisted (and, India alleged, commanded) by Pakistani military and civil officers. On 24 October, the rebels in Poonch set up an alternative government for Jammu & Kashmir called the Provisional Azad (Free) Government. It established itself in the western and northern parts of Kashmir where local Muslim insurgents or the Pashtun tribes had routed the maharaja’s forces. On 26 October, the maharaja signed an Instrument of Accession to India in order to receive

Indian military aid. Accordingly, India began airlifting troops to Srinagar the next day. At that point Sheikh Abdullah, the National Conference leader who had remained noncommittal on whether Kashmir should accede to India or Pakistan or remain independent, welcomed the Indian army's arrival.⁴⁶

Of course, the whole State was far from under the maharaja's control at the time. In May 1948, Pakistan admitted that its regular forces were conducting operations in Kashmir. The Indian and Pakistani armies fought each other to a standstill by January 1949, when the United Nations (UN) imposed a ceasefire.⁴⁷ The UN Security Council had first become formally interested in the Kashmir dispute in January 1948, when Indian delegates lodged a complaint against Pakistan in connection with the tribal invasion. The ceasefire line, known since 1972 as the Line of Control, now forms the de facto border between Indian-held and Pakistan-held territory. For both Pakistan and India, the Kashmir dispute highlighted just how complex and ambiguous territoriality had become in South Asia. As I will discuss in [chapter 3](#), the flow of the Indus system rivers through Jammu & Kashmir became a focal point for that ambiguity.

Conclusion

By the time that the Indus waters dispute arose, 'national' territories in South Asia posed a distinct problem to the Indian and Pakistani governments alike. The competing nationalist claims to political rights of the 1920s–1930s had coalesced into claims on territory by 1947. While some ambiguity about citizenship and belonging survived into the 1950s, the two states set about establishing themselves within their sovereign geographies. Yet the Kashmir conflict interrupted the possibility of a settled territoriality. It kept the definition of national spaces in flux. As I show in the next chapter, the border-crossing flow of the Indus and its tributaries would

soon unleash another bitter struggle to define what should, and should not, lie within each state's borders.



TERRITORIAL HYDRO-LOGICS

Water flows downhill. In the Indus Basin, the hills lie to the north-east: the six major rivers rise variously in the mountains of Tibet, Kashmir and northern India. Pakistan lies downstream. In the Indus waters dispute, which erupted between India and Pakistan in 1948 and found an apparent conclusion in the 1960 Indus Waters Treaty, geography mattered. Indian engineers had first access to most of the streams, by virtue of India's upstream position. In political terms, too, the two countries' rival logics of water rights accorded with their geographical positions. India adopted an ideology of what water analysts describe as absolute sovereignty: the assertion that an upstream power wholly owns the water that flows within its borders and can do as it wishes with water. Pakistan, downstream and vulnerable, proposed a principle known as territorial integrity: that a downstream state has the right to continue receiving water to which it is accustomed (most commonly articulated in terms of established uses of water—for irrigation purposes, hydropower, industry, or human drinking and washing—or, more recently, to maintain riverine ecosystems).¹

These opposed principles are, broadly speaking, well-recognised approaches to the law of transboundary watercourses, and imply different degrees of importance for state sovereignty as the key factor in international relations.² They are not confined to South Asia. Turkey, an upstream power on the Tigris and Euphrates, claims a right to deny water to downstream Syria and Iraq on the basis of territorial

sovereignty. Egypt, the most powerful state within the Nile Basin, has successfully protected the integrity of its water supplies and prevented major upstream development.³ Rivers challenge state sovereignty by flowing across borders. States consequently challenge each other's claims to sovereignty, by interfering with rivers or by contesting the right to do so. The role of sovereignty in constituting water rights dominated much of the debate between India and Pakistan over water rights, which emerged during the late 1940s and continued until the closing stages of negotiations for a water treaty in the late 1950s.

A casual reading might therefore suggest that geography determines water disputes. But in the Indus Basin, history mattered too. It played as great a part in precipitating the water dispute and shaping its political contours. In a dry region, water was the key to state power. The legacy of colonial development initiatives, which entrenched the state through irrigation extension, meant that India and Pakistan's competition for water was rooted in their domestic state-building projects. Moreover, the debate over sovereignty in water rights connected directly to the way that governing elites articulated their nation-states as territorial entities after the uncertainties of Partition. The water dispute, I will argue, was not primarily about water itself. The Indian and Pakistani states were chiefly concerned with their ability to control the territories that they governed, while developing those territories economically. In this sense the Indus Basin rivers were as rich in symbolism as they were in silt. A state's ability to control the flow of water out of, or into, its territory was a vital marker of its fitness to govern.

I begin this chapter by taking a long view on how and why the Indus waters dispute arose. To do so, I sketch the material and ideological origins of the Indus Basin's water-control system, and then how the 1947 Partition created the political

conditions for the dispute. After this, I explain how Indian and Pakistani policymakers conceived of and articulated their countries' claims on river water. Their opposing interpretations of what it means to own a river, or the water running through it, had implications beyond water management itself. At stake was what it meant to be an independent, sovereign state in the emerging international system. Water flows were key to territorial sovereignty.

The development imperative

India and Pakistan's territorial relationship to water resources had historical roots. It was the legacy of the way that the colonial state had spatialised its power during the late nineteenth and early twentieth centuries: economic and infrastructural development. State perspectives on space and geography contrasted with the contested and sometimes fragmentary imaginings of territory that characterised nationalist political discourse, which I outlined in [chapter 1](#). From the colonial state's point of view, territoriality was a matter of statehood and the entrenchment of power, rather than one of belonging. By constructing railways, canals and telegraph systems, and creating legal geographies to manage how Indians interacted with the new infrastructure, officials captured greater authority over the subcontinent's land and people.⁴ By 1940, Britain had passed the Colonial Development and Welfare Act. The Act instituted development as a goal of colonial governments, partly to counter growing nationalist criticisms and pressures.⁵

In many contexts, water control has been closely linked to hegemonic power. In the arid American West, for example, large-scale river diversion projects underpin what Donald Worster has called a 'techno-economic order imposed for the purpose of mastering a difficult environment'.⁶ In Spain, political discussions during the early twentieth century

concentrated on constructing a collective and state-led national irrigation system.⁷ In Israel, plans to irrigate the Negev Desert to encourage Jewish settlement of the area dated from at least 1947, changing the ethnic demographics of the new state and asserting Jewish dominance over Arab areas.⁸

Water-control projects help to define the meaning of statehood—how political leaders and bureaucrats gain and entrench their power to govern particular political communities. It is little surprise, then, that massive irrigation canal systems were the flagship colonial technological endeavour in north-western India. They encapsulated the state's development ideology. Since they also formed the object over which the Indus waters dispute would erupt in 1948, I will set out the background to canal development here.

In Punjab from the 1880s, the colonial authorities constructed canal colonies in state-owned 'wastelands' in western Punjab. By transforming thinly populated scrub into productive agricultural lands, the colonies demonstrated the value of European engineering and logistical ability.⁹ The colonisation programmes also boosted the rise of a rich peasant class while strengthening the position of existing landlords. Both classes proved loyal to the colonial state.¹⁰ During the 1930s, the provincial government in downstream Sindh matched the scale of Punjab's colonies with a large barrage on the Indus at Sukkur. Officials again used land allocations to maintain and strengthen their relationships with the big landlords who dominated the region (such as the Bhutto family, which later produced two Pakistani prime ministers, Zulfikar Ali and Benazir).¹¹

The new hydraulic and legal regimes that colonial development created in the basin put the state in charge. 'The state', however, was by no means a unitary entity. Provincial and local branches had long developed distinctive personalities. Water development was an important arena for

such assertions of distinctiveness. In the Indus Basin, the provincial governments of Sindh and Punjab had disagreed sharply over Punjab's Triple Canals Project and Sindh's Sukkur Barrage. The central government appointed two commissions to try to reconcile the provinces' rival claims on river waters. The Anderson Commission of 1935 achieved little. Justice B.N. Rau, a judicial heavyweight who went on to be India's representative at the United Nations, headed another in 1941–2. While the Rau Commission resulted in a draft agreement in which engineers representing Sindh and the Punjab agreed on all technical points, negotiations broke down before this was ratified by either province.¹² As I will show below, competition over water created provincial territorialities that echoed and complicated later India–Pakistan national rivalries. Well before independence, the Indus region was home to governments that depended financially on water resources development, and articulated claims to water as distinct territorial entities.

Nevertheless, water resources development had become the hallmark of governance in the basin. When independence arrived in 1947, South Asia's water managers, trained under the colonial system, emphasised improving water supply on a large scale rather than constructing smaller, more flexible projects or managing demand.¹³ By 1948, the Indian government was considering or executing 160 large-scale surface water projects.¹⁴

As a counterpoint to the ambiguous status of identity and citizenship in the wake of Partition, water development offered the Indian and Pakistani states a firm grounding in the divided landscape. Ostensibly apolitical projects can have important political effects by extending state institutions and infrastructure into 'underdeveloped' areas.¹⁵ As Sugata Bose has argued, the idiom of national development enabled postcolonial states to claim legitimacy as an embodiment of

the nation's will.¹⁶ Ashis Nandy has characterised science and development as two powerful elements of a state's *raison d'être* since the Second World War.¹⁷

In Pakistan, the political need for development was clear. The state faced deep controversies over the national language, the place of Islam in the constitution, and the relationship between the central government and the provinces. Development activities emerged as a key element of rhetoric among Pakistan's governing elites, offering a relatively neutral ground on which to build state authority. According to Hamza Alavi, a key mark of postcolonial countries is that the state directly appropriates a large part of economic surplus and deploys it in bureaucratically directed economic activity, claiming to promote development.¹⁸ This was certainly true of Pakistan after independence (though Markus Daechsel has persuasively argued that Pakistani development activities were more effective as performances of state power and technical expertise than at actually improving the country's economic base).¹⁹ Lubna Saif has also suggested that state authoritarianism and Pakistan's participation in a US-centred international system prevented meaningful national development from succeeding.²⁰ Yet in form, if not necessarily in content, the central government began to take planning seriously by 1953. It produced a series of Five-Year Plans, beginning in 1955–60, which purported to coordinate development activities across the nation as a whole.²¹ Prominent planning initiatives included industrialisation activities such as the Sindh Industrial Trading Estate in Karachi, farm mechanisation and infrastructure projects such as electrification and road-building.²²

Agriculture, which largely depended on irrigation water availability, was vital. At independence Pakistan had inherited several important agricultural regions: Sindh and West Punjab with wheat, cotton and rice, and East Bengal with jute. In 1967

the agricultural sector contributed half of West Pakistan's gross regional product. Even after industrialisation initiatives in the 1960s, the livestock sector contributed more to gross regional product than small- and large-scale industry combined.²³ Accordingly, water control emerged as a central plank of Pakistani development discourses by the early 1950s. Engineers planned the Thal Canal Colony in West Punjab. They also planned two major new barrages across the Indus in Sindh, which became integral to the postcolonial state's claims to legitimacy at both provincial and central levels.²⁴ Building new irrigation projects, and maintaining the colonial hydraulic inheritance, were critical to the success of any regime in Pakistan.

India's central government kept a firmer grip on the country than did Pakistan's. It had the advantage of the Indian National Congress as an inclusive party at the centre of national politics, Nehru as its charismatic head, and an ideology of secular nationalism that neither regionalism nor political Hinduism could overwhelm.²⁵ India also began life as an independent state with a much stronger industrial base than Pakistan. It had the trading hub of Mumbai, important industrial cities such as textile-producing Ahmedabad, and Kolkata's port and jute mills. Yet development was just as critical to how India's political leaders and powerful bureaucracy conceived of nation-building as it was in Pakistan.

As early as the 1930s, Congress ideologues such as Jawaharlal Nehru and Subhas Chandra Bose had espoused modernising development ideologies. Nehru, as an anti-colonial leader and subsequently as prime minister of independent India from 1947 to 1964, advocated rationalism, secularism, science and technology, and socialist-style planned economics as the basis for Indian national unity.²⁶ Bose never had a chance to implement his development philosophy as he

died in a plane crash in August 1945, following his failed attempt to launch an invasion of north-east India with Japanese support during the war. But as Congress president in 1938, he had promised to tackle poverty by introducing agricultural improvement and industrial development.

Not all Congress leaders agreed with modernising approaches. Mohandas K. 'Mahatma' Gandhi was sceptical of modernity in general and centralised state control in particular.²⁷ River development was no exception: in 1926 he rued their use as wastewater channels and navigational highways, which left little time or desire to 'stroll down [them] and in silent meditation listen to the message they murmur to us'.²⁸ With Gandhi's assassination in 1948 and Nehru in ascendancy for seventeen years after independence, the latter was in a strong position to implement his ideas. Nehru's triumph was visible in the prominence of India's Central Planning Commission, which from 1950 deployed a series of Five-Year Plans that promoted industrial and agricultural development.²⁹ Nehru embodied the rationale of development in India, particularly its scientific aspects.³⁰

By 1960 agriculture still contributed 49 per cent of India's gross domestic product.³¹ Akhil Gupta has argued that agricultural development in India after independence was the critical link between modernity and nationalism. Development discourse, he argues, pervaded peasant mobilisation as well as elite initiatives.³² The Community Development programmes that began in 1952 attempted to institute development as a series of small-scale local initiatives.³³ Large-scale infrastructure, though, was key to the Nehru administration's drive to attain self-sufficiency in food production.³⁴ The Indian state, like Pakistan's, depended on being able to mobilise water resources in the name of national development.

Towards a water dispute

With the governments of both countries intent on promoting development as a national project, and water control as the heart of development, the scene was set for tensions over water-sharing to emerge. The final element that produced the actual Indus dispute was the partitioning of Punjab's canal system by Sir Cyril Radcliffe's Boundary Commission. To explain this, I return momentarily to the months before independence in 1947. If the interspersed religious demography of Punjab had posed a conundrum to Radcliffe in his attempt to create contiguous blocks of majority-community areas, the canal system made matters even worse. Lucy Chester has shown that Radcliffe was deeply concerned about the division's effect on the canal system. She quotes Arthur Henderson, a former parliamentary under-secretary of state for India, who asserted that Radcliffe awarded areas to India so that the headworks of canals that irrigated Amritsar district would remain under the same administration as the canals themselves.³⁵ Congress and the Muslim League, as well as locally based actors such as rulers of Princely States and community organisations, put forward claims relating to canals and canal-irrigated land.³⁶ This was an early indication that the future governors of India and Pakistan understood canals to be an important adjunct to territory in the Indus Basin.

Even more than Congress or the League, Sikhs were highly concerned about the division of the canal systems. Before independence, Muslims dominated the west of colonial Punjab and Hindus the east. Sikhs were concentrated in central Punjab, but were also scattered everywhere in the province. They made up only 13 per cent of Punjab's population. Nevertheless, they had significant influence, not least because the British had allocated large tracts of irrigated land to Sikh farmers while developing the canal colonies of western Punjab during the late nineteenth and early twentieth centuries.³⁷ By 1947, Sikhs were concerned about losing property and access

to irrigated land owing to population transfers. East Punjab would have to rely on the old inundation canal system, and land there was much more difficult to farm profitably.

Sikh leaders were not shy about making their concerns known to the colonial authorities. Three of the most prominent—Master Tara Singh, Sardar Swaran Singh and Sardar Baldev Singh—authored a joint telegram in May 1947 to the Earl of Listowel, the secretary of state for India. They sent another in similar terms to Prime Minister Clement Attlee. The three Singhs claimed that the current proposal for dividing Punjab ‘deprive[d] them [the Sikhs] of entire canal colony developed mainly through their efforts and enterprise’. They conceived of water rights residing with people rather than in the land itself. The telegram went on: ‘The proposal mutilates the whole system of upper Bari Doab canal. We demand division of Punjab along River Chenab with provision for exchange of population and property.’ They ended with an implied threat: ‘Any interim arrangement inconsistent with this demand extremely prejudicial to Sikhs and will be resisted.’³⁸

The Sikh representation was unsuccessful. Radcliffe awarded Montgomery district (later renamed Sahiwal district) to Pakistan, and the area containing the headworks to India. The boundary paid no mind to Sikh claims of a right to use of canal colony land. But the Sikhs in post-Partition East Punjab were a force to be reckoned with. Sir Francis Mudie, a senior colonial official who became the first governor of West Punjab after independence, warned of his fear that Sikh refugees across the border might attempt to return to West Punjab by force.³⁹ Sikh bellicosity and potential to commit violence in Pakistan remained a concern for some diplomatic reporters until at least 1950, even if others downplayed the prospect.⁴⁰ Regardless of the actual likelihood of an unlicensed invasion, Partition had disrupted not only communal attachment to territory in Punjab but also accustomed water usage.

In a largely dry country, irrigated land was worth far more than land that relied on rainfall. Short of going to war to annex parts of West Punjab, the Indian authorities could not expand their possession of existing canal land. At the same time the central government in Delhi needed urgent relief from political pressure from refugees.⁴¹ Developing surface water resources in East Punjab was a logical solution, promising to relocate canal irrigation to Indian soil, even at the expense of Pakistan's downstream supplies.

The dispute's trigger nevertheless derived from post-Partition confusion rather than any carefully thought-out plan. The East Punjab government had signed a standstill agreement in June 1947, promising to continue providing accustomed water supplies to canals in the west. This was necessary because several of West Punjab's canals departed from the rivers at headworks located in Indian territory, managed by Indian engineers. The standstill agreement expired on 31 March 1948. On the same day, the Arbitral Tribunal that the departing British had set up to mediate disputes arising from the Partition awards ceased to function. On 1 April, East Punjab's engineers claimed that West Punjab had failed to renew the agreement, and shut off the water supplies from the Firozpur headworks to the Dipalpur Canal, and to the Pakistani portions of the Upper Bari Doab Canal.

The closure deprived almost eight per cent of West Pakistan's cultivable command area of water at the beginning of the critical summer seed-sowing period.⁴² Negotiations between the chief engineers of East and West Punjab in early April failed to resolve the problem, though Indian engineers allowed water to flow into the two Pakistani canals again at the beginning of May.⁴³ Shortly afterwards, Indian and Pakistani representatives met in New Delhi to make a new inter-Dominion agreement on 4 May 1948.⁴⁴ The agreement provided for the release of water to West Punjabi canals by

India on condition of payments by Pakistan. Pakistan also recognized India's right to develop future irrigation projects that might harm the levels of water in Pakistani canals.⁴⁵ West Punjab's canals were filled for the moment, but their future looked bleak.

India's hydro-logic: absolute sovereignty

Both governments now needed to make arguments asserting their right to the disputed waters. An important starting point for the Indian government's arguments was that previous development had favoured western Punjab and Sindh over eastern Punjab. Gopalaswami Ayyangar, the central transport minister, complained to British diplomats that West Punjab had received the major share of the canal system, but East Punjab's population was just as large.⁴⁶ Before Partition, the colonial government of Punjab had promised more water to cultivators in the southeast of the province by the end of the 1940s. Hissar and Rohtak districts, dominated by Hindu Jats, were notoriously susceptible to famine.⁴⁷ The post-Independence government in East Punjab determined to keep the promise, fearing that it would lose support if irrigation development in the region did not go ahead.⁴⁸

Hunger was the justification for the construction, too, of the Rajasthan Canal project, which diverted Sutlej water far beyond the pre-existing boundaries of Indus Basin irrigation projects. Officials invoked 'the scourge of famines'.⁴⁹ Partition refugees were also resettled in Rajasthan, increasing the pressure to bring in irrigation.⁵⁰ The Ministry of External Affairs briefed its missions abroad to emphasise, to any foreign officials who would listen, that India had inherited only three of pre-Partition Punjab's sixteen canal systems. Referring to Sikh migration from the West Punjab colonies, the briefing stated that 'All the rich colonies developed by men and women, who have now been forced to leave their

homes for India, have gone to West Punjab'.⁵¹ Historically uneven regional development, and pressing need, were elements of Indian claims on Indus system waters.

The most prominent strand of Indian arguments, however, was a territorial definition of water rights. In an early inter-Dominion conference at Karachi, which resulted in the signing of the 4 May agreement, India insisted that it could only agree to supply canal waters to Pakistan if West Punjab recognised East Punjab's undisputed rights over waters of rivers passing through Indian territory.⁵² A central government press release in 1949 stated that 'India has delayed development of famine areas in her own territory, whose claim over these waters is superior and prior'.⁵³ The operative distinction was not in fact developed and underdeveloped areas, but areas inside and outside India's geo-body. In a press briefing around the same time, Gopalaswami Ayyangar affirmed that India claimed ownership over every drop of water in East Punjab's rivers.⁵⁴ In 1951, the Ministry of External Affairs rejected Pakistan's use of the term 'international canal' to refer to channels in East Punjab that delivered water supplies into Pakistan: 'All canals, water works and in fact all other works [...] situated in the territory of India and Pakistan vest wholly and completely in the country in which they are situated.'⁵⁵ Through such communications, Indian officials insisted on viewing water as legally inseparable from the land over which it flowed.

The 4 May agreement was an ad hoc intervention, but it set out durable Indian and Pakistani attitudes towards sovereignty, territory and water. East Punjab claimed sovereign ownership over all 'Indian' rivers. In order to receive water, Pakistan should pay 'seigniorage' charges. These amounted to 10 per cent of the earning capacity of all the water that passed into West Punjab. That is to say, when India allowed water to flow across the border, Pakistan had to pay 10 per cent of the value of the crops that the water would be capable of irrigating,

whether or not farmers actually grew them.⁵⁶ India's logic in imposing seigniorage charges was that it (India) owned the water, and therefore Pakistan had no automatic right to it. West Punjab agreed to pay the charges but refused to recognise India's claim to own the water.⁵⁷ In fact, within a year Pakistan had repudiated the 4 May agreement entirely, and ceased to pay seigniorage charges.⁵⁸ Indian officials did not cut off water supplies again, but neither did they accept Pakistan's contention that the agreement was invalid.

The concept of seigniorage charges was based on a colonial precedent with implications for the definition of 'national' territory. The Tripartite Agreement of 1920 (as well as the rather earlier Sirhind Canal Agreement of 1873) between a unified, pre-Partition Punjab and the Princely States of Patiala (later part of PEPSU, the Patiala and East Punjab States Union), and Bikaner (later part of Rajasthan), had accompanied the central government's construction of the Sutlej Valley Project canal system. The Tripartite Agreement had classified Patiala and Bikaner as non-riparian territories, since the River Sutlej did not directly flow through them. On that basis, under colonial law, Patiala and Bikaner had no inherent claim on river water. The British Indian provinces therefore applied seigniorage charges to water that they diverted to Princely State territory, which was legally foreign.⁵⁹ Seigniorage payments were the result of the way that territory was defined as the domain of a particular sovereign authority.⁶⁰

I have argued elsewhere that the Indian central government intervened after independence to discourage East Punjab from demanding continued payments from Patiala and Bikaner. B.K. Gokhale, the secretary to the Ministry for Works, Mines and Power in New Delhi, argued that the old colonial distinction between 'British' India and 'foreign' State territory could no longer apply. India was now one single territory. The

centre was able to discipline its quarrelsome subordinate governments by insisting that a unified space of water development existed within the nation-state's borders, emphasising the difference between India's inside and outside.⁶¹

Competition among Indian States for access to river water was fierce, with the State governments of Rajasthan and PEPSU (until the latter merged with Punjab in 1956) claiming shares. A particular point of contention was the Bhakra-Nangal Dam project, originally planned by colonial engineers and constructed during the early to mid-1950s. As early as 1950, East Punjab, Rajasthan and PEPSU fell out over allocations of water from the project.⁶² They articulated claims to water rights within particular territories, much like the national-level claims of the Indian and Pakistani centres. Through the central water and States ministries, New Delhi officials again attempted to discipline the State governments, and browbeat them into signing an inter-State agreement in 1955.⁶³ The supposedly unified internal space of India, which formed the conceptual basis of the Indian negotiating position against Pakistan, was in fact riven with divisions. In the context of water disputes, it was not clear what 'national territory' actually was. But by levying seigniorage charges against Pakistan, East Punjab had asserted a clear differentiation between Indian and Pakistani territory.

Unsurprisingly, therefore, the territorial nature of water rights was the theme of important early Indian discussions. Soon after the water dispute arose, East Punjabi engineers produced a report that set out their vision of the relationship between water, sovereignty and territory. This report encapsulated the arguments that would become the central government's favoured public line, not only on the initial dispute over the Firozpur headworks, but on the entire question of sharing Indus system waters.

The report addressed Pakistan's argument that prior appropriation was the most important principle of water-sharing. Prior appropriation worked on the basis of historical precedent, meaning that the first user to begin drawing particular quantities of water from a river had a continuing right to use the same quantity of water in the future. The report accepted that in some cases the principle of prior appropriation held true, but the authors argued that the principle only applied to units 'which are part of one Sovereign Entity'.⁶⁴ In other words, Pakistan could not claim a right of prior appropriation on Indus system waters because Partition had rendered it part of a different sovereign state. As precedent, the report quoted a colonial law of 1873 which read: 'throughout the territories to which this Act extends the Government is entitled to use and control for public purposes the water of all rivers and streams flowing in natural channels and of all lakes and other natural collections of still water'. The Indian government recognised no obligation to allow water to flow out of its territory.

The report also quoted a landmark 1895 opinion of the US attorney general, Judson Harmon. In Harmon's words, an international principle of prior appropriation would 'amount to a recognition of an international servitude upon the territory of one nation for the benefit of the other and would be entirely inconsistent with the sovereignty of the upper nation over its national domain'. The United States had repudiated the Harmon doctrine shortly after pronouncing it, under the pressures of its downstream status on rivers flowing from Canada. Few international water treaties recognised the doctrine's validity.⁶⁵ The East Punjab report ignored these limitations. Instead, it said that the irrigation department would proceed on the basis of equitable apportionment, which it claimed was the internationally recognised 'moral rule'. 'With the partition of the [Punjab] Province it has become absolutely necessary now to redistribute the supplies of the common rivers in a manner equitable to both the states. Any

delay now in establishing our just rights would imply the acceptance of past distribution and would weaken our case in international law.’

According to the report, equitable apportionment meant just under half of the total normal winter discharge of pre-Partition Punjab’s five rivers (when water levels were usually around their lowest).⁶⁶ To meet these requirements, East Punjab needed water from the three rivers that flowed through it, namely the Ravi, Sutlej and Beas. Indeed, new uses of the Sutlej were already planned. The Bhakra-Nangal Dam complex, which provided a storage dam and a barrage on the Sutlej, had originated with the colonial government of united Punjab. With the project now destined to serve only Indian needs, engineers and politicians pushed for its canal system to be remodelled to supply more water to south-eastern Punjab, PEPSU (roughly the area which later became Haryana) and Rajasthan.⁶⁷ Pakistan would have to make up the deficits in the Sutlej Valley and Thal canal systems from the Indus, Jhelum and Chenab, which did not flow through East Punjab.

The central government had initial misgivings about East Punjab’s thinking on rivers, and about the international dispute as a whole. Nehru had leaned on the East Punjab government to restore water flows into Pakistan at the beginning of May 1948.⁶⁸ He also warned Gopichand Bhargava, East Punjab’s chief minister, not to re-stop canal water supplies in September, when rumours circulated that he might.⁶⁹ Officials from Britain’s Commonwealth Relations Office (CRO) believed that Sikhs, ‘and through them the E[ast] Punjab Government,’ were responsible for the water dispute.⁷⁰ Another British official in India reported that the centre was probably restraining the East Punjab government and people from deliberately spiting Pakistan by withholding canal waters.⁷¹ East Punjab could perhaps also exert influence on New Delhi. Sir Mohammed Zafarullah Khan, Pakistan’s

foreign minister, alleged in 1949 that pressure from East Punjabi representatives was the most likely cause for a stiffening in Gopalaswami Ayyangar's negotiating position during bilateral ministerial talks.⁷²

High-level discussions in Indian policy circles demonstrated how unsure some in New Delhi were about the correct way forward on the Indus dispute. Writing about its legal implications, India's advocate general opined that 'The case of East Punjab's right to diminish the existing supply of water to West Punjab is far from being a fool proof one'.⁷³ The Ministry of External Affairs took this to heart and recommended emphasising that Pakistan had signed the 4 May agreement, rather than India's inherent water ownership.⁷⁴

Behind the scenes, Nehru attempted to steer East Punjab towards a reconciliatory attitude. In late 1952, for example, Indian engineers shorted water supplies to Pakistan, breaking the terms of the 4 May agreement. Pakistani politicians protested. Nehru, convinced that the reductions had been deliberate, suspected that senior figures in the East Punjab government or the central Ministry of Irrigation and Power had given orders. He demanded that Irrigation Minister Gulzarilal Nanda find out who was responsible.⁷⁵ After several frustrating months, Nehru concluded that the East Punjab engineers in charge of canal headworks had not had clear instructions about water deliveries to Pakistan, and so had supplied less than the agreed amounts.⁷⁶

Powerful figures at the centre, then, were reluctant to claim absolute sovereignty over the rivers, suggesting a more complex approach to territoriality than that of the East Punjab report. Even outside the confidential correspondence that flitted between government offices in New Delhi, the arguments sometimes wavered. In 1956 Ghulam Mueenuddin, Pakistan's chief representative in the talks, gauged that India's central government had retreated from the 'extreme' East

Punjab position that all water in the eastern rivers belonged to India.⁷⁷ Public discussions within India also witnessed hedging. On one hand, Nehru, facing a question from a Lok Sabha member in 1953, reiterated that the agreement of 4 May 1948 had defined India's position.⁷⁸ On the other hand, in 1957 a representative in the Rajya Sabha, India's upper house of parliament, asked Irrigation Minister S.K. Patil, 'Whose is the water and whose is the right in respect of these rivers which run in many countries? That is not clear to many of us laymen.' Patil answered that riparian law was famously 'a matter of interpretation', and especially problematic as Partition 'was a kind of artificial division'. Patil refused to answer the question directly, citing a lack of appropriate legal expertise.⁷⁹

Yet further internal correspondence demonstrated that at least some central officials agreed with East Punjab's line. According to one official in the Ministry of Works, Mines and Power, the Punjab Partition (Apportionment of Assets and Liabilities) Order of 1947, which the outgoing colonial governor, Evan Jenkins, had issued on 13 August 1947, vested ownership of canals owned by undivided Punjab in the new provinces of East and West Punjab 'in accordance with their territorial situation'.⁸⁰ Indeed, Indian negotiators continued to press for the full supply of water in the eastern rivers. In 1952, as negotiations under the World Bank's auspices began, Indian delegates insisted that any joint India–Pakistan organisation for watershed development planning must not interfere with their freedom of action, and that the Bhakra Dam must go ahead.⁸¹

With major new diversion projects under way during the mid-1950s, including a major weir at Harike as well as the Bhakra project, Indian politicians claimed that it was politically impossible not to supply water to India's 'own people'.⁸² In the tense and hostile context of India–Pakistan

politics after independence, any moves on India's part to give up planned water diversion projects would seem a highly unpopular concession to Pakistani interests.⁸³ As one letter to the editor of the *Times of India* put it in 1954, 'we seem to be attaching too much importance to Pakistan's hue and cry. We should completely ignore their outbursts [...] one wonders where this appeasement policy will lead to.'⁸⁴

Dams and canals were mechanisms for abstracting water, but the imperative for building them came from the Indian authorities' assumption that their first responsibility was to develop resources within Indian territory. Nehru's assertion in 1958 that it 'would neither be morally right nor just and would also be politically impossible' to let Pakistanis starve did not mean he would fail to press India's interests.⁸⁵ His government never let go of its contention that India had the right and duty to make full use of waters within its territory, even if the rhetoric allowed for some flexibility. As late as September 1960, the Pakistan government continued to object to India's contention that the waters of common rivers were in fact 'territorial waters', divided between (and not jointly owned by) the two countries.⁸⁶ While the internal picture in India was complex and evolving, New Delhi's public position in the international negotiations relied on a relatively coherent articulation of India's right to water in a single national space.

Pakistan's hydro-logic: territorial integrity

The most important legal element of Pakistan's stance was the claim that Pakistan's territory had already acquired rights to that water through prior appropriation. To recap, prior appropriation held that the first party historically to begin using water thereby attained the right to use that water in perpetuity. According to this model, Pakistan's existing uses of river water entitled it to continue receiving the same water from the same sources. This argument emphasised territorial

integrity, the idea that an upstream water user had the responsibility not to harm downstream water availability. In that sense it apparently prioritised history over geography, but it had significant implications for the construction of sovereign space. As we saw above, the East Punjab engineers' report of 1948 argued that prior appropriation contravened the sovereignty of India, the upper riparian. Pakistani discourses did not emphasise national territory in quite the same abstracted way as the Indians did. They tended to focus on the rights of people and of particular irrigation projects, whether planned or already in use. Pakistani statements were also emotive. They deployed an image of Pakistan as the victim of Indian upstream aggression, while simultaneously threatening war in response. The political resonance of Pakistani arguments, however, revolved just as strongly around the critical importance of river water to Pakistan's statehood. Sovereignty remained the object of the water dispute.

The trends of Pakistani discourses took time to emerge. When the canal waters dispute broke out in April 1948, West Punjab's first argument was that it had not been able to pay sufficient attention to renewing the standstill agreement, which had expired on 31 March. It also claimed that East Punjab officials had assured them that water would continue to flow despite the lack of an agreement.⁸⁷ These arguments focused on the specifics of the standstill agreement rather than broader principles. Even at this stage, though, the text of the 4 May agreement stated that West Punjab more generally claimed a right to the waters of the East Punjab rivers 'in accordance with international law and equity'.⁸⁸ This contrasted sharply with India's invocation of absolute sovereignty and equitable utilisation. Broader arguments soon followed. As a government of Pakistan note asserted in August 1949, 'the problem should be settled on the basis of the well-known principles of regulation rights of nations in respect of waters of rivers flowing through more than one country'.⁸⁹

Pakistani arguments also had a geographical component. Pakistan insisted not only that water users in West Punjab had a right to draw water supplies whose usage they had established historically, but also that this water should come from the same sources. This meant that the Sutlej Valley canals should continue to receive water from the Sutlej.⁹⁰ Two main considerations propelled this proposition. The first was that constructing link canals to transfer water from the western rivers to existing eastern-river projects was expensive. The second was the legacy of a long-drawn-out history of negotiation between colonial Punjab and Sindh from the 1920s to the 1940s. As we saw above, the chief engineers of the provinces before 1947 had already assigned a great part of the flows of the western rivers to new projects in the regions that became Pakistan. Two of the most important were barrages across the Indus at Kotri and Guddu in Sindh, which were politically important to the central government's grip on a fractious province.⁹¹ Pakistani development planners were unwilling to see a reduction in the water supplies earmarked for the new barrages from the western rivers in order to transfer water to the existing Sutlej colonies.⁹²

Finally, Pakistani interlocutors insisted that prior appropriation gave legal rights to Pakistani cultivators, for instance at an inter-Dominion conference with Indian ministers in August 1949. A failed attempt to move a UN resolution to codify international riparian law followed quickly. Pakistan's delegation to the UN wrote a background paper in 1950 asserting a right to not only past uses but an 'equitable' share of further water for development.⁹³

Unfortunately, international law on the subject was fluid. In the wake of the founding of the United Nations and the corresponding push to regulate relations between states after the Second World War, the International Law Association (ILA) was only just beginning to codify transboundary

riparian law. ILA resolutions at Dubrovnik in 1956 and Helsinki in 1966 emphasised territorial integrity, along with equitable utilisation, over territorial sovereignty.⁹⁴ These resolutions seemed to support Pakistan's position more than India's, but the Indus negotiations paid little heed to this trend. Very early, at least by 1951, the government of India had adopted the position that the Indus dispute should not be settled using existing legal rights but by accounting for the potentialities of river development.⁹⁵ The subsequent World Bank negotiations similarly proceeded on an engineering rather than a legal basis, as Pakistan recognised.⁹⁶ Pakistan was left making a legal argument without recourse to the law.

The vulnerability of its downstream position dominated the rhetoric emerging from Pakistan. Prime Minister Liaquat Ali Khan told the *Pakistan News* in October 1949 that India was 'seeking to turn our lands into desert, and to imperil the existence of millions of our people'.⁹⁷ Seeking to mobilise international sympathy, Pakistani leaders, engineers, diplomats and the press all stressed that Pakistan was a victim of bullying by a larger, more powerful neighbour. In a 1950 statement to the United Nations, the Pakistan representative argued that 'The withholding of water essential in an arid region to the survival of millions of its inhabitants is, in the view of Pakistan, an international wrong and a peculiarly compelling use of force contrary to the obligations of membership in the United Nations'.⁹⁸ Less than a year later, American diplomats gauged that the Pakistan government was trying hard to establish the existence of an Indian campaign aimed at the destruction of Pakistan through the control of its water supplies.⁹⁹ In other words, Pakistani statements framed India's water policy as an attack on Pakistan's existence as an independent, sovereign nation-state. By citing international law and calling on the UN, they drew attention to both states' position in a larger international system with established norms of good behaviour.

When, subsequently, the World Bank became involved in the Indus negotiations, Indian officials were frustrated by what they termed a Pakistani press campaign alleging that the bank was aiding India's 'riparian aggression against Pakistan'.¹⁰⁰ Their complaint had some merit: several Karachi dailies carried very similar stories that India's threat to 'choke off' water from the eastern rivers under the bank's latest plan would have huge consequences for Pakistan. The newspapers predicted that more than 6.5 million acres of land in Bahawalpur and West Punjab would lie fallow, that more than 15 million people engaged in agriculture there would lose employment, and that a 33 per cent shortfall in food grain production would result.¹⁰¹ In the Pakistani arguments, downstream water rights were not only a legal question, but one of survival. If the West Pakistani people faced ruin, it would compromise the national state's internal sovereignty.

Indian leaders rejected such claims vehemently. At an Inter-Dominion Conference in August 1949, Indian leaders took a firm stance, which the Indian press condoned. The *Hindustan Times* claimed that the conference had failed to resolve the canal waters dispute, 'because Pakistan displayed the same irrational attitude which has come to characterize all her relations with India'.¹⁰² In 1951, the Indian High Commission in London issued a press release refuting Pakistan's allegation that India could divert the whole of the River Chenab into the River Ravi in Indian territory. Admittedly, cutting a 110-kilometre-long underground tunnel between the two rivers was technically possible. According to the press release, however, it was beyond India's financial resources. Pakistan, it went on, controlled nearly 75 per cent of the entire Indus system's water supplies, in places where India could not interfere.¹⁰³ Speaking in 1953, Nehru said that 'The canal waters issue [...] is eminently one which ought to be considered objectively and dispassionately so that the maximum advantage can be derived by both countries from the waters that flow through them. [...]

It is unfortunate that an issue like this should be treated in a spirit and atmosphere of rivalry and hostility.’¹⁰⁴

Sympathy was not the Pakistan government’s only card to play. The threat of war was equally important in making its voice heard, and Pakistan asserted its willingness to counter the threat to its sovereignty with force. Zafarullah Khan, Pakistan’s foreign minister, told the *Pakistan News* in October 1949 that India had denied Pakistan water that the latter needed ‘not only for the welfare and prosperity, but even the livelihood and existence of large sections of the people of West Pakistan’. Zafarullah proceeded to imply, in sympathy with many Pakistanis, that Pakistan was willing to go to war over water: ‘[A] diminution in that flow or even a threat of interruption’, he went on, ‘which would have the effect of converting millions of acres of fertile land into arid wastes, creates a situation likely to endanger the maintenance of international peace.’¹⁰⁵

The *Pakistan News* was a domestic daily, and Zafarullah Khan’s statement circulated among English-literate Pakistanis, but this line also played to international assumptions. The British high commissioner in Karachi took the possibility of war seriously: ‘The four-fifths of the present population of the West Punjab who might expect to die of hunger then would certainly prefer to die fighting now,’ he wrote in a report to London.¹⁰⁶ Clearly, the high commissioner thought that water was a popular issue, not just a case of axe-grinding among politicians. The dispute certainly captured Western attention. The US State Department and Britain’s CRO corresponded closely about the possibility that the water dispute could contribute to wider mounting tensions over Kashmir, which in 1951 threatened to spill over into renewed fighting.¹⁰⁷ Nehru also warned Gopichand Bhargava, the chief minister of East Punjab, to take a conciliatory line on canal waters. Stopping canal waters to Pakistan, he said, would lead ‘to desperate

measures and possibly it may lead to war itself'.¹⁰⁸ Water rights, clearly, was a forum in which the Pakistan state could assert external sovereignty, against India.

According to British and American diplomats, the Pakistani armed forces took the possibility of a water war seriously. In November 1952, the chief of staff of the Pakistan Air Force, who was himself a British Royal Air Force officer on loan to Pakistan, thought that the summer of 1954 would be the most likely time for war with India. Partly, he said, this was because Pakistan expected Indian forces to be ready for a conflict at that time. Partly, too, that was when Pakistan expected India to divert the Beas and Sutlej rivers from within Indian territory (India proper, not Jammu & Kashmir).¹⁰⁹ The West Punjab provincial assembly passed a resolution shortly afterwards, in January 1953, announcing that the province was prepared to make any sacrifice to get its share of the Indus waters. Citizens, the assembly announced, must prepare for 'emergencies' (which could well have meant war).¹¹⁰ Extending the idea of war into metaphor, the Pakistani embassy in Washington DC produced a booklet in 1953 in a bid to gain American public sympathy and political support. Its provocative title was *Pakistan: The Struggle for Irrigation Water—and Existence*. India's control of the eastern rivers, it claimed, created a 'threat of damage far greater than any invading army could bring with bombs and shell fire'.¹¹¹ Meanwhile, US diplomats in Pakistan wrote home to warn that 'sources report man in street openly advocating Jihad against India'.¹¹²

Popular feeling was a concern to Indian observers in Pakistan, too. N.V. Rao, the Indian deputy high commissioner stationed in Lahore, warned of widespread protest meetings in Multan, Montgomery and Bahawalpur during July 1954. The meetings, he reported, demanded 'firm action' against India. Meanwhile, in the North-West Frontier Province, leaders of

the political parties the Awami League, Islam [*sic*] League and Jamiat-ul-Ulema-e-Islam told public meetings that India's actions on the Indus tributaries amounted to aggression against Pakistan and that the only solution to problems outstanding between the countries was war. The *pir* of Manki Sharif, the president of the Frontier Awami League, urged the government to call an all-parties conference to determine 'solid steps' that could be taken immediately. Rao finished by observing that a *hartal* (closure of shops and businesses) had just taken place in Bahawalpur, where processions had slogans such as '[the] Sutlej is ours and we will have it'.¹¹³ Rhetoric deploying the message that Pakistan owned river waters contradicted Indian claims to sovereignty over them. While not articulated in the same language, diverse Pakistani voices were arguing for their nation-state's territorial integrity.

No doubt there was an element of bluster in the pronouncements of Pakistani politicians, newspapers and officials. Many of their interventions, such as the booklet *Pakistan: The Struggle for Irrigation Water—and Existence*, were clearly intended to mobilise Western sentiment in Pakistan's favour. Pakistan and India both waged a propaganda war at the United Nations, through their missions abroad and in the international press.¹¹⁴ British and American missions in South Asia occasionally wrote home to warn of the incomplete or inaccurate facts pervading Indian and Pakistani communications on the canal waters dispute.¹¹⁵ Both the United States and the United Kingdom, however, preferred to remain in the background. They supported the World Bank's negotiating initiative from 1951, and policymakers discussed problems and solutions relating to the Indus dispute among themselves, but otherwise took little action. They certainly did not advocate material intervention in the dispute, and even discouraged Pakistan from referring the matter formally to the UN Security Council, which was already preoccupied with the Kashmir dispute.¹¹⁶

Statements in the domestic press and at public meetings were perhaps also intended to whip up public feeling for political gain. Indian officials and politicians complained of this throughout the late 1940s and 1950s. A member of the Rajya Sabha in 1957 asked what the government of India intended to do about Pakistani President Iskander Mirza's threat, in a recent speech at Karachi, to launch military action if river waters ceased to flow.¹¹⁷ The Indian high commissioner in Pakistan reported that Pakistani foreign policy became strident and flamboyant in expression and execution during 1956–7. He attributed the change to a new Pakistani prime minister. Hussain Shaheed Suhrawardy, while briefly in office, attempted to link the Kashmir and Indus waters issues together to create an impression at home and abroad that Pakistan was an innocent and injured party.¹¹⁸ Further Indian reports alleged that political campaigning in Pakistan, during the run-up to a general election scheduled for 1958 (but never held), intensified rhetoric about the Indus dispute.¹¹⁹ Indeed, in May 1958 Nawab Muzaffar Ali Khan Qizilbash, the chief minister of West Pakistan, publicly claimed that India was preparing to stop canal waters by 1961–2. Qizilbash termed this 'nothing short of an act of war against Pakistan'.¹²⁰

The political importance of being seen to address Pakistan's vulnerability became clear shortly after the water dispute arose. The Sutlej provided an opportunity for Pakistani engineers to turn the tables on India. In Punjab it crossed the border several times back and forth. About eight miles upstream of the Firozpur headworks, both banks of the river ran through Pakistani territory. With control over both banks, it was possible for Pakistani engineers to construct canal headworks in order to divert water further into Pakistan. After the shock of East Punjab's closures at Firozpur in April 1948, the West Punjab government began work on a cut (artificial opening) in the riverbank that would divert water from an

upstream portion of the Sutlej to the Dipalpur Canal, one of those that India's April closure had affected severely. It was possible for Pakistani engineers to make another cut further downstream, after the riverbed had crossed back into India, passed through the Firozpur weir, and returned permanently to Pakistani territory, in order to resupply the river with water. This would have circumvented the Firozpur headworks, keeping the bulk of the river's water in Pakistan. According to the Indian engineer Kanwar Sain, the new channel was 'an attempt to nullify the Radcliffe Award'.¹²¹ Through the cut, Pakistani engineers were attempting to use an upstream position to capture river water within a national territory.

The Dipalpur scheme proved popular in Pakistan. A large force of semi-voluntary workers did the digging, reportedly with enthusiasm, alongside troops.¹²² Shaukat Hayat Khan, West Punjab's revenue minister, inaugurated the work at a public celebration in May 1948. He gave a speech claiming that West Punjab was permanently entitled under international law to the water.¹²³ The British deputy high commissioner in Lahore reported that behind the scenes the West Punjab cabinet was 'in a spin—fearing that India would go to war and they only just summoned up enough courage not to call the whole proposal off'.¹²⁴ Indian correspondence on the subject does not suggest that New Delhi considered the possibility of fighting over the Dipalpur scheme seriously, if at all. But the deputy high commissioner also wrote that the West Punjab government had been suffering from criticism, presumably from the press and public, over its earlier failure to foresee the possibility of East Punjab's stoppage of water supplies. Working on the cut was one of the few ways that Pakistani authorities could make a show of proactively protecting Pakistani interests, short of declaring war themselves.

In one sense the Dipalpur cut scheme was defensive. West Punjab's engineers intended to prevent India from shutting off

water supplies to the Dipalpur, Upper Bari Doab and other canals dependent on the Sutlej. At the same time, by bypassing Firozpur, it promised to make the headworks there virtually useless to India.¹²⁵ The Indian press carried frequent reports about the cut.¹²⁶ The *Times of India*, for instance, warned that the cut could turn Indian territory into a 'barren desert'.¹²⁷ The former Princely State of Bikaner relied for irrigation on the Eastern and Bikaner canals which started at Firozpur. With minimal rainfall and brackish groundwater, Bikaner needed canal water for drinking purposes as well as irrigation. Gokhale, the Indian central secretary for Works, Mines and Power, told British consular officers that the cut could affect two million people in India.¹²⁸

Pakistani officials claimed that they would only put the cut to use if Indian authorities shut off water supplies at Firozpur again, but the threat was undeniable.¹²⁹ As the *Karachi Dawn* warned, East Punjab's designs on canal waters were 'a very dangerous policy to pursue. Because many of the rivers of Pakistan and India cross and re-cross each other's territories [...] it would open a new chapter of discordant retaliation in which rivers and barrages will bedevil inter-Dominion friendship and prosperity.'¹³⁰ West Punjab and the Pakistani central government were willing to take advantage of geography if they could. Their argument for prior appropriation was pragmatic rather than principled.

Fortunately for Bikaner, the Dipalpur cut could pose only a temporary threat to Indian water supplies. As early as December 1948, India's Central Waterpower, Irrigation and Navigation Commission was in discussions with the Ministry of Works, Mines and Power about constructing a new barrage on the Sutlej at Harike, just downstream of the confluence of the Beas and Sutlej. The Harike Barrage enabled India to divert Sutlej waters on a large scale long before the river crossed into Pakistan for the first time.¹³¹ Indian engineers

completed construction at Harike as early as 1952, making the Firozpur headworks redundant to Indian water supplies. The project was expensive, costing nearly 73 million rupees, but it put the upstream advantage back in Indian hands. The moment of public confidence which the cut had produced in West Punjab was brief.

While mobilising a very different language of water rights from India's, Pakistani leaders were equally concerned with the impact of water availability on their state. On one level Pakistani claims of victimhood and helplessness were reasonable responses to the country's downstream position. The fear and suspicion that East Punjab's shutting off of water in April 1948 produced among Pakistani leaders never evaporated. A new and vulnerable state like Pakistan, with a weak economy and a faltering political system, could hardly afford such a jolt to its stability.

The Pakistani stance on the Indus waters dispute also demonstrated the state's complicated relationship with questions of national territorial sovereignty. Prior appropriation prioritised the history of water development, not its geographical potential. At the same time, the way that Pakistani leaders articulated their claims framed the nation-state as the fundamental locus of development. Both the emotive language of 'our' water, and the rationalistic quantification of actual and possible effects on the economy and population, took Pakistan to be a given territorial entity which was also a container for economic development.¹³²

All this occurred in the context of a Pakistani state that struggled to function as a container of anything. If disagreements among Indian States and New Delhi about water use complicated Indian claims to a unified national space, territoriality was thoroughly in flux in Pakistan. As Britain withdrew from South Asia in 1947, the Afghan government claimed that large areas of northern and western

West Pakistan should form part of an autonomous 'Pashtunistan', which would connect with contiguous Pashtun areas in Afghanistan. Kabul channelled funds and weapons to border tribes on the North-West Frontier in an attempt to foment insurrection. The tribes proved resistant to Afghan entreaties, and tended to assert autonomy from the Pakistan government for their own sake, not for an imagined Pashtunistan.¹³³ The Muslim unity that Jinnah had advocated for decades proved unable to produce a straightforwardly 'national' territory.

East Bengal posed an even more difficult conundrum. Language, cultural practices and the character of democratic politics separated Bengalis from the west wing as surely as distance. The One Unit scheme of 1955, which amalgamated Sindh, West Punjab, Balochistan and the North-West Frontier Province into West Pakistan, was part of a bid by central elites to develop a federal framework that would give the West Pakistan regions parity at the centre, despite East Bengal's demographic majority. Yet One Unit only suppressed regional political identities: it did not negate them. The relationship between land, government and national identity remained as fraught as it had been before.¹³⁴

Conversely, from the point of view of West Pakistan's development planners, One Unit had the happy side-effect of nullifying strong Sindhi opposition to integrated water planning.¹³⁵ The Pakistani centre, like its Indian counterpart, attempted to create a unified national space for hydro-development. That Pakistani rhetoric on international waters portrayed the national state as the protector of water users from Indian predation was part of the same broad effort to assert the state's authority over territory through hydraulic means. Pakistan's appeals to the international water law principle of territorial integrity contrasted with the uncertain, contested status of its own 'national' territoriality.

Conclusion

Both India and Pakistan were concerned with sovereignty in the sense of preserving political stability at home, continuing to develop water resources, and representing the interests of their populations internationally. The need to create spaces of national development, necessary for territorialising state power, compelled both governments to claim river water. For India, territorial sovereignty was the key principle. In New Delhi's conception, driven in part by the precedent that East Punjab engineers set, water was no different from any other natural resource lying within India's borders. For Pakistan, the natural flow of rivers across borders produced alternative sovereignties. Despite the many and various arguments that both sides made during the ten years between the dispute's beginning in 1948 and the closing stages of negotiations from roughly 1958, these principles remained fairly constant.

Territory and sovereignty were, then, key concerns of both the Indian and Pakistani governments throughout the Indus waters dispute. Both received support from their national presses and publics. Riparian positioning—upstream and downstream—informed how policy elites articulated the implications that sovereignty had on water use and water rights. With the upstream advantage, Indian policymakers asserted a right to equitable apportionment (drawing water away from existing Pakistani canals that depended on the Ravi, Sutlej and Beas). They could support their demands with the physical ability to divert water flows at will. Downstream and vulnerable, Pakistani leaders stressed the principle of prior appropriation. They appealed to international law and Great Power intervention.

At the same time, discussions between and within both states pointed to the more nuanced status of territoriality. Both central governments struggled to discipline their internal parts. The Indus waters dispute offered an opportunity to

policymakers on both sides to frame Radcliffe's division line, and not subnational boundaries, as the border that mattered. Territoriality was under construction. The implications of state sovereignty were uncertain. The rivers' border-crossing flow complicated both. As the next chapter will show, the entanglement of the Indus waters dispute with the Kashmir conflict forced both sides to make even more bellicose sovereignty claims.



3

SOVEREIGNTY ENTANGLEMENTS IN KASHMIR

Kashmir is the site of South Asia's most bitter and protracted conflict. A small region at the subcontinent's mountainous north-western fringe, during colonial days Kashmir was renowned for its beauty but was only minimally important to the imperial government. After independence, India and Pakistan both had designs on the autonomous principality—Pakistan because it bordered West Punjab and had an overwhelmingly Muslim population, and India for cultural and political reasons. Kashmir's Hindu maharaja acceded to India in October 1947 even though his subjects were largely Muslim. The administrations in Karachi and New Delhi fought each other for control of Kashmir with guns, propaganda and complaints to the United Nations.

Kashmir also had a major bearing on the Indus waters dispute. The Indus, Chenab and Jhelum all flow through Kashmir before entering the Punjab plains. India's recent construction of the Baglihar Dam on the Chenab (since 1999) and Kishanganga hydroelectric project on a Jhelum tributary (since 2007) in Jammu & Kashmir has returned Kashmiri water to international headlines.¹ As I showed in the last chapter, a river's trajectory had significant implications for how the Indian and Pakistani establishments conceived of sovereignty and the rights that accompany territorial control. In this chapter I demonstrate that the water and the Kashmir

disputes were intimately entangled. Kashmir raised questions of sovereignty that the Indus waters negotiations could not resolve.

To say that scholarship has identified a complex set of factors in the Kashmir conflict would be an understatement. Authors have emphasised Kashmir's ideological and strategic importance, its role in the balance of power between centre and States in Indian federalism, the Pukhtun tribesmen who joined an insurrection against the maharaja's government in the autumn of 1947, and the emerging global conflict between the Soviet Union and the West.² The extent to which Kashmir is a cause or a symptom of India–Pakistan tension is itself a topic of debate. Robert Wirsing argues that Kashmir is merely a focal point for wider tensions.³ Kashmir is important to questions of militarism, nationalist politics and state-building in South Asia.

While secondary literature on Kashmir has often referred to the complications that river geography has made to political, strategic and economic factors, water has never been at the heart of these authors' analysis. Several authors have noted Pakistan's fear that India could use its control of the headwaters of the Indus Basin rivers to draw supplies away from Pakistan's canal network.⁴ That fear has had inflammatory potential. Aloys Arthur Michel has pointed out that Pakistan formally committed its armed forces to the Kashmir struggle in May 1948, the month after India had cut off supplies to the West Pakistani canals, and speculated about a connection.⁵ Robert Wirsing, Daniel Stoll and Christopher Jasparro have recently made a similar point, suggesting that Pakistan's ordering of regular army units into Kashmir was perhaps intended 'to throw up a defensive shield in Kashmir to protect Pakistan's river-resource flanks'.⁶ The thesis is reasonable but lacks decisive evidence.

Whether Kashmir was relevant to the Indus dispute at all was itself hotly contested, with Pakistanis propounding that view and Indians demurring. There is no ‘smoking gun’ evidence that fully proves or disproves either position. Rather than trying to order the disputes over the Indus and over Kashmir chronologically or by relative importance to bilateral relations, this chapter investigates connections between the two. I examine the Kashmir–water nexus as a further example of how Indian and Pakistani constructions of state sovereignty were built around territory and natural resources during the 1950s and 1960s.

I begin by outlining the different approaches that India and Pakistan took to Kashmir’s sovereignty. I then demonstrate that water politics enabled New Delhi to progressively erode Jammu & Kashmir’s autonomy, while Pakistani leaders used Kashmir’s upstream position on several Indus system rivers to make claims on territory. Next I argue that Pakistan’s construction of the Mangla Dam in Pakistan Administered Kashmir further strengthened Pakistan’s effective state sovereignty in the supposedly autonomous region of Pakistan Administered Kashmir, and show how Indian responses provide a window onto broader concerns about what Pakistan’s attitude towards Kashmir’s rivers implied for Indian sovereignty. Lastly, I turn to the 1960 Indus Waters Treaty. I show that it avoided addressing the territorial aspect of the water dispute in Kashmir, leaving Pakistan’s insecurity and India’s defensiveness about sovereignty in place as continuing sources of tension after 1960.

Legal arguments and sovereign realities

Indian and Pakistani approaches to the Kashmir conflict demonstrated the fraught relationship between sovereignty, territory and belonging. The most fundamental problem was conflicting interpretations of Kashmir’s legal status as a

geopolitical entity. This placed sovereignty at the heart of the dispute.⁷ The Indian government claimed sole legal possession of Kashmir according to the Instrument of Accession that Maharaja Hari Singh signed in October 1947. The instrument made over control of several aspects of government while stating that Hari Singh preserved formal sovereignty.⁸ India accused the Pakistani government and armed forces of illegally fomenting rebellion by aiding and managing the Pashtun invasion. Christopher Snedden has recently shown that the Poonch uprising began independently of outside influence.⁹ There was truth, though, in the accusation that the Pakistani administration supported the tribesmen.¹⁰ Once the Pakistan government admitted in May 1948 that the regular Pakistan army was conducting operations in the conflict, Indian spokespeople could portray Pakistan as simply an aggressor who had put troops on Indian soil.¹¹

In the same spirit, Indian leaders rejected the call by the United Nations, through a 1948 resolution, to hold a plebiscite in Kashmir to determine its future. Pandit Govind Ballabh Pant, India's home minister and minister for States, declared firmly to a meeting of the National Conference organisation in 1955 that 'the verdict of the Kashmir people [had been] already expressed through the National Conference', and that the question of accession to India was 'already settled finally'.¹² In 1957 the Ministry of External Affairs briefed its diplomats on the line to take if asked about a plebiscite: Kashmir was part of India, and 'The application of the right of self-determination to parts of a State or to linguistic, religious or racial groups within a State would mean the break up of its sovereignty and territorial integrity, which it is the purpose of the United Nations to uphold'.¹³ Some Jammu & Kashmir residents, particularly Dogra Hindus in Jammu, also emphasised unity with India. The Praja Parishad, for instance, formed in the early 1950s to insist on Jammu's distinctiveness from Kashmir. It argued that a resolution of the Jammu

Assembly to integrate into India legitimately represented the people of Jammu's wishes.¹⁴ Pandit Prem Nath Dogra, president of the Praja Parishad, told a gathering of villagers in Jammu in 1953 that 'plebiscite or no plebiscite, we have already decided to join India and no power in the world can separate the two'.¹⁵

Pakistan, for its part, argued that its standstill agreement with Kashmir predated the Instrument of Accession, and precluded Kashmir from entering into negotiations with other powers. The instrument was therefore illegal.¹⁶ Pakistan also claimed that the accession of Kashmir to India in October 1947 was fraudulent, suggesting that the Indian government sent troops into Kashmir before the maharaja actually signed the instrument. If Indian troops had already entered the State beforehand, then Pakistanis could argue that Hari Singh had given up his exclusive sovereignty under duress, making the Instrument of Accession legally void.¹⁷ Pakistani leaders stopped short of claiming formal title to Jammu & Kashmir. Instead it asserted that the State's future constitutional status was undefined: they might not be part of Pakistan, but neither was it legally part of India. Pakistan Administered Kashmir was formally independent, and the Pakistan government invoked the right of all Kashmiris to self-determination. Pakistan supported the United Nations' referendum resolution.

At the same time, with domination over the Pakistan Administered Kashmir government, the Pakistani centre actually exerted extraterritorial sovereignty. Pakistan's leadership took steps to secure control over Pakistan Administered Kashmir. Pakistan Administered Kashmir's government took orders from Karachi (later Islamabad). Pakistani officials staffed its civil service, and the Pakistan army was responsible for defence. The centre intervened in everyday governance, with the Ministry of Kashmir Affairs helping organise minor agricultural development, irrigation

and forest management schemes.¹⁸ Sovereignty in Kashmir was more complex than Pakistan's formal position admitted.

The absolutist terms of legal arguments also masked the more complex actual nature of Indian claims in the region. Kashmir's territory was a discursive, as well as military, battleground. The *Times of India* referred, just after Kashmir's formal accession, to Pakistani encroachments on Kashmiri, not Indian, soil.¹⁹ Moreover, Jammu & Kashmir retained a special degree of autonomy, unlike any other Indian State after independence. Ideas of Indian territoriality in Kashmir contained ambiguity, which gave rise to legal confusion. A Jammu judge in 1950, for example, ruled that it was not possible to use legislation controlling human movement from 'Pakistan' into 'India' to imprison a resident of a Pakistan Administered Kashmir village who was caught on the Indian side of the ceasefire line. A newspaper paraphrased the judge's reasoning: 'The village of the accused, Salhot[,], being *de jure* territory of the Jammu and Kashmir State, cannot be said by any stretch of imagination to be territory of Pakistan.'²⁰ Formally speaking, the Indian state therefore ignored the actual failure of Indian power in the parts of territory under Pakistani control. Yet, in practice, the heavily militarised ceasefire line formed a barrier to Kashmiris' movements.

Indian claims that Jammu & Kashmir was an integral part of Indian territory were limited in formal as well as practical terms. The State retained a special position within the Indian Union. The Instrument of Accession and, later, India's 1950 constitution guaranteed significant local autonomy.²¹ The Indian leadership was even open to the possibility of relinquishing its claim on parts of the State under Pakistani control. In 1948 Vallabhbhai Patel, India's home minister, considered the possibility of partitioning Kashmir between India and Pakistan. Patel suggested that India would be willing to give up parts of Kashmir where local sentiment was pro-

Pakistan, so long as India could retain areas it considered essential to its strategic interests.²² Patel was the Congress party's strongman and an advocate of a hard-line stance on Pakistan and on India's Muslim minority. That he made such a suggestion suggests that it had traction in the Indian government. At the time, though, Patel gauged the proposal too much for the Indian electorate to swallow.

After another thirteen years of stalemate, in 1962 Nehru publicly suggested converting the ceasefire line into a permanent border. Pakistan's president, Mohammad Ayub Khan, rejected the offer out of hand.²³ These partition offers did not mean that Indian leaders were willing to compromise New Delhi's control over the Valley of Kashmir (the State's overwhelmingly Muslim-majority heartland) or Jammu (with a substantial Hindu population). But they demonstrated a more flexible approach to sovereignty in Kashmir than many Indian public pronouncements would suggest.

There was also a strong emotional strain to Indian and Pakistani perspectives. Ananya Kabir has highlighted a long plains tradition of viewing the Valley as a paradise on Earth, which intensified popular Indian desire to absorb Kashmir. Kabir argues that the State has become essential to nationalist geographical imaginations in India, making any changes to the official international boundary tantamount to betraying the nation.²⁴ As a 1954 feature article in the *Times of India* enthused, below 'the vast encircling mass of mountains that is the glory of the Kashmir Valley [...] the poet will find inspiration and the artist undreamed of beauties of colour and scenery'.²⁵ Such sentiments could colour the viewpoints of senior leaders. Indian Prime Minister Jawaharlal Nehru's personal connection to the region is well known: he was a descendant of Kashmiri Brahmins. He wrote, in his 1946 history-cum-memoir, that one of his strongest mental images of India was 'some mountain valley in Kashmir in the spring,

covered with new flowers, and with a brook bubbling and gurgling through it.’ ‘Kashmir’, he also remarked regarding the eighth century CE, ‘had always been and continued to be an important seat of Indian learning and culture’.²⁶ Indian claims on Kashmir could be sentimental as well as legal.

Sentiment also played a significant role in Pakistani approaches. The large, populous Muslim state that lay on West Pakistan’s border might have seemed a natural addition to the nation’s territory. The very term Pakistan, coined by the Indian Muslim student Chaudhry Rahmat Ali in 1933, was an acronym in which the ‘K’ stood for ‘Kashmir’.²⁷ In public, Pakistani leaders emphasised popular feelings of Muslim solidarity between Kashmiris and Pakistanis, especially on the North-West Frontier and in the North-West Frontier Province where many Kashmiris had relatives. In a broadcast in November 1947, Prime Minister Liaquat Ali Khan spoke of a plot by the ‘enemies’ of Kashmiri Muslims—whether the Dogra rulers or Indian forces was not clear—who wanted to exterminate them.²⁸

In such discourses, Pakistan figured as a protector, not the ruler, of Kashmiri Muslims. Other Pakistani leaders did assert a direct claim on Kashmir. It was a Muslim-majority State and belonged ‘to Pakistan as a matter of right’, Abdul Qayyum Khan told the press in October 1947.²⁹ Either way, the appeal of brotherhood between Pakistani and Kashmiri Muslims was important. An unsympathetic British consular official in 1950 alluded to ordinary Pakistanis’ attitude towards Kashmir as one of ‘emotional delusion’.³⁰ The British official missed the point. As I showed in [chapter 1](#), the politics of the 1930s and 1940s had produced a territorial Pakistan as the compromise between a universal Muslim community and practical self-determination for the Muslims of the subcontinent. For a state that had only just gained a definite territorial basis, the relationship between nationality, political community and

space was far from settled, and Kashmir was easily incorporated into national geographical imaginations.

This led to a contradictory position. The Pakistan government sought, on the one hand, to make the territorial state into the nation's spatial container. It thereby attempted to construct a classically 'Westphalian' state out of the complex manoeuvrings of Partition. On the other hand, leaders such as Liaquat asserted that affective ties between Muslims in Pakistan and Kashmir spilled out of the container, and gave rise to a logic of nationalist solidarity that transcended the mere legal domains of states. Unlike Indian leaders, who settled for (or railed against) a truncated geo-body at Partition, Pakistani leaders spent the subsequent years attempting to define what Pakistan meant in territorial as well as ethnic, political and religious terms. Kashmir further destabilised the meanings of territory. For both Pakistan and India, the Kashmir dispute highlighted just how complex and ambiguous territoriality had become in South Asia.

Sovereignty, water and Kashmir

The uncertain role of both states in Kashmir further complicated the relationship between sovereignty, territory and water control. During the 1950s, water policy was part of New Delhi's steps to integrate Jammu & Kashmir State more closely into the Indian Union. As early as 1949 Niranjan Das Gulhati, a senior engineer in India's Ministry of Works, Mines and Power and later (from 1954) leader of the water dispute negotiating delegation, advocated incorporating Kashmiri rights on existing and future withdrawals from the Jhelum and Chenab in any settlement with Pakistan on the canal waters dispute. Gulhati's recommendation rather contradicted contemporary Indian assertions that the canal dispute was about Punjab alone.³¹ When the 1954 Bank Plan proposed assigning the western rivers (Indus, Jhelum and Chenab) to

Pakistan and the eastern rivers (Ravi, Sutlej and Beas) to India, the Ministry of States wrote urgently to Bakshi Ghulam Mohammed, Jammu & Kashmir's chief minister. It stressed the need to coordinate a case for protecting Jammu & Kashmir's existing and future uses of the Jhelum and Chenab (the Indus main channel flowing wholly outside Indian-held territory).³² Ordinarily, State governments of the Indian Union had a limited role in the Indus negotiations, and both India and Pakistan expected Kashmir to be a water supplier rather than consumer. On this occasion, though, the ministry wanted information on Jammu & Kashmir's (small-scale) existing and projected water needs so that the delegation in Washington DC could represent these as part of the total Indian requirement for river waters in the Indus Basin.

This was a clear indication that New Delhi treated Jammu & Kashmir territory as Indian, even if there was room for negotiation over India's theoretical rights over Pakistan Administered Kashmir. Internal developments demonstrated the same line of thought, since Jammu & Kashmir representatives took part in inter-State water discussions about how to use India's share of the basin's waters, alongside Punjab, PEPSU and Rajasthan.³³ Nehru confirmed that 'although the Kashmir state has not thus far been an important factor in these canal waters disputes, it has undoubtedly been in the picture'.³⁴

The integration of Kashmir into Indian water policy for the Indus river system complemented New Delhi's other steps to normalise governance in the State. The Instrument of Accession's promise that Maharaja Hari Singh would retain his rule had quickly proved hollow. Nehru's support of Sheikh Abdullah, the populist leader of the Muslim Conference and long-time opponent of royal power and the Hindu Dogra elite who supported it, helped force Hari Singh to resign within two years.³⁵ Abdullah's own ambitions for greater autonomy,

however, provoked a break with Nehru. In 1953 the Indian central government imprisoned him. In 1954 Jammu & Kashmir's Constituent Assembly, now led by Abdullah's more malleable former lieutenant, Bakshi Ghulam Mohammed, voted for full accession to the Union.

Greater integration followed. A 1958 amendment to the Indian constitution placed Jammu & Kashmir under the purview of India's civil services, which had previously been excluded as part of its special status.³⁶ In 1963 Bakshi Ghulam Mohammed announced that Jammu & Kashmir's *Sardar-i-Riyasat* (literally 'head of the state') and prime minister would be renamed governor and chief minister, respectively.³⁷ This move was clearly intended to subordinate the Jammu & Kashmir administration to the Indian Union by removing symbols of autonomy and giving the State's governors the same labels as those elsewhere in India. Integration on the Indian side of the ceasefire line drew Jammu & Kashmir more closely into the Indian mainstream, turning the line itself into an increasingly firm border.

Unlike India, Pakistan did not incorporate Pakistan Administered Kashmir's water requirements into its demands at the Indus negotiations. Yet water, with its implications for Pakistani sovereignty, was critically important to Pakistan's relationship to Kashmir. Kashmir lay upstream on the Indus, Jhelum and Chenab. These were the three rivers that India expected Pakistan to use to replace water losses from the Ravi, Sutlej and Beas. Pakistani leaders accordingly presented possession of Kashmir as the hinge between water control and territoriality.

A letter from Pakistani Prime Minister Liaquat Ali Khan to US President Harry S. Truman in 1949 summed up Pakistani arguments. Liaquat attempted to ground Pakistan's claims on Kashmir in the region's hydraulic geography, as well as its professed cultural ties. 'The geographical and strategic

position of Kashmir in relation to Pakistan,' wrote Liaquat, 'the flow of its rivers, the direction of its roads, the channels of its trade, the historical, economic and cultural ties which bind its people to Pakistan, link Kashmir indissolubly with Pakistan. Nature has so to speak fashioned them together.'³⁸ Arguing for a coherent policy during the 1950s is difficult, because Pakistan's political elite suffered a constant merry-go-round of factionalism and changes in leadership. But politicians, bureaucrats and military figures all consistently emphasised the need for a firmer grip on the western rivers' headwaters.

India's threatened and actual abstractions from the eastern rivers, in Punjab and Himachal Pradesh, heightened this relationship. 'Dependence of Pakistan upon rivers flowing from Kashmir [has] been increased manifold by threat of India to shut off waters of River[s] Sutlej (with its tributary [the] Beas) and Ravi which flow into India from Pakistan,' read a Pakistani communiqué to the Indian government in 1951. 'Waters of [Kashmir's] rivers [were the] lifeblood of West Pakistan,' the communiqué went on, echoing Liaquat's letter to Truman. '[A] glance at [a] map is enough to show geographical unity of Kashmir and West Pakistan.' Pakistani engineers could construct flood-control works, necessary for downstream water security, only in the hilly catchments of Kashmir, it finally stated.³⁹

Technical as well as political personnel in Pakistan were concerned about the Kashmir river situation. In September 1953, the UK High Commission reported that Pakistani engineers feared a possible Indian diversionary project on the Chenab, a canal in the Diangarh area of Kashmir. Such a project would pose a considerable threat to Pakistan's canals.⁴⁰ If India drew water from the Chenab and Jhelum, two of the western rivers, then even Pakistan's ability to feed supplies into the Sutlej Valley via link canals would suffer. The image

of desolate fields and starving farmers, which Pakistan's public relations machine promoted, threatened to become a reality. Kashmir and river waters were, in this picture, thoroughly entangled.

In practice, the precise relationship between Pakistan's claims on Kashmir and Indus waters was not so clear. Both issues aroused elite ire and popular passions, but there is no decisive evidence of how far professed concern over one might have obscured real intentions regarding the other. Pakistani leaders certainly did sometimes privately prioritise hydro-territorial claims to the Chenab watershed. These could take precedence over public pronouncements on the importance of Pakistani solidarity with Kashmiri Muslims. Pakistan was committed to the plebiscite principle:⁴¹ but, as Britain's Foreign Office estimated in October 1949, Pakistan might not insist on a plebiscite if an alternative settlement guaranteed the accession of Kashmir up to and beyond the far bank of the Chenab. Anything less would seem to be a surrender to Indian interests.⁴²

Pakistan's desire for both banks of the Chenab was consistent. In order to construct dams or canal headworks that could divert water from the river into canals, engineers needed control over both riverbanks. Leaders were able to add a communal basis to technical requirements: discussions in Pakistan's central cabinet in August 1953 stressed that Pakistan should insist on controlling the whole Chenab, both banks of which had Muslim-majority populations.⁴³ The following month Iskander Mirza, defence minister and director of the Department of Kashmir and Afghanistan Affairs, spoke to British diplomats. He confirmed that if Kashmir were divided between India and Pakistan—whether by plebiscite or not—Pakistan would demand the part of the Chenab Valley south of the Vale of Kashmir. Highlighting the area's importance for road communications as well as water control,

Mirza said that Pakistan needed it to link Punjab with Poonch, a Muslim-majority area.⁴⁴ Shortly afterwards Zafarullah Khan, Pakistan's foreign minister, repeated to the UK High Commission that Pakistan would demand both banks of the Chenab in any Kashmir settlement.⁴⁵

Influential Pakistanis outside the government also identified a connection between rivers in Kashmir's and Pakistan's fortunes. In 1957 Inayatullah Khan ('Allama') Mashriqi, religious philosopher and founder of the paramilitary Khaksar movement before independence, advertised a 'peaceful march of one million people on India' from Lahore to protest against India's control over parts of Kashmir. A flyer issued in January 1957 in connection with the proposed march reported Mashriqi's words, complete with challenging syntax: 'barring politics, as the land of Jammu & Kashmir has a direct connection with the land of West Pak[istan], and if separated, will cause Pakistan's utter economic destruction owing to the rivers flowing into it from the Kashmir Valley'. Since India had no natural connection with Jammu & Kashmir, the flyer continued, 'its handing over this land to the People of Pakistan will be for the good and prosperity of 80 million people'.⁴⁶ The Pakistan government apparently persuaded Mashriqi's marchers to disband before they reached Indian-controlled territory.

Pakistan's concern with Kashmir therefore went beyond the ideological and religious considerations that have dominated previous accounts of the conflict. Kashmir's high terrain and steep-sided gorges provided an ideal location for dam sites. Its upstream position on the Indus, Jhelum and Chenab also made it essential to the Pakistani establishment's perceptions of national water security, when India had already demonstrated its intention to swallow the eastern rivers. Arguing on the basis of downstream river integrity that Pakistan had rights to Indus system waters, Pakistani leaders claimed that Pakistan's right

to water conferred a right to control the territory that contained the rivers' headwaters: Kashmir. If water rights were to depend on territorial sovereignty, Pakistani leaders took Indian claims and inverted them.

Territorial claims also lay at the heart of Indian objections to how Pakistani leaders portrayed the relationship between water and the Kashmir conflict. One early Indian statement summed up New Delhi's take on Pakistan's arguments regarding the Chenab watershed. 'Pakistan', an Indian press release had exclaimed in 1951, 'might as well claim sovereignty over the catchment area of the Kabul river in Afghanistan and Mexico claim similar rights over the headwaters of the Colorado in the USA.'⁴⁷ In 1957 Suhrawardy remarked that Pakistan needed control of Kashmir because of the Indus rivers. An Indian embassy official in Washington DC complained to the State Department that Suhrawardy was attempting to establish a connection between Kashmir and canal waters where none existed.⁴⁸ In September 1959, while India–Pakistan–World Bank talks were under way in London, the Indian high commissioner in Karachi wrote to New Delhi to report 'whisperings' that the London talks were foundering on proposed Indian uses of the western rivers. 'No doubt', he wrote, this represented a Pakistani attempt not only to whittle down India's riparian rights, but also to further Pakistan's interests in the Kashmir question.⁴⁹

Indian leaders went further. They rejected Pakistan's linking of the Indus and Kashmir problems outright. Early on, Nehru denied Pakistani claims that India could feasibly use its territorial control over Kashmir to construct projects that would harm Pakistan's interests. 'It was a fantastic idea,' Nehru told a public audience on the occasion of Gandhi's birthday. 'Would India take the rivers to the sky?'⁵⁰ In 1951 Nehru restated his opinion more prosaically in a letter to Eugene Black, president of the World Bank. 'The Canal

Waters dispute between India and Pakistan has nothing to do with the Kashmir issue [...] So far as the rivers flowing into Pakistan from Kashmir are concerned, there is no question of reducing the quantity of water which they carry into Pakistan by diversion or any other device.’⁵¹ During the same year India’s Ministry of External Affairs issued a press release entitled ‘Physical facts refute fantastic story’, designed to counter Pakistani publicity statements. It was not possible, the press release claimed, to divert water from the Indus, Jhelum or Chenab to India from any place in Jammu & Kashmir.⁵²

The Indian press release had a point. The Indus flowed through areas that Pakistan controlled, and the Jhelum and Chenab ran mainly in deep gorges between high mountains, which prevented interference that could seriously affect Pakistan.⁵³ Pakistanis disagreed. A senior engineer told J.C. McCormick, a British diplomat in Karachi, of his fear that India could start construction of a dam at Diangarh. Located near Riasi in Jammu, such a dam could divert water from the Chenab to the Ravi. McCormick had some first-hand observational knowledge of the surrounding country and thought such a scheme would be prohibitively expensive, if at all possible. It is not clear that Indian engineers were really planning a dam there. A colleague of McCormick’s stationed in New Delhi had no knowledge of such a project.⁵⁴

The Indian government did draw up an abortive scheme to transfer water from the western rivers to the eastern basin, a five-mile-long tunnel to divert water from a Chenab tributary to the Ravi. But the tunnel was to start from Marhu in Himachal Pradesh, not in Kashmir.⁵⁵ The colonial-era Mangla canal headworks, which lay on the Jhelum in Indian-controlled territory, were more of a problem. During winter, when river levels on the plains were low, they supplied the Upper Jhelum and Lower Bari Doab canals in Pakistan. In the ominous words of a note by the UK High Commission in Pakistan,

‘India could destroy West Punjab by refusing to operate Mangla’.⁵⁶ India did not do so, but Pakistani engineers had real grounds for concern.

The Mangla Dam

In the end the Jhelum, and not the Chenab, became the scene for the most important physical manifestation of Kashmir’s hydrological importance to Pakistan. West Pakistan’s Water and Power Development Authority (WAPDA) constructed a dam at Mangla, near Mirpur, just inside the Pakistan Administered Kashmir border with West Punjab (despite the similarity in name to the old headworks, which were in Indian Kashmir). Planned during the late 1950s and mainly constructed during the 1960s, the 128-metre-high dam impounds the Jhelum’s flow in a 259-square-kilometre reservoir.⁵⁷ The reservoir flooded the existing Mirpur town and surrounding areas, displacing approximately 90,000 people.⁵⁸ The case of the Mangla Dam shows how concerns about territoriality, sovereignty and water flows intersected with material changes inside Kashmir. The dam substantially altered Pakistan Administered Kashmir’s landscape. It formed a key technical node in the existing hydraulic relationship between Pakistan Administered Kashmir and Pakistan. It also symbolised Pakistan’s domination over the region.

The Mangla project had material implications for Pakistan’s relationship with Pakistan Administered Kashmir. For a start, construction work entailed an extensive Pakistani institutional presence. The project brought WAPDA, one of West Pakistan’s most powerful government agencies, into Pakistan Administered Kashmir on a large scale for the first time. WAPDA could not manage the whole catchment area, much of which lay under Indian control in Jammu & Kashmir, but it could and did undertake watershed management across nearly 5,000 square kilometres in Pakistan Administered Kashmir

and West Pakistan. Its programme included afforestation and small engineering works.⁵⁹ Pakistani officials were also responsible for the building of schools and a hospital at the site.⁶⁰ The West Pakistan government's management of the construction programme also placed political relations at the dam site under provincial control—as when West Pakistan's Labour Ministry stepped in to resolve a two-day strike by 8,000 construction workers in 1964.⁶¹

The dam made good on a decade's worth of Pakistani claims that Kashmir was essential to irrigation in Punjab. It formed the linchpin of irrigation in the area that Pakistan's Indus Basin Plan called the Jhelum–Chenab Zone, namely the Chaj, Rechna and Bari doabs. It fed the colonial-era Triple Canal Project, plus new link canals designed to transfer water from the western rivers to colonies that had previously depended on the eastern rivers. It also provided hydropower.⁶²

The dam added a technical layer to the existing, natural riparian relationship between Pakistan Administered Kashmir and West Pakistan. Punjab's irrigation system, integral to the state's position in the political and physical landscape of Pakistan, now extended into Kashmir. Mir Bashir Khan, the project's chief engineer, wrote a celebratory feature article in *Dawn* when the dam was completed in 1967. Mangla, he said, marked 'the culmination of a gigantic effort undertaken [...] to make West Pakistan self-sufficient in the fields of irrigation and power'.⁶³ The Pakistani press, under the sway of the Ayub administration's censorship, lost no time in depicting the project as a symbol of national pride. According to a headline in the *Morning News*, it was the 'Mighty Mangla Dam: A Symbol of Progress'.⁶⁴ A *Dawn* editorial in 1958 called Mangla, along with the Tarbela Dam on the Indus main channel, the mark of 'a great and glorious era in the history of Pakistan'.⁶⁵ Pakistani discourses elided the disputed status of Pakistan Administered Kashmir, and its distinction from

Pakistan proper. They portrayed the Mangla Dam as very much a Pakistani national project.

On closer inspection the political effects of the dam were not nearly so clear-cut. Building the dam embroiled the Pakistan government in a public struggle over the meaning of sovereignty in Pakistan Administered Kashmir. Given that the Mangla reservoir flooded the whole of Mirpur town and displaced close to 100,000 people, it is hardly surprising that an opposition lobby quickly emerged there. The material effects of the reservoir formed the nucleus of debate, but the arguments that Kashmiris—and Pakistanis—made about Mangla were not simply material. They were not just about homes and livelihoods. They were also couched in languages of belonging, nationhood and reciprocal relations between state and people.

Public doubts about Pakistan's right to build a dam in Kashmir came up early, in 1957, before Ayub Khan had even launched his military coup. With the Mangla Dam Organisation in place, and planning under way, residents of Mirpur held a series of public meetings at which speakers argued that Pakistan Administered Kashmir was an independent territory. Pakistan, they said, did not have sovereignty there. In March 1957 Abdul Qayyum Khan, the president of Pakistan Administered Kashmir, replied that the question had to be examined in the context of the welfare of Pakistan. It was a mark of Karachi's influence over the Pakistan Administered Kashmir administration that the latter's own president should frame the problem this way, although Khan did also assure Kashmiris that his government would not do anything to injure their interests.⁶⁶ Khan's intervention apparently did not achieve a great deal. In July, speakers at a meeting of 1,000 Mirpur residents again questioned Pakistan's authority to construct a dam in what they called 'disputed territory'. A smaller public meeting held a few days later

demanding that a plebiscite on the sovereign status of Pakistan Administered Kashmir should precede construction work on the dam. In response, the Pakistan Administered Kashmir government organised further public meetings to explain the necessity of constructing the dam, and to assure audiences of adequate compensation and arrangements for resettlement.⁶⁷ Pakistani officials in September were still complaining of ‘subversives’ who opposed construction, including by holding demonstrations in the United Kingdom and United States.⁶⁸

By March 1958 the Ministry of Kashmir Affairs was satisfied that the Pakistan government’s decision to pay compensation had taken momentum away from the anti-dam front, though it noted that ‘self-interested people and some local politicians’ continued to demand that the project should be postponed until after a final settlement of Kashmir’s sovereign status.⁶⁹ Other public meetings in Mirpur in early 1958 served as a forum for the articulation of loyalties to Pakistan, as well as grievances. Speakers in January emphasised the need for full compensation and took the opportunity to demand representative government in Pakistan Administered Kashmir, which Karachi had so far denied them. But at the same time, some speakers recognised that Mangla was necessary for the prosperity of Pakistan and did not oppose it outright.⁷⁰ Discussions about Mangla were soon diverted into the detail of compensation and resettlement, rather than the larger question of Pakistan’s right to build the dam. The introduction of martial law in Pakistan after Ayub’s coup, and the Pakistan Administered Kashmir government’s corresponding Emergency Powers Act of 1958 perhaps also helped discourage opposition. According to the Ministry of Kashmir Affairs, the new regime ‘had a salutary effect and brought about an approach of all-round improvement in the administration’ in Kashmir.⁷¹ Whether through persuasion or coercion, the centre had its way.

Displaced people were mostly cleared from the area by early 1962, many going into temporary shelters. Pakistani newspapers portrayed this, too, as a symbol of Kashmir–Pakistan links. According to a February 1962 report in *Dawn*, the chief engineer of the Mangla project, Khawaja Abdul Ghafoor, ‘paid glowing tributes to the affected persons and said that their decision to leave their homes and hearths would go down in history as a great sacrifice for a pressing national cause’.⁷² This reflected a consistent development discourse in Pakistan, such as a report in the *Morning News* in 1970 that 80,000 people displaced by the Tarbela Dam’s 160-square-kilometre reservoir had ‘accepted [the need] to leave their homes in the larger interests of the nation’.⁷³ In both cases the discourse was disingenuous, since the inhabitants of flooded homes hardly had a choice about moving. The West Pakistan provincial government used compulsory purchase orders to dispossess them. Praising the sacrifice of Pakistan Administered Kashmiris for the Pakistani nation jarred with Pakistan’s autocratic dominance over the region.

The resettlement of dam-affected people in Pakistan was not only a pragmatic response to displacement. It also strengthened demographic ties between Pakistan Administered Kashmir and Pakistan. As early as August 1957, the president of Pakistan Administered Kashmir and the Mangla Dam authorities met at Murree to discuss resettlement. WAPDA would take charge of building a new Mirpur town. There was very little other land available in Pakistan Administered Kashmir, so they agreed also to find homes for displaced people in West Pakistan, in districts that had belonged to Punjab before One Unit—Rawalpindi, Jhelum, Gujrat, Gujranwala, Sialkot, Lyallpur and Montgomery.⁷⁴ Ayub Khan took a paternalistic approach, pushing for the government to allocate land rather than award cash on the basis that they would spend cash compensation recklessly. But WAPDA, the Ministry of Finance and the Ministry of Fuel, Power and

Natural Resources all agreed that it was not politically desirable to withhold cash payments.⁷⁵

Either way, the Pakistan government was putting its power to use. It shuffled sections of Pakistan Administered Kashmir's population around, dictating where they would live and how they would be compensated—a well-worn aspect of state power in South Asian water control projects.⁷⁶ The resettlement problem dragged on into the mid-1970s, accompanied still by nationalist discourses. 'Mangla Dam displaced persons who have already suffered in the cause of National Development should not be made to suffer twice,' a central government note argued in 1976.⁷⁷ The dam had brought the Pakistan state to Pakistan Administered Kashmir, and Kashmiris to Pakistan, on a large scale. Indian politicians, officials and press objected to the dam's construction on the basis that Pakistan Administered Kashmir was Indian territory. Mangla had already been a contested place in water politics: in 1949 Indian officials had left discussions about the colonial-era Mangla headworks out of negotiations between the two Punjabs, in case admitting West Punjab's interests in the headworks should prejudice Indian claims on Jammu & Kashmir.⁷⁸ Similarly, when the Pakistan government set up the Mangla Dam Organisation in 1957, the Indian government protested. In August, Indian officials decided to lodge an objection with the UN Security Council about the start of work on the project. The Ministry of External Affairs instructed India's permanent representative to send a letter to the president of the Security Council, stating:

The execution of this Dam Project is a further instance of consolidation by the Government of Pakistan of their authority over the Indian territory of Jammu & Kashmir which they continue to occupy by force and of the exploitation of the resources of the territory to the disadvantage of the people of Jammu & Kashmir and for the benefit of the people of Pakistan.⁷⁹

In October V.K. Krishna Menon, India's defence minister, told the Security Council that an agreement between Karachi and the Pakistan Administered Kashmir authorities to construct the dam violated the principles of the UN Charter. Pakistan Administered Kashmir, Menon said, was under Indian sovereignty. The people there had no right to enter into any international agreements.⁸⁰ In January 1958 the Indian government formally complained to the Security Council about Pakistan's violation of 'the sovereignty of the union of India and its territory in Jammu & Kashmir'.⁸¹ New Delhi also briefed its negotiating team at the World Bank-sponsored Indus waters talks in Washington DC not to agree to any works in 'Pakistan-held' Kashmir.⁸²

Nehru's government had a difficult line to walk. Officials viewed the dam as a violation of Indian sovereignty, but Indian leaders evidently did not consider Mangla sufficient grounds for military action. Pakistan's freedom to act in 'Indian' territory nevertheless caused the administration embarrassment. Representatives in the Lok and Rajya Sabhas pointedly asked what the government intended to do about it.⁸³ Nehru replied that the dam had to be considered in relation to broader questions, and at an appropriate time. After all, he said, 'the dam is not going to rise suddenly'. One Lok Sabha member, D.A. Mirza, retorted that Pakistan's building of the dam was an act of aggression and that India should meet like with like.⁸⁴ Nehru also faced press questions about the dam.⁸⁵ He equivocated on the issue. In August 1958, he even suggested it would be preferable to continue supplying some water to Pakistan through the eastern rivers (therefore letting go of the principle of Indian water sovereignty) rather than accept Pakistan's construction of the dam on Kashmiri soil.⁸⁶

Indian objections to the Mangla Dam gathered energy from the tenseness of the moment during which Pakistan began construction at Mirpur, following a period of relative calm.

The mid-1950s had brought a lull in tensions over Kashmiri water. Indian and Pakistani teams became embroiled in the early and middle phases of World Bank negotiations between 1952 and 1956, and refrained from commenting on connections between the Indus and Kashmir disputes.⁸⁷ But in 1956–7 Hussain Shaheed Suhrawardy, Pakistan's prime minister, renewed the bellicosity of official Pakistani rhetoric against India. He put Kashmir's rivers back on the agenda, unleashing a new round of Indian counterclaims. According to the *Times of India* in March 1957, India's willingness to cede the three western rivers to Pakistan, under a 1954 World Bank plan for the division of Indus waters, showed that Kashmir's integration with India would not lead to interference with waters that Pakistan needed.⁸⁸ The article failed to recognise that Pakistani leaders were able to use doubts about India's good intentions in order to stake a territorial claim on the Chenab watershed.

Another example of the disconnect between the two sides' discourses appeared in August. India's Ministry of External Affairs briefed its consulates abroad that a Pakistani telecast, starring Suhrawardy, had put forward the misconceived argument that most of the Indus rivers rose in Kashmir. In fact, the briefing stated, only one river rose there. The briefing warned consulates of the 'need to expose these lies lest they should stick by constant repetition'.⁸⁹ Again, this rather missed the point that the Jhelum and Chenab flowed through Indian-held Kashmir before reaching Pakistan-held territory. India's upstream location, not the true source of the rivers, was Pakistan's worry.

Nevertheless, India eventually acquiesced in the Mangla scheme. The World Bank was in favour of a storage dam on the Jhelum and link canals to replace supplies from the eastern rivers. The Pakistani delegation at negotiations in London in 1958 rejected their Indian counterparts' alternative schemes.

These would have put Chenab works, designed to supply both countries, on Indian soil. By that point, though, the Pakistan government was determined to sever its dependence completely on works located in India.⁹⁰ Nehru reassured Bakshi Ghulam Mohammed, Jammu & Kashmir's chief minister, in 1959 that the Indian government was not giving up its claim to sovereignty over Pakistan Administered Kashmir, but told him that there would be no war to prevent the dam's construction.⁹¹ On this occasion the broader imperatives to settle the Indus waters dispute trumped Indian concerns about the construction of the dam in what was, anyway, Pakistan-held territory.

Kashmir and the Indus Waters Treaty

Water remained, however, a tendentious issue in relation to Kashmir. When Nehru visited Karachi in September 1960 to sign the Indus Waters Treaty with Ayub Khan, the two leaders also held lengthy discussions about other questions.⁹² According to Indian diplomatic reports, the atmosphere of the talks was 'informal and friendly'. Discussions ranged over travel facilities, agreements on outstanding issues to do with moveable property left behind in each country by departing Partition migrants, the exploitation of gas reserves at Sui in Balochistan, and cooperation on scientific and technical matters. On Kashmir, however, they achieved little.⁹³ By June 1961, Ayub told American diplomats that he was unlikely to get a settlement of the Kashmir dispute through direct negotiation with Nehru. Meanwhile, the Indian press blamed inflammatory speeches by Ayub himself for destroying the goodwill that the treaty had produced.⁹⁴ Either way the treaty, which the scholar P.R. Chari has referred to as a confidence-building measure, did not build much confidence.⁹⁵ Instead, it became a new source of contention.

A closer look at the relationship between the negotiations, the treaty and Kashmir's geography is necessary to understand why. Both Indian and Pakistani negotiators had been concerned throughout the 1950s to protect their respective claims on Kashmir. The Indian team agreed to Pakistani water control works in Pakistan Administered Jammu & Kashmir, as part of the Indus Basin works programme, only so long as the treaty wording safeguarded India's legal position—its claim to sovereignty over the whole of Kashmir.⁹⁶ The Pakistan government similarly asked the World Bank to ensure that 'the water treaty should not be so worded as to prejudice Pakistan[']s stand regarding Jammu & Kashmir territory'.⁹⁷ The result was a treaty that deliberately avoided addressing the problem of competing approaches to Kashmiri sovereignty. This was essential to getting the treaty signed, but did nothing to resolve the Kashmir conflict.⁹⁸

The treaty assigned the water flows of the Ravi, Sutlej and Beas to India—something for which Indian negotiators had pressed since 1948. Pakistan acquired sole use of the Indus, Jhelum and Chenab, which it could use to make up the water deficits in land previously irrigated by the eastern rivers. Pakistan agreed to the division in return for \$850 million (more than \$6.8 billion in 2016 terms) in international assistance to construct replacement canals and new dams at Mangla and Tarbela. But the fact that the Jhelum and Chenab both flowed through Jammu & Kashmir before reaching Pakistani territory proved a block to improving relations.

Despite the many arguments that Indian and Pakistani policymakers made that linked water rights to ownership of territory, article IV(15) of the treaty hinted at both sides' eventual determination to separate the water settlement from territorial sovereignty. 'Nothing in this Treaty', it read, 'shall be construed as affecting existing territorial rights over the waters of any of the Rivers or the beds or banks thereof.'

Article XI(1) restated the matter: ‘nothing contained in this Treaty, and nothing arising out of the execution thereof, shall be construed as constituting a recognition or waiver (whether tacit, by implication or otherwise) of any rights or claims whatsoever of either of the Parties other than those rights or claims which are expressly recognised or waived in this Treaty’.⁹⁹ In other words, the treaty governed only the allocation of the flows of the six rivers and their tributaries. No other rights accrued. India had agreed to allow water to flow into Pakistan; it had not relinquished its claim to sovereignty over the Indus Basin’s rivers.

The passage of so many rivers through Kashmir, and the suitability of its topography for dam-building and hydropower generation, nevertheless put the region at the centre of several provisions. Neither the treaty nor its annexures directly acknowledged Jammu & Kashmir or Pakistan Administered Kashmir by name. They certainly did not mention the State’s disputed status. But references abounded to works, watercourses and places there. Annexure C, which provided for limited Indian ‘agricultural uses’ on the western rivers, specified the Ranbir and Pratap canals, which both took off from the Chenab in Jammu & Kashmir. India could continue existing irrigation uses.¹⁰⁰ Annexure D provided for India to build hydroelectric power works on the western rivers, again in Jammu & Kashmir. It named existing and potential generation plants, without noting the political implications of their location.¹⁰¹

The treaty’s evasion of the Kashmir issue was pragmatic, but did not address the fundamental cause of Pakistan’s water insecurity. It left ‘Pakistani’ rivers, the Jhelum and Chenab, flowing through Indian Kashmir. With no prospect of water from the eastern rivers, Pakistani discourses on the western rivers acquired an even stronger possessive tone, which intensified Pakistan’s claims on Kashmir, the land through

which those rivers ran. In March 1960 Foreign Minister Manzur Qadir, speaking in Karachi, asserted that Pakistan's coming dependence on the western rivers heightened the importance of gaining control over them. The Indian high commissioner in Karachi, who reported on the speech to New Delhi, interpreted Qadir as hinting that Pakistan might accept a partition along the Chenab watershed as an alternative to a full plebiscite in Kashmir.¹⁰² If so, this would have been a rare instance of a Pakistani leader publicly emphasising watershed control over Kashmiri self-determination.

There were many other examples of the same attitude. Around the same time, President Ayub Khan stated publicly that India's agreement that the water of three rivers passing through Kashmir belonged to Pakistan meant that the territory through which these rivers flowed should belong to Pakistan too.¹⁰³ Nehru told the Lok Sabha that Ayub had raised the same point during talks between the two leaders that accompanied the signing of the treaty in September 1960.¹⁰⁴ During the same month, Pakistan's *Civil and Military Gazette* argued that Pakistan now had 'the weightiest reason for having physical control over their [the western rivers'] upper reaches [...] There can be no escape from the reality that Kashmir and canal water are not two problems but one.' The Urdu daily *Nawa-i-Waqt* stated that without a Kashmir settlement, 'India will continue to have our life in her hands', according to the public relations office in India's Karachi consulate.¹⁰⁵ Even in 1962 Zulfikar Ali Bhutto, Pakistan's minister of information, told an audience in Hyderabad, Sindh, that the struggle for Pakistan could never be complete without a Kashmir solution because the State was the source of Pakistan's water.¹⁰⁶

India's position on Kashmir also survived the Indus Waters Treaty unscathed. Indian leaders had always insisted that Pakistan's presence in Pakistan Administered Kashmir was a breach of Indian sovereignty. A 1961 briefing instructed

Indian diplomats to counter the Ayub administration's claim that Pakistan needed Kashmir all the more as a result of the treaty. The official Indian line was that the treaty's guarantee of flows in the western rivers ought to be enough to satisfy Pakistan. The Ministry of External Affairs repeated the point that if lower riparians could legitimately claim physical control of the upper reaches of rivers, national maps would need redrawing across the world.¹⁰⁷

Indian attitudes towards sovereignty in Kashmir still retained ambivalence, though. India's ambassador to the United States, Braj Kumar Nehru (Jawaharlal's cousin), told the State Department in 1962 that the transfer of some Kashmiri land outside the Valley to Pakistan 'could be negotiable'.¹⁰⁸ But nothing came of this possibility. Instead, in 1963 Jawaharlal Nehru told the *New York Times* of his frustration with Pakistan's demands for control of river headwaters despite the existence of the Indus treaty. Nehru refused to countenance the idea of partitioning the Valley.¹⁰⁹

In practice, the treaty did limit India's de facto sovereignty in Jammu & Kashmir. The heavy restrictions on Indian uses of the western rivers substantially limited possibilities for economic development there. Jammu & Kashmir could only maintain, not extend, its irrigation provision from the western rivers. Of the eastern rivers, which India could use freely, only the Ravi passes at all through Jammu & Kashmir. Even then it merely runs along parts of Jammu's border with Himachal Pradesh and Punjab. By contrast the Jhelum, restricted to Pakistan's use, flows through the heart of the Valley. As early as April 1960, the chief engineer for irrigation in Jammu told a US diplomat that India had suspended plans for a dam on the Chenab near Riasi owing to informal Pakistani objections.¹¹⁰ But the territory of Jammu remained firmly in Indian possession.

Neither the Indian nor the Pakistani government would tolerate even the appearance of an implication for Kashmiri sovereignty in the Indus treaty. The treaty's success depended on its supposedly 'technical' basis. That enabled a separation from political issues, including Kashmir, as policy analysts such as Dennis Kux have argued.¹¹¹ As I will show in more detail in [chapter 6](#), it did depend on the apparent decoupling of water rights from territory, particularly in Kashmir. But in fact the attempts to separate water from territorial issues was a rhetorical sleight of hand. Geographers such as Kathryn Furlong, Colleen Sneddon, and Chris Fox have demonstrated convincingly in other contexts that transboundary river development is almost always a political matter.¹¹² In the case of the Indus system and Kashmir, it was both practically and politically impossible to divorce the rivers from the land over which they flowed. It was not possible to abstract water, as a resource, from the political context of people making claims to that water.

Conclusion

Kashmir's importance in the Indus waters dispute was in keeping with its general weight in India–Pakistan relations, and vice versa. The tangled relationship between sovereignty, territory and water pervaded both equally. As in the waters dispute more generally, there was fierce competition to define the terms of the debate. Indian leaders insisted that Pakistan's actions and claims violated Indian sovereignty: a 1970 Ministry of External Affairs briefing insisted that Pakistan's 'illegal occupation' of parts of Kashmir was the only issue, but Islamabad (Pakistan's new capital) wanted India to give up its assumption of sovereignty over the whole State as the starting point for negotiations.¹¹³ These stances mirrored India's attempts to define uses of transboundary river water as a domestic matter, versus Pakistan's assertion of downstream rights.

Yet Kashmir provided an additional layer of complication. India had physical access to rivers in Indian territory, but not to Pakistan Administered Kashmir. In the water dispute, India stood on its physical position while Pakistan invoked theoretical rights. In Kashmir, both sides had control of some territory, and made theoretical arguments about what should happen in the rest. Ironically, in the field of water development during the 1950s and 1960s, Pakistan exercised more de facto sovereignty than India in Kashmir. The Mangla Dam project symbolised Pakistani power. It literally integrated a part of Kashmir into Pakistan's water and energy supply networks, and extended the authority of West Pakistan agencies such as WAPDA into new territory.

By contrast, the Indus Waters Treaty severely limited Indian development work in Jammu & Kashmir. It thereby closed off one of the most significant routes to establishing state legitimacy in Kashmir: the price for India's assertion of absolute sovereignty over the eastern rivers on the plains. Indian Kashmiris have since put pressure on the central government over what they claim is the treaty's unfairness to them. The Jammu & Kashmir State assembly passed a resolution in 2003 demanding that the treaty be renegotiated.¹¹⁴ Power demand in Jammu & Kashmir, a State whose population increased from 2.5 million at the time of the treaty's signing to 10.5 million in 2011, has greatly outstripped increases in supply. The treaty's restrictions on water storage for hydropower on the western rivers, according to R. Nazakat and A. Nengroo, mean that the State government has developed only 2,500 MW of the region's estimated hydroelectric power potential of 20,000 MW. The State government is forced to run costly gas power plants and import power from India's centrally managed northern grid.¹¹⁵ In August 2014 the State's chief minister, Omar Abdullah, said that the terms of the Indus Waters Treaty had scotched the

State government's plans for a major water supply project from the Chenab.¹¹⁶

The entanglement of river control and territorial claims over Kashmir shows that the framework of absolute sovereignty versus territorial integrity in water rights, which I emphasised in [chapter 2](#), is too narrow to explain the ramifications of the Indus dispute. Identifying these positions helps explain the influence of riparian positioning on states' hydro-logics, but the unsettled nature of territoriality in Kashmir was equally important. With an enormous disparity between India's and Pakistan's legal claims on Kashmir, and the realities of state power there, an important element of the broader water dispute cannot be categorised according to transboundary water law norms. Indeed, the Indus Waters Treaty represented only the narrowest settlement of the water dispute because it did not address any of the territorial concerns that underpinned hydropolitics in the basin. As Hasan-Askari Rizvi has noted, Pakistani official circles still argue that Pakistan has more territorial and economic links with Kashmir than does India, relying as it does on the Indus, Jhelum and Chenab for almost all of its surface water supplies.¹¹⁷

Water and Kashmir have both remained emotive bilateral issues. During the 1980s, India planned the Tulbul navigation lock at the mouth of Wular Lake on the Jhelum, approximately 60 kilometres downstream of Srinagar. Pakistan feared that the project would also divert water for power generation and irrigation. The Indian ambassador in Pakistan accused the host government in 1986 of manufacturing a controversy through 'high voltage publicity'.¹¹⁸

Present-day analysts have plausibly suggested that water's role in the Kashmir dispute goes far beyond the Baglihar and Kishanganga projects. 'Peace between India and Pakistan', writes Nasrullah Mirza, 'is inconceivable without giving due consideration to the geographical imperatives' of the Indus

river system.¹¹⁹ Robert Wirsing agrees, stating that ‘water’s exclusion from any plan of conflict resolution pertaining to the India–Pakistan dispute over Kashmir would kill the plan at its birth’.¹²⁰ Sundeep Waslekar, based on interviews with policymakers and military figures, identifies a shift in priorities. He argues that until the late 1990s, public debate never linked the Kashmir conflict to rivers. Instead it focused on issues such as terrorism, human rights and the legality of accession. In 1999, he continues, Pakistani Prime Minister Nawaz Sharif opened peace talks with India, suggesting that the Chenab could become an international border in Kashmir. General Pervez Musharraf’s military coup against Sharif abruptly terminated those talks. But subsequent Pakistani proposals have redeployed the ‘Chenab formula’.¹²¹

At the time of writing, the website of the Pakistan military’s official Inter-Services Public Relations wing carried an article accusing India of using its position in Kashmir to wage a water war against Pakistan:

India is dotting the Kashmiri landscape with large and small dams that exceed its need and requirement. This massive dam build-up ignores the fact that it is happening on a disputed territory that remains on the U.N. Security Council agenda awaiting resolution. The Indian dam build-up is like creating a large valve that can be turned off any time to punish Pakistan, or to thirst it to death or surrender [*sic*].¹²²

Meanwhile, the Indian government continues to insist that Kashmir, or at least Jammu & Kashmir State, are integral parts of the Union. In 2014 and 2015 the governing right-wing Bharatiya Janata Party, under the leadership of Prime Minister Narendra Modi, tried and failed to scrap article 370 of the Indian constitution and thereby abolish Jammu & Kashmir’s special status.¹²³ But Kashmir was not the only place where the waters dispute collided sharply with competition to assert sovereignty. In the next chapter, we travel downstream to see how water exacerbated territorial tensions in Punjab’s riverine borderland.



PUNJAB'S RIVERINE BORDERLANDS

Colonel J.N. MacKay was a British officer stationed in Gurdaspur district, northern Punjab, in 1947. Gurdaspur was a scene of special confusion during Partition, since Sir Cyril Radcliffe's Boundary Commission awarded parts of the district to India despite its 51 per cent Muslim majority. Though India and Pakistan became formally independent at the stroke of midnight on 15 August, the outgoing viceroy, Viscount Louis Mountbatten, did not announce the boundary award until 17 August. In Gurdaspur it was not clear whether the local administration should fly the Indian or Pakistan flag during independence celebrations on the 15th. 'We, on that day, flew both flags in a doubtful jubilation,' wrote MacKay to the editor of the *Manchester Guardian* shortly afterwards.

Gurdaspur proved significant in the Indus waters dispute. It was the location of the Madhopur headworks connecting the River Ravi to the Upper Bari Doab Canal, which East Punjab's engineers shut off in April 1948. It was also important in the Kashmir conflict, since India's possession of the district gave Indian forces a land route to the Valley of Kashmir. MacKay's letter, however, did not focus on Gurdaspur's larger significance. Instead he related the tale of a Muslim executive officer who replaced a Hindu in a post in Gurdaspur on the eve of Partition. While the local people believed that this meant Gurdaspur would be allotted to Pakistan, the Muslim officer in question had in fact opted to serve India, where he owned

property. The officer, however, quickly changed his mind and disappeared to Pakistan. ‘That he could have elected to serve India’, wrote MacKay as early as 1950, ‘must now seem incredible.’¹

MacKay’s story illustrates the impact of the border on partitioned Punjab. In February and April 2013, I experienced dislocation at another part of the Punjab border, the Wagah–Attari crossing that lies between Lahore and Amritsar. The crossing is on the Ravi’s old floodplain, 15 kilometres south-east from where the river finally crosses into Pakistan. At Wagah, however, it is the border’s human aspect that is key. Every sunset, Indian and Pakistani soldiers—the tallest, sternest-looking that either side can produce—march up and down the thin fence that separates them. Dressed in crisp uniforms and carrying assault rifles, they stride in parallel along the fence, high-kicking and barking orders. The fence itself demarcates the international boundary. Both halves of this unique parade ground open up onto stands for civilians. The Indian side is now a popular destination for domestic and foreign tourists. On the other side, a smaller but still enthusiastic group of Pakistanis gather. Encouraged by officials with megaphones and patriotic T-shirts, the crowds shout ‘*India ki jai!*’ (‘Victory to India!’) or ‘*Pakistan zindabad!*’ (‘Long live Pakistan!’). It is a great *tamasha*, or spectacle, that displays nationalist fervour in a relatively safe environment.

My sense of dislocation did not stem from attending the ceremony, though I saw it from both sides within a single week. Instead, it came from putting the Wagah–Attari interface to its other, less common use. A handful of people cross the border here each day. On the sunny February Saturday that I stepped from Pakistan into India, the place was deserted save for one Pakistani diplomat travelling to his post in New Delhi. Yet the full technology of the modern territorial state was on

show: passport control, customs desks, policemen armed with pistols and suspicious glares. All this was familiar from countless airports. The novelty was walking across the no man's land where the soldiers parade at sunset.

Stride across a painted yellow line, and you are in India. The writing changes from Urdu, written in a Persianate script, to Hindi, written in Devanagari. Officials' uniforms suddenly alter in style. After passing through immigration and out into Indian Punjab, I immediately spotted stores advertising themselves as 'Wine Shop' and 'Pig Meat Shop'—two commodities illegal in Pakistan, just a few hundred metres away. Behind me was the fence, stretching away to the north and south, and the military units who police it. Though the ground, trees and auto-rickshaws looked the same, there was no doubt I was in a different country. The Muslim officer's attempt to remain on the 'wrong' side of the border in Gurdaspur after independence, which MacKay related, did indeed seem incredible to me then.

In 1947, by contrast, it was far from clear what the new border actually meant. There was no fence at that time.² The Indian and Pakistani governments only gradually restricted the free movement of people between the two halves of Punjab. Both countries had settled large numbers of refugees in 'evacuee property'—homes and lands whose occupants had fled during Partition violence—and officials did not want the original inhabitants returning. In 1948 the Indian government introduced a permit system to prevent returns. Pakistan followed suit within months.³

The precise location of the border was also in doubt in several places. As late as 1951, the chief secretaries of East and West Punjab agreed that a clearly demarcated boundary was necessary. In April 1956, police officials from each side agreed to a working policy to deal with riverbed changes. India and Pakistan did not finally resolve their border

differences until January 1960, the same year that Prime Minister Nehru and President Ayub Khan signed the Indus Waters Treaty. As with the Indus treaty, however, even a high-level agreement did not fully address the tensions between water, sovereignty and territory that played out at the border.

The new border defined the limits of the Indian and Pakistani states' authority, and served as a site for the aggressive performance of state identity. This is a common feature of borders in South Asia and beyond.⁴ In the classical sense, borders are 'dividers between geopolitical blocs'.⁵ Historians and historically minded geographers have engaged with the causes and effects of border-making in the past.⁶ In South Asian history, the question of borders and boundaries has been a popular one in the last two decades.

Joya Chatterji and Lucy Chester have examined the interaction of water flows and border politics during Partition and its aftermath. Chatterji argues that the Radcliffe Commission in Bengal struggled to come to terms with the unstable nature of *char* lands (strips of land rising above the river level). In places, the boundary award also abandoned the principle of communal majority populations in order to create viable economic units in East and West Bengal. Chatterji demonstrates that communities severed by the borders initially ignored the international divide, until new Indian and Pakistani paramilitary patrols aggressively interrupted their movement back and forth. Chester shows that Radcliffe was keenly aware of the desirability of preserving the unity of Punjab's canal system, and draws attention to some of the problems that the unsettled border presented after independence. Chester accurately asserts that we understand Bengal's borderlands more thoroughly than Punjab's.⁷ This chapter helps to redress the balance by investigating the relationship between rivers and the Punjab border more closely. I particularly examine the conflicting pressures that local, provincial and national

officials felt to take aggressive or restrained stances on border policy.

The border's riverine geography complicated the ad hoc arrangements for governing it during the 1940s–1950s. Several interlinked aspects of border management highlight the co-production of politicised space by humans and nature (the river and land), which I address in this chapter. Firstly, two important canal headworks, at Firozpur and Sulemanki, straddled the new border. Controlling these was significant not only for the operation of canals, but also for how local officials viewed national sovereignty. The attempts of East and West Punjabi engineers to maintain and use them overlapped with disputed territory. Chester identifies disputes over the headworks as among the most significant territorial issues that arose from the boundary award in Punjab, but does not consider them in detail.⁸ Secondly, disputes arose over river islands, especially in the Sutlej. The annual rise and fall of the river cyclically exposed and then reclaimed island land. Where the boundary cut across these semi-seasonal islands, confusion often arose. A number of small-scale armed stand-offs between Indian and Pakistani police and military forces took place on islands. In the chapter's third section, I examine changes in riverine border management after the intergovernmental border agreement and the Indus Waters Treaty, both signed in 1960. I show that such high-level agreements set up new rules that helped to regularise the ambiguous nature of 'national' space that characterised the 1950s. Water and sovereignty converged in Punjab's borderlands, producing an especially intimate relationship between border spaces and the rivers' fluvial action.

Making places national

Two major canal headworks on the Sutlej caused significant tensions over the exact demarcation of the boundary line in

Punjab. One of these was at Firozpur, where several canals started—the Bikaner and Eastern (India), plus the Dipalpur (India and Pakistan). Along with Madhopur, Firozpur was where East Punjabi engineers shut off water supplies to Pakistani canals. Radcliffe had designated the boundary between Firozpur and Montgomery (modern Sahiwal) districts as the international border. Since it cut through the headworks, near Hussainiwala, he envisaged joint India–Pakistan control at Firozpur. Unfortunately, his hopes for Firozpur proved unfounded. Aside from the headworks’ part in the Indus waters dispute, their position straddling the border made daily life difficult for those responsible for operating them. Indian and Pakistani engineers’ attempts to maintain their portions of the works, checking for damage and carrying out repairs, frequently involved moving through enemy territory or contested ground.

The second headworks were at Sulemanki, which connected the river to the Eastern Sadiqia, Fordwah and Pakpattan canals. All of them served Pakistan.⁹ The boundary award placed the main weir at the Sulemanki headworks unambiguously in Pakistani territory. The award stated: ‘if the existing delimitation of the boundaries of Montgomery district does not ensure that the Sulemanke [*sic*] headworks falls into the territorial jurisdiction of the West Punjab, that province is awarded so much of the territory concerned as covers the headworks, and the boundary between the Montgomery district and the Ferozepore [*sic*] district is to be adjusted accordingly’.¹⁰ Trouble nevertheless arose over control of the left marginal bund, a long earthen embankment that ran parallel to the river, upstream of the weir, in order to prevent abnormally high flood waters from spilling out into the surrounding countryside. Approximately 300 metres of the left marginal bund at Sulemanki lay in Pakistan, but the rest was in territory that India claimed. Contention at Sulemanki revolved around whether the bund was actually part of the headworks.

If so, then it belonged to Pakistan regardless of the old boundary between the districts of Firozpur (India) and Montgomery (Pakistan). If the bund was not part of the headworks, then some of its length was in Indian territory.¹¹

These territorial ambiguities quickly resulted in local-level tensions. In October 1947, a breach occurred in the bund about 200 metres from the Sulemanki weir, in Indian-claimed territory. A Pakistani labour party attempted to repair the embankment, but Indian troops from nearby Faridkot State chased them away. In September 1948 the Indian army and police erected a barrier on the bund just less than five kilometres from the weir. In October, the Indian authorities imposed graduated restrictions on the movement of Pakistani nationals along the left marginal bund. The Pakistani army could patrol up to the sixth *Burji* (numbered post).¹² Pakistani border police patrolled up to the sixteenth *Burji*. Irrigation employees could travel as far as the twenty-second *Burji*. In December Indian forces moved their barrier closer, to within two kilometres of the headworks. This evidently came closer to the river than the twenty-second *Burji* and interfered with Pakistani police patrols, as officials of Firozpur and Montgomery districts soon agreed that Pakistani border police could resume activity along the entire length of the embankment.¹³

Nevertheless, by May 1949 it was clear that Indian pickets at the headworks were causing problems for the Pakistani irrigation authorities. On 10 May the Indian army established a picket on the Sulemanki–Firozpur road, which made it difficult for West Punjabi canal staff to inspect the bund. Pakistan's central government worried that West Punjab's engineers might miss breaches that could occur during rains if they could not inspect the bund. Damage to parts of the headworks could result.¹⁴ The Indian Ministry of External Affairs told Pakistan's high commissioner that the military

post had been moved nearer to the embankment only to protect against raiders coming over from the Pakistani side of the border. It claimed to have already instructed the government of East Punjab to give all necessary facilities to Pakistani staff during repairs to the bund.¹⁵ Yet in July 1949, the difficulty that the Indian military presence caused to West Punjabi irrigation staff became clear. Indian police officials arrested Iqbal Ahmed, a minor Pakistani irrigation official, on the bund. Though brief, the incident illustrated the problematic and shifting conditions that accompanied Indian and Pakistani attempts to keep the divided canal system in working order, while asserting control in the borderland.

The Pakistani side of the story portrays the Indians as obstructive and unreasonable. According to Ahmed's own statement, on 22 July 1949 he was sent to count trees along the left marginal bund.¹⁶ It is not clear why. The engineers in charge of the headworks might have monitored trees because their roots could strengthen the soil and help prevent the river from eroding the embankment, or the West Punjab authorities might have been using Ahmed's movements to maintain a claim on disputed territory.¹⁷ For security, he took with him one head constable of the Pakistani border police and three regular constables. The party reached the fifth *Burji* unobstructed, where the head constable of the Pakistani border police shouted and signalled to some 'Hindu' police about 300 metres away (here I quote the terminology used in Ahmed's report). A 100-strong detachment of Indian police and military then encircled the Pakistani party.

The Sikh *thanedar* (officer in charge of a police station) seemed inclined to let the Pakistanis retreat to neutral ground. A Gurkha *havaladar* (army rank equivalent to sergeant), however, refused to let the Pakistanis go without permission from his superiors. Ahmed claimed that he and his party were blindfolded with turbans, and taken to nearby Fazilka police

station. The staff there treated them reasonably. At around sunset Mohan Singh, the officer in charge of the police station and presumably the same friendly Sikh *thanedar*, gave the Pakistanis food and drink. They stayed in the lock-up until 3 p.m. the next day, when an Indian military officer arrived and instructed Mohan Singh to return the Pakistanis to the headworks. Singh and other senior Indian officers seemed quite concerned with the Pakistanis' welfare. The Indian police again blindfolded Ahmed and company, and drove them back to the fourth *Burji* of the left marginal bund. There, they released them into the care of a waiting Pakistani military detachment.

The Indian side of the story, preserved in records in both New Delhi and Lahore, presented the case as one of sinister trespass. Indian reports put the number of armed Pakistanis at seven, not four, in addition to the (presumably) unarmed Ahmed. Indian observers, according to a note from the East Punjab authorities to their Pakistani counterparts, saw Ahmed and one armed man openly approaching an Indian outpost while another six armed Pakistanis were 'creeping stealthily', with bayonets provocatively fixed to their rifles. As the Pakistanis advanced further, the Indians challenged them. Three of the armed men ran away, leaving Iqbal Ahmed and four policemen to be arrested, conforming to the number of men arrested in Ahmed's report. The tone of the Indian communiqué suggested that Ahmed and company were taking offensive action. Correspondence within the Indian government put the reason for the arrest more prosaically, noting that the Indian picket had not received any warning of a visit from the other side, and that no Indian escort accompanied the Pakistanis.¹⁸ Indian authorities denied blindfolding Ahmed and the policemen. It seems that they took the decision to release the company after East Punjabi officials corresponded with senior Pakistani counterparts.

While the accounts of events differ, it is clear that the arrests did occur. The incident showed that the border was fluid, unfixed, and subject to sudden, apparently arbitrary changes. Scholars such as Reece Jones and Willem van Schendel have written eloquently about how ordinary citizens have negotiated territorial ambiguities and porous boundaries along the India–Bangladesh border, confronting both state oppression and opportunities to forge distinct borderland identities.¹⁹ In 1950s Punjab, there was little for local officials to gain from such ambiguities. To them, the boundary and the rivers that divided India from Pakistan were equally hazardous.

Local perspectives are key to understanding how borders, water and conceptualisations of sovereignty converged in 1940s–1950s Punjab. Though the border locations of canal headworks had ramifications for broader provincial and national politics, and were therefore of concern to the national governments, it was local officials and residents who most strongly advocated firm action to gain control of headworks. In doing so, they routinely invoked national prestige.

Officials in Pakistan’s Montgomery district, which abutted the Sulemanki headworks, furnish an example. H.A. Khan, deputy commissioner there and head of the district administration, was enthusiastic about asserting Pakistan’s rights over the territory that the Boundary Commission had awarded to it. He bemoaned ‘the excesses [of violence and looting] perpetrated by the Sikhs at Partition’. He exhorted his superiors to provide military posts along the new border in order to protect Pakistani peasants against further Sikh robberies. Khan also wanted support for his efforts to arm and train borderland residents.²⁰ Violent cross-border raids, especially to conduct cattle-rustling, were a feature of everyday life during the late 1940s.²¹

The Sulemanki headworks were Khan’s particular concern. In late 1947, Khan launched a letter-writing campaign to

provincial and national governments. He did so with the aid of Sahibzada Nawazish Ali, secretary of the Montgomery district Muslim League and president of the local Bar Association. Ali had assisted Mohammed Zafarullah Khan with the presentation of the Muslim League's case on the Punjab border to the Radcliffe Commission. Ali and Khan both encouraged the government to take a more aggressive stance at the headworks.

In November 1947, the two men wrote virtually identical letters about the headworks to senior figures in the West Punjab government. Their rhetoric combined the familiar tropes of territory and nationhood. Ali complained of the Pakistani authorities' inaction against India's exercise of 'rights of ownership and dominion' over part of the headworks, namely the road near the bridge. He predicted that failure to enforce Pakistan's right over the headworks would lead to trouble later, when the West Punjab irrigation authorities needed to repair the marginal bund on the left bank of the Sutlej. His symbolic and pragmatic concerns converged, delivered in an arch tone: 'It must be a very sad state of affairs where neither the Provincial nor the Central Government cares to know the limits of their jurisdiction much less to take adequate precautions for the safety of such an important item of a state's assets [as the headworks].'²²

Khan, in turn, wrote to his superior, the commissioner of Multan Division. Like Ali, he complained that the provincial government failed to respond to India's apparently nefarious designs on the headworks. 'I am certain', he wrote, 'that if we defer the matter any longer, the Indian Union will take the initiative and we will be confronted with a fait-accompli. The problems of the defence and protection of Sulemanki Weir—the life line of Nili Bar and Bahawalpur Colonies—would grow in magnitude as time is allowed to lapse in inactivity.'²³ Khan recommended that the Pakistani police force establish

armed posts at the limits of Pakistani territory—including the headworks—before Indian forces set up posts at the old Montgomery district boundary, which had put part of the headworks in Ferozpur district. This reflected a concern in Ali's letter. Ali complained that people in the area widely assumed that the old boundary still held, even though the Boundary Commission had ordered adjustments to place the headworks in Pakistan. Locals, Ali went on, mistakenly allowed India to exercise control over what now amounted to Pakistani territory. The commissioner of Multan Division supported Khan's and Ali's advocacy of firm action at Sulemanki, demonstrating that such concerns could resonate up the chain of command.²⁴ In a later letter, Ali referred to 'pointed public interest' in boundary matters, positioning himself as a popular spokesperson. Again, Ali argued that the Sulemanki headworks was 'our life line', and that Pakistan ought to safeguard its interests in the irrigation system by securing 'every inch of territory awarded to us' by Radcliffe.²⁵

In 1948, Ali and Khan apparently conspired in their letter-writing. This time they sent identical copies to different recipients. Ali wrote to Sir Mohammed Zafarullah Khan, Pakistan's foreign minister. H.A. Khan wrote to Akhter Husain, Pakistan's central financial commissioner. They urged these senior figures to exercise Pakistan's control over both banks of the Sutlej, where the boundary line lay on the far side of the river. They argued that 'it is impossible to entertain any idea of adjustment [to the] boundary which may entail giving up even the smallest area', because both banks of the river were necessary for irrigation and defensive purposes. 'For a State', they concluded, meaning Pakistan, 'it makes a world of difference whether the State owns both the riverine areas or only one.'²⁶ The West Punjab government also received letters about border and irrigation issues from other people who billed themselves as concerned citizens, such as the Lahore lawyer Abdul Aziz.²⁷

Borders, as John Agnew has noted, are both lines on the ground and social constructs that ‘trap thinking about and acting in the world in territorial terms’.²⁸ Letters such as H.A. Khan’s and Nawazish Ali’s sought to locate the Sulemanki headworks in a wider geography of Pakistani interests. They emphasised the fluvial connection between the state’s presence at the border and the welfare of agriculturists downstream. Scaling up local concerns to the national level might have been little more than a strategy to increase the impact of their missives. But the recent history of Partition, South Asian nationalism, the ambiguities of the border and the Indus waters dispute all conspired to give their warnings real weight.

Individuals could deploy this discursive resource in different ways. Nawazish Ali’s letter to the chief secretary of West Punjab invoked Pakistan’s jurisdiction over the headworks as a national asset. H.A. Khan rooted his case more firmly in the material context of the irrigation system, by highlighting the headworks’ importance to the large area covered by the Nili Bar and the canal colonies of Bahawalpur, a large Princely State that had joined Pakistan on independence in 1947. They both emphasised that the headworks, as an integral part of the irrigation system on which West Punjab depended, made the place where the works were located nationally important.

Khan’s successor as deputy commissioner of Montgomery district, Raja Hassan Akhtar, followed his predecessor’s line on territorial matters. ‘I feel it my painful duty in the name of the Pakistan State’, he wrote, ‘to invite once more the attention of the Government to the fact that in order to discharge its function properly the State must take possession of every inch of undisputed territory within the limits of its sovereignty.’²⁹ Akhtar’s own successor, S.A. Haq, again continued the tradition. In December 1949, the East and West Punjab authorities were at loggerheads over who had the right to

remove an obstruction on the left marginal bund at the Sulemanki headworks. Haq suggested a higher-level India–Pakistan conference to resolve the matter. Inaction was not an option. He wrote of the danger if Pakistan were ‘to leave the matter, as it is, and confess our inability to keep our control on territory, which belongs to us, in every respect under the Radcliff [*sic*] Award. I need not dilate upon the implications of this confession of weaknesses.’³⁰ Enforcing state presence at the border was a matter of principle as well as pragmatism. Ali, Khan and later deputy commissioners all worked to translate local border spaces into places of national importance. The hydraulic connections that spanned Punjab’s countryside, as well as patriotic pride, made their arguments plausible.

The irony of local actors’ letter-writing to the provincial and national governments lay in its ineffectiveness. Missives continued to flow because the higher authorities did not take the aggressive actions that Khan and Ali demanded. In Lahore and Karachi, senior officials interpreted the possibility and necessity of hardening borderland policy very differently. Pragmatism, not pride, tended to characterise their dealings. On 19 November 1949, for example, Brigadier Nazir Ahmed of Pakistan and Brigadier Sant Singh of India met at Sulemanki to determine the location of a joint traffic exchange post. Trouble defining the headworks prevented them from agreeing where Pakistan actually ended and India began, but they did agree informally that the West Punjab authorities should maintain and control the left marginal bund until the boundary was formally demarcated.³¹ This was an ad hoc working arrangement to allow certain types of mobility (for police and irrigation officials) in order to do specific types of work, without prejudicing formal understandings of territorial ownership.

We saw in [chapters 2 and 3](#) that the rhetoric emanating from the governments of India and Pakistan made liberal use of nationalist sentiment to highlight the supposed link between national territorial sovereignty and control over water resources. On the other hand, the restraint that more senior figures exercised in cases like the arrest of Iqbal Ahmed, and informal patrolling agreements, was fairly typical of situations where border issues intersected with the river and the irrigation system. Much scholarship on borderlands has asserted that borders are integral to the definition of power within a bounded territorial space, which governments require in order to attain identity as nation-states.³² Indeed, Stuart Elden has argued that borders, in the modern sense of well-defined boundaries between states, arise because control over territory forms the basis of state power.³³ The example of canal headworks in divided Punjab, however, reverses the usual narrative in which local (usually non-state) actors disregard or circumvent territorialities imposed from above. Instead, it was senior officials who imposed flexibility where some local (usually state) actors sought rigidity.³⁴ Understanding borderlands in the context of nationalism and state-building therefore requires a nuanced reading of fissures within the state, as well as of divisions between state and society.

Perhaps with a view to preventing the escalation of conflicts which might come about as a result of significant military involvement, the defence planners and commanding generals on both sides were keen to avoid committing troops to border disputes in Punjab. In early September 1949, the Pakistani border police occupied an area along the River Ujh (a tributary of the Ravi, which rises in Jammu before flowing through northern Punjab) that Radcliffe had awarded to West Punjab. The deputy commissioner of Sialkot district apparently authorised the move, without orders from senior authorities.

India's armed forces responded with continual low-level shooting, especially at night.

Within days, a meeting between Pakistani military and civilian officers in Lahore agreed that the Pakistani border police would not be able to hold their position. Major General Muhammad Iftikhar Khan, the general officer commanding 10th Division, refused to lend the army's help. The meeting agreed to withdraw the border police from their position on the east bank of the Ujh before that day's sunset made it too dark to cross the river. Major General Khan also emphasised that the civilian authorities should consult the army before taking decisions that required military support. He warned them that the army was not willing to move forward to support Pakistani police at the Sulemanki headworks, either.³⁵ The central government also showed itself keen to keep troops out of the fray, possibly to limit the chance of escalation. The foreign ministry in Karachi telegraphed the West Punjab government with instructions that civilian forces, and not the army, should contest any Indian patrols in disputed areas.³⁶

One place where Pakistani forces, apparently regular army units, did attempt to make territorial gains was the Ferozpur headworks at Hussainiwala. Here, the Indian military also resisted civil officials' attempts to escalate the conflict. The Indian commanding officer, General Thorat, advised in November 1949 'that purely from Military point of view [*sic*], we should not give undue importance to these minor encroachments on the Indian territory'. Doing so might lead to corresponding Pakistani demands that Indian forces vacate their advantageous position at Dera Baba Nanak Bridge.³⁷ A tit-for-tat arrangement, in which each side would allow the other some leeway, was the order of the day.

However, even senior officials on both sides were singularly unwilling to do anything that might appear to formally cede territory. While it might have made rational sense for India and

Pakistan to swap small pieces of territory at the canal headworks and across the River Sutlej, any such move needed high-level diplomatic discussion.³⁸ In 1949, when the East Punjab authorities took forcible possession of a portion of the left marginal bund at the Sulemanki headworks, Pakistan's high commissioner in New Delhi objected. 'The Government of Pakistan takes a very grave view of this encroachment of their territory,' he warned India's Ministry of External Affairs.³⁹ Conversely, Gyan Singh Kahlon, the deputy commissioner of Firozpur district, noted that the East Punjab government had allowed Pakistani irrigation personnel to do repairs on the bund with the clear understanding that any such arrangements would not prejudice the formal issue of territorial jurisdiction.⁴⁰

Niranhan Das Gulhati, a Ministry of Works, Mines and Power official who was closely involved in India's Indus waters negotiations, noted the problems that the East Punjab's irrigation department faced in carrying out river training works near the Firozpur headworks. Indian labour refused to approach areas, within territory that India claimed, where Pakistan had established armed checkpoints. If India allowed Pakistan to take on the maintenance of these works, he wrote, the chief engineers of East and West Punjab should come to an informal understanding on a seasonal basis. The governments of India and Pakistan should certainly not sign any official agreement, as this would, 'in effect, [recognise] Pakistan's hold over a portion of our territory'.⁴¹ B.K. Gokhale, of the same ministry, was inclined to agree.⁴²

Pakistani suggestions that its dependence on water from the Sulemanki and Firozpur headworks gave it a right to control them mirrored its claims on the Kashmir headwaters (where Pakistani leaders claimed territorial rights over the Chenab watershed). Indian responses, that dependence on water was no argument for territorial jurisdiction, were equally familiar.

Pakistanis based their claim to control at Sulemanki and Firozpur on the grounds that they took 100 per cent of the waters at the former and 75 per cent at the latter. According to a 1949 Indian memo, 'this to our minds is no reason for acquiring territory not granted to Pakistan by the Radcliffe award or for aggressive action'.⁴³

Six years later the position had changed little. An Indian note in 1955 rejected a Pakistani suggestion for joint control over Firozpur headworks, as originally envisaged by Radcliffe, on the basis that the World Bank had already abandoned the idea of unitary control over the canal system. Instead, the bank had proposed splitting the rivers during the previous year. 'Accepting a territorial position based on Pakistan's interest in the Firozpur headworks', as the Indian report put it, 'would be contrary to all that has been agreed to and to all that is being done at present in relation to the settlement of the canal waters dispute.'⁴⁴

During this period the border was an imagined construct, not a distinct line that could be clearly marked on a map. It remained undemarcated on the ground. It was a product of working arrangements between the two sides, which were subject to change and conflicting interpretation. It is notable that the apparently mundane activity of counting trees on an embankment caused Iqbal Ahmed's arrest. This activity transgressed an invisible line and brought out anxieties on the Indian side about regulating movement. In general, the concern with territorial sovereignty combined with anxieties about the movement of people near the border to produce an ad hoc, often erratic, form of state control over space. The fluidity of the border produced, in turn, the sense of insecurity that pressed letter writers such as Sahibzada Nawazish Ali and H.A. Khan into stridently nationalist assertions of Pakistani sovereignty.

Bordering Punjab after independence meant fixing the spatial limits of activity by the representatives of one country or the other. For this reason the militarisation of the border region was extremely important, even if the actual level of conflict never rose above a very small scale. As a correspondent for the London *Times* in India wrote in 1954, after visiting Sulemanki, 'Brick forts face each other with only a few yards in between: Pakistani border police and Indians sit in adjacent trees on lookout platforms staring at each other; and there is barbed wire everywhere and warning notices of minefields.'⁴⁵ It is small wonder that the canal headworks, which were part of a major international water dispute, formed flashpoints for conflict.

Islands and river geography

The changeability of Punjab's rivers also exacerbated tensions over border headworks. A substantial historiography identifies tough or unstable physical environments as a characteristic of frontiers.⁴⁶ In this vein, the River Sutlej at the India–Pakistan border added environmental instability to the production of borderland space during the late 1940s and 1950s. The border's geography included a river that crossed the boundary line several times. Seasonal islands appeared and disappeared as water levels fell in winter and rose in summer. Shifts in the course of the river left small pockets of land on the 'wrong' side of the riverbank, cut off from the rest of the country that owned them. These elements of the riverine environment could become points of serious, sometimes violent, contention between Indians and Pakistanis. The movement of water at the border, as well as the shifting topography that it produced, was a complicating factor in defining territoriality at the spatial interface between the Indian and Pakistani states.

The meandering nature of South Asian rivers, which carry heavy loads of silt down from the Himalayas, had troubled

engineers in the Indus Basin long before 1947. While riverbank communities traditionally cultivated *sailab* land (the fertile stretches exposed by the rivers' seasonal rise and fall and changes in course), colonial irrigation authorities attempted to trap rivers into a given course. They used 'training' works such as embankments to preserve water levels at canal headworks.⁴⁷ After independence, the seasonality of river islands challenged the Indian and Pakistani states' assumption of a fixed and stable territorial shape, as scholarship on divided Bengal has already recognised.⁴⁸

One island in Punjab that attracted particular ire was Gatti Kamelawala. This lay just downstream of the Firozpur headworks in the Sutlej, and the majority of its 22 square kilometres lay on the Indian side of the boundary. East Punjab's irrigation department considered the island essential to the defence of the headworks. Unfortunately for them, Gatti Kamelawala became inaccessible to Indian personnel every summer, when glacial snows melted in the river's Himalayan upper reaches and swelled the downstream portion with the annual inundation. Only a small part of the island lay on the Pakistani side but, crucially, it was accessible from the riverbank all year round. Despite its marginal holding, Pakistan claimed the whole Gatti. To support their claim, Pakistani officials cited an agreement between the generals commanding the Pakistan and Indian forces in Punjab, respectively Berthold Wells Key (a British officer who remained in the Pakistan army) and K.S. Thimayya.⁴⁹ The Indian authorities refused to recognise the agreement at all, which neither the Pakistani nor Indian government had formally accepted. They argued additionally that the Key–Thimayya agreement did not apply to river islands and was therefore not a relevant guide at Gatti Kamelawala.⁵⁰

The disputed ownership of the island became an issue in late March 1952, when hostilities broke out between Indian

and Pakistani armed police. According to the East Punjab border police report, officers received word that Pakistani civilians were grazing cattle and cutting wood on the Gatti. Police personnel went to the island, where they found Pakistani civilians under the protection of the West Punjabi border police. The two police forces exchanged fire.⁵¹ The Indian forces evidently came off worse, as by early April the Pakistanis had secured nearly the whole of the island.⁵² Indian police took up corresponding positions on its south-eastern tip, which remained under their control, and were later reinforced by the Indian army.⁵³ During the first weeks of the dispute there were several casualties on both sides. The Pakistani border police also captured nine Indian policemen, and handed them over to West Punjab's civil police force. The police charged the Indians with crimes including attempted murder, though the outcome of this case is not clear. By December 1953 the Indian forces had increased in number to 600 men, and had reclaimed half of the island's (larger) winter area.⁵⁴ The stand-off rumbled on until at least 1956, when sources on the dispute dry up. The exact reasons for the dispute are not entirely clear, as available records do not recount its beginnings in detail.

The reasons for its continuation are clearer. East Punjab's irrigation department advocated maintaining an armed presence on the Gatti, since it provided a useful point for taking soundings (measurements of the river's depth) just upstream of the headworks.⁵⁵ Occasionally, India's central Ministry of Works, Mines and Power supported East Punjab's claim. But the completion of the Harike weir upstream, later in 1952, opened a new source of water for the Indian canals that had previously depended on Firozpur. The Indian army, most officials in the government of India who wrote about the subject, and even other branches of the East Punjab government felt that the island was not worth holding.⁵⁶ It is unclear what happened to jurisdiction over the island in the

end, though a 1960 ministerial agreement between India and Pakistan assigned the Ferozpur headworks in full to Pakistan. It seems likely that the Gatti went with them to Pakistan's control. The commissioner of Jalandhar Division was probably correct when he wrote, as early as 1952, that the dispute over Gatti Kamelawala was driven largely by prestige on both sides rather than any real strategic or economic concerns.⁵⁷

Though the dispute over the Gatti was of dubious strategic importance, the case did reveal something about the political implications of Punjab's riverine border geography. Firstly, ease of possession of the island was more important than *de jure* sovereignty. It mattered more that Pakistani troops had a land link back to the island, and therefore were able to easily reoccupy it when it emerged from the river's receding waters each winter, than that the Radcliffe line placed the greater part of the island under Indian ownership.⁵⁸ The border, in other words, was not a firm line. The notion of a frontier is helpful here: a zone of ill-defined sovereignty, in which competing territorial claims played out.

Secondly, in turn, the category of territory in Punjab was not as stable as classical international relations theory might imply. The fundamental basis of cartographic representations of states as territorial areas, which underpins modern state formation, relies on land remaining the same. This means that a line drawn on the map corresponds, and will continue to correspond, to a particular point in space in the material world. The shifting action of the river at Gatti Kamelawala continually reshaped territory. This instability was what gave Pakistan the opportunity to take control of the island.

The Indian and Pakistani central financial commissioners met in 1955 to attempt to settle several ambiguities related to border islands. Following the meeting, a joint note pointed out the administrative difficulties that the changing shapes of islands presented. One dispute that they discussed was over

another Sutlej island, known to India as Gatti Dhandi Qadim and to Pakistan as Gatti Shahbazke. The boundaries of East Punjab's Firozpur district and West Punjab's Montgomery and Lahore districts all intersected there. The island lay between the right and left arms of the river and, when the dispute first arose in February 1951, the right arm was classified as the main stream of the Sutlej. A creek divided the island into two equal parts and formed the practical boundary between the Indian and Pakistani zones of control. Pakistani civilians used the northern portion of the island's pasture, and Indian grazers tended animals on the southern portion. After floods in 1950 and changes in the course of the river, however, the creek dried up. According to the Indian case, this apparently encouraged Pakistani cultivators to extend their possession to the southern portion in 1951.

Both Indian and Pakistani authorities claimed that their civilians and police forces had originally been in possession of the disputed territory, but by the time of the financial commissioners' meeting there were no reliable data regarding the area or the shape of Gatti Dhandi Qadim/Shahbazke as it had previously existed. Neither side could establish a territorial claim beyond doubt. Each delegation offered contradictory evidence, in which the imperfect state of topographical knowledge about the island repeatedly came into play. For example, Indian representatives stated that a yellow mark on the map that both sides shared denoted the creek, which had since changed course. Pakistani officials argued that the same marks represented not flowing creeks but a depression in the earth, which naturally could not change its course.⁵⁹ The financial commissioners were unable to agree finally on which country had originally been in possession of what.⁶⁰ Either way, the amount of area in question was tiny. India's claim varied from 1,835 acres to just 633 acres. The land in question was used for cattle-grazing, but was too small to have a significant economic impact beyond the local level.

Questions of prestige were probably as important at Gatti Dhandi Qadim as they were at Gatti Kamelawala. Nationalism alone, however, did not produce the dispute. The combination of unstable topography, limited knowledge and imprecise cartography created the conditions and a good deal of the impetus. The sum of these uncertainties was, again, that the border was not a fixed line. In this case, the border was barely even knowable to either of the states that were attempting to enforce it.

1960 and beyond

In 1960, the situation at the Punjab border changed in two important ways. Firstly, talks between Indian and Pakistani politicians in January succeeded in settling four of the five disputes relating to the boundary between India and West Pakistan. Secondly, President Ayub Khan of Pakistan and Prime Minister Nehru of India signed the Indus Waters Treaty in September. This removed any need to compete over the control of the Firozpur or Sulemanki headworks in order to secure water supplies by allocating all of the water flowing in the Sutlej to India. Both of these high-level international agreements had a profound effect on border management. The two central governments became more closely involved in border affairs, seeking to comply—and ensure each other's compliance—with the border and water settlements. Alongside local and provincial cross-border relations, the 1960s brought national imperatives more strongly into play.

For a long time, settlement of border issues had seemed as elusive as ever. Encouraging signs occurred in September 1958, when Nehru and Prime Minister Firoz Khan Noon of Pakistan met in New Delhi. The two men agreed that each country's foreign office would consult with engineers, in order to hammer out a plan for settling the disputes over the Sulemanki and Firozpur headworks. The initiative amounted

to little, since a meeting between bureaucrats in Karachi in February 1959 revealed that Pakistan's position had hardened. The Pakistanis now challenged the Radcliffe award at Firozpur, arguing that the boundary should be redrawn from the middle of the weir in order to divide the headworks neatly between the two countries. This marked a reversal of Pakistan's previous demand for joint, coordinated management. It perhaps reflected the strong likelihood that the coming Indus waters settlement would assign the Sutlej to India, leaving Pakistan with little stake in what happened at the headworks. Nehru protested that Pakistan was attempting to encroach on India's territorial rights.⁶¹

The prospects for a settlement at Sulemanki were no brighter. The canal headworks were, of course, allotted to Pakistan under the Radcliffe award, but India still contended that the left marginal bund did not count. India's high commissioner thought that the Pakistanis were stalling while awaiting the results of the Washington parleys on the Indus dispute. Chester writes, citing private information, that Pakistan's stalling tactic was in fact due to concerns that an arbitration process might compromise Pakistan's defence position if it awarded the strategically important headworks wholly to India.⁶² It is also possible that Ayub Khan's military coup of November 1958 produced a harder stance on border issues.

Renewed political talks in January 1960 were more successful. Pakistan and India both gave up their claims to certain villages lying on the 'wrong' sides of rivers. At the Firozpur headworks, they agreed to follow the Boundary Commission's award, and maintained the district boundary between the Firozpur and Lahore districts as the international line. This left part of the barrage and the headworks of the Dipalpur Canal in India. At Sulemanki the Indian government finally agreed to Pakistan's definition of headworks, and

transferred the left marginal bund to West Pakistan. The only issue that the negotiators did not resolve was a dispute over the Rann of Kutch, a large salt marsh lying much further south, between Sindh and Gujarat.

At the negotiations, the military detachments reportedly got on well, and agreed to a set of ground rules that the opposing forces would follow on the border between India and West Pakistan. Civilian bureaucrats had a more difficult time, and it took ministerial intervention to resolve the Sulemanki headworks issue. The Indian high commissioner in Karachi reported home that the negotiations owed their success to a mutual desire to settle problems 'which had baffled solution for twelve weary years'. The territorial exchanges, he wrote, would more or less balance out. Small skirmishes would be eliminated.⁶³

Border relations at the upper levels continued to improve. A boundary demarcation operation had begun in October 1959, and a ceremony at Karachi in September 1963 marked its culmination. The central surveys of India and Pakistan had finished mapping out the 1,040-kilometre-long boundary between Rajasthan and West Pakistan. The surveyors general of India and Pakistan, the Indian deputy high commissioner in Karachi and Mohammed Shafqat, the director general of the Pakistani Ministry of External Affairs, signed approximately a thousand maps depicting sections of the boundary at various scales. These maps now constituted the authentic record of the international boundary in this sector.⁶⁴

Of course, the existence of the ground rules did not eliminate border tensions altogether. In January 1961, India and Pakistan exchanged the areas 'held adversely' by either country. This was intended to iron out the anomalies of territorial holdings at the border, and indeed helped to reduce tension in some areas, as when Pakistani forces withdrew from the Firozpur headworks.⁶⁵ But Pakistani reports complained

that the East Punjabi government quickly began constructing observation towers on their side, in close proximity to the border, against the letter and spirit of the ground rules. A race to build border towers ensued, with Indian and Pakistani troops seeking to locate towers at strategic points.

Disagreements over observation towers demonstrated the continuing role of rivers in border management. One such point was the Kikar tree-post and observation tower, on the Pakistani side near the Firozpur headworks. From its top, Pakistani sentries could easily see movements on the Indian side, not only on the river bridge and headworks but also as far as the walls of Firozpur town.⁶⁶ Its position carried dangers as well as benefits. Early on, the chief engineer of West Pakistan's irrigation department (which had replaced the West Punjab authority in 1955, when the province merged into the One Unit scheme) worried that the post was located too close to the river's floodplain. It could be washed away when the waters rose during the coming winter inundation.⁶⁷ Local engineers inspected the area, and concluded that there was no imminent danger to the tree-post or the observation tower. The commandant of the Sutlej Rangers, a paramilitary force that had succeeded West Punjab's border police, disagreed.⁶⁸ In September 1962, the West Pakistan government claimed that the Indian irrigation authorities had opened the regulating gates of the headworks in order to deliberately send excess water downstream, causing erosion of the riverbank on the Pakistani side. Water came within 14 yards of the tower before receding back to the river.⁶⁹ In 1963, the wing commander of the Sutlej Rangers in Kasur reported that East Punjab irrigation personnel had begun piling near the last three regulating gates on their side of the Firozpur headworks.

The Indian authorities informed their Pakistani counterparts that they were repairing several regulating gates. But this, in the words of the director general of the West Pakistan Rangers,

appeared only 'to be a bluff. The real intention', he went on, 'is to raise the height of the river bed on their side in order to divert the flow of water towards Kikar Tower without closing their gates[,] to which we had protested last year[,] and thus accomplish their aim of having the Kikar Tower washed away.'⁷⁰ The West Pakistan government ordered its irrigation department to undertake stone-pitching work around the tower at Kikar in order to protect against further flooding. The Indian police at Firozpur protested that this violated the ground rules for border management (which had been revised in 1961).⁷¹ Indian labourers, meanwhile, completed an embankment on the East Punjab side of the river.⁷² River water and local manoeuvring continued to cause tensions at the border.

The Kikar Tower affair produced a deadlock between the governments of India and Pakistan over the implications of the ground rules. A bilateral conference in New Delhi in March 1963 drew up a new set of ground rules. These provided for the scaling down of some Indian towers and the demolition of three Pakistani towers. The new regulations designated a zone within 914 metres (1,000 yards) of the border where constructions such as towers had to conform to height restrictions. Either country could demand joint inspection of both sides of the zone at any time.⁷³

Formalising the operation of border management did not make the two countries friends. Relations between India and Pakistan remained tense throughout the 1960s. In 1965, tensions would spill over to war in Kashmir, which also spread onto the plains of Punjab. Yet the kinds of disputes that arose after the agreements of 1960 and 1961 were more concerned with actions that had tactical or strategic military implications than with prestige. The priority was no longer to define the limits of Indian or Pakistani territory. The blurred nature of spatialities at the edges of the Indian and Pakistani states in

Punjab, which had prevailed through the late 1940s and into the 1950s, was eliminated.

The Indus Waters Treaty also reduced the scope for local agency at the border. For a start, the two canal headworks on the Sutlej would soon become relevant only to India's irrigation system, because the treaty assigned the river to India. During a ten-year transitional period (which in fact extended to 1973), Pakistan constructed link canals to transfer water from the western rivers to colonies that had previously depended on the Ravi and Sutlej. At the same time, India's development of an upstream weir at Harike, as well as the Bhakra–Beas–Rajasthan complex of projects (which redrew the map of water supplies to East Punjab and Rajasthan), made both the Firozpur and the Sulemanki headworks largely irrelevant.⁷⁴

Disputes that implicated the treaty drew swift and decisive senior attention. The Permanent Indus Commission, a joint body established under the treaty's provisions for resolving differences, helped put an end to a dispute that arose in August 1961. Pakistani officials worried that Indian engineers were carrying out work in the river that could damage the Firozpur headworks (on which Pakistan still relied, under the transitional arrangements). Mian Shamin Ahmed, the superintending engineer of the Dipalpur Canal circle at Lahore, reported to the Waters Treaty Implementation Cell of the West Pakistan government that troubling erosion was taking place downstream of the Firozpur headworks. This river action, he wrote, had started very recently owing to the dismantling of a small spur lying on the Indian side. This spur had been situated about 300 metres feet downstream of the weir and about 90–120 metres upstream of the international border. The spur had been constructed before Partition to protect the downstream banks of the Dipalpur Canal, the head reach of which flowed parallel to the river. Ahmed confessed

that he did not have a detailed plan of the headworks, but reported that he had inspected the spur visually by telescope. He had seen that the stone apron and pitching had been dislodged, meaning that the spur was likely to wash away with the next high water.⁷⁵

The director general of the West Pakistan Rangers suspected that the Indians had dismantled the spur in order to encourage flooding and endanger a newly constructed Pakistani observation tower. Since the work involved headworks from which India was still supplying water to Pakistan's Dipalpur Canal, the Pakistani commissioner for Indus Waters was able to take up the matter with his Indian counterpart. The latter denied the dismantling of the spur, claiming that no spur had ever existed there.⁷⁶ A joint inspection downstream of the Firozpur headworks by the Permanent Indus Commission proved the Indian commissioner right. What had looked like a spur to the West Pakistani authorities was actually the stone apron at the nose of the guide bank of the headworks. Indian maintenance works posed no apparent danger to the Dipalpur Canal, and the commission had done its job.⁷⁷

The Sulemanki headworks were also a site for reconciliation. In June 1963, the wing commander of the Pakistani Desert Rangers at Sulemanki reported that Indian civilians were carrying out work near the left marginal bund (which India had accepted was in Pakistan during the 1960 border talks). His enquiries to the East Punjab authorities suggested that the latter were carrying out surveys ahead of constructing an embankment about 120 metres long. It ran parallel to the left marginal bund, just inside Indian territory. The commander of the Desert Rangers at nearby Bahawalpur argued that the purpose of the new embankment was to divert flood water from Indian territory to the Sulemanki headworks. Whenever the flood discharge exceeded the normal capacity of the headworks, it was usual practice for the engineers to make

relief cuts on both the left and right marginal bunds. This diverted some of the flood waters away from the headworks and dissipated their force. The construction of an additional bund inside Indian territory would prevent Pakistani engineers from decreasing the pressure of flood waters on the headworks through the left flank. This was not a violation of the ground rules or the Indus Waters Treaty but, as the commander put it, ‘in view of its impending effect we can ill afford to let them [the Indians] proceed with such an undertaking’.⁷⁸ Under instructions from the director general of the West Pakistan Rangers, the Sulemanki commander lodged a strong protest with the Indian authorities. He also kept a close watch on developments at the embankment.⁷⁹ The East Punjab authorities ultimately stopped building the embankment after the governments of India and Pakistan came to an arrangement for the drainage of water from Indian territory back to the River Sutlej through a siphon.⁸⁰

In both the Firozpur and Sulemanki cases, maintaining the Indus Waters Treaty became more important than competitive assertions of territorial sovereignty. Instead of articulating national interests in terms of sovereign power, officials looked to the rules of the treaty to make cases against their counterparts across the border. The West Pakistan authorities therefore found themselves powerless in the face of troubling Indian activities that did not have an obvious connection to water management. For example, in 1969 the Permanent Indus Commission inspected ditches in Kasur district that Sayyed Z.H. Jafri, the chief engineer of Pakistan’s Waters Treaty Implementation Cell, thought were designed to flood Pakistani territory. The commission concluded that the ditches were for defensive purposes only, leaving Pakistani officials with no grounds for objecting.⁸¹

Conclusion

I will conclude with a momentary leap from the local to the global. Across Asia and Africa, post-war decolonisation ushered in a new regime of nation-states (or at least states claiming to represent nations). Firm geographical boundaries separated them, at least in theory. As European imperial powers withdrew to less formal roles, such as the British Empire's transition to the Commonwealth, they turned over governance to new political elites. Historians have highlighted the messiness of decolonisation: the struggles for power among potential new rulers, and the colonialists who were often reluctant to relinquish it. They have also emphasised the fraught nature of border-making. The often arbitrary placement of borders divided historically connected lands and communities. Consequently, complex interplays of local and international politics frequently produced contested boundaries. The Partition line in Punjab is one South Asian example; the border between Pakistan's North-West Frontier and Afghanistan is another. Further afield, the problematic border between Iraq and Kuwait was a legacy of Britain's role in the Middle East. The All-African People's Conference in Accra in 1958 denounced the assumption that postcolonial states would inherit imperially made borders as a ploy to divide the peoples of Africa. But border wars and secessionist movements (attempts to erect new borders) plagued Kenya, Somalia, Mali, Nigeria, South Africa, Mozambique, Angola and Namibia during the 1960s.⁸² Decolonisation scholarship rarely, however, takes environmental factors into consideration.

The role of the natural environment in disputes at the Punjab border was more intensive than that which it played in the wider Indus waters dispute. The Indus dispute was over who had the right to control the Indus rivers, and what they could do with river waters. The Indus dispute was based on technocratic control. Engineers from one state or the other acted on water to manipulate it in particular ways. Geography

mattered in so far as it determined how the Indus system rivers drained the basin's catchment. The lie of the land presented, and constrained, opportunities for dam-building and canal-digging. But the political implications of river control at the basin scale were thrashed out in New Delhi, Karachi/Islamabad, and negotiating rooms in Washington DC.

By contrast, local officials at the Punjab border lived day to day with the rivers' dynamism. Trouble with headworks management and border islands demonstrated more clearly how the actions of the river opened and closed opportunities for human action. The Sutlej was not a neutral backdrop to the playing out of the India–Pakistan rivalry, but actively shaped border disputes. The border itself was also in flux. Whether because of the ambiguities in Radcliffe's award of the headworks, or because of islands appearing and disappearing in the river, the spatial edges of the Indian and Pakistani states' domains were blurred. The river and the border played equally problematic roles in the construction of territoriality. The environments of decolonisation, and their impacts on processes of post-independence state-building, deserve more attention from historians.



SPACES OF COOPERATION

In this chapter and the next, I turn to the ‘classical’ story of the Indus waters dispute: the World Bank-sponsored negotiations. We saw in [chapters 3 and 4](#) that the three-way relationship between territory, water and state-building was hugely complicated in India and Pakistan after independence. My topic in this chapter is a major attempt to simplify that relationship during a critical early period of the dispute, between 1951 and 1954. My focus is on David E. Lilienthal, a prominent American technocrat and water manager. The ideas that Lilienthal set out in a 1951 magazine article, entitled ‘Kashmir: Another “Korea” in the Making?’, laid the foundation for subsequent negotiations between India and Pakistan under the World Bank’s auspices, which took place between 1952 and 1960. His most important principles were an ‘apolitical’ approach based on technical and engineering data, and an assumption that the Indus Basin constituted a single hydrological unit. Taking these as a starting point, the World Bank secured Indian and Pakistani agreement to hold negotiations. At the end of the period, however, it became clear that neither Indians nor Pakistanis were prepared to work closely together. The settlement would need to divide the rivers between the two countries, rather than provide for joint, cooperative development of the Indus Basin. This chapter is the story of a failed attempt to transcend territoriality.

Previous work on Lilienthal’s involvement in the canal waters dispute has usefully emphasised the technical approach that he took to the problem.¹ Keeping politics out of the

negotiation process, some authors have argued, was the key to their success.² Such work has demonstrated the importance of scientific data and technical understanding in forming the basis of his approach and the negotiations that followed, but accepts Lilienthal too readily on his own terms: as a catalyst for change, a pragmatist who saw India–Pakistan tension over the Indus Basin as a practical engineering problem and devised a compelling (if politically naïve) programme for overcoming it. I argue that existing narratives represent a misreading of the nature of politics in the Indus Basin. In particular, previous authors have not considered in depth the political logic and implications of Lilienthal’s proposal for resolving the Indus issue. Lilienthal’s article deployed international cooperation as a trope of anti-politics—despite its implications for the claims to territorial sovereignty of two recently constituted, nationalist post-colonial governments. While his elision of politics was a useful rhetorical tool, I argue, it could not alter the fact that the Indus dispute was deeply ingrained in Indian and Pakistani claims to sovereignty.

I therefore focus on the spatial politics of Lilienthal’s article, and their implications. We understand little about the way that his proposal discursively constructed a particular kind of political space in which water development could take place. Mid-twentieth-century engineers imagined river basins as a natural scale of development. In a river basin, technocratic schemes for water management could appear to occupy a plane above the messiness of politics, while at the same time transcending political or administrative boundaries. I argue that Lilienthal attempted to ‘naturalise’ the Indus Basin as the correct space for cooperative, technically efficient water resources development. To do so he emphasised the role of engineers and technocratic planning, seeking an alternative to conflict in the basin. This chapter therefore encompasses the phase of negotiations that engineers, and considerations framed as ‘technical’, dominated. Lilienthal’s presentation of

the Indus Basin as a natural scale of development was quite unnatural, for both geophysical and political reasons. Moreover, his proposal, and reactions to it in India and Pakistan, were thoroughly political. Understanding Lilienthal's proposals for the Indus Basin—what he envisaged and why, ultimately, his vision failed—takes us to the heart of the debate over the nature of the Indus dispute and treaty.

I begin by introducing Lilienthal as an individual, explaining his interest in the Indus dispute, and outlining his proposal. I then make my case for understanding his writing in terms of its discursive construction of a 'basin space'. I demonstrate that Lilienthal, having rhetorically established the basin as a scale for development, went on to identify the hydraulic engineers of East and West Punjab as 'scale-jumpers': people uniquely well placed to escape the confines of post-Partition geopolitics and carry out cooperative, technocratic control over the Indus and its tributaries. Thirdly, I show that the way the World Bank, India and Pakistan took up and used Lilienthal's proposal quickly undermined the basis of cooperation that he envisaged. His foundational proposal was reduced to merely symbolic importance. Finally, I demonstrate in more detail that the politics of territorial sovereignty constricted the possibilities for a settlement. In particular, the principle of cooperative joint development of the Indus Basin as a whole, the core of Lilienthal's plan, died an early and comprehensive death. Cooperation in the basin proved a much more political beast than Lilienthal imagined.

'A Punjab powder keg'

David E. Lilienthal was one of the great American technocrats of the mid-twentieth century. A founding director of the Tennessee Valley Authority (TVA) in 1933, the world's first integrated river-valley development agency, he went on to become a member of the US Atomic Energy Commission. His

books were bestsellers, particularly the effusive *TVA: Democracy on the March* (1944), which extolled the TVA's beneficent, modernising influence on American culture and landscape. In February 1951, retired from government service and poised on the brink of a lucrative career in development consultancy, Lilienthal and his wife Helen left Washington DC for South Asia. They travelled to the subcontinent at the invitation of Jawaharlal Nehru, India's prime minister, who wanted Lilienthal's perspective on India's programmes to develop its scientific capabilities and water resources.³

Such a desire struck familiar contemporary notes. American water managers had been transporting their expertise to Australia, South Africa, Hawaii and Palestine from the early 1900s.⁴ As Lilienthal's biographer wrote, he 'was a metaphor for [1950s] America's vision as a world leader. He believed in big technical solutions and good will.'⁵ At the same time, the international development community after the Second World War was greatly concerned with schemes to improve water provision in developing countries.⁶ The US government promoted large-scale river development through its assistance programmes and influence over institutions that funded dam projects, such as the World Bank.⁷ After the Second World War, decolonised states provided a new arena for the intensified circulation of American development expertise.⁸

Lilienthal's 1951 visit to South Asia, however, was sponsored not by a government or an international body, but by the investigative journal *Collier's*. The journal had previously published his articles about atomic energy and nuclear weapons, which he had written in connection with his time at the Atomic Energy Commission. Though the trip was not a formal US government mission, he spoke with officials before he left. Lilienthal appears to have got along well with George McGhee, the assistant secretary of state for Near Eastern, South Asian and African affairs, whom he described

as ‘a chunky, youthful go-getter, dynamic sort, built like a light-heavyweight boxer, or a good fullback’.⁹ Lilienthal went with the State Department’s blessings and support.

Lilienthal’s intervention naturally had some reference to his professional interests, but was perhaps rooted more in his strong sense of a modernising mission than in a personal stake in resolving the dispute.¹⁰ He was not, though, a modernisation theorist in the style of Talcott Parsons, or other social scientists who brought modernization theory to the fore of American foreign policy during the Kennedy era. Unlike them, Lilienthal was a practitioner first and a philosopher second.¹¹ Nor did he aspire to the type of totalising state-led development project that James Scott has depicted as characteristic of twentieth-century technocracy.¹² In his previous work he had, in Hargrove’s succinct phrase, steered the TVA towards ‘us[ing] its technology to develop natural resources that the valley people could then exploit as they wished’.¹³

However, he did view modernisation as a path to better human lives, assuming that big technical solutions imposed from the top could create the conditions for grass-roots democracy. He set these ideas out in his well-known 1944 book *TVA: Democracy on the March*.¹⁴ ‘I write of the Tennessee Valley’, he stressed, ‘but all this could have happened in almost any of a thousand other valleys where rivers run from the hills to the sea.’ The Nile, the Amazon and the Ganges were among the rivers he alluded to.¹⁵ Lilienthal’s enthusiasm for development in Asia depended on his belief that the American experience of the TVA could apply in vastly different geographical and cultural contexts. He fitted readily into a world in which transnational actors from the West could take their technical expertise abroad to developing countries, reframing their knowledge of local conditions as knowledge of the principles of development.

In India, Lilienthal toured major dam projects in Orissa and Punjab, including the Bhakra-Nangal complex, and visited the Tata steel works in Jamshedpur. In West Bengal he inspected the Damodar Valley Corporation, and met young Indian engineers who had trained at the TVA. While in the subcontinent, Lilienthal also visited Karachi to talk with Prime Minister Liaquat Ali Khan and Pakistani water managers. A visit to a village outside Lahore made a strong impression. ‘What we saw in this collection of sun-dried huts and walls’, he wrote in his journal,

were some fine, dignified-looking human beings, some fine-looking children, grave, friendly [...] but they were living like animals, except only for the people providing services—a man hammering brass, a man running a primitive sewing machine. The bullock cows and the people were all together. Filth, no sanitation, and, of course, everywhere babies, babies. [...] The people on the land, in these horrible mud huts—how will they ever, ever get out of this savage way of living?¹⁶

Two days later, in Delhi, he accompanied Nehru to an industrial exhibit. Lilienthal expected an ‘introduction to India the mystical, India the introspective, India of Gandhi and spinning’. Instead, he met with ‘one of the finest collections of gadgetry and the worship of machinery that I can remember’.¹⁷ The two sides of South Asia that Lilienthal recorded embodied the contradiction between a hoary Western stereotype of South Asia—the poverty-stricken land of filth, hunger and tradition—and the potential for two newly independent, rapidly modernising nations to surge into the future. Like many Westerners of his generation (and since), Lilienthal saw development as the answer to Asia’s relative poverty.¹⁸

Lilienthal spent just over two weeks in South Asia, where public news coverage assumed that he was giving high-level technical advice to government officials. In fact he gave no specific advice on water resources development.¹⁹ Instead, it was geopolitics that occupied his attention, and which he

wrote about on his return to the United States. He authored two articles for *Collier's*, arguing that the United States needed to take a more active role in cultivating India's friendship.

The first, 'Are We Losing India?', insisted that the West could work with Nehru, whose policy of 'non-alignment' in the Cold War alienated many Americans. Nehru's refusal to condemn the People's Republic of China for its part in the Korean War, which had begun in 1950, was a particular sore point. Lilienthal was far from alone in worrying about India's future. Before the Korean War, American strategists had conceived containing Asian communism to mean holding defensible lines. Their interest was in strategic bases, and countries with developed industry. India provided none of these. After Korea, however, strategists began to assume that the Cold War would shift to a competition between the superpowers to marshal populations and resources in the 'third world'. South Asia, and particularly India, became key sites in US strategic thinking.²⁰ As Lilienthal suspected, if the United States could not forge a lasting friendship with India, then the latter might move closer to the Soviet sphere, or even into it altogether.²¹ The United States, Lilienthal argued, needed to rejuvenate its relationship with India.

The second article, the subject of this chapter and the piece with the greater impact, suggested that the United States and the World Bank should encourage India and Pakistan to cooperate over water resources development in the Indus Basin. This article, 'Kashmir: Another "Korea" in the Making?', was published on 4 August 1951. In it, Lilienthal argued that the United States was on the verge of 'losing' India to the Soviet bloc, the way that it had 'lost' China. The Kashmir conflict, he wrote, derailed progress in South Asia, acting as the block between the subcontinent's development potential and its troubled reality. Solving the Indus waters

problem, he thought, was a necessary first step on the way to a Kashmir settlement.

That Lilienthal specifically addressed the Indus dispute at all was due to a conversation with Walter Lippmann, a writer for the *New York Herald* who had identified it as a major cause of instability in India–Pakistan relations.²² ‘Kashmir: Another “Korea” in the Making?’ reflected Lilienthal’s journey towards addressing the Indus waters problem. The article began by characterising the Kashmir dispute as the most dangerous threat to peace in South Asia, and only afterwards moved on to the Indus Basin.²³ The Kashmir dispute, Lilienthal thought, posed a direct threat to American interests.²⁴ ‘The real issue,’ he wrote,

is [...] how best to promote and insure peace and a sense of community in the Indo-Pakistan subcontinent; how best to avoid a UN situation that will create another, though different, ‘Korea’. In this new ‘Korea’, religious fanaticism would be substituted for Communist fanaticism, but the result for the UN (and hence the USA) would be similar—commitment of armed forces to enforce its decrees.²⁵

As in Korea, the Truman administration’s policy of containing international communism might press the United States into providing peacekeeping security in Kashmir, in order to forestall or counter the threat of Soviet intervention. This threat had been on American policymakers’ minds for some time. Even before the outbreak of the Korean War, future US President Dwight D. Eisenhower (then serving in a non-official position) had worried that the Chinese Communist victory over the Kuomintang meant that ‘[East] Asia is lost [...] India itself is not safe!’²⁶ After Indian and Pakistani independence, American strategists expected British ‘leadership’ in the region to bring the unruly new Commonwealth members to heel. By 1951, however, London’s interventions in the United Nations had singularly failed to draw the sting from the Kashmir conflict. State Department officials increasingly questioned Britain’s ability

to resolve Indian and Pakistani differences. With tensions between Karachi and New Delhi seemingly on a sharply upward trajectory, officials recommended that the United States take a more active role in the subcontinent.

In June of the same year President Truman, following anxious messages from his ambassador in New Delhi about the political dividends that Soviet and Chinese promises of food were reaping among a hungry Indian public, dispatched 2 million tons of food grains to a shortage-hit India. The United States for the first time entered into a major aid relationship with Nehru's administration.²⁷ Despite its reluctance, the United States had a stake in regional stability. It became a key player in the United Nations' management of the Kashmir issue by participating in the Commission for India and Pakistan, which the Security Council set up in 1948 to implement a plebiscite.²⁸ Because of this, Lilienthal worried that deterioration in India-Pakistan relations would draw his country into a protracted armed struggle.²⁹

The United States therefore had good reason to want to prevent a war in Kashmir. Lilienthal argued that the Kashmir conflict was too intractable for American intervention to be of use unless something could first reduce the general level of tension in the subcontinent. He pointed out that India and Pakistan were progressing towards resolution of two other major bilateral issues, namely trade embargoes and the return of women who had been abducted during Partition. Despite this, mutual hostility continued to dominate relations. Lilienthal identified the canal waters dispute as among the most dangerous motors of mutual suspicion.³⁰

Both Pakistan and India, he wrote, needed the waters of the Indus Basin. Pakistan's 18 million acres of canal-irrigated land could not survive without supplies from the Indus and its tributaries, and the 22 million Pakistanis who lived in the basin needed the food and the money that the land generated. On the

other hand, India's population of 20 million in the Indus Basin had access only to 5 million acres of irrigated land. On India's side of the border, a further 35 million acres lay uncultivated, though 'if irrigated [this land] could raise food and do a good job of it'.³¹ Both populations required water in order to cultivate existing farmland, and to develop future uses. The trouble was, as Pakistanis had argued since 1948, India's planned uses could reduce the water available in Pakistan. 'It is pure dynamite,' Lilienthal wrote, 'a Punjab powder keg.' He rejected Pakistan's legal argument about its riparian rights as inadequate to the task of ensuring future development. Instead, he envisioned a technical solution. India and Pakistan, he argued, needed to work together 'in a joint use of this truly international river basin on an engineering basis'.³²

Securing the necessary cooperation would not be easy. Proposals for joint development could not help ruffling feathers in India and Pakistan, where trust was low on both sides. Binational talks on setting up a joint investigation into the Indus waters problem had already proved difficult.³³ A canal waters solution would signify basic reversals in Indian and Pakistani policy, as George McGhee wrote in later correspondence with Lilienthal.³⁴ The UK high commissioner in Pakistan, in a commentary on Lilienthal's article, made a similar point.³⁵ But Lilienthal thought that cooperation was possible. Using the Indus Basin's waters more fully, he wrote, was 'not a religious or political problem but a feasible engineering and business problem'.³⁶

All parties needed to treat the Indus question as a purely technical one, he argued, leaving aside political issues. The technical approach that Lilienthal advocated depended on taking negotiations out of the hands of political leaders. He was able to draw on what Johan Schot and Vincent Lagendijk have termed 'technocratic internationalism', first developed in Europe between the world wars to provide a conceptual toolkit

for technical specialists to frame international development cooperation as ‘apolitical’.³⁷ Never mind the practical difficulty of separating ‘technical’ and ‘political’ issues, which Nehru himself mildly pointed out in later correspondence with the World Bank.³⁸ Technical expertise was held in high esteem during the mid-twentieth century. Even the controversial and highly politicised Partition arrangements, drawn up by Sir Cyril Radcliffe and the Boundary Commissions in 1947, had benefited from the appearance of being a technical, apolitical exercise.³⁹

Lilienthal’s proposal shared an important element with previous Indus Basin river development schemes. This was a modernist understanding of water as a resource, a category that permitted a discursive distinction between productive and unproductive things. Resources, as productive things, could be used to underpin state formation and socio-economies.⁴⁰ More specifically, incremental additions to the level of human control over the rivers system—using barrages and storage dams, drainage ditches and canals—were familiar to governments, engineers and populations in the region. In South Asia, hydraulic engineering was particularly prestigious. As we saw in [chapter 1](#), top-down human intervention in the Indus Rivers system had a long and honoured tradition in both India and Pakistan. Lilienthal’s appeal to technical expertise as the proper facilitator of large-scale water development in the Indus Basin resonated with contemporary ideas in South Asia and beyond.

The ‘natural’ object of development

A more controversial aspect of Lilienthal’s article was his framing of the space in which engineers should ideally deploy their expertise. He identified the areal extent of this space as the whole Indus Basin, which he characterised as a natural, and therefore apolitical, object of development. In so doing, he

sought to undermine the hard distinction between Indian and Pakistani territory that confined water planning within nationalised spaces, in which the actors and processes of development derived their authority from mutually independent national governments. In Lilienthal's view, dividing the basin between states meant ignoring the rivers' ability to tie human actors and environmental processes on both sides of the border together. Political and administrative boundaries within the basin, in his view, were human impositions.

Worse, they prevented the rational exploitation of the rivers. Using Indus Basin waters more fully could not, he wrote, 'be achieved by the countries working separately: the river pays no attention to Partition—the Indus, she "just keeps running along", through Kashmir and India and Pakistan'.⁴¹ Explicitly contrasting the human (that is, political) demarcations of territory in north-western South Asia with the river's natural terrain (using the Indus to represent all the rivers in the basin), he assigned the river system a large degree of agency in determining the possibilities for human life in the basin.

Lilienthal had previous experience of trans-border river valley development. Coordinating water governance across an area that comprised divided political spaces was the TVA's speciality. Its authority in the Tennessee Valley crossed state lines; its remit included flood control, power generation and land management. Appropriately enough, Lilienthal cited the TVA as a precedent for river valley development that cut across political and administrative borders: 'The whole Indus system must be developed as a unit—designed, built and operated as a unit, as in the seven-state TVA system back in the U.S.'⁴² A coordinated approach to all aspects of the Tennessee Valley's economy and environment was, in his view, at the heart of the TVA's success.⁴³

Transposing the TVA concept to the Indus basin was problematic. Lilienthal's reading of the Indus Basin elided national with subnational borders, ignoring the higher authority that the US federal government provided for multi-state initiatives. Nor did he go so far as to set out a comprehensive agenda for institution-building and development. Yet he did reflect his TVA experience by taking a river basin as the ideal unit to be an object of development. As he wrote elsewhere, in a chapter tellingly entitled 'A Seamless Web: The Unity of Land and Water and Men', the TVA's purpose had been 'to "envision in its entirety" the potentialities of the whole river system, for navigation, for power, for flood control, and for recreation'.⁴⁴ This kind of total development was what he advocated for the Indus Basin.

Of course, the way that Lilienthal represented the Indus Basin was not as natural as he claimed. In fact it combined environmental and political topographies. He considered only Indian and Pakistani uses of water in the Indus system, although China and Afghanistan were also riparian states. He paid scant attention to the fact that the Indus main channel rises in Tibet, which China had incorporated in 1950. He did not even mention the Kabul River, which flows through southern Afghanistan before joining the Indus main channel in Pakistan's North-West Frontier Province (now renamed Khyber Pakhtunkhwa). Presumably the lack of previous water resources development outside Punjab and Sindh, and his focus on India and Pakistan's dispute over Kashmir, caused him to overlook those countries in his discussion. Afghanistan had, since 1946, planned a major river-valley development project, but on the Helmand (which flows towards Iran, not Pakistan) rather than the Kabul.⁴⁵ China later became a major developer of water resources with transboundary implications, particularly on the River Tsangpo (the Brahmaputra), but not at the time Lilienthal was writing. (Indeed, as late as 1960, Indian officials dismissed the idea that Chinese dam-building

would pose a threat to downstream water supplies).⁴⁶ Lilienthal's neglect of the other Indus system riparians is understandable, given that contemporary Indian and Pakistani public debates paid them no more attention. It did, however, undermine his attempt to distinguish human-made territoriality from nature's power to disregard political boundaries.

Human-made borders therefore still helped to define the Indian, Pakistani and Kashmiri parts of the basin as one discrete object of development. Lilienthal's consideration of surface water, but not groundwater, also privileged certain aspects of the basin's environment over others. Admittedly, groundwater exploitation did not become common until the 1960s and 1970s, when the Green Revolution made tubewells a major feature of agriculture in both Punjab.⁴⁷ These omissions, however, helped to enact what Chris Sneddon and Coleen Fox have called the 'discursive simplification' of a river basin's environment, a 'representation of the natural environment [that] both generates and sustains the power of states to carve out certain political scales [...] and alter biophysical relationships'.⁴⁸ Lilienthal's particular view of the basin naturalised the relationships between a selected range of human actors and environmental processes.

Nevertheless, his way of seeing the basin carried normative weight during the time in which he wrote. River basins were well established as objects of development in international development discourse by the 1950s. François Molle has identified the concept of a river basin as subject to cyclical popularity since the 1700s. He argues that the period from the 1930s to the 1960s represented only one peak of its popularity. In addition to the TVA, Molle points to European experiences on the Ruhr, the Rhine and the Rhône. American and European approaches to river basin management spread quickly in the mid-twentieth century to Mexico, Morocco and South Africa, among other countries.⁴⁹

In South Asia, river development across whole valleys was also a well-known concept. Shortly before independence, the colonial government had approved plans for multi-purpose river valley development on the Damodar, Mahanadi and Kosi rivers. The early postcolonial state in India continued work in the same vein of ‘aggressive supply-side solutions’.⁵⁰ Supply-side hydrology, which prioritises centralised planning to promote maximum use of water rather than allowing levels of demand to drive development projects, has since come under criticism for its negative social and environmental effects.⁵¹ In the early 1950s, though, it was popular with governments and water management agencies in the region. The Indian National Planning Committee’s subcommittee on river training and irrigation, first appointed in 1938 (before independence), laid out programmes for bringing river valleys under engineers’ control.⁵² In 1950 the renamed Indian National Planning Commission recognised the exemplary usefulness of multi-purpose river development in the United States.⁵³ The prominent physicist Meghnad Saha guided the Damodar Valley Corporation, created in February 1948, towards adapting elements of the TVA model.⁵⁴ In Pakistan, work was already under way on the Thal Valley Project in West Punjab and the Kotri Barrage in Sindh. Lilienthal, identified as he was with the TVA, was well placed to advocate basin-wide action. In his *Collier’s* article, in his previous TVA work, and in his later projects in Colombia (1954) and Iran (1956–63), a great deal of Lilienthal’s intellectual effort aimed to establish river basins as the most appropriate environmental scale for water resource development.⁵⁵

Jumping scales

Enacting Lilienthal’s vision of the Indus Basin as a natural, apolitical space, in which development processes could act without regard for political borders, required a leap from the conceptual to the actual. Pushing water development from an

activity that occurred within contiguous but separate national spaces to one that spanned the whole basin required what Neil Smith has called a ‘scale jump’.⁵⁶ In geography and critical international relations literature, scale is shorthand for describing ‘the complex dynamics that interface between nature and society’, characteristic of water governance regimes, over a given area (or set of areas).⁵⁷ A scale jump, in this case, meant shifting the terms of the Indus water debate to a larger geographical area, and in the process expanding the range of actors (individuals, institutions and nations) that interacted with social and environmental processes within that area.

Because India and Pakistan seemed to have vested interests in confining plans for development to their own territory, Lilienthal needed a group of actors to facilitate his scale jump. He could not turn to politicians; his rhetoric demanded separating ‘technical’ from ‘political’ questions. He therefore appealed to engineers, not simply as abstract agents of technological change but as individuals with personal histories and professional goals rooted in the basin. Engineers’ professional ties offered an opportunity to transcend political differences. Though the engineering ethos in the region had recently fallen prey to pernicious influences, he held, all was not lost. ‘Partition did not repeal engineering or professional principles among these [Indian and Pakistani] engineers,’ he wrote, ‘it merely made them secondary, for a time, to politics and emotion.’⁵⁸ His appeal was to an epistemic community: a network of professionals who share assumptions about, and faith in, particular forms of knowledge or truth applicable to the world.⁵⁹ Engineers of various ranks, operating at different levels of governance and with responsibility for greater or lesser areas across the basin, had the potential to constitute what Harriet Bulkeley has termed ‘network governance’, which operates beyond simple territorial state boundaries, across several overlapping geographical scales.⁶⁰

Lilienthal took Indian and Pakistani engineers' common understanding of the scientific nature of the Indus waters problem for granted. This was an astute move: Dennis Kux has identified the technical language that Indian and Pakistani negotiators shared as one of the key factors explaining the success of the later Indus waters negotiations.⁶¹ As a British observer noted, engineers might disagree about the specifics of water-flow data but their training in modern hydrology gave them a common understanding of the principles of water resource development.⁶² South Asian engineers, Lilienthal thought, correctly perceived the Indus rivers as a single environmental system: 'They saw the river basin as a unit, as it is in nature'.⁶³ With their scientific worldview and technical knowledge, engineers would presumably sympathise with his desire to extend development to the limits of apparently natural, rather than explicitly man-made, boundaries.

In Lilienthal's thinking, a technical understanding of the Indus Basin as an environmental system naturally transcended national boundaries, and resided at the scale of the basin itself. Under British rule in undivided Punjab, engineers had been trained to consider the whole irrigation system as one unit. National divisions in the canal system were a novel phenomenon, which interrupted a history of canal development within the political framework provided by one imperial government. It was only Partition, 'a politico-religious instrument [which] fell like an ax' across the Punjab, that had displaced unitary engineering.⁶⁴ Never mind that during this final, climactic section of the article, Lilienthal's invocation of Punjabi engineers (to the exclusion of the Sindh cadre) actually conflated the Indus Basin with Punjab. The larger point was that, however one defined the basin, an international border cut through the middle of it. Engineers, claimed Lilienthal, had the perspective and epistemological authority to disregard such a border.

Lilienthal appealed to more than a common technical viewpoint, however, to move engineers away from their new orientation towards the separate states of India and Pakistan. He also nostalgically invoked their shared past in the colonial irrigation service. Engineers in East and West Punjab, he believed, could put aside their recent differences and remember friendships with former colleagues. Their friendships and professional ties, which predated Partition, cut across Radcliffe's line. They could use their personal and professional relationships to negotiate between the national and supranational scales. Lilienthal wrote:

This proposal I make would draw upon the professional sense and honor of the men, both in Pakistan and India, whom I got to know [...] I am convinced that they are quite capable of working together again. It was touching to see how homesick the Hindu and Sikh engineers who fled Pakistan are for their ancestral home in Lahore and their old associates. [...] When the partition rioting began, Hindu engineers helped their Moslem colleagues and vice versa, hid them, fed them, got them safely on their way. Their loyalty is now to their new countries. But from what I have seen of them and from my knowledge of technical men anywhere, they can also be loyal to this job of making a river basin go to work for both of their countries, as a joint venture.⁶⁵

Engineers therefore offered a route out of rigid demarcations of the kind of territorialised sovereignty that underpins modern state formation. They did not represent an unofficial 'diplomacy from below', as Morieux has written of a different context, but an alternative way of doing diplomacy from within the state.⁶⁶ Engineers served nation-states but, Lilienthal thought, could understand and constructively manage the relationship between environmental and political process within and beyond the state's borders. As Simon Dalby reminds us, 'Politics is about connections that do not necessarily work in the terms of spatial controls over areas'.⁶⁷ Lilienthal appealed to a sense of epistemic community in which memories of cooperation (demarcated in terms of time—the past) superseded each engineer's physical location in a

state's territorial space. If a naturalised Indus Basin provided the object of cooperative development, then Punjab's engineers could use their old friendships to recover their 'natural' scale of operations, and become its agents.

Lilienthal's proposals caught the eye of Eugene Black, the president of the World Bank. The bank was then still a fairly new organisation. Black spotted an opportunity for it to establish itself as a major force for international development by helping to resolve the Indus waters dispute. The bank later became a major player not only in negotiations over how to allocate water in the Indus Basin, but also in organising related financing for the construction of the huge Indus Basin development programme. From the opening of formal negotiations in May 1952 to the signing of the treaty in September 1960, the World Bank served as something between a good officer and a mediator in the Indus Basin talks.⁶⁸

In 1951, Black quickly put Lilienthal's proposal to the test by writing to Jawaharlal Nehru and Liaquat Ali Khan, the prime ministers of India and Pakistan respectively. Black told them that the bank would tender its good offices in canal water negotiations on condition that both governments accepted three basic principles of Lilienthal's proposal. Firstly, that the water resources of the Indus Basin would be sufficient for both countries' needs if properly developed and used. Secondly, that the rivers should be managed cooperatively to promote the economic development of the Indus Basin as a whole. Thirdly, that the problem should be addressed on a functional and not political plane, without relation to past negotiations and claims, and independent of political issues.⁶⁹

Nehru, in correspondence with his cousin Braj Kumar Nehru, then an official in the irrigation ministry, called Lilienthal's article 'full of mistakes and factual errors. However,' he went on, 'there is something in the proposal he

has made.’⁷⁰ Accordingly, the prime ministers’ responses were largely positive. Nehru and Liaquat both replied that they would gladly use the bank’s help in coming to an agreement about the canal waters. Both, moreover, reinforced Lilienthal’s wish to separate out the canal waters dispute from other India–Pakistan problems and treat it on an engineering plane, ‘even though’, as Nehru wrote, ‘in existing circumstances, it may be a little difficult to divorce it completely from political issues’.⁷¹

In November 1951, the World Bank set up a working party with the aim of basing a settlement on Lilienthal’s principles.⁷² Indian and Pakistani engineers both participated. The World Bank’s members of the working party would not arbitrate, but only advise the Indian and Pakistani members.⁷³ When the year closed, the governments in New Delhi and Karachi had agreed to negotiations, but both were cautious. Karachi felt that Black’s terms eroded one of Lilienthal’s proposed starting points, namely setting Pakistani fears of deprivation to rest.⁷⁴ The Indians, for their part, kept sovereignty to the fore by insisting that any future joint organisation should not interfere with their freedom of action. They also insisted that the Bhakra-Nangal project must go ahead.⁷⁵

In February 1952, Black visited South Asia to try to secure firmer commitments to the bank’s approach. He obtained agreements that neither India nor Pakistan would take action to diminish water supplies to any existing uses on the Indus Basin rivers. Both governments also agreed that their shared objective was to increase substantially the total amount of water available to both countries, an idea that later proved extremely important.⁷⁶ The next step was for the working party to formulate its approach, gather data and propose a plan. It toured the Indus Basin between 1952 and 1953, before convening in Washington in September 1953. With the three

parties finally at the negotiating table, the last piece of Lilienthal's puzzle fell into place.

The failure of cooperation

Despite the promising start, the space for cooperation that Lilienthal had tried to institute, literally and figuratively, proved much narrower than he expected. By 1954 the idea of joint development had completely failed, for several reasons. The World Bank left ambiguities in its approach, which widened the scope for disagreement. Lilienthal had stipulated that negotiations should start by assuming that a new plan would preserve Pakistan's existing water uses. But the terms that Black set out to Jawaharlal Nehru and Liaquat Ali Khan stated that Indus waters were 'sufficient for present and future needs'. This was much less clear than Lilienthal's initial proposal, and disagreements over how much water Pakistan could claim for existing canal systems bogged down subsequent discussions.⁷⁷ As India pressed on with the development of a weir on the Sutlej at Harike to feed new canals, Pakistan accused India several times of withholding water.⁷⁸ Public pronouncements from Indian and Pakistani leaders demonstrated that, while technical specialists might be drawing up the plans, politicians continued to set the terms of public debate about the Indus system.⁷⁹ The dispute continued to sour India–Pakistan relations.

Most importantly, neither the Indian nor Pakistani planning team was prepared to actually implement cooperative development, the fundamental principle that Lilienthal required as the first step towards resolving the dispute. In the summer of 1952, the two delegations travelled to Washington DC and met with General Raymond A. Wheeler. Wheeler was a senior World Bank engineer, tasked with heading the trilateral working party. The delegations could not even agree on how to begin resolving the conflicting development needs

that India and Pakistani stated. After three weeks of fruitless negotiation in the United States, they abandoned the idea of joint planning.⁸⁰ Instead, each team went away to produce a separate plan.

After encouraging signs that the Pakistani leadership was 'soft-peddling' the canal waters issue in mid-1953, the delegations presented their plans to each other and the bank in October.⁸¹ Neither side accepted the other's scheme. Eugene Black, the bank's president, later summed up the underlying reason for the failure of the first round of talks: 'I thought maybe we'd get all these engineers together and sit around a table. [...] I felt that engineers were different from other people, that they were interested in combating nature, that they were above politics [...] But I was naïve.'⁸² Hostility between India and Pakistan was such that neither side saw genuinely integrated development as possible or even desirable.⁸³

Engineers, contrary to Lilienthal's aspirations, proved nationalist in their approach to the water dispute. The two plans seemed to indicate that there was not in fact enough water available in the Indus system to satisfy the requirements of both countries.⁸⁴ Nevertheless, Niranhan Das Gulhati, a member of the Indian team, has since claimed that India's plan represented 'the first basin-wide plan ever prepared for the Indus system of rivers [...] [which] ignored the new political boundary between India and Pakistan', while the Pakistan plan ignored India's development needs.⁸⁵ In other words, Gulhati suggests that the Indian delegation drew up plans for water development on both sides of the border, but Pakistan allocated water only to Pakistani projects.

Both plans, however, embodied significant national self-interest. The Indian proposal envisaged new irrigation development in both countries but asserted complete Indian sovereignty over the eastern rivers (Ravi, Sutlej and Beas), which flowed through India 'proper' (excluding Jammu &

Kashmir). The plan allocated water to Pakistan only from the western rivers, which did not flow across the Indian plains (the Indus, Jhelum and Chenab). It did not even preserve all of the western rivers' flows to Pakistan, allocating 7 per cent to India. Pakistan's proposal focused on preserving its existing uses from the Sutlej, while India hoped to divert Sutlej water for its own uses, expecting Pakistan to replace its lost supplies with water from rivers further to the north and west.⁸⁶ The geographical location of water sources was therefore a significant issue.

During informal discussions in the winter of 1953/4, the Indian and Pakistani delegations both encouraged Wheeler to draw up a third plan to break the deadlock.⁸⁷ In February 1954, with Black's blessings, Wheeler presented the bank's own proposal, transforming the institution's role from a facilitator of negotiations to an active participant in development planning. Known as the 'bank plan', it introduced the key principle of the eventual Indus Waters Treaty, namely a division of the basin that allocated the western rivers to Pakistan and the eastern rivers to India.⁸⁸ Under the bank plan, Pakistan would obtain all waters in the western rivers except for small uses in Jammu & Kashmir. India would receive all the water in the eastern rivers. There would be no bilateral cooperation on project works construction.

The bank plan therefore reversed Lilienthal's principle of developing the Indus Basin as a single unit.⁸⁹ The plan called for India, as the principal beneficiary of link canals in Pakistan (which were to be constructed in order to transfer water from the western rivers to Pakistani canal colonies, which had historically drawn water from the eastern rivers), to pay for them. The bank plan also made provision for a transitional period during which Pakistan would continue to receive water from the eastern rivers, while India progressively extracted

more and more water upstream to feed its new irrigation and hydropower systems.

Black, Nehru and Liaquat had agreed to hold negotiations on an apolitical basis, meaning that engineers from both sides would aim to balance equitable apportionment with technical efficiency. Nevertheless, the bank's delegates believed that issues with political implications had caused the working party discussions to flounder. The first of these was that the water supplies and storage potential within the Indus Basin were inadequate to meet Indian and Pakistani demands. This contradicted the principles that Lilienthal had laid out and that Eugene Black of the World Bank had used to open negotiations. Second, the delegations disagreed on the physical location of sources of supply water, with India expecting Pakistan to supply the Sutlej Valley canals from the western rivers via link canals, while Pakistan insisted on maintaining the same volume of water supplied from the Sutlej. The bank plan, instead, gave allocations roughly halfway between those of the separate Indian and Pakistani plans.

India and Pakistan's inability to meet in the middle had led to the third and most intractable problem: neither party would seriously consider constructing a unified system of works for mutual benefit that spanned two sovereign territories.⁹⁰ Responding to the impasse, the bank plan affirmed a territorial principle: India and Pakistan would each construct the works located in their own territories. The plan proposed dividing basin territory between the two countries, contrary to what Lilienthal had intended. The Indian government accepted the plan quickly, in March 1954, but stressed the sacrifices that it was making. In a letter to the bank, the Indian government claimed that the plan required India:

to give up the use of a large part of the waters flowing through her own territory and thus to abandon, for all time, any hope of the development of a considerable portion of the extensive arid lands in India which has no

possible source of water supply other than the Indus system of rivers and which will therefore remain a desert forever.⁹¹

Presumably the complaint that India had to give up water flowing through ‘her own territory’ referred to the passage of the Chenab through Himachal Pradesh and Jammu & Kashmir. The Indian government continued to claim that its cooperation with the bank’s scheme was a matter of national sacrifice. Nehru, for instance, told the Rajya Sabha (the upper house of parliament) in May 1954 that India had accepted the bank’s proposals not because it was in full agreement, but in the interests of a speedy final settlement.⁹²

The bank plan was less favourable to Pakistan. The bank’s engineers proposed that they would be able to guarantee as much water to Pakistani canals as these had enjoyed before Partition. In addition, they promised more water for the Sutlej Valley canals (that is, water that colonial plans had assigned to the Sutlej Valley canal project, but that had never been used in practice). Even this, however, was a potential source of tension within Pakistan. Allocations to the Sutlej Valley canals had been a matter of dispute between the provinces of Sindh and Punjab during the colonial period.⁹³

The bank plan troubled the Pakistani delegation on another front. It was not just the average quantity of water available in a year that concerned them, but the specific timing of its availability. The lower Indus plains are hot enough to grow crops throughout the year, but water is not naturally available perennially (twice-yearly, in this context). The main growing season, known as *kharif*, occurs during the summer. During this period, snow and glacial ice melts high in the Himalayas, and runs south-west towards the sea. This meltwater is the most important source of water in the basin, representing one and a half times as much water as that available due to rainfall runoff downstream, which in turn is largely supplied by the summer monsoon.⁹⁴ This water feeds the Indus and its many

tributaries, and puts the rivers into high spate. A lesser, short growing season (known as *rabi*) occurs during the winter, supplied by winter rains. The Pakistani team wanted storage on the western rivers—in other words, dams that could contain large reservoirs of water to be released at the engineers' will—which they hoped would free their country from the tyranny of nature's water cycle.

Damming the Indus Basin was not a new idea. The most productive projects constructed during colonial days in Sindh and Punjab had provided water for farmers to grow crops during both growing seasons. Flagship colonial works such as the Sukkur Barrage, constructed during the 1920s and 1930s on the Indus in northern Sindh, relied on regulating water supply during the winter as well as the summer, in order to wring two yields per year from the land. After independence, the Sutlej Valley canals and the Thal Valley Project in West Punjab, as well as big new barrage projects under way in Sindh at Kotri and Guddu, all relied on double-cropping to meet economic projections. The bank's engineers claimed that their allocations could guarantee water supply to the Kotri Barrage and Thal project. Nothing was said of another planned Pakistani barrage project on the Indus at Taunsa. The bank plan appeared to supply Pakistan's projects without constructing any storage in West Pakistan. But the Pakistani team maintained that storage in West Pakistan was necessary in order to fully regulate the timing of flows. By backing up large reservoirs behind dams, Pakistani engineers would be able to release water to downstream canals over the winter, when river levels were lower than in summer.⁹⁵

Unhappy with the proposals, the administration in Karachi delayed in giving the bank an answer. Stalling tactics were possible because Pakistan was in a stronger position in 1954 than it had been when talks began in 1952.⁹⁶ The recovery of Europe and the Korean War both increased demand for

Pakistan's main export materials, jute and cotton, strengthening the Pakistani economy. The growing importance of these products to the national exchequer placed more emphasis on East Pakistan, where jute was grown and the Indus rivers did not run: the western water dispute thus lost a modicum of its existential importance to the central government. With more foreign exchange flowing in, Karachi was perhaps more confident in squaring off against New Delhi, and more able to fund development projects. Muhammad Ali Bogra, the prime minister, perhaps also took heart from a military alliance with the United States which had been under way since mid-1953.⁹⁷ Pakistani leaders in the early 1950s hoped for Western backing in disputes with India, despite experience that little was forthcoming.⁹⁸ At the same time, conversely, Pakistani obstinacy was partly motivated by a belief (which American policymakers contested) that the United States had pressured the bank into making a proposal favourable to India in order to offset Indian resentment over American grants of military aid to Pakistan.⁹⁹

In May 1954, the government of Pakistan wrote to the World Bank to say that it could not 'visualise with equanimity the possibility of implementing a plan which would affect its vital interest adversely for all time to come'.¹⁰⁰ This was a hedge, neither an acceptance of the plan nor a rejection. Mohammed Ayub, a senior Finance Ministry bureaucrat who was attached to the negotiating team, accused the bank's engineers of overestimating the amount of water available, resulting in unworkable plans.¹⁰¹ Mohammed Zafarullah Khan, Pakistan's firebrand foreign minister, visited Washington to meet with Black and other bank officials; he returned to Pakistan still unhappy with their proposals.¹⁰² Meanwhile, Pakistani newspapers devoted increasing column inches to India's 'riparian aggression'.¹⁰³ The Indian press and government, in turn, reacted sharply against what they claimed was Zafarullah's political interference in technical

negotiations.¹⁰⁴ The bank pressed for further talks in order to clarify its position, and promote the plan's advantages to Pakistan.

The Pakistani government instead took action to counter what it saw as the unfavourable aspects of the bank plan. It hired Tipton and Kalmbach, an American engineering firm, as consultants. The Tipton team reported that the bank plan would interfere with existing Pakistani uses, impede new projects that had been planned before Partition, and limit additional water available in Pakistan for new works. Their verdict, which the Pakistan government advertised to its foreign friends, was that the bank plan greatly favoured India.¹⁰⁵

The Indian administration denounced Pakistan's hedging as a rejection of the bank plan. It declared that the negotiating process had ended in failure, and announced that Indian engineers would begin diverting water into the Bhakra-Nangal project. In a first-of-the-month address to the Pakistani public, Prime Minister Muhammad Ali Bogra refrained from making political capital out of this development. But the Pakistani government privately held that India's action breached all existing understandings between India, Pakistan and the World Bank. Officials in Karachi told American diplomats that the opening of the Bhakra canals demonstrated that India showed no consideration for international commitments.¹⁰⁶

The Indian government's own correspondence, however, indicates that it had considered the effect of opening Bhakra carefully. Since April 1953, Indian officials had 'examined very exhaustively' the question of whether opening the Bhakra canals would violate the commitment, which Nehru had given to Black, not to diminish supplies while talks were still ongoing. Nehru insisted that he had made this agreement conditional on its only applying for a short time. He believed that his government had kept its promise: it delayed opening

the canals in October and December 1953, despite telling the Pakistan delegation at the working party talks that India intended to run the canals. After the canals finally did open late in May 1954, Pakistan's high commissioner in New Delhi protested that they violated Pakistan's rights under international law and the statutes, orders and awards governing Partition, as well as the agreements confirmed in Black's 1952 letters.¹⁰⁷

Nehru anticipated the failure of further talks between Pakistan and the World Bank in Washington, and suspected that Pakistan might consequently refer the canal waters dispute to the United Nations. He ordered the Ministry of External Affairs to brief Indian lawyers and have them on standby to travel to the Security Council. Official correspondence from the period suggests a general agreement that Indian engineers so far had done a good job in the negotiations, but could not go up against an astute lawyer like Zafarullah Khan, who had taken a personal interest in the dispute. Yet Nehru prepared for a political fight rather than a legal one, holding the Security Council to be 'very much a political body'.¹⁰⁸ That was not necessarily to India's disadvantage. The Indian government had, after all, actively kept the water dispute out of the legal sphere when it successfully fended off Pakistani attempts to take the matter to the International Court of Justice in 1951.¹⁰⁹

Following interim talks over the summer, serious negotiations between India, Pakistan and the bank resumed in Washington in December 1954. The talks suffered, however, from a severe and consistent mismatch between Indian and Pakistani priorities. Pakistan prioritised independence from Indian water flows. Whereas early Pakistani political rhetoric had emphasised West Punjab's right to water from the Sutlej, Beas and Ravi, the Pakistan government by the mid-1950s wanted to draw all of its water supplies from the western rivers. With memories of 1948 still sharp, Pakistani leaders did

not trust the Indian authorities to let water flow, treaty or no treaty. The Pakistani team also wanted any settlement to include major projects in Sindh—the new Kotri and Guddu barrages and canal systems, along with extensions to the command area of the existing Sukkur Barrage. Finally, Pakistani negotiators claimed that not enough water flowed regularly in the basin to satisfy both countries' requirements. India prioritised limiting cost, and getting work done quickly so that it could put development works it had been constructing during the 1950s, such as the Bhakra-Nangal project, to full use as soon as possible.

Schemes that gave Pakistan full independence cost a great deal. Schemes that reduced costs to India left Pakistan at least partially dependent on India to supply water. The bank considered ditching its plan but decided instead to continue chipping away at the impasse, while leaving the principles of division for later consideration.¹¹⁰ With the two teams at loggerheads, the Bank's delegation continued to provide much of the negotiations' momentum.

Conclusion

Throughout the avowedly technical phase of negotiations during the early and mid-1950s, politics simmered just below the surface. Soon afterwards, as the next chapter will show, politics—explicitly framed—became more prominent. Technocratic internationalism, like joint development, had failed to resolve the Indus dispute.

Personally, too, Lilienthal had little continuing involvement in the Indus issue. He was reportedly disappointed when the World Bank did not ultimately set up a supranational engineering corporation and ask him to lead it, though according to his published diaries he turned down an earlier State Department proposal that he should mediate between India and Pakistan.¹¹¹ After his work on the Indus waters

problem, Lilienthal set up a consultancy called the Development and Resources Corporation, which worked as a contractor with foreign governments and specialised in river valley development.

Nevertheless, Lilienthal remains a key figure in the history of the Indus negotiations. He wrote his article to address the specific concerns of US foreign policy and South Asian political stability, but drew on much wider currents. His proposal encapsulated the post-war confidence of large-scale, top-down developmentalism. His ideas were attractive enough to Eugene Black, Jawaharlal Nehru and Liaquat Ali Khan to forge an initial consensus on the need for technical negotiations under the World Bank.

Apart from providing this impetus, Lilienthal's role is mainly important because of what he failed to do. He did not reconnect the engineers of Indian and Pakistani Punjab into an epistemic community that existed beyond and above nationalist politics. He did not succeed in establishing the Indus Basin as the scale of cooperative water development. His vision of joint, cooperative development foundered on these two points.

Lilienthal's proposal deserves attention because it alerts us to the alternatives of historical possibility. In the unstable context of the early 1950s, Indian and Pakistani stances on the Indus dispute did not seem as entrenched as they later proved to be. Despite Nehru's reservations about the practicalities of anti-politics, he and the other leaders were willing to suspend disbelief and take a new kind of action to work towards resolving the dispute. Lilienthal was naïve about the strength and durability of political division that followed Partition. In hindsight Partition seems a sharp break that thrust India and Pakistan down interacting but fundamentally different national paths. It did not seem so at the time, though. Just as the international borders in Punjab and Bengal remained fuzzy,

and the Indian and Pakistani governments took time to resolve issues surrounding refugees and citizenship, the final division of the Indus Basin was not inevitable. The next chapter shows how and why that division came about.



NEGOTIATING INTERNATIONAL POLITICS

After signing the Indus Waters Treaty in 1960, Field Marshal Mohammad Ayub Khan, president of Pakistan, sent a telegram to David Lilienthal, who had first suggested a joint India–Pakistan development of the Indus Basin. ‘You have cause for legitimate pride in fulfilment of your cherished desire for harmony and understanding between the two neighbours,’ he wrote.¹ Shortly afterwards, Eugene Black, president of the World Bank, credited Lilienthal with inducing the bank to mediate.² Lilienthal’s article in *Collier’s* had undoubtedly crystallised the Indus waters problem for Western policymakers. It had provided the impetus for World Bank intervention, and firmly linked the Indus and Kashmir issues together in American minds. Ostensibly, the negotiations that followed the bank’s involvement were technical rather than political, in that they prioritised discussions between engineers and were divorced from broader questions of bilateral relations. But, as [chapter 5](#) showed, tensions between technical discourses and national interests complicated the birth and infancy of negotiations between the Indian, Pakistani and bank delegations. In this chapter I argue that developments from late 1954 established politics explicitly as the basis of the negotiations.

I use politics in three senses. Firstly, with the 1954 bank plan establishing the principle of dividing the rivers rather than organising joint development of them, engineers lost

prominence in the negotiations. The governments of India and Pakistan now focused on asserting the need for the maximum possible water uses within their national territories. Secondly, the standing and influence of political leaders in New Delhi and Karachi or Islamabad became key to both their willingness to negotiate and their ability to mollify or suppress domestic opposition.³ India's economic crisis and mounting tension with China during the late 1950s, coupled with Ayub Khan's military coup in Pakistan in 1958, were decisive in creating the political conditions that pushed Nehru and Ayub to strike a bargain, with some confidence that their own populations would swallow it.

Thirdly, by 1958 the problems in the negotiations revolved increasingly around two political questions, even though they involved technical issues of water flows and infrastructure. Both were embedded in spatial politics. On one hand, the Pakistan government vehemently insisted on reducing India's 'upstreamness' by ensuring that any treaty would not permit India to interfere with the flows of the western rivers, the Indus, Jhelum and Chenab. On the other, Indian leaders asserted equally stridently that Rajasthan (the borders of which came within around 20 kilometres of the Sutlej, but which had no land adjoining the actual riverbanks) was a riparian territory with rights to Indus system waters. These were not engineering questions. They were political issues, rooted in ideas of sovereignty and the relationship between nation-states and their citizens.

International politics were also critical to the resolution of the Indus dispute. When it became clear in early 1958 that the South Asian governments could not afford to construct new river-control works to divide the rivers, the United States, United Kingdom and other Western countries stepped in. Humanitarian concern for peasants in the basin played little, if any, part in motivating Western aid. Instead, Western

policymakers' concern was the Cold War, particularly the worry that ongoing instability in South Asia could open up the region to greater influence from China or the Soviet Union. They had no formal role in negotiating the settlement itself, but the diplomats and foreign offices of the donor countries were very much present in discussions of how to finance it. They brought the global geopolitics of the era with them.

Both domestic and international politics had, of course, formed the backdrop to and impetus for the earlier negotiations. The difference now was that all parties had abandoned expectations that technocratic internationalism could provide the solution. Instead, political and diplomatic considerations had a more direct bearing on the matters under discussion and the solutions that negotiators found. This chapter explores how the treaty came into being, locating it in the context of Cold War-era international finance, American strategic priorities, and a moment of political opportunity in South Asia that saw relatively stable, strong administrations coinciding in India and Pakistan for the first time. I will first explain why negotiations ground to a halt between 1955 and 1958. I then argue that the period between 1958 and 1960, during which the treaty agreement crystallised, represented an important moment of opportunity in South Asian domestic and international politics. The conclusion of the treaty was a product of circumstance.

Playing politics

The increasingly political nature of the negotiations between India, Pakistan and the bank became clear between August and December 1954. During this time the negotiations broadened to include non-engineers, apparently at Pakistan's request. William B. Iliff, soon to be the World Bank's vice-president, became its representative at the talks. General Wheeler, the previous head of the bank delegation, stayed on board to act as

Iliff's chief engineering adviser.⁴ Both national delegations also saw a change of leadership. The new Pakistani leader was Ghulam Mueenuddin, a career civil servant who had previously served as Pakistan's secretary of Health and Labour. Later, during the 1960s, Mueenuddin went on to serve in senior civilian capacities under Mohammad Ayub Khan's government, including a brief period as election commissioner. With a generalist at the head of its team, the Pakistan government seemed to be trying a new approach by moving away from engineering concerns.

Niranhan Das Gulhati took over the Indian delegation. Gulhati was a senior official in India's central irrigation ministry, and until his taking charge he had been the delegation's second in command. The previous Indian delegation head, A.N. Khosla (former chairman of the Central Waterpower, Irrigation and Navigation Commission), had left the talks following his election to the upper house of India's parliament, the Rajya Sabha. Gulhati records in his memoir that he fended off an attempt by Mueenuddin to have the central government replace him with Braj Kumar Nehru, a generalist civil servant.⁵ The Indian team, instead, maintained a technical person at its head.

During 1955, the reshuffled teams negotiated ad hoc arrangements to regulate continued water flows, pending a final agreement. Meanwhile, the World Bank engaged its engineering consultants, Tippetts, Abbott, McCarthy and Stratton (TAMS), to carry out hydrological studies. In early 1956, TAMS verified Pakistan's argument that existing flow resources in the basin were insufficient to meet the many needs that both parties claimed. Based on the TAMS report, the bank modified its proposals by issuing an aide-memoire in May 1956. The aide-memoire stated that a comprehensive plan would aim to match Pakistan's actual pre-Partition withdrawals, attempt to bring most of the Sutlej Valley canals

up to their allocations, and meet the requirements of the Thal project in West Punjab and the Kotri Barrage. It promised to give full consideration to the requirements of Pakistan's other barrages in Sindh—the existing Sukkur Barrage and the newly planned Guddu Barrage.⁶

The aide-memoire also implied that, if the flow resources of the western rivers were found insufficient to meet these needs, the bank would consider creating water storage capacity in West Pakistan through dams with large reservoirs. The Pakistan team had long lobbied for storage on the western rivers. The sticking point now became persuading the Indian team to agree. Under the bank's principle of 'beneficiary pays', India was liable to pay a share of the cost of works that the bank deemed necessary to replace water deficits in Pakistan. Gulhati's delegation insisted that storage was unnecessary. Faced with Pakistan's continuing refusal to accept any plan on the table as it stood, the bank asked both countries' teams to search out less expensive methods for meeting Pakistan's requirements.

In October 1956, India and Pakistan submitted their own plans based on the aide-memoire. Pakistan's proposal was known as the Pakistani master plan, since it set out a comprehensive system of works. Unsurprisingly, it was expensive. The projected cost of the first stage alone was \$1.3 billion. Even then, the master plan would only provide for replacement of existing uses, not for the further development works that Pakistan demanded. By contrast, the Indian plan prioritised reducing the cost of works to be undertaken in Pakistan. It was parsimonious to the point of being, as the scholar Undala Alam has put it, 'unrealistically frugal'.⁷

Again, the bank stepped in and made its own proposals. In May 1957, Iliff presented a set of 'heads of agreement', a draft of the bank's ideas. The heads of agreement reaffirmed the principle of dividing the basin, allowing for a transition period

during which India would continue to supply water to Pakistan while Pakistan constructed replacement works. They also added something new: the establishment of a commission to prepare plans and oversee the division of water.

The Indian and Pakistani governments reassured the World Bank of their desire to cooperate, but they remained wary of each other's intentions. Pakistan in particular was not willing to commit to giving up the eastern rivers without stronger indications of what it would receive in return. To assuage this doubt, the bank rewrote the heads of agreement. They now specified that any agreement by either party to give up claims on any particular portion or source of water would hold good only in the context of the negotiations themselves. Such agreements could not be taken as more general precedents by the other party. In other words, Mueenuddin obtained reassurance that if he accepted the principle of dividing the basin territorially as part of an Indus settlement, he would not have committed the Pakistan government to the principle if the talks broke down again.

At this point, the bank took a harder line. Iliff met with the Indian and Pakistani delegations in July 1957 to discuss the revised heads of agreement. He told Gulhati and Mueenuddin that the negotiations had reached a make-or-break moment. He would ask Gulhati and Mueenuddin to comment on the way that each other reacted to the bank's current proposal. Those comments would determine whether or not the bank was willing to continue facilitating negotiations.⁸

Iliff's warning was not an empty threat. President Black was growing disillusioned with the likelihood of a settlement, and questioned whether the World Bank's role still had value. Iliff, who was rumoured to be tipped for promotion and wanted to clear the Indus problem from his desk, was still betting that having the two governments remain at the table was the fastest route to a settlement.⁹ He convinced Black to give them one

more chance to reach agreement. He told American officials that the embarrassment of being held publicly accountable for any breakdown in negotiations would keep the Indian and Pakistani delegations on track. It would not be easy, though. There was no chance of overall settlement of political problems between India and Pakistan. The levels of mutual suspicion that existed between them, Iliff said, were ‘shocking’.¹⁰

In early 1958, two fundamental problems came to a head. The first was a debate over how to define the extent of the Indus Basin. The second was the continuing divergence between India’s parsimony and Pakistan’s expensive quest for hydraulic independence. Addressing the first point, the question of defining the Indus Basin’s geographical boundaries posed a significant problem. India’s flagship project in the basin, the Bhakra-Nangal Dam complex and canals, was intended not only to supply hydropower to north India, but also to combat the threat of recurrent famine that had historically haunted PEPSU and Rajasthan. PEPSU had merged with East Punjab during India’s 1956 wholesale reorganisation of State boundaries, and the Indian government could claim water for the former PEPSU as part of East Punjab’s requirements. Rajasthan was the problem, lying as it did a long way from any of the six Indus system rivers.

After independence Rajasthan, which had abundant uncultivated land but severely limited water supplies, seemed ripe for the kind of transformation that canal irrigation had already wrought in Punjab and Sindh. Indian engineers planned a new Rajasthan Canal (now known as the Indira Gandhi Canal), which drew water from the Sutlej via the barrage at Harike. As well as strengthening the relationship between cultivators and the state bureaucracy, the planned Rajasthan Canal promised to be, in the words of the engineer who oversaw much of its construction, ‘the most effective

single measure in the solution of the food shortage of the country'.¹¹

Previously, the colonial Sutlej Valley canals project had served Bikaner State, establishing uses of basin waters in territory that became Rajasthan. A centrally-sponsored inter-State water agreement between Punjab, PEPSU, Rajasthan and Kashmir in 1955 had been designed to reinforce this precedent, and assert that Rajasthan's claims to water from the eastern rivers had priority over West Punjab's.¹² In this light, the Pakistan delegation opposed Rajasthan's inclusion in the basin. As Pakistan's ambassador to the United States had pointed out, West Pakistan depended solely on the Indus system. Rajasthan, by contrast, could use water from the Ganges and Yamuna.¹³ The *Times of India* carried a characteristic Indian rebuttal to Pakistani claims in March 1957: 'This country is not going to compromise its own future merely to satisfy Pakistani pique.'¹⁴ An Indian embassy official emphasised to the State Department, a year later, that Rajasthan's peasants needed water, and India could not hold off using Bhakra-Nangal indefinitely.¹⁵ The underlying logic was consistent with Indian arguments that national sovereignty equalled water rights: Rajasthanis had a claim on water by virtue of being Indian, regardless of the actual location of their land.

In April 1958 several members of the Lok Sabha, India's lower house of parliament, urged the administration to take a firm stance against Pakistan. S.K. Patil, the central minister for Irrigation and Power, responded by announcing that India would begin to draw more water from the Ravi, Sutlej and Beas by 1962, whether or not Pakistan had constructed replacement works. Patil stressed that India could not ignore the interests of millions of its peasants, alluding to the domestic political ramifications of stalling development programmes.¹⁶

Although Patil was only reaffirming a statement that the government had made during the previous parliamentary session, his announcement rattled Karachi. Within days, the Pakistan government asked the bank to urge India not to follow through on the 1962 deadline. Mueenuddin, in conversation with US diplomats in Karachi, reiterated his view that Rajasthan was outside the basin. To the State Department's dismay, Pakistani leaders considered asking the United Nations to intervene.¹⁷ As Mueenuddin had hoped, however, Eugene Black wrote to Nehru in May to urge him not to open the canal.¹⁸

The crisis was averted in the short term, but Rajasthan's water requirements were ultimately included in the Indus Waters Treaty. Even finding an agreed definition of the Indus Basin, the assumed starting point for negotiations in Lilienthal's *Collier's* article, proved to be a tricky matter of politics and not a simple one of engineering. The inclusion of Rajasthan demonstrated that the relationship between territory and water rights was unstable, evolving and subject to negotiation.

The second major issue that dogged the late stages of talks was the contradiction between New Delhi's desire for a cheap treaty and Karachi's insistence that the settlement should not leave Pakistan dependent on river diversion works on Indian soil. The question crystallised, from 1957, around an Indian plan for a tunnel at Marhu. The idea was for India to take water from the Chenab (one of the western rivers) through a tunnel at Marhu in Himachal Pradesh, and transferring it into the Ravi (one of the eastern rivers). Further downstream, India would ensure that the same volume of water flowed into Pakistan through the eastern rivers. In other words, Pakistan would ostensibly receive the full volume of the western rivers' water flow, but some of it would wind its way through India first.

Iliff believed that the Marhu tunnel scheme would be cheaper than previous plans. It did away with much of the need for long, expensive link canals within Pakistani territory that would transfer water from the western rivers to the eastern rivers' canal colonies. Iliff did not mention another benefit of the Marhu scheme, namely that link canals, like other open artificial channels, suffer from evaporation and 'conveyance loss'—water that seeps through the canal bed into the surrounding soil. They are therefore highly inefficient, help cause waterlogging by raising water tables, and can even block drainage channels.¹⁹

Iliff did note, however, that the Marhu tunnel was politically impossible to propose to Pakistan because it would leave India in control of 'Pakistani' water.²⁰ Indeed, in October 1957 Mueenuddin, Pakistan's lead negotiator, rejected any plan based on the Marhu tunnel as politically unthinkable. Equally unacceptable, he told the British and American officials, was an alternative proposal for a storage dam on the Chenab in Indian-held Jammu. Either proposal, Mueenuddin said, would need a level of harmony and goodwill that could only come after a Kashmir settlement.²¹ The Marhu tunnel scheme's reappearance in early 1958 won support from many inside the World Bank.²² The Pakistani team rejected it, but talks in Rome during April–May 1958 nevertheless included the tunnel on the agenda.

Meanwhile, the delegations searched for alternatives. Despite adverse implications for tensions between Sindh and Punjab within Pakistan, the Pakistani team agreed to prepare a new proposal for storage on the River Jhelum.²³ In July, Mueenuddin presented a new plan to India and the bank at a meeting in London. The London plan relied on major dams at Tarbela on the Indus, Mangla on the Jhelum, three smaller dams on tributaries of the Jhelum and Indus, and a series of link canals. It was much cheaper than previous plans, although

estimates varied: the Pakistani delegation quoted \$728 million, while the Indians estimated \$666 million for the same set of works.²⁴ India was still, however, unwilling to pay for works that it thought too expensive.²⁵

The Indian delegation countered the London plan with another in December 1958. This new proposal retained the Marhu tunnel and included Indian use of several other sites on the Chenab, a western river, in Jammu & Kashmir and Himachal Pradesh. In return, India would deliver 5 million acre-feet of water through the eastern rivers to West Punjab—accounting for half of Pakistan's replacement needs. The other half could come from three link canals from the western rivers to the eastern rivers, which Pakistani engineers were already constructing. In February 1959, Mueenuddin rejected the Indian plan on the grounds, again, that it was politically undesirable and would not make Pakistan independent of India for water supplies.²⁶ Lilienthal's scheme for cooperation was comprehensively scuttled, and negotiations were at an impasse.

Moments of opportunity

Despite the bleak picture that emerged in the negotiating room by 1958, broader political changes enabled a settlement, for two reasons. Firstly, the period 1958–60 was a unique moment of political opportunity in both India and Pakistan. Secondly, and no less importantly, Cold War geopolitics and the World Bank's ability to organise international financing opened possibilities for funding the costly replacement and development works that Pakistan needed.

The years 1958–60 represented a particular moment in South Asia's political history. The administrations of Mohammad Ayub Khan and Jawaharlal Nehru both had specific reasons for signing the Indus Waters Treaty at the time that they did. Ayub, a military dictator, sought

developmentalism as a source of legitimacy. An Indus settlement would free up water and financial resources for development. On Nehru's part, India's second five-year plan for economic development was in dire trouble. Settling the Indus waters dispute had the potential to rescue Nehru's development programme.

I will explain Ayub's and Nehru's positions in more detail. Ayub Khan came to power through a coup in 1958 that, while bloodless, swept away the incipient democracy that had governed Pakistan since 1947. Several factors led to the coup: intense politicking by West Pakistani politicians, the degeneration of parliamentary politics in East Pakistan (where physical violence during a debate in the Dhaka assembly in September resulted in the death of the deputy speaker), and high rates of inflation that caused industrial unrest. In addition the government's opponents, such as former Prime Minister H.S. Suhrawardy, denounced the alliance with Western powers that had benefited Pakistan's bureaucratic and military establishment with \$500 million of military aid and \$750 million of economic aid.

Intent on pulling the plug on the democratic process before scheduled national elections could bring the regime's opponents into power on a surge of popular sentiment, President Mirza abrogated the constitution and declared martial law on 7 October. He appointed Ayub as chief martial law administrator. Mirza castigated politicians' 'ruthless struggle for power', their corruption and their 'prostitution of Islam for political ends'. On 27 October, the Supreme Court legalised the new regime, which included a hand-picked twelve-man cabinet with Ayub as prime minister. Disagreements between Mirza and Ayub quickly resulted in the general launching a full coup, dismissing and exiling the president just after the latter had announced the new cabinet.²⁷

Having taken control, the new regime needed to keep it. Ayub's martial law administration banned political parties, kept the press on a tight leash, and put the army on the streets to maintain order. Even after the troops returned to their barracks during the second week of November, Ayub remained firmly in charge of government. His administration punished more than 1,500 civil officials for corruption, and used disqualification orders to ban a similar number of them from holding public office. He introduced a system of quasi-representative government called Basic Democracies in 1959, which included direct popular representation at only the most local level. A new constitution in 1962 turned Ayub from a martial law administrator into a civilian president, and brought an indirectly elected National Assembly into existence. As president, Ayub retained the power to appoint and dismiss all provincial governors, ministers and members of administrative commissions. Except for judges of the high courts and Supreme Court, all appointees were directly responsible to him. He was also chief of Pakistan's defence services, and had the final say in foreign policy. He could even introduce and veto legislation in the National Assembly. The press remained heavily censored.²⁸

Ayub's coup heralded the end of a decade of political instability, which had followed Jinnah's death in 1948. The dramatic change in Pakistani politics between 1957 and 1958 illustrates the impact that the coup had on Pakistan's bargaining position. In June 1957, Iliff had told US embassy officials, after three weeks of intensive talks in Karachi and New Delhi, that Pakistan's political leadership wanted to keep the Indus dispute and other issues with India festering in order to maintain their domestic political standing. President Mirza had rhetorically asked embassy staff, 'how can we hope to come [to an] agreement with people who worship the monkey, the snake and the cow', denigrating the Hindu faith of most Indian leaders.²⁹ Prime Minister Suhrawardy complained that

India had been so intransigent in the past that Pakistan would not be able to trust any new deal.³⁰ Nehru, for his part, believed before the coup that Pakistan's leadership was so unstable that an agreement with one set of rulers might become worthless the next time Pakistan's political compass shifted orientation.³¹

Ayub's early regime, strengthened by military rule and the disarray of its opponents, did not need anti-Indian rhetoric to increase its popularity at home.³² Ayub also benefited from the One Unit scheme, which in 1955 had amalgamated the provinces of Punjab, Sindh, Balochistan and North-West Frontier Province under one West Pakistan provincial government. Sindh–Punjab tensions had previously posed a problem during Indus talks, since Sindhi politicians protested that the centre's negotiating strategy placed West Punjab's water needs ahead of Sindh's. In 1954, for example, Sindh's forest minister, Ahmed Khan Rajpar, had claimed that a 1942 decision of the colonial government prevented Punjab from withdrawing water from the Indus main channel without prior approval from the Sindh government. This threatened to make it legally impossible for Pakistan's centre to give unilateral effect to World Bank recommendations for storage on the Indus, since irrigation was under provincial jurisdiction in Pakistan.³³

Under One Unit, Sindh's powerful landlords, who depended on water from the Indus main channel stem to maintain the wealth of their large estates, lost much of their influence. In the new West Pakistan assembly, they had had to compete with Punjabi and other interests. With Ayub's abrogation of democracy their voices were doubly drowned, leaving the centre relatively free from regional constraints.³⁴ Under these conditions, the centre could override previous debates within Pakistan about what state sovereignty implied for regional

water rights. Mueenuddin had the breathing space finally to negotiate the Indus Waters Treaty.

Securing an Indus settlement was important to Ayub because he did not rely on force alone to maintain his rule. Instead he sought legitimacy by presenting himself as a benevolent autocrat who would improve the lives of ordinary Pakistanis. The martial law administration made some cosmetic advances: it stopped shopkeepers from inflating prices, prevented the hoarding of goods such as medicines, and kept the streets clean.³⁵ Ayub claimed to represent the true spirit of the country, which (he said) the political leaders of the 1950s had betrayed through corruption and factionalism. The dictator later claimed of the early years: 'The regime enjoyed widespread public support throughout the country and was sustained and inspired by popular enthusiasm. [...] I took full advantage of the situation and introduced my full programme of reforms without losing time.'³⁶ Apart from the new political order of Basic Democracies, Ayub attempted social reform by promulgating new laws on divorce, polygamy, child marriage and inheritance.

Ayub's flagship policies, however, related to economic development. He introduced striking (if ineffective) land reforms in 1959, encouraged farm mechanisation, took the chairmanship of the Planning Commission in 1961, and assisted private industry through reforms to the tax and state-backed credit systems. Ayub presented himself as the driver of a 'development decade'.³⁷ Agriculture, which in West Pakistan depended on irrigation, was also an important component of development. A 1960 central government report on food and agriculture highlighted jute and cotton as major foreign exchange earners. It was therefore 'essential for the nation to give the highest priority to agricultural development'.³⁸ The Indus waters dispute with India was a significant block to Pakistani development, since the World Bank and foreign

donors such as the United States refused to lend money or provide technical assistance for projects involving water from the disputed rivers to either Pakistan or India.³⁹ Ayub needed an Indus treaty in order to press ahead with the large-scale development of water resources.

India also had a pressing need to settle the Indus dispute by the late 1950s. The country's second five-year plan, operational from 1956 to 1961, was in trouble. Comprehensive medium-term plans were a common feature in postcolonial and developing countries, inspired by the wave of central economic planning in the Soviet Union and throughout the developing world.⁴⁰ However, by 1958 the sheen had worn off India's planning process. The first plan had emphasised the expansion of agriculture. Under coincidentally favourable climactic conditions, the agriculture sector exceeded its targets. The first plan also met other short-term goals, keeping inflation low and promoting refugee rehabilitation. The second plan was based on a development model drawn up by Prasanta Chandra Mahalanobis, a Cambridge-educated physicist who developed a passion for statistics during the 1930s and 1940s. Nehru appointed him chief adviser to the Planning Commission in 1955. The second plan, which embodied Mahalanobis's intellectual work, shifted focus to industrialisation as the starting point in a long-term import substitution strategy, and doubled the outlay of the first plan. Planners assumed that agriculture would continue to increase productivity without corresponding investment.

As chairman of the Planning Commission, Nehru had a large personal stake in the planning process, but the second plan was not a success. It suffered from an acute shortage of foreign exchange, which forced the Planning Commission to cut back development targets. Prices rose by 20 per cent during the plan's period. In particular, a 50 per cent increase in food prices between the plan's beginning and the summer of

1957 forced the central government to import large quantities of wheat. The third plan, scheduled to begin in 1961, returned more emphasis to agriculture.⁴¹ India's economic problems meant that Nehru needed foreign assistance to make the remainder of the second plan, and the coming third plan, work. Ayub's coup came at a moment when Nehru needed a settlement.

Reputation was another motivating factor. Nehru's foreign policy showed him determined to project himself internationally as the representative of subjugated countries. He had vocally supported Indonesia when the Dutch recolonised it in 1945–9, condemned South Africa's apartheid policy, and supported Communist China. Nehru also presented himself as impervious to superpower wooing. Instead, as part of the non-aligned movement, he attempted to work between the Eastern and Western blocs, initiating diplomatic actions in 1956 over Hungary and Suez.⁴² By 1957, Nehru was interested in improving relations with Pakistan because bad international press relating to the Kashmir situation threatened to dent his aura of moral correctness.⁴³

Pressure from China was another reason for New Delhi's thaw. During the early 1950s the Indian and Chinese governments had formed a friendship. In 1951, Beijing forced an agreement on the Tibetan leadership for effective Chinese control. Nehru's government, which had a stake in the area through India's common border with Tibet, chose to maintain good relations with China and did not protest. As the decade advanced, Delhi and Beijing found common ground in their mutual mistrust of the United States' blossoming alliance with Pakistan. In 1954, India and China signed an agreement with Beijing that recognised Tibet as part of China and outlined five principles of peaceful coexistence, the *Panchsheel*.

Yet the border between the two countries, named the McMahon Line after the British official who had drawn it in

1914, marked potential trouble. The British had maintained an 80,000 square-kilometre buffer zone, inhabited by self-administering tribes, between the McMahon Line and colonially administered territory. The zone included an area that traditionally paid tribute to Tibet. After independence, the Indian government attempted to consolidate power there through development activities. In July 1958, however, an official Chinese magazine printed a map showing large parts of the border zone as Chinese territory. An exchange of letters between Nehru and Chou En-lai, the Chinese premier, failed to resolve matters. When a Tibetan uprising against the Chinese authorities broke out in 1959 the Dalai Lama, Tibet's leader, and his followers escaped to India. In Dharamsala, Himachal Pradesh, they set up a government in exile in 1960, with New Delhi's support.⁴⁴ By the late 1950s, China had displaced Pakistan as the Indian government's most imminent perceived threat.

Distressing signs in US foreign policy perhaps also made Nehru more interested in reaching peace with Pakistan. He worried that American military aid to Pakistan had strengthened its armed forces to the point that they could realistically challenge India's military.⁴⁵ When Eisenhower declared in January 1957 that the United States would defend the territorial integrity of Middle Eastern countries threatened by aggression from communist-controlled states, Nehru perceived this as evidence of 'some definite [American] policy against India'.⁴⁶ Still worsening relations with China (which would spill over into a border war in 1962) may have increased his sense of insecurity. By July 1959, Nehru no longer thought the United States 'particularly aim[ed] at harm to India', but still did not trust Eisenhower's administration to have India's interests at heart.⁴⁷

The domestic dominance of the Congress Party, and Nehru with it, was simultaneously declining. The 1957 elections saw

Congress's support base in the provinces eroding, which pushed the party into new coalition governments in Uttar Pradesh, Bihar and Bombay. At the 1962 elections, shortly after the signing of the Indus Waters Treaty, Congress retained its overall majority but bled significant numbers of votes. The party was on a downward trajectory.⁴⁸ Like Ayub, Nehru signed the treaty during a moment of grace, still strong in government and benefiting from a cooling of anti-Pakistan passions in New Delhi's policy circles between 1957 and 1958. Moreover, Nehru himself was seventy years old by 1960 (he died in 1964). Other Indian and Pakistani leaders, and Iliff, worried during the late 1950s that the chance of an Indus settlement could well die with the prime minister.⁴⁹ A few years later, the Indian centre might not have been able to come to terms with Pakistan so readily.

Paying for geopolitics

International politics were just as important as South Asian domestic politics in creating the conditions for the Indus settlement. Specifically, foreign funding was key, and it depended heavily on Western strategic imperatives. Since the international funding position developed in tandem with South Asian politics, it is necessary for a moment to take the narrative back in time before explaining how financial geopolitics finally sealed the Indus deal.

The United States had long-standing interests in South Asia. Even during the late 1940s, while the Truman administration was preoccupied with potential communist threats in Western Europe and the Mediterranean, the Central Intelligence Agency had developed links to the Indian intelligence community. Their mutual suspicion of the Communist Party of India, and the neighbouring People's Republic of China, prompted the relationship.⁵⁰ By 1949–50, American strategists developed a stronger interest in the 'third world' as a result of

Josef Stalin's more active foreign policy. Soviet efforts included retaining Iran's oilfields, extending influence in Italy's former North African colonies, and successfully exploding an atomic bomb.⁵¹ One result of the United States' rediscovered global consciousness was a 1949 National Security Council paper, approved by President Truman, which warned: 'Should India and Pakistan fall to communism, the United States and its friends might find themselves denied any foothold on the Asian mainland.'⁵²

The outbreak of the Korean War in 1950 brought Asia sharply into US consciousness. One effect was a growing interest among State Department officials in South Asia, which lay at the strategic crossroads between the Soviet Union, China and the Persian Gulf's oil resources. Whether American concern for South Asia was due to realistic calculations of the region's importance, a misjudged assumption that the Soviet Union and Communist China were working hard to control it (as Robert McMahon has argued), or to American historical and cultural assumptions that the British strategies of the nineteenth-century Great Game against imperial Russia still held good in the Cold War era (Andrew Rotter's thesis), Washington now began to intervene.⁵³

In 1951, the United States entered a limited aid relationship with India, providing wheat when drought in Madras and Bihar caused severe food shortages. US aid to India rose steadily under the Eisenhower and Kennedy administrations. Between 1956 and 1963 the United States provided more than \$2 billion in surplus farm commodities alone. This was despite an often frosty relationship caused by Eisenhower's conservative approach to foreign aid and Nehru's policy of non-alignment.⁵⁴ India's potential to produce food and manpower in the event of general war provided a strategic rationale for continued American interest in the region, as it had for the British Empire during the Second World War.

Moreover India, as the world's largest democracy, was an attractive proving-ground for Western claims that communism was not the most effective path to development for poor countries.⁵⁵

Equally importantly, Pakistan had emerged as a Cold War ally for the United States. With Nehru pursuing non-alignment, American strategists who wanted a secure base in the subcontinent had little choice but to bargain with Pakistan. In 1953, the ongoing factional shifting of Pakistani politics produced a triumvirate of pro-American leaders in Karachi: President Ghulam Mohammad, Defence Secretary Iskander Mirza, and Commander-in-Chief Mohammad Ayub Khan. The United States signed an arms deal with Pakistan that year, encouraged a Turkish–Pakistani defence pact in April 1954, and made its own defence agreement with Pakistan in 1954. In 1955 the Baghdad Pact, a mutual defence organisation involving Britain, Turkey, Iran and Iraq, emerged with informal American support.

The United States–Pakistan alliance was built on flawed premises: Eisenhower's defence advisers based their assumptions about Pakistan's contribution to Middle East defence on wishful thinking, while the Pakistani authorities wrongly expected American support against its local rivals, India and Afghanistan, as well as the communist bloc.⁵⁶ With Mirza and Ayub Khan retaining powerful positions through the mid-1950s, however, the relationship between Karachi and Washington DC remained close.

Strategic conditions did not make American funding for an Indus settlement inevitable. The US government, already stuck in the quagmire of Kashmir through its leading role in the UN Security Council, was not anxious to be dragged into another intractable parochial dispute. In 1955, Pakistan's ambassador in Washington DC had pressed his hosts to ensure that the World Bank took a harder line with New Delhi. State

Department officials replied that they wished to steer clear of the Indus issue.⁵⁷ In March 1956, President Black of the World Bank was the next to try to involve the United States. Black discussed the possibility of an American contribution to funding for an Indus settlement with State Department officials. He suggested that the United States and Colombo Plan countries (the United Kingdom, Ceylon, Canada, Australia and New Zealand) should provide \$400 million, of a total \$750 million required. At the time, both US and British officials wondered whether Pakistan's need for added water supplies had enough priority over other development requirements to justify such a large investment of limited aid resources to one country, as part of a project that would take years to complete.⁵⁸

To further complicate matters, neither the State Department nor the president's office could simply allocate such large sums of American money. Congressional approval was necessary, and potentially difficult to obtain.⁵⁹ The relationship between the US Congress and the Indian government—Nehru in particular—had a poor record. Congressmen had tried to attach strings to the 1951 bill that authorised wheat shipments to India. Some argued that the US administration should require India to provide strategic mineral resources in exchange for food; others asked why the United States should help a nation that consorted with Soviet and Chinese communists.⁶⁰ Nehru, who was simultaneously negotiating with the Soviet Union and the People's Republic of China for food purchase deals, refused many of the American conditions.⁶¹ The arrival of Chester Bowles as US ambassador to India in October of that year helped: Bowles was enthusiastic about India, and popular there.⁶² Yet the US and Indian governments clashed several more times during the 1950s. Sore points included Nehru's continued policy of non-alignment, and Secretary of State John Foster Dulles's support

for continued Portuguese possession of Goa, a colony in western India.⁶³

American reluctance to commit to investment in South Asian river projects left the World Bank with a problem. In the autumn of 1957 the bank came under pressure from Mueenuddin, who stressed Pakistan's inability to pay for link canals (which would provide no new income). India, for its part, was in no position to finance its proportionate cost of the works that any of the proposals on the table required.⁶⁴ In the first half of 1958, with Indian and Pakistani differences over the Marhu tunnel proposal stalling the Indus negotiations, the World Bank again suggested securing outside funding. This time the response from the United States was more positive.

An aid offensive from the communist bloc, combined with the Soviet Union's attention-grabbing launch of two Sputnik satellites in late 1957, had changed the game of American aid politics. By March 1958 John F. Kennedy, then a prominent Democratic senator, proposed a major increase in foreign aid. India was Kennedy's priority. His proposed legislation—which Eugene Black supported—coincided with an upswing in American public support for aid that appealed directly to Asia's rural poor and not to urban elites or technocratic planners.⁶⁵ An enormous, top-down, highly technical programme like that to develop the Indus Basin hardly fitted Kennedy's rubric. But it was at least partly consonant with American appetites for a more interventionist role in poverty alleviation, because it promised increased food production. By May 1958, President Eisenhower had pledged his government's assistance to help make any Indus waters settlement effective and to contribute to the economic development of India and Pakistan. This might include supporting World Bank loans to Pakistan.⁶⁶

State Department officials also helped drive a new American enthusiasm for contributing to an Indus settlement.

In November 1957, Assistant Secretary of State William M. Rountree identified four major interrelated problems confronting South Asian regional stability. These were an arms race between the Indian and Pakistani militaries, the Indus waters dispute, Kashmir, and a final settlement of the financial and refugee problems dating back to Partition. Each problem contributed to the overall tension; the poor state of bilateral relations reciprocally made the two governments less amenable to compromise over any individual issue. The problems also were interlinked. Geography and attitudes towards sovereignty tied together the Indus and Kashmir disputes. Both sides procured arms and military equipment to deploy in Kashmir. Settling large refugee populations in Sindh, Rajasthan, and East and West Punjab increased Pakistan's and India's requirements for water and hydropower. Finally, charges relating to canal water were among the Partition's financial loose ends.

Rountree felt that the right time had come to break the feedback loop that seemed to imprison subcontinental relations. He proposed American intervention to secure a 'package deal' that would address all four problems together. The United States could contribute economic assistance to both countries, including through special congressional approval for large-scale, long-term aid to India, and public assurances that the United States would defend India and Pakistan against aggression (presumably meaning outside aggression, rather than from each other). Secretary of State Dulles approved Rountree's proposals and instructed the department to carry them out urgently.⁶⁷

Rountree had picked the moment partly because both the Indian and Pakistani finance ministers had recently asked the United States to intervene more directly in bilateral problems. Amjad Ali of Pakistan, during a visit to Washington DC, had suggested that the United States should use India's need for

economic assistance to press for a settlement of the Kashmir and Indus issues. Ali was reportedly annoyed that the Americans had so far refused to use their influence to help a strategic ally. At around the same time, T.T. Krishnamachari, India's finance minister, had told another State Department official that India needed to compromise with Pakistan over Kashmir. Krishnamachari indicated that Nehru was 'in the mood' for a settlement because India needed to reduce its large-scale arms expenditure and prioritise economic development.⁶⁸

Commenting on Rountree's paper, the Karachi embassy reluctantly agreed to the principle of tying economic assistance to a political settlement. Conditional aid could damage the United States' reputation, belying American protestations that it gave aid on the basis of need rather than for political gain. The American public and Congress, however, would demand clear evidence that a large aid programme would enhance US and world security.⁶⁹ Britain's Commonwealth Relations Office, which had previously rejected the idea of linking together Kashmir and Indus settlements as too complicated, now expressed cautious agreement with the American approach.⁷⁰ Over the summer, US diplomats in South Asia suggested the idea to Pakistan's President Iskander Mirza and Prime Minister Firoz Khan Noon. Mirza and Noon accepted the package deal in principle. A parallel proposal to Nehru received a friendly but noncommittal response.⁷¹ (In fact, Nehru wrote privately of Eisenhower's proposal that 'Nothing will come of it, of course, and we do not propose to encourage him').⁷²

At the same time, Pakistani officials began sounding out the US embassy in Karachi about possibilities for American assistance to bridge the gap between the cost of a settlement of the canal waters dispute, and India's and Pakistan's ability to pay for it. The American ambassador told M.S.A. Baig, an

official at Pakistan's foreign ministry, that the US government was not prepared to commit any funding to works in the Indus Basin without a settlement of the dispute. But embassy officials thought that the evident Pakistani interest in finance was an encouraging sign.⁷³ In June, the deputy chairman of the West Pakistan Water Development Authority, Hamid Jalal, told American diplomats in Lahore that the World Bank could only be expected to finance a small portion of the necessary costs itself. Jalal was nevertheless confident that the bank 'would help Pakistan secure loans from friendly countries'.⁷⁴

In October 1958, as we have already seen, the game suddenly changed with Mohammad Ayub Khan's military coup. To Ayub's developmentalist administration, substantial foreign funding via the multilateral Indus Basin Development Fund, which the World Bank organised, was an attractive lure. The fund provided for major dams at Mangla and Tarbela, which the administration could present as development works, and not just replacement. As a caustic later Indian communication put it, Pakistani 'obduracy regarding the pending issues is not likely to be carried to the point where the prospects of the billion dollar aid [*sic*] will be irretrievably imperilled'.⁷⁵ Soon after the coup, Ayub ordered the Pakistan delegation at the Indus waters talks to accept the proposal on the table. That proposal was the bank's 1956 aide-memoire, as modified by the 1957 heads of agreement: a partitioned water-control system, with storage dams on the western rivers.⁷⁶ The proposal allowed for a transition period during which India would continue to supply water to Pakistan while Pakistan constructed replacement works. It also added something new: the establishment of a commission to prepare plans and oversee the division of water.

With Ayub's readiness to strike a deal over the Indus issue, the US package proposal collapsed. American diplomats finally settled on finding money for a solution to the water

dispute, without formal reference to other India–Pakistan tensions. In December, the US ambassadors in Karachi and New Delhi wrote to the State Department, recommending that the United States should prepare to help fund an Indus waters settlement.⁷⁷ Early in 1959, the World Bank began assembling promises of assistance from friendly countries. By August, six foreign powers had agreed to help underwrite an Indus agreement: Australia, Canada, New Zealand, West Germany, the United Kingdom and the United States. Thus the way was open for the financing of a major scheme of works in the Indus Basin, which would go far beyond what Pakistan and India themselves could and would pay for. This gave each of the negotiating parties a way to address its concerns without demanding a deal-breaker from the other.

It also gave the contributors to the Indus Basin Development Fund an opportunity to assist development in South Asia. Going into financial negotiations, each donor country had different priorities. Britain emphasised regional stability in the Cold War diplomatic context. Canada wanted to export surplus commodities. Australia had earth-moving equipment that it no longer wanted, and a surplus of wheat. West Germany wished to assist Indian economic development by reducing the amount that New Delhi had to pay Pakistan for replacement works, but Black and Iliff worried about Pakistani resentment if India were partly let off the financial hook. Ultimately, however, the contributing countries agreed to the bank's insistence that all contributions should be cash grants, not grants in kind, and not tied to the purchasing of any particular equipment. All contracts to supply equipment, materials and consultancy services would be open to competitive tendering: the Pakistan government would invite suppliers to provide quotes and pick the best. This benefited countries that were competitive on the international market for capital goods, such as the United States and United Kingdom.⁷⁸

Strategic concerns were foremost in the minds of American policymakers. 'In the tremendous task the U.S. has set itself of helping to establish the peace and maintain the hopes of the world [...] [a] solution of the Indus waters problem, if thus purchasable [through development aid], would be a signal achievement of U.S. foreign policy,' J. Jefferson Jones, director of the State Department's South Asia office, had written as early as April 1957.⁷⁹ In 1959, Under Secretary of State C. Douglas Dillon informed the Treasury that Black had finally reached a firm understanding with Nehru and Ayub, and the time had come to find money for a solution.⁸⁰ Later in the year Donald Kennedy, the new director of the office of South Asian affairs, advocated a US contribution, then estimated at \$500 million, to the Secretary of State in similar terms. 'It was generally agreed', Kennedy said, though he declined to specify by whom, 'the elimination of this problem will [contribute] greatly to a lessening of the tension between the two countries, thus augmenting their resistance to Communist tactics, and to encouraging closer economic cooperation between them.' Kennedy noted that Dillon of the State Department, the secretary of the Treasury, the director of the Bureau of the Budget, and President Eisenhower himself had all agreed to commit American money to the cost of hydraulic works in the Indus Basin.⁸¹

However much the State Department pushed for it, American funding still needed legislative approval. In 1960 the Eisenhower administration set about amending the 1951 Mutual Security Act, which provided for US military aid, technical cooperation and development assistance to friendly countries, to include references to the Indus Basin Development Fund. Doing so required consent from Congress. A draft of section 404 of the Act emphasised Congress's desire for 'the development of the Indus Basin through a programme of cooperation among South Asian and other nations of the

free world in order to promote economic growth and political stability in South Asia'.⁸²

But Congress gave the executive trouble over the terms that the World Bank had set out, which dictated the manner in which donor countries should provide financing. A 1954 US law required the federal government to use privately owned American vessels for at least 50 per cent of its sea transport requirements. The bank insisted on uniformity in shipping policy, at the expense of such national requirements. Dillon attempted to soothe ruffled feathers by meeting with representatives of the American Merchant Marine Institute, who had many friends in Congress. In the end, however, the executive had to promise to compensate the industry by increasing the use of American shipping in other regions.⁸³

With domestic wrinkles ironed out, the US government was ready to sign up to the Indus Basin Development Fund. The donor countries formally entered into the fund agreement on the same day as the signing of the Indus Waters Treaty, 19 September 1960. The fund totalled \$893.5 million—significantly less than Pakistan's earlier demand of \$1.297 billion, but still representing a grant to Pakistan of \$305.9 million in foreign exchange, and \$173.8 million from India (payable in pounds sterling). Another part of the fund was a US loan of \$235 million, repayable in Pakistani rupees, and a further \$150 million of loans from the United States and World Bank. The United States bore the brunt of the financial burden, dispensing \$177 million in direct grants alone.⁸⁴ Western development aid had made the treaty possible.

The Indus Waters Treaty reversed that principles that David E. Lilienthal had set out in 1951. Rather than joint, cooperative work, the treaty split the basin into two distinct arenas for technocratic development. As India had always insisted, the treaty apportioned the flow of the eastern rivers (the Ravi, Sutlej and Beas) to it—roughly one-fifth of the volume of

water in the Indus Basin. Pakistan acquired exclusive use of the western rivers (the Indus, Jhelum and Chenab), accounting for the rest of the basin's flows—and thus attained the hydraulic independence that Mueenuddin's delegation had pressed for during the later stages of negotiation. The treaty provided for a ten-year transition period, during which Pakistan would receive progressively diminishing water supplies through the eastern rivers. The split of the rivers was not complete: both countries could use either set of rivers for 'domestic uses': washing, drinking water, sewage disposal and industrial purposes. They could also make 'non-consumptive uses', including navigation, fishing and flood protection, so long as nearly the same volume of water returned to the same river or tributaries. Most importantly, India also retained the right to execute hydroelectric power-generation projects on the western rivers. For the purposes of large-scale irrigated agriculture, however, the rivers were divided.

Conclusion

That the Indus Waters Treaty came about in the way that it did depended on historical contingency. Alam is correct in arguing that reaching an agreement was a rational strategy for both Indian and Pakistani leaderships. Doing so opened the way to maximising water availability in their countries. Indeed, the Indus Waters Treaty served both Pakistani and Indian interests. But it was far from the inevitable outcome of imperatives towards cooperation.

To an extent, the treaty was an exception to the relationship that Miriam Lowi has identified between hegemonic power and riparian position. Conflict, she argues, is most likely when the most powerful country in a river basin is upstream. Cooperation is more likely if the hegemon is downstream, and has a critical need for water. She cites the 1959 Nile River Agreement between hegemonic, downstream Egypt and

weaker, upstream Sudan, counterpointed by the unilateral approach of strong, upstream Turkey to the Tigris and Euphrates. Of the Indus dispute, Lowi suggests that the Indian government's need to maintain good relations with the 60 million Muslims who lived within its borders, and the reasonable fight that Pakistan (with American-supplied weapons) could be expected to put up in a military conflict, altered its hegemonic behaviour enough to induce the treaty signing.⁸⁵

As this chapter has shown, the immediate context in which India and Pakistan struck the Indus deal was the critically important factor. As Ashok Subramanian, Bridget Brown and Aaron Wolf have recognised in a report for the World Bank, political opportunity—the belief that cooperation will enhance the political future of a state or individual policymakers—can be an important factor in inducing cooperation on transboundary rivers.⁸⁶ Without a political moment of opportunity, which arrived at the same time in New Delhi and Rawalpindi (the headquarters of Ayub's military government), seeming to give concessions to the 'enemy' would have been far more politically costly on both sides.

Making the Indian and Pakistani water control systems as mutually independent as possible was a political decision, not a technical one. It was Ayub and Nehru who carried it out, not the engineers on their negotiating teams. On a broader scale, the Cold War context created the conditions for the Treaty. In the name of regional stability and to demonstrate superiority over the Soviets, the United States and its allies were prepared to pour vast amounts of aid into the Indus Basin Development Fund.

The treaty's ultimate political legacy was mixed. It achieved a settlement of the specific dispute over the allocation of the Indus rivers and opened the way for the furious pace of water resources development that the Indian and Pakistani

engineering services carried out during the 1960s–1970s. At the same time, it did not comprehensively break the deadlock between the two neighbours. It fell short of the hopes that David E. Lilienthal, the American technocrat who had first suggested apolitical negotiations under World Bank auspices, had raised when he wrote his seminal 1951 article in *Collier's* magazine. We saw in [chapters 3](#) and [4](#) that two issues related to water, the Kashmir dispute and the management of the riverine international border in Punjab, continued after 1960. Tensions over water did not disappear. Despite this, the treaty's reputation as a rare instance of meaningful cooperation in India–Pakistan relations has also persisted. The rhetoric that accompanied the treaty's signing, however, was short-lived, and efforts to build on it equivocal. As the next chapter will show, the Indus treaty proved able only to help regulate the torrent of cross-border tension, not dam the flow.



THE PHANTOM OF COOPERATION

‘AMICABLE SETTLEMENT OF OUTSTANDING INDO-PAK DISPUTE: Modest Beginning Made Towards Co-operation’. So read a headline on 20 September 1960 in the *Times of India*, one of the country’s leading English-language dailies, reporting that Prime Minister Jawaharlal Nehru had signed the Indus Waters Treaty with Pakistan’s President Mohammad Ayub Khan in Karachi the previous day. It was not a front-page story: instead, readers only learned in detail about ‘the happy end [to] a dispute that has strained the relations between the two countries since partition’ on page five.¹ The front page did, however, carry a photograph of Nehru and Ayub signing the treaty. ‘In a moving speech’, the journalist wrote of a civic reception, ‘Mr Nehru declared: “Those who have open hearts and open minds can solve the most intractable of problems.”’²

The Indus dispute was not the only problem in question. While Nehru was in Pakistan, he and Ayub held extensive discussions, including about Kashmir. Nehru announced his firm conviction that the visit would mark the turning point in the relations between the two nations, offering a chance to mend the 13-year breach that Partition had made.³ Meanwhile in Delhi, Hafiz Mohammed Ibrahim, India’s irrigation minister, gave a radio broadcast. ‘The signing of the Treaty’, he told the Indian public, ‘will bring a new era of co-operation between India and Pakistan in harnessing the large natural

resources of the Indus and its tributaries.’⁴ Indian journalists also generally spoke positively about the treaty, albeit with some reservations about the amount of money that India had agreed to put into the settlement. Most of the press corps held out hope for greater India–Pakistan cooperation following hard on the treaty’s heels.⁵

Back in Karachi, Ayub reportedly diverged from his prepared speech to explain this newfound atmosphere of collegiality. ‘With this spirit there is no reason why we should not be able to solve all our disputes,’ he said.⁶ Confidential diplomatic reporting suggested that Ayub had actually been sceptical about what his more general conversation with Nehru might achieve.⁷ Perhaps the day’s events inspired him to adopt a more confident mood. At any rate the Pakistani press, which Ayub’s marshal law administration used as a mouthpiece, put a sheen on the treaty’s importance—both in itself and as a symbol of larger things to come. Karachi’s daily *Dawn* declared that ‘The momentous Treaty [...] has not just opened a new chapter of India–Pakistan relations but has also ensured agricultural prosperity for West Pakistan’.⁸ The statement echoed an earlier report in the *Times of Karachi*, which predicted that ‘the agreement augurs well to mark the end of the bitter and dark chapter in the history of Indo–Pak relations. We may hope that it will also mark the beginning of an era of goodwill and closer mutual cooperation, considerate neighbourliness and clearer appreciation of one another’s point of view.’⁹ In the years following the treaty’s signing, some high officials in India and Pakistan believed that they could capitalise on the treaty in order to move towards greater regional cooperation. Ghulam Mueenuddin, the Pakistani civil servant who had led his country’s delegation to the Indus negotiations, saw the settlement as a launching point for a broader treaty with India.¹⁰ H. Dayal, the Indian high commissioner in Pakistan, suggested increased trade, exchange visits by parliamentarians, and a joint programme of

flood control in West Bengal and East Pakistan as ways to build on the Indus treaty.¹¹

Interested parties outside the subcontinent were also enthusiastic. Canada's Prime Minister John Diefenbaker announced his country's contribution to the Indus Basin Development Fund, which provided for hydro-works in Pakistan, with an expressed hope for friendly relations between 'two sister nations of the Commonwealth'.¹² The US administration was the biggest contributor to the fund, and the State Department had played a key role in encouraging the World Bank, Pakistan and India to persist with negotiations throughout the 1950s. American funding had depended on the ability of the State Department and the White House to assure Congress that financial support would help improve relations between India and Pakistan.¹³ In 1961, Nehru bore out some of their hopes when he apparently discussed the possibility of a 'non-territorial' approach to Kashmir with US President Dwight D. Eisenhower. The US ambassador to India, John Kenneth Galbraith, suggested a sovereignty-sharing arrangement, including joint tenancy over river waters along the lines of the US–Canadian International Joint Commission that governed the trans-border Great Lakes.¹⁴ Indians, Pakistanis and the foreign powers that had helped shepherd the Indus Waters Treaty into existence all shared the hope that the agreement might be a stepping stone towards peace in South Asia.

Not everyone was so optimistic. Fatima Jinnah, the sister of the late founding father of Pakistan, was a prominent critic of the treaty. She accused Ayub of 'frittering away our permanent water rights'.¹⁵ Ayub's later autobiography alluded to the unpopularity of his decision to sign. 'The solution that we had finally arrived at was not the ideal one,' he recalled, 'but it was the best we could get under the circumstances.'¹⁶ Shams-ul-Mulk, a retired senior Pakistani hydraulic engineer,

remembered that Pakistanis widely believed the treaty to be a sell-out to India.¹⁷ In India, according to one newspaper report, ‘almost all members’ of the Lok Sabha, ‘irrespective of party affiliations’, attacked the administration for ‘its policy of “appeasement and surrender” to Pakistan and charged it with “letting down” the country’. Their criticisms focused on India’s payments to Pakistan for the construction of link canals, the ten-year transition period during which India would continue to supply some water to Pakistan through the eastern rivers, and, more generally, ‘taking little care of India’s needs and requirements of water, especially in Rajasthan’.¹⁸

The treaty’s ultimate political legacy was mixed. It achieved a settlement of the specific dispute over the allocation of the Indus rivers and opened the way for the furious pace of water resources development that the Indian and Pakistan engineering services carried out during the 1960s–1970s. At the same time, it did not comprehensively break the deadlock between the two neighbours. It fell short of the hopes that David E. Lilienthal, the American technocrat who had first suggested apolitical negotiations under World Bank auspices, raised when he wrote his seminal 1951 article in *Collier’s* magazine. We saw in [chapters 3](#) and [4](#) that two issues related to water, the Kashmir dispute and the management of the riverine international border in Punjab, continued after 1960. Tensions over water did not disappear. Despite this, the treaty’s reputation as a rare instance of meaningful cooperation in India–Pakistan relations has also persisted. The rhetoric that accompanied the treaty’s signing, however, was short-lived. Efforts to build on it were equivocal.

In this chapter, I trace the legacy of the Indus dispute, negotiations and treaty in India–Pakistan relations. On the eastern side of the subcontinent, a dispute over the river-waters of divided Bengal gathered momentum during the late 1950s and continued through the 1960s. The Bengal disputes provide

a useful way to think through the enduring nature of sovereignty in India and Pakistan after the treaty's signing. The Indus Basin itself is less useful: apart from issues related to Kashmir and Punjab's borderland, India and Pakistan's continuing interactions in the basin became largely procedural. The Permanent Indus Commission, the bilateral body that the two governments set up to inspect water control works and communicate about possible issues, worked quietly and steadily after 1960.¹⁹ Other scholars have explored the implications that the treaty had on the subsequent development of water control in the basin, demonstrating that the partition of the rivers had implications for relations between central, provincial and local elites in India and Pakistan.²⁰ Likewise, the implications of the treaty for more recent developments on the Indus rivers, most notably Indian hydroelectric projects in Jammu and Kashmir, are well known.²¹

By contrast, the early years of the Bengal water disputes have received little scholarly attention, and none that considers them in the context of state-building and sovereignty. Yet the Bengal disputes demonstrated that sovereignty, territory and water rights remained closely entangled in the attitudes and actions of Indian and Pakistani leaders. They also made clear that the Indus Waters Treaty affected India–Pakistan relations beyond the basin itself, as policymakers and the press frequently discussed Bengal with reference to the Indus treaty. Thus, this final chapter demonstrates that officials' concerns about sovereignty in relation to the Indus dispute could 'travel' to other contexts.

I begin by outlining the hydrological and political underpinnings of the Bengal river disputes, before explaining a doomed collaboration between the US government and the World Bank, which attempted to replicate an Indus model in Bengal. Like the World Bank's intervention in the Indus system, these proposals for Bengal's rivers represented the

confluence of development diplomacy and Cold War geopolitics. I then argue, however, that Indian objections to the proposals insisted again on national sovereignty, construed both as control over 'Indian' rivers and as freedom from foreign intervention. The Indus negotiations had not lessened the importance of national sovereignty in South Asian water politics. They strengthened it. To Ayub Khan's government, the Indus Basin Development Fund demonstrated that compromises with India could lead to major international funding for prestigious technical projects. To Indian parliamentarians and policymakers, however, the Indus settlement served as a warning against multilateral negotiations over natural resources, not as a model to be replicated.

Two river disputes in divided Bengal

Partition dismembered Bengal in 1947. The western portion became (Indian) West Bengal and the eastern part became, as part of Pakistan, East Bengal. Following an administrative reorganisation of Pakistani provincial governments in 1955, East Bengal was formally renamed East Pakistan.²² The political relationship between India and East Pakistan was complex. It was often tense but less toxic than encounters between New Delhi and the (West Pakistan-dominated) central government in Karachi. Partition had brought violence to Bengal, but not on the swift and brutal scale that enveloped Punjab.²³ Many more non-Muslims stayed on than in West Pakistan, so East Pakistan still had a substantial Hindu minority during the 1950s and 1960s. The province, a jute producer, initially depended heavily on India for processing and markets. Then, when the Pakistan government limited jute exports to India after 1949, East Pakistan set up its own mills.²⁴ Yet the two Bengals continued to trade with each other. During the earlier 1950s, these trade connections provoked some attempts at friendship. In 1957, for example,

East Pakistani politicians including Chief Minister Ataur Rahman Khan met with Nehru and stressed their desire to end the hostility between New Delhi and Karachi, hoping that the two Bengals could re-forge a trading relationship.²⁵ In 1958, however, the Ayub Khan administration clamped down on cross-border 'smuggling' and suppressed inter-Bengal trade.²⁶

Ayub's trade policy did not necessarily have East Pakistanis' best interests at heart. His policy of state support for the private sector promoted economic growth in West Pakistan (and concentrated wealth in the hands of a few industrialist families). It did little for East Pakistan, even though jute exports provided the bulk of that country's foreign exchange earnings. Per capita income in the eastern wing, which had been 10 per cent lower than in the west in 1947, was 40 per cent lower by the late 1960s.²⁷ Ayub's policy continued the established tradition. After independence, the West Pakistani elites who controlled Pakistan's central government consistently prioritised agriculture and industry in Punjab and Sindh over economic development in East Pakistan.

East Pakistan, then, differed from the west wing in economic growth, political influence and (to an extent) its relationship with India. Yet East Pakistan was, like the country's western wing, a potentially vulnerable lower riparian. The two Bengals shared one of the world's most famous rivers, the Ganges (or Ganga). Rising in Gangotri, in the Indian Himalayas, the 2,510-kilometre-long river flows south-east through India towards East Pakistan. The vast Gangetic plain constitutes the heartland of north India, including the populous and politically important state of Uttar Pradesh. Before entering Bangladesh, the main stem of the Ganges splits into two channels: the Bhagirathi–Hugli, which flows south to Kolkata in West Bengal, and the Padma. The Padma, which formed the border between India and East

Pakistan, runs south-east to join the Brahmaputra before emptying into the Bay of Bengal via the lower delta.²⁸ The Brahmaputra itself rises in Tibet, north of the Himalayas, and then flows through north-eastern India, entering East Pakistan via Assam. After the confluence of the Brahmaputra and Padma, the combined flow mingles with the Meghna, which comprises the flows of tributaries in the hills of eastern India.²⁹

The nature of river disputes in the subcontinent's north-east diverged from those in the north-west, largely because the region's geography was so different. Unlike the Indus Basin, the Bengal delta had plenty of water. It had been an important and productive frontier region under Mughal rule from the seventeenth century, attracting settlers intent on wringing livelihoods from its fertile soils, a dynamic that the region perhaps retained as late as the 1890s.³⁰ Yet harnessing its water for economic modernisation was difficult. The delta's landscape, which comprised the greater part of East Pakistan, had a fluvial nature that hampered major infrastructure construction. Under colonial rule, British authorities had done little even to regulate its waterways, spending only £5 million on improving navigation facilities during the last three decades of the nineteenth century. By contrast, the colonial government had spent more than £200 million on railways, attempting to integrate the delta's economy into broader trade networks.³¹ Under-investment, plus an exuberantly watery landscape, made East Pakistan's economy far less dependent than those of Punjab and Sindh on an elaborate artificial system for putting water onto farmland. Jute, East Pakistan's main cash crop, was grown on freshly deposited silt next to the major rivers during the wet season. It did not use canal irrigation at all.

Nevertheless, two major projects in divided Bengal became points of contention. The first was Pakistan's hydroelectric project in East Pakistan (constructed in 1957–62) on the

Karnafuli, a stream that originates in Mizoram in India (and is not part of the Ganges–Brahmaputra system). The second was an Indian barrage on the Ganges, at Farakka in West Bengal (constructed in 1961–75), approximately 20 kilometres from the India–Pakistan border. Both projects had important implications for how Indian and Pakistani leaders conceived of sovereignty and territorial integrity. Since they occurred virtually simultaneously, discussions among policymakers often treated the two problems together.

A striking feature of the first dispute was that Pakistani authorities planned a water control project that could adversely affect India—quite the reverse of conditions in the Indus Basin. The project in question was a dam built at Kaptai on the Karnafuli River, a relatively short channel which rises in the Lushai Hills in India before flowing 270 kilometres south-west through the Chittagong Hill Tracts and Chittagong itself into the Bay of Bengal. Plans for the dam surfaced early. Immediately after independence, Pakistan’s Prime Minister Liaquat Ali Khan had emphasised the importance of the Chittagong Hill Tracts to hydroelectric power generation in East Pakistan.³² The dam’s location was only approximately 30 kilometres from the Indian border. The project’s primary aim was to supply cheap power for industry and rural development in East Pakistan. Engineers also expected the dam to provide some flood control benefits to the lower Karnafuli basin and, by capturing and storing silt, increase the depth of water available in Chittagong port during the dry season.³³

Along with such projected benefits, there was inevitably a cost. The dam would create a reservoir that would submerge 360 square kilometres of land. The majority of this densely populated region was home to shifting cultivation, or wet-rice agriculture, practised by Chakmas, an aboriginal population of Buddhist ‘hill people’. By the time the dam was completed in

1961, its reservoir had displaced 90,000 hill people, plus approximately 8,000 Bengali settlers.³⁴ Contemporary scholarly investigation into the resettlement programme for these displaced people was damning, finding it poorly planned and executed, with local officials hampered by retrograde attitudes towards the hill tribes, whom they wrongly considered 'migratory'.³⁵ The displaced hill people did not all remain in East Pakistan: according to one estimate, around 40,000 of them sought refuge in India and ended up in what is now Arunachal Pradesh, along the Sino-Indian border, where they remain stateless.³⁶

From the point of view of the Indian government during the late 1950s, there was a more pressing matter. The Karnafuli reservoir was expected to flood across the international border and submerge an undetermined (but presumed small) area of Indian territory, mainly in the north-eastern State of Assam.³⁷ Pakistan's ability to construct a project that would affect Indian territory distinguished the Karnafuli project from the Indus Basin. In the latter, Pakistan's 1948 attempt to link the Dipalpur Canal to the Sutlej, upstream of the Indian-controlled headworks at Firozpur on the East–West Punjab border, was virtually the only opportunity that Pakistani engineers found to alarm their Indian counterparts.³⁸ Even in that case, India's development of the Harike weir, further upstream, quickly made Firozpur itself redundant to Indian purposes.³⁹ By contrast, Indian engineers could do nothing to prevent the construction of Karnafuli. Pakistani plans for the new dam were therefore capable of undermining Indian control over territory by putting it under water.

Despite the reservoir's effect on Indian territory, India's leaders quickly showed a willingness to compromise with Pakistan. Nehru refused to object to the project 'merely for the sake of objection'.⁴⁰ In August 1959 he told the Rajya Sabha, India's upper house of parliament, that 'if a certain small area

in India comes underwater in such scheme [*sic*], that itself is no reason why we should refuse permission. It is common practice between two countries to cooperate or permit some such cooperation by agreement.’⁴¹ In some ways, Nehru’s exhortation was surprising: it contradicted the insistence on the sanctity of borders and national territory that historians and social scientists have identified as characteristic of modern nation-states.⁴² It also contrasted with the hard-line approach to territorial sovereignty embodied in Indian arguments on the Indus dispute.

At the time, other issues perhaps weighed more heavily on Nehru’s mind than the Karnafuli reservoir. India’s deteriorating relationship with China was possibly one. This was also a period of compromise in India–Pakistan border issues. Shortly after Nehru’s statement, Indian and Pakistani government ministers settled minor territorial disputes on their shared border in the east. Sardar Swaran Singh and Lieutenant General K.M. Sheikh, cabinet ministers in India and Pakistan respectively, agreed on a new demarcation of parts of the boundary line and the referral of future disagreements to an independent tribunal.⁴³ The two governments were also working towards the demarcation of the Punjab border, which came about in 1960 (see [chapter 4](#)). The signs were promising, then, that the Indian and Pakistani leaderships’ concerns about water flows in divided Bengal might be more easily resolvable than the Indus waters dispute.

With the backing of the political leadership, negotiations between Indian and Pakistani engineers seemed to be making progress. Planning and construction began in earnest during the late 1950s. In February 1958, Pakistani officials had requested Indian permission to conduct surveys in order to determine how much Indian land might be flooded by the reservoir.⁴⁴ The government of Pakistan was willing to let Indian engineers visit the Karnafuli site to conduct a joint

survey with their Pakistani counterparts.⁴⁵ By the time that Indian engineers arrived in December 1959, Pakistan had agreed to pay monetary compensation to India for the areas that the reservoir would flood.⁴⁶ Even when Pakistani plans to raise the height of the dam came to light in December 1960 (meaning that more water could be stored behind it, and the reservoir would consequently cover more ground), Pakistani officials mollified their Indian counterparts by offering India a portion of the Karnafuli dam's projected 80,000 kW of hydropower at cost price.⁴⁷ By the time that the Indus Waters Treaty was signed in 1960, the Indian and Pakistani governments had already arrived at a limited degree of collaboration on the Karnafuli project.

The Farakka Barrage, by contrast, produced a flood of bitterness. It was intended to increase water flow levels in the Bhagirathi-Hugli, the Ganges distributary on which Kolkata port is located. The project's principal aim was to flush silt from the riverbed into the sea. Indian planners considered this necessary to prevent deposits from building up on the port's seabed, blocking access to deep-draught shipping.⁴⁸ To do so, the barrage was designed to divert 12,000 cubic metres per second of the dry-season (January–May) flow of the Ganges.⁴⁹ The Farakka Barrage project was formally instituted in 1961. Actual construction began in 1964, but encountered many delays due to the central government's inadequate allocation of funds and a shortage of foreign exchange.⁵⁰ The issues relating to Farakka paralleled those in the Indus Basin: Indian developments upstream had the potential to lower the volume of water available downstream in Pakistan.

Plans for the project were old. They had first surfaced during the colonial period, when the British irrigation engineer Sir Arthur Cotton in 1858 proposed a weir across the Ganges to improve the navigability of Bengal's rivers.⁵¹ Like many colonial projects, Cotton's weir ran into bureaucratic

wrangling in London and Kolkata (the nineteenth-century capital of imperial India) and never moved further than the drawing board. Following independence, Indian engineers found that it was feasible to divert Ganges water through a barrage at Farakka.⁵² Limited technical correspondence between the Indian and Pakistani governments made little headway: while India suggested collaboration on Ganges weirs in 1953, in practice officials in Delhi refused to undertake even a joint survey that Pakistan proposed in 1954.⁵³

Yet it was not until the end of the decade that the barrage became an important bilateral issue. Provincial pressure was key. The West Bengal State government was highly developmentalist, even by Indian standards. It made large investments in transport infrastructure, which Partition had disrupted, and intervened regularly in markets to alleviate food and cloth shortages. Partition's social and economic effects nevertheless lingered, with other parts of India overtaking West Bengal's industrial and agricultural production. Left-wing and Bengali ethnic parties were highly influential within the State, often working against the dictates of the Congress-controlled government in New Delhi.⁵⁴ In 1959, the West Bengal government pushed the centre hard to go ahead with the barrage scheme, provoking strong East Pakistani press reactions.⁵⁵

This was precisely the time at which an Indus water settlement seemed likely to become a more realistic possibility, so it is hardly surprising that the Indus treaty featured in discussions of Farakka. In January 1959, the *Pakistan Observer* quoted 'authoritative sources' in stating that 'with threat of stoppage of water supply in West Pakistan from river headworks lying in Indian territory, Indian authorities are now engaged in similar designs on eastern wing of Pakistan [*sic*] [...] It is designed to strangulate economy of Pakistan [*sic*].' The Farakka Barrage's potential impact on

Ganges water, in other words, paralleled that of the Bhakra Dam and other Indian works on the Ravi, Sutlej and Beas. The US consulate in Dhaka, the provincial capital of East Pakistan, reported that all the city's newspapers had printed virtually identical stories. American diplomats thought that the source was most likely the East Pakistan government's public relations department, aiming to distract public attention from domestic problems.⁵⁶ Later that month, on 15 January, an editorial in the *Azad* drew parallels between the Indus Basin and Farakka disputes by suggesting that 'India seems to be determined to exploit the geographical advantages against East as well as West Pakistan. [...] To destroy Pakistan is her objective.'⁵⁷

Pakistani officials and US diplomats agreed that Farakka was a problem comparable with the Indus dispute, even if the Americans demurred from the assumption that an Indian conspiracy to destroy Pakistan lay behind it. Ellsworth Bunker, the US ambassador to India, warned Washington in late 1958 that tensions over Bengal's rivers could flare up to Indus proportions.⁵⁸ The Ganges did not have quite the same strategic weight as the Indus system, since it was not geographically entangled with Kashmir, but State Department officials were still concerned that the Bengal dispute could politically destabilise South Asia. In February 1959, Masood Husain, chairman of the Inland Water Transport Authority of East Pakistan, agreed with the statement of Frederick P. Bartlett, director of the State Department's South Asia office, that a lack of coordination between the governments would likely lead to 'a new Indus waters-type dispute'.⁵⁹ Conversely, a further American report noted in December 1960 that the prospects for a Ganges settlement would benefit 'from the favourable atmosphere [recently] created by the successful negotiations on the Indus River'. The report added, presciently, that the type of settlement that the Indus treaty represented—the flows of individual rivers assigned in whole

to India or to Pakistan—was unworkable in Bengal because every major river flowed through both Indian and Pakistani territory.⁶⁰

The similarity in rhetoric between the Indus dispute and Pakistani officials' interpretation of Farakka is striking. Continual reference to nefarious Indian designs on Pakistan's water supplies, and accusations that Indian works were deliberately designed to destroy Pakistan's economy, characterised both. In a 1961 letter to Nehru, Ayub warned that water availability in the Ganges and Teesta was 'a matter of life or death for the people of Pakistan', closely mirroring the tone of Pakistani pronouncements on the Indus rivers.⁶¹ But this comparison disregarded the oceanic differences between the Indus and Ganges issues. One Indian scholarly article, written during the Farakka dispute, inverted the discourse of need that Pakistani leaders deployed on the Indus. The author, K.P. Mathrani, made the case that 210 million Indians in the Ganga basin had no other source of water, while East Pakistan was blessed with abundant rainfall (though, Mathrani failed to note, only at times when it was not cursed with serious flooding).⁶² India, in this reading, had a better claim to needing Ganges water than Pakistan.

As one Indian engineer has admitted, diversions at Farakka during the period of low flow in the Ganges system, from mid-April to early May, threatened to more than halve the volume of water available in East Pakistan.⁶³ But the lesser economic and irrigational dependence of East Pakistan on the Ganges–Brahmaputra rivers, compared with West Pakistan on the Indus, reduced the plausibility of East Pakistani claims to an existential need for river water. Only one per cent of East Pakistani agricultural output in 1947 relied on surface water irrigation from the Ganges–Brahmaputra system.⁶⁴ The *Pakistan Observer's* line, that India was attempting to 'strangulate' East Pakistan's economy with the Farakka

Barrage project, could not resonate in the same way as equivalent pronouncements about the Indus.⁶⁵ Conversely, the lack of existing water uses in eastern Bengal gave Indian representatives the opportunity to underestimate East Pakistan's future needs.⁶⁶

The Karnafuli and Farakka projects provoked contrasting public responses in India and Pakistan. East Pakistan's plans for the Karnafuli presented an inconvenience but not a major sticking point in bilateral relations. Even though the reservoir's flooding of land in Assam threatened, literally and figuratively, to submerge Indian sovereignty over the territory, New Delhi traded its agreement to the project for cheap hydroelectric power. The dam's effects were confined to a small, remote region.⁶⁷ By contrast the Farakka Barrage, which disrupted the flows of one of South Asia's largest and most economically important rivers, sparked fears in Pakistan that mirrored those about Indian plans for Indus waters. Farakka threatened Pakistan's territorial integrity (in the hydraulic sense, namely its continued receipt of water flows from an upper riparian). It could damage Pakistani leaders' ability to govern East Pakistan by demonstrating their inability to protect the population from Indian actions. Indian leaders, for their part, faced a choice between grappling with Pakistan over yet another river development project and accepting a limitation on their claim to absolute sovereignty over water flows within Indian borders.

The Indus precedent

The flurry of Pakistani and American concerns about Farakka between 1959 and 1961 died down when the Indian central government did not provide enough financial support to West Bengal to make the project viable. The situation changed again in 1967: a new State government came to power in West Bengal, bearing pre-election promises to make the barrage a

reality.⁶⁸ The project then became a serious point of India–Pakistan contention. It also attracted increasing international attention, with both the State Department and the World Bank beginning to frame interventions.⁶⁹ American policymakers now went further than identifying superficial similarities between the Farakka dispute and the Indus waters problem. During the late 1960s State Department officials, in collaboration with the World Bank, proposed the Indus Waters Treaty as a model for resolving the Bengal rivers dispute. How and why their suggestions failed to gain traction highlights the difficulty of applying a model of conflict resolution from one context to another—even if both disputes involved the same nation-states, a similar type of issue and an almost contemporary historical period.

An attempted American intervention in the Bengal waters dispute reflected David E. Lilienthal's earlier concerns about South Asian security. These had prompted his suggestion of cooperative development in the Indus Basin. As Lilienthal had in 1951, American diplomats during the late 1950s and 1960s proposed framing the resolution of tensions about specific hydro-projects in terms of a larger-scale apportionment of waters in river basins. They again sought a river settlement as a prelude to greater general India–Pakistan cooperation. R.B. Horgan, a member of the US mission in Calcutta, argued in 1967 that finding a solution to the Farakka Barrage problem alone would be impossible. It was too entrenched in a web of interrelated water issues. Instead, Horgan thought that negotiations on the Bengal rivers should expand to encompass all planned projects on the Ganges.⁷⁰ This echoed Lilienthal's recommendation that negotiations over the River Sutlej in Punjab be scaled up to encompass the entire Indus Basin.

State Department memoranda in Washington DC the following month adopted another important element of Lilienthal's Indus proposals. This was the idea that India–

Pakistan relations were so generally tense that technical cooperation on river diversion projects was the only plausible area in which to build up precedents for cooperation. William J. Handley, an Office of Near Eastern Affairs official, wrote to the secretary of state that the Bengal rivers problem—much like the Indus before it—was probably the only contemporary area where India and Pakistan could work together. Relations between the two countries were at a low ebb by that time, even by their own standards. In 1965, Pakistan's army had launched an ill-conceived attempt to 'liberate' Kashmir, sending troops across the ceasefire line. Its commanders wrongly expected Indian Kashmiris to rise up in support. India's military instead took the fight to the plains and retaliated across the Punjab border, with tank detachments approaching Lahore. The conflict resulted in a costly stalemate, with both sides withdrawing to the positions they had held only a few weeks previously. Soviet-sponsored negotiations in Tashkent between Ayub Khan and Lal Bahadur Shastri, who became India's prime minister following Nehru's death in 1964, brokered peace by restoring the status quo. Tension between India and Pakistan remained strong.

Handley followed Lilienthal's precedent by maintaining that there was little hope of an amicable settlement of the Bengal rivers issue, except as part of a broader joint river basin development programme that would benefit both nations.⁷¹ Handley's recommendations also represented a longer lineage of thinking on the Bengal rivers problem within the State Department. One 1964 policy briefing, for instance, had touted the Indus Waters Treaty as a strong example of India–Pakistan collaboration, and argued that tension in Bengal offered another 'significant opportunity for cooperation'. The briefing acknowledged, however, that the Indus treaty was proving more expensive than joint development would have been. Moreover, on the Bengal rivers, in contrast with the Indus Basin, 'independent action is not feasible because of the

physical nature of the river systems'.⁷² The author did not seem to consider that Lilienthal had made precisely the same point about interconnectivity in Punjab, claiming that colonial engineers had planned the basin's irrigation system as one unit. Lilienthal's reading of Punjab's colonial irrigation history was accurate, but proved less important than he thought. Subsequent negotiations had demonstrated that Indian and Pakistani planners would rather spend the time and money constructing mutually independent water control systems than work together.

The next essential component of an Indus-type settlement of the Bengal waters dispute was a third-party facilitator. The perceived success of the World Bank's role in settling the Indus dispute encouraged bank officials themselves to seek an active part in tackling tensions on the Bengal rivers. In September 1967 George Woods, the bank's president, noted the institution's successful role in bringing about the Indus treaty. He suggested technical work as a starting point for new India–Pakistan negotiations.⁷³

Woods thought that India's prime minister, Indira Gandhi, wanted a peaceful settlement with Pakistan but was reluctant to move towards one for fear of domestic opinion. Gandhi's position was difficult. Even under ideal circumstances, any Indian administration would struggle to negotiate with and make concessions to Pakistan on important subjects, after the latter had so recently tried and failed to wrest Kashmir from India by force.⁷⁴ Worse, Gandhi's domestic position was tenuous. The strength of the Congress Party at the centre and in the States had waned after the deaths of Nehru in 1964 and Lal Bahadur Shastri in 1966. It was no longer able to secure national integration and stable government. Even within Congress, Gandhi faced a threat from a collection of party bosses (known as the Syndicate) immediately after the 1967 general elections that confirmed her premiership. The

Syndicate wrongly assumed she would be a malleable figurehead. Gandhi instead sought an independent power base. Her attempts to consolidate her position included anti-American rhetoric to distinguish her from the Syndicate's pro-American views. Meanwhile, by the late 1960s planning emphasis on agriculture had not yielded even returns across the country. Something from 40 to 50 per cent of agriculturists remained below the officially described poverty level, despite the sector's diversion of public funds away from industrial development.⁷⁵ Whether or not she wanted to resolve the Farakka issue, Gandhi had little room for manoeuvre in party politics or in national economics.

Woods had better reason to believe that Ayub Khan in Pakistan wanted to find a compromise, particularly as his own leadership suffered from the aftershocks of the war. The fighting had depleted military stores, exacerbated by the United States' halting of military assistance to both antagonists. Pakistan, more dependent on US equipment than India, suffered more from the embargo. Ayub's regime subsequently burdened an already strained national economy with increased defence expenditure. Meanwhile, the war had shaken business confidence, reduced private investment and slowed Pakistan's rate of growth. Failures of the monsoon rains in 1965 and 1966 led to food shortages, especially in East Pakistan. The province's large industrial labour force and university student population led protests against post-war inflation and the centre's neglect of provincial economic development. The developments of the mid-1960s only exacerbated existing problems: many East Pakistanis had been suspicious of the centre as early as 1948, when Mohammed Ali Jinnah, Pakistan's first governor-general, declared that Bengali could not be a national language.⁷⁶

In 1966 Sheikh Mujibur Rahman, the leader of the Awami League, a political party in East Pakistan, set out a six-point

programme for provincial autonomy. Ayub's regime accused Mujib of secessionism, but by the summer of 1967 even moderate Bengali political parties demanded the restoration of direct elections and parliamentary government. The regime decided to extend the state of emergency that it had declared at the beginning of the 1965 war, turning East Pakistan into a virtual police state.⁷⁷

Ayub therefore desperately needed something positive to help him regain ground in the province. Indian officials believed that the rather sudden emergence of the Pakistan central government's objections to Farakka, in 1967, resulted from Ayub's search for an East Pakistani issue to push.⁷⁸ Wringing a waters settlement from India would demonstrate his ability to defend Pakistan's interests while contributing to East Pakistan's development. As Woods realised, the World Bank was well positioned to help him do so. Having once found that bank-sponsored negotiations could liberate large sums of foreign financial assistance, via the Indus Basin Development Fund, it is likely that Ayub Khan's administration perceived the possible benefits of a repeat performance in Bengal, despite a period of bitterness during the mid-1960s over the funding and location of the Tarbela Dam on the Indus.⁷⁹

In autumn 1967, Indian and Pakistani officials scheduled direct bilateral talks on Farakka for the first time since 1962, but the meetings made little progress.⁸⁰ American diplomats and bank officers began to pin their hopes for Bengal water-sharing on Dr Roger Revelle. Like Lilienthal before him, Revelle was a Western development expert. He directed the Center for Population Studies at Harvard, having previously held several scientific advisory roles with the US government. He also had a track record of policy work in South Asia as a perennial adviser to the Indian and Pakistani governments during the 1960s. He was a member of India's Education

Commission in 1964 and 1965.⁸¹ In Pakistan, he headed a group of technical specialists from US universities and industrial firms which made a major study of waterlogging and salinity problems in West Pakistan. President John F. Kennedy had ordered the group's assembly in 1961, at the request of Ayub Khan. Though the Pakistan government had almost entirely ignored the report that Revelle published in 1964, his cachet in US government and World Bank circles seemed undiminished.⁸²

The professor set to work. In November 1967, Revelle agreed with the government of Pakistan to work towards a settlement of the Bengal rivers problem. This could take the form of an international treaty for the division of rivers, albeit without any immediate prospect of Indian cooperation.⁸³ As Revelle pressed ahead with his study, further communications between the State Department and the World Bank drew implicit parallels with the Indus water negotiations. They focused on the importance of a technical approach, the usefulness of water cooperation as a starting point for more general improvements in India–Pakistan relations, and the World Bank's potential as a catalyst for change.⁸⁴ American and World Bank proposals to address Bengal river tensions, in other words, cited the Indus model as a positive one.

Sovereignty redux

The Indus treaty's success as a portable model depended on the Indian and Pakistani governments agreeing that it formed an acceptable precedent for other settlements. I have already outlined Ayub Khan's favourable disposition towards the Revelle initiative, though my research did not uncover the detail necessary for a deeper analysis of Pakistan's position. In India, by contrast, the outlook was less encouraging. There, the Indus Waters Treaty continued to be controversial. During the 1965 war, Prime Minister Shastri had had to reassure

opposition leaders in parliament that the Pakistani authorities would not be able to use India's treaty payments for canal construction towards the war effort. The money, Shastri told parliamentarians, reached canal contractors via the World Bank, not the Pakistan government.⁸⁵ *The Hindu* in July 1968 accused Pakistan of making claims to Ganges water in the hope that an international agreement would result in India paying 'compensation' or 'replacement' costs to Pakistan, so that Pakistan could develop water resources from the Brahmaputra instead. *The Hindu* remembered the Indus treaty's 'unfair' advantages to Pakistan. Not only had India 'generous[ly]' signed away the right to waters that flowed through Indian territory, but Indian money had even helped fund Pakistani works construction.⁸⁶ The article pointed to the possibility that a territorial division of rivers could occur in the east of the subcontinent as it had in the west, revivifying Indian concerns to maintain absolute sovereignty over 'Indian' rivers. The *Times of India* similarly rejected comparisons between Farakka and the Indus dispute. 'There is hardly any similarity between the two,' read a 1969 article. 'Their geographical location, meteorology, hydrography are entirely dissimilar [...]. Unlike the Indus, the Ganga is wholly an Indian river and nearly 180 million people in this country depend on it.'⁸⁷

Aside from the Indus treaty's unpopularity, Indian leaders during the late 1960s more broadly sought to rebuff foreign intervention into South Asian affairs. In April 1967 L.K. Jha, secretary to Prime Minister Gandhi, and Braj Kumar Nehru, India's ambassador to the United States, met with Walt Whitman Rostow, the State Department's under-secretary. They told Rostow that Gandhi's administration suffered from domestic charges that it was succumbing to outside pressure. The source of the trouble was that the World Bank had publicly advocated India-Pakistan economic cooperation. Joint industrial projects, which the bank favoured, were

potentially vulnerable to a Pakistani decision to cut off supplies. Indian officials were annoyed by what they perceived as the World Bank's high-pressure tactics and its implicit threat to deny aid.⁸⁸ In the circumstances, the Revelle initiative went nowhere.

Indian politicians also rejected the Indus analogy as damaging to Indian interests. In August 1968 Dr K.L. Rao, the central minister for Irrigation and Power, faced hostile questions in the Lok Sabha, the lower house of parliament, about a conference with Pakistani officials that he had held in New Delhi in May. Rao asserted that the government rejected any possibility of third-party involvement in the Bengal rivers issues, including by the World Bank, and denied that the bank had approached him or his colleagues. He stressed that any discussions would be purely bilateral. Rao quoted a letter to Gandhi from the Soviet prime minister, Alexei Kosygin, who urged 'both countries [to] show goodwill in the search for a mutually acceptable solution as has been done in the case of the problem of the use of waters of rivers in the Indus Basin'. Rao denied, however, that the Indus dispute and the Bengal rivers dispute had anything in common.⁸⁹

Cold War geopolitics was one reason for Rao's hostile response to Kosygin's letter. India's relationship with the Soviet Union was poor. This had not long been the case. Between 1953 and 1964, Soviet leader Nikita Khrushchev had fostered friendship with New Delhi in order to encourage Indian non-alignment.⁹⁰ India and China's short border war in 1962 had drawn Nehru's government closer to the Soviets, who had begun to split from the People's Republic in 1956–7.⁹¹ Leonid Brezhnev's accession to power in Moscow in 1964 brought, however, a shift in Soviet policy. Brezhnev sought to normalise relations with Pakistan, hoping to draw the sting out of the Western-allied country's dangerous proximity to Soviet territory.⁹² He agreed in April 1968 to supply a modest amount

of military equipment to Pakistan.⁹³ By that summer, when Rao addressed the Lok Sabha, Moscow had established strong links with Islamabad. The Indian government was sceptical of Soviet intentions.⁹⁴

Khurshida Begum suggests that Indira Gandhi's particular emphasis on bilateralism, rather than multilateralism, lay behind Indian objections to third-party involvement in the Farakka dispute.⁹⁵ Indian resistance to any hint of outside interference in South Asia was also more general. As Andrew Rotter has argued (drawing on a 1951 report by Sir Archibald Nye, the British high commissioner in India), Indian foreign policy tended to operate in three 'circles'. The policy of non-alignment characterised India's engagement with the 'outer circle': the United States, Britain, the Soviet Union and the People's Republic of China. In the 'middle circle' of miscellaneous other states, Indian interests were mild or moderate. In the 'inner circle' of contiguous countries, especially Pakistan, the Indian government pursued a 'narrow calculation of self-interest' (Nye's words).⁹⁶ Ambivalent about or hostile to the recent history of the Indus waters negotiations, Rao and other Indian policymakers placed the Bengal rivers firmly in the inner circle. India's national interest, rather than its participation in an idealistic international community, was the guiding influence. Gandhi's administration was consequently free to exploit its position of strength against Pakistan. Domestic pressure to construct the barrage was Rao's key concern, not foreign reactions—whether Pakistani or international.

At the same time, Indian protests against attempts to draw similarities between the Indus and Bengal water disputes masked an important parallel between them. Territory remained central to the way that the Indian and Pakistani governments thought about water development projects. A concern with territory per se became particularly important

when Pakistani actions threatened to flood Indian land. After the two governments agreed on compensation for the Karnafuli flooding, further planned barrages on the Padma and Teesta rivers threatened to submerge more Indian soil. The Ministry of External Affairs in New Delhi protested that the flooding 'would constitute a serious infringement of the territorial sovereignty of India'. Ominously, the communication warned that the Indian authorities reserved the right to take any action they considered necessary 'to protect their interests in the sovereignty of their territory'.⁹⁷ At the local level, the government of West Bengal complained that an embankment that some Pakistani nationals constructed in the River Fulkumar would flood large agricultural and residential areas in India.⁹⁸ Water control projects, large or small, could have border-crossing implications.

Sovereignty, in the sense of a government's ability to act without restriction in its own territory, formed the nub of the Bengal rivers disputes. East Pakistan's assertion of a right to build barrages that would flood Indian territory was one side of the coin. The other was India's insistence on the right to take unilateral action in developing the Ganges, which reflected its stance on the Indus system, as Khurshida Begum has noted.⁹⁹ Outside the official sphere, one Indian scholar writing in 1968 claimed that, according to the precedent of the Harmon doctrine, India had every right to build the Farakka Barrage because all waters 'are subject to the sovereignty of the state where they are found'.¹⁰⁰ This mirrored exactly the Indian government's earlier stance in the Indus dispute. Territoriality had underpinned official discourses on the Ravi, Sutlej and Beas rivers, figuring as the non-negotiable core of the Indus issue. India claimed complete ownership over every drop of water. The Indian government, however, took a softer rhetorical line on the Ganges. Rather than denying that East Pakistan had any right to water, New Delhi sought to present the balance of water rights as lying on its side of the border.

Indian leaders argued that the Ganges hardly counted as an international river because so much of its catchment area was in India, as well as downplaying East Pakistan's need for water.¹⁰¹

This less severe rhetoric did little, however, to restrain Indian leaders' determination to assert sovereign freedom of action. During the early days of the Farakka controversy, Hafiz Mohammed Ibrahim, the central minister for Irrigation and Power, had responded to probing from Lok Sabha members with assurances that the Indian government would not hold up work because of fear of Pakistani objections.¹⁰² Indian leaders, including Nehru, made similar statements in the house in 1961.¹⁰³ In July 1968, Dr K.L. Rao tabled a statement in the Rajya Sabha, informing members that Indian negotiators had recently rejected the Pakistani delegation's call to involve international agencies. South Asian engineers, the Indian delegation reportedly argued, were fully competent in water resources development. Despite agreeing to reciprocal exchanges of engineers to visit the Farakka Barrage site in India and the planned site for the Ganges-Kobadak project (another East Pakistan scheme, designed to irrigate the southern part of the province), Rao assured the house that talks held with Pakistan would not affect adversely the planned timetable for the completion of the Farakka project.¹⁰⁴

Such pronouncements were intended to prevent the government's domestic enemies from using the appearance of compromise with Pakistan to attack the Congress party. When Pakistani engineers arrived to inspect the Farakka site in 1968, for example, opposition members suggested in parliament that the Pakistani delegation included 'defence personnel' whose job it was to scout for ways to do damage to India.¹⁰⁵ Demonstrating sovereign independence was a concern of successive Indian leaders, on the Ganges as on the Indus tributaries. At the heart of the Gandhi administration's

rejection of foreign involvement, and of Pakistan's right to veto infrastructure works in India, was the same insistence on territorial sovereignty.

As short-lived as it was, the idea of using the Indus Waters Treaty as a model for India–Pakistan cooperation in Bengal during the late 1960s demonstrated some of the pitfalls of trying to take a model of collaboration from one context and applying it to another. The intervention of the 1971 civil war in Pakistan, and subsequent secession of Bangladesh, does of course complicate the picture. We cannot know whether negotiations between the governments in New Delhi and Islamabad would have been more fruitful than those between Delhi and Dhaka. But the initial reactions of Indian officials to Pakistani proposals that the Bengal rivers issue be scaled up, and that the World Bank become involved, did emphasise the historical peculiarity of the original Indus treaty. Ayub Khan had signed the Indus treaty at a time when his military regime in Pakistan gave at least a veneer of stability to a formerly chaotic political situation in the country; his coup removed some of the doubts that the Nehru administration had had about the ability of a Pakistani government to adhere to an international agreement. By 1967–8, when the Farakka issue was coming to a head, Ayub's government had become weak.

East Pakistan's economic problems persisted, and the campaign for political autonomy there developed into a secessionist movement under Sheikh Mujib. In West Pakistan, Ayub's constitutional scheme for limited democracy failed to curb a wave of popular protest against the deeply unpopular amalgamation of the provinces, which had occurred in 1955. Protests against One Unit swept West Pakistan during 1968, demanding the recreation of separate provinces. Ayub resigned in 1969 and relinquished power to Yahya Khan, the commander-in-chief. Yahya's complete inability to handle the powerful opposing personalities of Sheikh Mujib and Zulfikar Ali Bhutto, the doyen of West Pakistan and the splintered

country's future prime minister, contributed to the break-up of the state.¹⁰⁶

India, too, was in a very different position in the late 1960s. To recap, during the 1950s Nehru had been a strong leader, but an old one. His advancing years helped to impress upon Pakistani policymakers the importance of securing a settlement while Nehru was still in power, since it was widely believed in Karachi that his successor was not likely to be as 'soft' on Pakistan. At the same time, Nehru had needed American and World Bank aid to help prop up his failing second five-year plan, whose focus on industry at the expense of agriculture had led to a crisis in food prices and depleted India's foreign exchange reserves. Settling the Indus waters dispute had been one way in which Nehru could normalise relations with Pakistan, in the hope of eventually reducing military expenditure in Kashmir. By contrast, Indira Gandhi's later administration stood to make no such direct gains from a Ganges water settlement.

Finally, the status of the World Bank, the all-important third party in the Indus negotiations, had changed greatly during the early to mid-1960s. Following a high point in the bank's relationship with Indian officials between 1958 and 1962, it became increasingly critical of Indian economic management during the third five-year plan period (1960–5). Heavy industry projects, which the Indian government prioritised, seemed to bank staff to take too long to bear fruit. The steel industry was struggling under government controls. In 1964, the bank proposed a new in-depth study to assess the reasons for what it saw as India's unsatisfactory economic performance. The proposal, which smacked of Western intervention in domestic affairs, was poorly received in New Delhi. A 1966 bank report criticised India's exchange rate policy, administrative controls over imports, and relative neglect of agriculture. Meanwhile, the 1960s was a

challenging decade in New Delhi. India's wars with China in 1962 and Pakistan in 1965, the deaths of two successive prime ministers, and the subsequent power struggle in the Congress under Indira Gandhi shook the unity that the party had previously enjoyed at the centre. In this context the bank, through the multilateral Aid to India Consortium which it had set up in 1958, was able to pressure the Indian government into liberalising import controls and devaluing the rupee.¹⁰⁷ Indian policymakers were therefore highly sceptical of the bank's intentions when Pakistan agreed to its intervention in the Bengal rivers dispute. The conditions for a major settlement of an emotive bilateral issue such as water-sharing, which required political compromise, development funding and possibly foreign assistance, were poor. The parties to the dispute—especially India—had much less reason to come together in a negotiated resolution.

Conclusion

Revelle's initiative, American and World Bank interest in intervention, and bilateral talks between India and Pakistan all failed to make any real headway in solving the Bengal rivers dispute. The 1971 secession of Bangladesh initially promised good relations with India because the Indian military had fought alongside the Mukhti Bahini, the Bangladeshi freedom fighters. Unsurprisingly, the new Bangladeshi leader, Sheikh Mujibur Rahman, was friendly towards the colossus next door. When Indian engineers completed the Farakka Barrage and feeder canal at the beginning of 1975, Mujib's and Gandhi's governments signed a short-term agreement for a trial operation of the barrage. The agreement was unpopular with opposition parties in both countries, and was possibly one of the many reasons why army majors assassinated Mujib that August.

With her former ally dead, Gandhi hardened her attitude towards Bangladesh. In January 1976, Indian engineers unilaterally diverted water at Farakka without any consultation with Bangladesh. Just over a year later, Gandhi's Congress party lost a national election to the Janata Party, and the new government attempted to strengthen India's bilateral relations with its neighbours. At the same time, President Ziaur Rahman of Bangladesh advocated the formation of a South Asian Association for Regional Cooperation (SAARC) in the hope that it would help keep his country from falling under India's heel. In November, at the confluence of these two political moments, the governments managed to agree on water-sharing arrangements for a five-year period.¹⁰⁸ When the five years were over, they had proved unable to agree on plans to further develop Ganges water uses.¹⁰⁹ New Delhi and Dhaka finally signed a water treaty in December 1996. The treaty was very limited in nature, and took little account of developments in the international law of watercourses or contemporary efforts to promote sustainable development.¹¹⁰ It was certainly nothing on the scale of the Indus treaty, but it remains the only formal agreement between India and Bangladesh governing water use in the Ganges.

Aaron Mulvany has recently shown that water managers responsible for flood control in Puducherry, a former French colony in south India, are susceptible to 'policy legends' that present particular narratives of the past as a basis for contemporary decision-making. In Puducherry's case, the dominant policy legend is that French-era engineering was more effective than post-independence works because of the now-lost expertise, professionalism and objectivity of colonial engineers.¹¹¹ The Indus Waters Treaty is perhaps too contested to be the subject of a fully formed policy legend. But, as we saw, it has acquired a totemic significance in some policy circles.

This chapter has demonstrated that the treaty's broader significance, beyond regulating relations on the Indus rivers, is largely symbolic. The treaty served as a reminder that Indian and Pakistani leaders could work together to find compromise solutions to bilateral problems. At the same time, the treaty quickly entered both Indian and Pakistani political discourses as an example of the futility of compromise: many on both sides bemoaned the 'selling out' of their country's water rights in return for a peace in the subcontinent that did not follow. Ayub Khan was willing to overlook the treaty's unpopularity and respond to American and World Bank advances that sought to replicate it in Bengal. Indira Gandhi, who was in a stronger international position but delicately placed at home, refused.

It was perhaps natural for American and World Bank policymakers, who had stakes in good India–Pakistan relations but no way of compelling them, to look to the Indus example as a model for settling the Bengal rivers dispute. But the abject failure of this concept suggests that the successes of the Indus treaty apply very specifically to the Indus Basin itself. Commentators are quite correct in asserting that the treaty has survived two major wars intact and has never been substantially breached (notwithstanding differing points of view on the legitimacy of the Baglihar and Kishanganga projects under the terms of the treaty). But that does not make it a model for broader cooperation.

The Farakka dispute showed, on the contrary, that the Indus Waters Treaty was one of a kind. The treaty was rooted in the riverine geography of the Indus Basin and in the contingent political circumstances that brought it about. Both were absent in Bengal. What the two cases had in common was an Indian leadership intent on asserting sovereignty by controlling river flows, and a Pakistani state that needed to shore up its domestic power by ensuring—and being seen to ensure—continued receipt of water. That Nehru was so willing to

accept the flooding of Indian land by Pakistan's Karnafuli project suggests that the central government was not unduly concerned with the specifics of territory in remote, strategically unimportant parts of north-eastern India. Delhi officials and parliamentarians were, however, thoroughly opposed to accepting that another state could impose restrictions on their plans for large-scale water development works in the Gangetic heartland. Albeit with a softer rhetoric, India's leaders asserted ownership over the Ganges in the same manner that they had claimed the Ravi, Sutlej and Beas. The leaders of India—as well as of Pakistan—were still working to entrench the power of the postcolonial state. Asserting sovereignty over water remained a powerful means to that compelling end.

Conclusion

Throughout this book I have followed two main lines of argument about the Indus waters dispute. Firstly, territoriality and sovereignty were central to water politics in the basin. Controlling water flows within national territory was essential to making a state sovereign: it was a necessary part of state-building. Because of this, the dispute was as much a political as an engineering problem. Secondly, I have argued that the dispute and treaty occupied a very particular historical moment. Within South Asia, the ideas about sovereignty that Indian and Pakistani leaders attempted to enact were a product of the two states' political development after decolonisation. Globally, the 1960 treaty depended on its Cold War context. In this conclusion I will summarise my findings on these two themes, before finishing with some thoughts on the continuing tension between India and Pakistan over Indus water resources.

First, then, water was essential to both 'internal' and 'external' sovereignty in South Asia. Internally, it was integral to state-building in India and Pakistan. At independence, both governments inherited a close relationship between water provision and state power. Regulating irrigation water and taxing the agricultural sector underpinned the political and economic viability of both states. Administrations at local, provincial and national levels aimed to further their sovereignty over 'national' territory by controlling water flows. Both states relied on the tried-and-tested colonial-era technique of irrigation extension as the basis for economic development, and added a greater push towards increasing electricity provision through hydroelectric projects. Water was

therefore essential to the ‘internal’ sovereignty of India and Pakistan. Water control was an important means by which the administrations spatially extended their power, and found a material basis for state sovereignty.

Equally importantly, water flows were key to ‘external’ sovereignty—each government’s ability to assert its sovereign equality with other states, and prevent their interference with its own water resources. A geography of rivers, canals and diversion works tied together upstream and downstream people, making fluvial connections between places and objects that the Partition boundary had assigned to different polities. For India and Pakistan, the problem of sovereignty manifested differently because of their relative positions upstream and downstream.

Indian administrators presented their freedom to use water within Indian river as integral to sovereignty. In statements to their own public, to foreign diplomats and frequently in the World Bank’s negotiating rooms, Indian spokespeople claimed unfettered rights over the eastern rivers—the Ravi, Sutlej and Beas. India’s status as a sovereign state conferred complete freedom to use the rivers within Indian territory, without any interference from downstream Pakistan. In practice, this principle only went so far. Jammu & Kashmir was the obvious exception: despite claiming full sovereignty over the entire contested region, New Delhi not only acquiesced in Pakistan’s building of the Mangla Dam but also agreed to severely limit Jammu & Kashmir State’s own water uses. They were also willing to forgo claims on the Chenab. One of the western rivers, it flowed through the Indian State of Himachal Pradesh before entering Pakistan. Using the Chenab in Himachal was more difficult than utilising the Ravi, Sutlej and Beas in the Bilaspur foothills or on the Punjab plains. But it was not impossible, as Indian schemes for a tunnel at Marhu demonstrated. According to the logic of India’s claims on the eastern rivers, the Chenab should have been just as ‘Indian’ as

the others. The actual Indian negotiating position, as it crystallised during the mid- to late 1950s, was therefore much more flexible on absolute sovereignty over rivers than New Delhi's rhetoric suggested. Instead, Indian officials focused on making their claim that the eastern rivers formed a distinct hydrological-territorial unit—one that belonged to India. The 1960 treaty fully territorialised them as Indian rivers. In short, New Delhi let go of the western rivers in order to increase its effective sovereignty in the eastern half of the basin. Diversion works on the Sutlej and Beas enacted that sovereignty in concrete.

Pakistan asserted a bargaining position on the principle of territorial integrity: that a downstream state has a right to continue to receive water without interference from upper riparians. In the conventional phraseology of international law and water policy studies, sovereignty and integrity appear to be mutually opposed principles, adopted respectively by upstream and downstream powers. Like India, however, Pakistan made trade-offs in its sovereignty claims. In the treaty, Pakistan gained relative independence from the upstream, Indian parts of the river system. The key nodal points of the restructured Pakistani water-control system were in territory that Pakistan controlled: the Tarbela Dam in West Punjab and the Mangla Dam in Pakistan Administered Kashmir, plus an assortment of barrages and link canals. The first cost was relinquishing the historical claim on water from the eastern rivers. Like India, Pakistan accepted that it could not own all the rivers that ran through its territory. The second cost was a heavy dependence on foreign money and expertise, which arguably limited Pakistani sovereignty. To an extent this was already an established feature of Pakistani policymaking. Previous irrigation projects such as the Kotri Barrage had relied on foreign consultants and manufacturers. Pakistan's military had long used American arms and funding. But the scale of the Indus Basin development programme, and the

fund behind it, were unprecedented. The treaty enabled foreign capital and expertise to entrench themselves further in Pakistan, in return for Islamabad's heightened territorial control over water.

We should also be cautious about how we interpret Pakistani assertions of territorial integrity, the principle that a downstream user should continue to receive water from a particular river. As I have shown, these were fully rooted in broader notions of state sovereignty. The Indus rivers flowed through the heart of Pakistan's agricultural economy and political make-up. It was not unreasonable for Pakistani leaders to claim that continued receipt of water flows was critical to the state's survival. Even if some of Pakistan's cultivators could have survived without irrigation water, it is likely that Pakistan's political structures could not. Proving to its population that it could go head to head with India in order to secure water resources was therefore critical to the Pakistan state's claims to have succeeded effectively to British power and authority. The rhetoric of river integrity did not eventually preclude compromise.

On the other hand, such compromises did not negate the reality of new international borders. Lilienthal had proposed cooperative river development work as a mechanism for transcending boundaries and reuniting the basin's divided political space, but Indian and Pakistani concerns to preserve mutual autonomy made his ideas unworkable. During the 1950s and 1960s, the territorial border between India and Pakistan actually grew more significant. The Sutlej's entanglement with the Punjab boundary complicated matters during the 1950s, helping to produce a number of armed stand-offs, but also prompting local officials in both countries to use ad hoc arrangements with their opposite numbers on the other side. The history of water at the border reveals connections that might otherwise be hidden, such as the agency of local officials in pushing their superiors to stand up for national

sovereignty over liminal spaces. It also shows how much more systematic border management became after 1960, erasing much of the earlier ambiguity by instituting a harder territorial boundary, while prioritising international obligations under the Indus Waters Treaty. It is possible that the treaty, by removing the transboundary political importance of headworks on the eastern rivers, paved the way for the border settlement. Further research would be necessary to test that hypothesis.

Regardless, the border agreement traded elements of both sides' territorial claims in order to establish more clearly demarcated zones of authority over space. The year 1960 marked the firmer divide of both territory and rivers.

In sum, South Asian territoriality was under construction. Indian and Pakistani leaders' made fairly consistent claims regarding territory, sovereignty and water rights, but they did vary. The Indus Waters Treaty finally produced a more fixed territoriality, based on the division of development spheres, but it contradicted both countries' original claims on rivers. The treaty also became the guiding principle of border management along the Sutlej in Punjab during the 1960s. It overrode local officials' concern to assert sovereignty over borderland territory, which had characterised the 1950s. Yet it could not resolve the problem of competing sovereignties in Kashmir. Sovereignty over water and space were both negotiable, but continually contested.

My second line of argument has been that entanglements of sovereignty, territory and water in the Indus dispute represented a particular historical moment in decolonisation. The developing international system, emerging in a distinctive form after the Second World War, had a major bearing on how the dispute played out. Indian leaders, in resisting and then grudgingly accepting third-party intervention, emphasised freedom from interference rather than the equality of nations. But Nehru's insistence on statesmanlike behaviour and good-neighbourliness demonstrated his awareness that India had an

international position to maintain, even if his assertions of goodwill sounded hollow to Pakistani observers. On the other hand, Pakistani leaders' frequent invocations of international law asserted their status as the representatives of a sovereign power that had the ability to engage other powers on the basis of formal equality. The international system set the broader context for India's and Pakistan's manoeuvrings during the water dispute. Reciprocally, the dispute helped shape their engagement with Cold War geopolitics.

The discourse of technocratic internationalism that brought Indian and Pakistani representatives to the negotiating table was a part of Cold War development discourse. Strategic concerns were paramount in the politics of international aid during the period. The language of goodwill that accompanied the Indus Basin Development Fund only masked the strategic calculations that lay behind Western donors' decisions to contribute. Indeed, the State Department and the US Congress discussed in detail the implications of South Asian political stability for US foreign policy, and the prestige that the government could purchase by supporting the fund. The symbolic and financial resources that US-sponsored Cold War developmentalism could muster provided Jawaharlal Nehru and Mohammad Ayub Khan with a way to compromise, without losing face.

India's and Pakistan's experiences have implications for how we see sovereignty in decolonisation more broadly. They were not alone among postcolonial states in insisting aggressively on territorialisation. Competing Israeli and Palestinian territorial imaginations have anchored their claims to nationhood in the same contested land, creating disputes over effective and legal sovereignty in areas such as the Gaza Strip.¹ During the Nigerian Civil War of 1967–70, the Nigerian federal government launched military action against Biafran secessionists in order to defend and preserve the

borders of a state that the British colonial government had drawn before handing power to nationalist elites. The federal government also resisted pressure from the United States and others to allow humanitarian organisations such as the International Committee of the Red Cross and Joint Church Aid to operate relief flights into Biafra. US policymakers' reluctance to act against Nigerian sovereignty, despite pressure from a domestic campaign that supported humanitarian intervention, bolstered the federal government's position.² By contrast, sub-Saharan Africa since the 1980s has witnessed an apparent disintegration of centralised territorial states and the devolution of sovereign authority into private hands.³ Neatly bordered nation-states were a product of decolonisation, albeit a temporary one in places. In Africa, as well as in South Asia, the type of territoriality that emerged after decolonisation depended strongly on contemporary conditions—and it is still developing.

I have shown that competitive water control in India and Pakistan became the focal point for a historical moment that combined the pressures of postcolonial state-building, development discourses and Cold War geopolitics. The viability of South Asian states as the dominators of bounded territories, within the space of international politics, was at stake. Both the particular trajectories of Indian and Pakistani politics, and broader global trends, produced leaderships that were intent on asserting sovereignty over water resources. I will finish by asking what implications this insight has for how India and Pakistan might continue to compete over water resources in the Indus Basin.

The conditions of decolonisation that first fomented tensions have changed. Most notably, the territorial uncertainty that characterised the years after Partition has lessened. While Kashmir remains a sore point for Indians and Pakistanis, a series of wars there has done nothing to move the actual line

of control. Neither state shows significant signs of revising its position on Kashmiri sovereignty. The Indian and Pakistani governments seem to have learned to live with the anomaly—though the existence of a separatist movement in Jammu & Kashmir since the 1980s suggests that Kashmiris themselves are less quiescent. The Punjab border is now thoroughly fixed, and a site for the public spectacle of the border-closing ceremony at Wagah, rather than for violent clashes.

On the other hand, the Indian and Pakistani states have both accepted the imperatives of neo-liberalism and globalisation. India's deregulation and economic liberalisation during the mid-1990s, which ended half a century of socialist-inspired economic management, have been particularly important. Global brands and foreign direct investment are a common sight in both countries, at least in urban centres.⁴ Yet this does not necessarily herald the end of territoriality. As Saskia Sassen has argued, 'even as globalization has expanded, territoriality remains a key ordering in the international system'. Since at least the 1980s, the growing strength of global financial centres has 'alter[ed] the valence of (rather than destroy[ed], as is often argued) older national-state capabilities'.⁵ In the wake of attacks on the World Trade Center in New York on 11 September 2001, US foreign policy and discussions in the UN Security Council have increasingly revolved around the idea of contingent sovereignty. The sovereignty of states need not be recognised if they fail, for instance, to prevent terrorists from operating within their borders. This does not mean, however, that space and territory cease to be important. As Stuart Elden suggests, policymakers are merely reformulating them.⁶

In the case of the Indus rivers, state territoriality is still the framework for water resources development. Institutionally, Pakistan's Water and Power Development Authority and India's Central Water Commission continue to coordinate

irrigation and hydropower development among provincial authorities. The national and provincial water bureaucracies extend state power over people and territory via water control, just as they did in 1947. Water remains crucial to agriculture, industrial production and the sustenance of human life across the Indus Basin. As long as the water management authorities are not privatised, the connection between water provision and state power is unlikely to ebb. India's Baglihar and Kishanganga projects, which are designed to provide hydropower rather than irrigation control, were points of disagreement with Pakistan under the terms of the Indus Waters Treaty between the 2000s and early 2010s. Intensive urban economic development, which has produced power deficits (manifested as 'load-shedding', or planned blackouts), in both Pakistan and north-western India, seems likely to lead to more and not less tension over water. Possible changes in the economic structure of the basin, such as a large-scale shift away from water-intensive agriculture, could plausibly open up scope for India and Pakistan to reduce their dependence on Indus waters. Importing 'virtual' water, embedded in food grown elsewhere, is one possibility. Reducing their electricity requirements, however, is less likely.

The Indus Waters Treaty continues to inscribe national ownership onto the basin's rivers. By dividing the rivers territorially, the treaty reaffirms the Partition boundary and maintains the separation between Indian and Pakistani hydro-development spaces. The treaty arose out of specific circumstances: the Indian and Pakistani political leaderships' mutual determination to sever their hydrological connections as far as possible. It now helps to perpetuate those circumstances. Without abrogating the treaty and starting again, or thoroughly amending it, the Indian and Pakistani governments would struggle to institute a different relationship between states, sovereignty and water in the basin.⁷ The rivers are thoroughly divided.

Notes

INTRODUCTION

1. 'Water Dispute Stirs People and Government of West Punjab to Action to End Dependence on East', *Dawn* 12 May 1948.
2. United Kingdom (UK) high commissioner, Karachi, to Commonwealth Relations Office (CRO), 30 Apr. 1948, DO 35/2995, #4, United Kingdom National Archives, Kew (UKNA).
3. 'Punjab Canal Dispute Ends: Inter-Dominion Agreement', *Times of India* 5 May 1948.
4. China and Afghanistan are also riparians (countries where the rivers flow) on the Indus system, but to a more minor extent. They have not been involved in the dispute between India and Pakistan.
5. A.N. Laghari, D. Vanham and W. Rauch, 'The Indus Basin in the Framework of Current and Future Water Resources Management', *Hydrology and Earth System Sciences* 16, no. 4 (2012), 1064. A further 9 million live in Afghanistan, plus a handful in Tibet, China.
6. Barbara Weightman, *Dragons and Tigers: A Geography of South, East and Southeast Asia*, 3rd edn (Hoboken, NJ: Wiley, 2011), 194.
7. According to Indian government statistics, it contributes only one-fifteenth of the country's potentially utilisable surface water flows. India's Central Water Commission calculates the Indian part of the Indus Basin's surface water potential as 46 billion m³, out of a national total of 690.32 billion m³. Central Water Commission, 'Water Info', Table 3, <http://www.cwc.nic.in/main/webpages/statistics.html#3> [accessed 12 Oct. 2015].

8. See India page at the UN Food and Agriculture Organisation's AQUASTAT website:
http://www.fao.org/nr/water/aquastat/countries_regions/ind/index.stm (2011, revised Feb. 2015) [accessed 12 Oct. 2015].
9. Water will remain a problem. The IPCC reports that South Asia's highly variable rainfall patterns have shown an overall average decline in rainfall during the past century. In future, the summer monsoon is very likely to become heavier, increasing the risk of flooding. In the Indus Basin the rate of glacial melt will probably increase, putting more water into the river system in the short term, but with water levels eventually falling as the glaciers lose significant mass. See Y. Hijoka et al., 'Asia', in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel of Climate Change*, ed. V.R. Barros et al. (Cambridge, UK, and New York: Cambridge University Press, 2014), 1333. Santosh Nepal and Arun Bhakta Shrestha, 'Impact of Climate Change on the Hydrological Regime of the Indus, Ganges and Brahmaputra River Basins: A Review of the Literature', *International Journal of Water Resources Development* 31, no. 2 (2015), 210. Nepal and Shrestha argue, however, that the future annual flow of water in the rivers is difficult to predict, because the precise effects of changes in precipitation are uncertain.
10. A selection includes: Majed Akhter, 'More on the Sharing of the Indus Waters', *Economic and Political Weekly* 45, no. 17 (2010). John Briscoe, 'Troubled Waters: Can a Bridge Be Built over the Indus?', *Economic and Political Weekly* 45, no. 50 (2010). Haris Gazdar, 'Baglihar and Politics of Water: A Historical Perspective from Pakistan', *Economic and Political Weekly* 40, no. 9 (2005). Ramaswamy R. Iyer, 'Indus Treaty: A Different View', *Economic and Political Weekly* 40, no. 29 (2005). Ramaswamy R. Iyer, 'Was the Indus Waters Treaty in Trouble?', *Economic and Political Weekly* 37, no. 25 (2002). Muhammed Siyad, 'Indus Waters Treaty and

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12. Comment by 'Naveed', 9 Aug. 2014, in response to Walton, 'Pakistan and India in Dam Building Race', *Circle of Blue*. I have corrected spellings and punctuation and added missing words.
13. One Pakistani and one Indian perspective: Bashir A. Malik, *Indus Waters Treaty in Retrospect* (Lahore: Brite Books, 2005). Brahma Chellaney, *Water: Asia's New Battleground* (Washington DC: Georgetown University Press, 2011).
14. Aloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition* (New Haven and London: Yale University Press, 1967).
15. Undala Z. Alam, 'Water Rationality: Mediating the Indus Waters Treaty' (PhD, University of Durham, 1998).

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1. THE PROBLEM OF TERRITORY

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27. Jalal, *Sole Spokesman*, 179–80.
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29. See Sarah F.D. Ansari, *Life after Partition: Migration, Community and Strife in Sindh, 1947–1962* (Karachi: Oxford University Press, 2005), ch. 2.
30. Jalal, *Self and Sovereignty*, 411–13.
31. Fiction writers on both sides of the border, for instance, have examined the confusion about the relationship between people, place and nation that population migrations produced. Sadat Hasan Manto's short story 'Toba Tek Singh' (1955) and Kushwant Singh's novella *Train to Pakistan* (1956) are two classic examples. Notable examples of the substantial historiography of everyday Partition experiences that has emerged since the 1990s include Ritu Menon and Kamla Bhasin, *Borders and Boundaries: Women in India's Partition* (New Delhi: Kali for Women, 1998). Urvashi Butalia, *The Other Side of Silence: Voices from the Partition of India* (New Delhi and

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43. Christopher Snedden, *The Untold Story of the People of Azad Kashmir* (London: Hurst, 2012), 19–20.
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Schofield, *Kashmir in the Crossfire*, 119–60.

2. TERRITORIAL HYDRO-LOGICS

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2. Territorial integrity and absolute sovereignty are two of four commonly invoked principles. The other two are limited territorial sovereignty (which restricts absolute sovereignty to 'reasonable uses'), and integrated basin development (the basin is regarded as one economic unit, regardless of state boundaries, to be developed as efficiently as possible). Jerome Lipper, 'Equitable Utilization', in *The Law of International Drainage Basins*, ed. A.H. Garretson, R.D.

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8. Leila M. Harris and Samer Alatout, 'Negotiating Hydro-Scales, Forging States: Comparison of the Upper Tigris/Euphrates and Jordan River Basins', *Political Geography* 29, no. 3 (2010), 152–3.
9. David Gilmartin, 'Migration and Modernity: The State, the Punjabi Village, and the Settling of the Canal Colonies', in *People on the Move: Punjabi Colonial and Post-Colonial Migration*, ed. Ian Talbot and Shinder Thandi (Oxford: Oxford University Press, 2004), 3–5. By 1901 the Jhelum, Chenab, Sutlej and Ravi (all of the Punjab rivers except the Beas) contributed to an extensive irrigation system. The majority of these canals drew water from the eastern rivers but the biggest discharges were down the Jhelum and the Indus itself, which lay further to the north-west. In 1905 the colonial Punjab government inaugurated the Triple Canals Project, drawing water from the Jhelum and Chenab. An ambitious scheme of the 1920s, the Sutlej Valley Project, introduced four new barrages (including one at Firozpur, the headworks at the heart of the India–Pakistan dispute in 1948) and eleven canals. Aloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition* (New Haven and London: Yale University Press, 1967), 58–104. Graham Chapman, *The Geopolitics of South Asia: From Early*

- Empires to the Nuclear Age*, 2nd edn (Aldershot: Ashgate, 2003), 129–31.
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 11. Daniel Haines, *Building the Empire, Building the Nation: Development, Legitimacy, and Hydro-Politics in Sind, 1919–1969* (Karachi: Oxford University Press, 2013), ch. 2.
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 17. Ashis Nandy, 'Introduction: Science as a Reason of State', in *Science, Hegemony and Violence: A Requiem for Modernity* (Tokyo and Oxford: Oxford University Press, 1988), 1–4.
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 26. Bhikhu Parekh, 'Nehru and the National Philosophy of India', *Economic and Political Weekly* 26, no. 1 (1991).
 27. Bose, 'Instruments and Idioms', 49–51.
 28. Mohandas K. Gandhi, 'The Use We Make of Our Rivers', in *Social Service, Work and Reform*, ed. V.B. Kher (Ahmedabad: Navajivan Publ. House, 1976), 115–16.
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Nov. 1949, DO 142/231, United Kingdom National Archives, Kew (UKNA).

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provided jobs, too, in East Punjab: stopping construction would have put 20,000 labourers out of work, according to the East Punjab premier.

49. Briefing to missions abroad, 21 Mar. 1959, CG/16/61, External Affairs, UNES Branch, NAI.
50. By 1949, a government scheme directed refugee landholders from Jhang district, which lay on the banks of the Chenab in Pakistan, to Rohtak. While the director general of rehabilitation endeavoured to match the value of land that refugees claimed to have lost, giving larger land allocations in dry districts such as Hissar and Gurgaon, a system of graded cuts to land allocation meant that few refugees gained land to the actual value of what they had lost. Former holders of more land lost proportionately more. Tai Yong Tan and Gyanesh Kudaisya, *The Aftermath of Partition in South Asia* (London and New York: Routledge, 2000), 116.
51. Briefing to missions abroad, 27 Sept. 1949, 6/1/7-XP(P)/49, p. 8, External Affairs, External Publication (P) Branch, NAI.
52. Note by UK high commissioner in India, 5 May 1948, DO 142/231, #4a, UKNA.
53. US embassy, New Delhi, to secretary of state, 7 Oct. 1949, CDF 745.45F/10–749, NARA.
54. US embassy, New Delhi, to secretary of state, 27 Sept. 1949, CDF 745.45F/9–2749, NARA.
55. Ministry of External Affairs to Pakistan high commissioner, New Delhi, 18 Aug. 1951, 6/1-Pak-III/51, p. 60, External Affairs, Pakistan—III Branch, NAI.
56. UK deputy high commissioner, Lahore, to UK high commissioner, Karachi, 2–3 May 1948, DO 35/2995, #13, UKNA, p. 288. Pakistan also agreed to pay 40 per cent of the cost of maintaining the headworks and canals that India used to divert water into Pakistan's canals.
57. Government of Pakistan press note containing text of 4 May agreement, enclosed with UK High Commission,

Karachi, to CRO, 10 May 1948, DO 35/2995, #16, UKNA.

58. Indian delegation to the UN to Ministry of External Affairs, 28 Dec. 1950, 23/106-Pak-III/50, p. 85, External Affairs, Pakistan—III Branch, NAI.
59. ‘Sutlej Valley Tripartite Agreement’, 4 September 1920, enclosed with memo by Sardar Lall Vij, 29 Apr. 1948, File no. 20(40)-IA, 1948, Ministry of States, Internal ‘A’ Branch, NAI.
60. On the calculation of territory, see Matthew G. Hannah, ‘Calculable Territory and the West German Census Boycott Movements of the 1980s’, *Political Geography* 28, no. 1 (2009).
61. See Daniel Haines, ‘Disputed Rivers: Sovereignty, Territory and State-Making in South Asia, 1948–1951’, *Geopolitics* 19, no. 3 (2014).
62. Ministry of States note, 27 June 1950, Progs, Nos 24(24)-Econ, 1950(A), p. 15, NAI.
63. Ministry of States note, 1 Mar. 1955, Progs, Nos 6 (17)-K, 1954, p. 42, NAI.
64. This and subsequent quotations are from: ‘Brief Note on Water Rights of the East Punjab in the Punjab Rivers’, 2 May[?] 1948, 11(35)-B, pp. 49–59, Finance Department, Budget Code Revision Branch, NAI.
65. On the Harmon doctrine see Lipper, ‘Equitable Utilization’. S.C. McCaffrey and K.J. Neville, ‘The Politics of Sharing Water: International Law, Sovereignty, and Transboundary Rivers and Aquifers’, in *The Politics of Water: A Survey*, ed. K. Wegerich and J. Warner (London: Routledge, 2010), 21–4.
66. The report calculated the total discharge at 42,763 cusecs (cubic feet per second), of which it claimed that East Punjab was entitled to 19,471 and West Punjab to 23,292.
67. See Michel, *Indus Rivers*, 317–21.
68. Nehru to Liaquat Ali Khan, 29 Apr. 1948, Progs, Nos 11(35)-B, 1948, p. 66, Finance Department, Budget Code

Revision Branch, NAI.

69. Nehru to Bhargava, 26 Sept. 1948, in S. Gopal, ed., *Selected Works of Jawaharlal Nehru: Second Series*, vol. 7 (New Delhi: Jawaharlal Nehru Memorial Fund, 1988), 123.
70. ‘Indo-Pakistan Canal Water Dispute: The Kashmir Aspect’, May 1948[?], DO 142/231, #9, UKNA.
71. If India were acting chiefly out of spite, the official pointed out, the central government would prioritise the Bhakra Nangal project over the Damodar Valley scheme, which was not the case. UK High Commission, New Delhi, to CRO, 12 Jan. 1950, DO 35/2995, #67, UKNA.
72. US embassy, Karachi, to secretary of state, 24 Aug. 1949, CDF 745.45F155/8–2449, NARA.
73. Memo by assistant secretary to Cabinet Secretariat, 22 Jan. 1949, F.23/77-Pak-III/50, p. 1, External Affairs, Pakistan—III Branch, NAI.
74. Note by Ministry of External Affairs, 21 July 1949, 23/106-Pak-III/50, p. 12, NAI.
75. Nehru to Nanda, 11 Jan. 1953, in S. Gopal, ed., *Selected Works of Jawaharlal Nehru: Second Series*, vol. 21 (New Delhi: Jawaharlal Nehru Memorial Fund, 1997), 501–3.
76. Nehru to Nanda, 23 Mar. 1953, in Gopal, ed., *Selected Works Vol. 21*, 510–11.
77. Mueenuddin to State Department, 11 Dec. 1956, CDF 690D.91322/12–1156, NARA.
78. Text of Q&A in Lok Sabha, 20 Feb. 1953, Appendix D to UK High Commission, Karachi, to secretary of state for Commonwealth Relations, 7 Mar. 1953, DO 35/6648, #44, UNKA.
79. Text of Q&A in Rajya Sabha, 24 Dec. 1957, ‘320 Pakistan–India Lok Sabha Reports 1957–5’, Karachi General Records, 1949–1961, RG 84, NARA.
80. ‘Summary: Dispute between East Punjab and West Punjab on the Supply of Water from Upper Bari Doab Canal System and the Ferozepur Headworks to the West Punjab

Areas', enclosed with memo by Ministry of Works, Mines and Power, 29 Apr. 1948, Progs, Nos 10(40)-IA, 1948, Ministry of States, Internal 'A' Branch, NAI.

81. Extract from 'Review of Events in Pakistan for 4th Quarter of 1951', 28 Jan. 1952, DO 35/2996, #40, UKNA. India and Pakistan did not set up such an organisation.
82. UK High Commission, New Delhi, 5 Dec. 1951, DO 35/2996, #148, UKNA.
83. Report by member of Trade Commission, enclosed with UK high commissioner in India to CRO, 12 Jan. 1950.
84. 'Canal Waters Dispute', *Times of India* 22 July 1954.
85. Memo of conversation between Nehru and embassy officials, enclosed with US embassy to State Department, 3 June 1958, 'Package', General Subject Files Relating to South Asian Affairs, A1 Entry 1306, RG 59, NARA.
86. Text of letter from Government of Pakistan to Iliff, copied in State Department to US embassy, Karachi, 7 Sept. 1960, CDF 690D.91322/9-769, RG 59, NARA.
87. UK deputy high commissioner, Lahore, to UK high commissioner, Karachi, 2 May 1948, enclosed with UK high commissioner, Karachi, to CRO, 8 May 1948, DO 142/231, #10, UKNA.
88. Text of Inter-Dominion Agreement signed 4 May 1948 at New Delhi, enclosed with UK high commissioner, Karachi, to CRO, 10 May 1948, DO 142/231, #11, UKNA.
89. Government of Pakistan aide-memoire, 2 Aug. 1949, CDF 745.45F/8-249, RG 59, NARA.
90. Pakistan contended that projects planned before independence, under the unified Punjab administration or by the Sindh provincial government, counted as 'existing' uses because the colonial government had promised water supplies to the projects.
91. See Haines, *Building the Empire*, chs. 3-6.
92. Note on Sindh projects, 9 Aug. 1948, DO 142/231, #28, UKNA.

93. UK High Commission, Karachi, to CRO, extract from Opdom 32, 11 Aug. 1949, DO 35/2995, #38, UKNA. UK High Commission, Karachi, to CRO, extract from Opdom 43, 28 Nov. 1949, DO 35/2995, #(?), UKNA. Copy of Pakistan delegation to the UN's background paper, 3 Mar. 1950, DO 35/2995, pp. 102–2, UKNA.
94. Cecil J. Olmstead, 'Introduction', in *The Law of International Drainage Basins*, ed. A.H. Garretson, R.D. Hayton and C.J. Olmstead (Dobbs Ferry, NY: Oceana, 1967), 9.
95. US embassy, New Delhi, to State Department, 8 Sept. 1951, CDF 690D.9132/9–851, NARA. India's position is known in international law as the principle of integrated basin development. The river basin is regarded as one economic unit, regardless of state boundaries, to be developed as efficiently as possible. Integrated development has become increasingly prominent in today's thinking. McCaffrey and Neville, 'The Politics of Sharing Water: International Law, Sovereignty, and Transboundary Rivers and Aquifers', 20.
96. Memo by Mueenuddin, 12 Dec. 1956, CDF 690D.91322/12–1156, RG 59, NARA.
97. Extract from *Pakistan News*, 9 Oct. 1949, DO 35/2995, #40A, UKNA.
98. Indian UN delegation to Ministry of External Affairs, 28 Dec. 1950, 23/106-Pak-III/50, p. 85, External Affairs, Pakistan—III Branch, NAI.
99. US embassy, Karachi, to State Department, 25 Aug. 1951, 690D.9132/8–2551, NARA. This was also a major theme of Pakistani discourses on the Kashmir conflict. See [chapter 2](#).
100. Indian High Commission, Karachi, fortnightly report for the period ending 15 June 1954, PI/54/13218/201 (K), #17, External Affairs, Pakistan—I Branch, NAI.
101. US embassy, Karachi, to State Department, 3 July 1954, '322.2—Boundary Waters 1954', Karachi Classified

General Records, 1949–1961, RG 84, NARA.

102. 'Extract from the India News', 20 Aug. 1949, DO 35/2995, #43, UKNA.
103. Extract from Indian High Commission, London, Press Release 1850, 10 Sept. 1951, DO 35/2996, #126, p. 97, UKNA.
104. UK high commissioner in India to CRO, 12 Feb. 1953, DO 35/6648, #24, UKNA.
105. 'Extract from Pakistan News', 9 Oct. 1949, DO 35/2995, #40A, UKNA.
106. UK High Commission, Karachi, to CRO, 16 Nov. 1948, DO 142/231, #33, UKNA.
107. State Department to US embassies, London and New Delhi, 18 July 1951, CDF 690D.91/7–1851, NARA.
108. Nehru to Bhargava, 5 July 1948, in Gopal, ed., *Selected Works Vol. 7*, 123.
109. UK High Commission, Karachi, to CRO, 29 Nov. 1952, DO 35/6648, #5, UKNA. Presumably he referred to the Bhakra-Nangal Dam project in Himachal Pradesh and its canal system.
110. Appendix A, 'Resolution Passed in the Punjab Assembly, 18th December, 1952', enclosed with UK High Commission, Karachi, to CRO, 30 Jan. 1953, DO 35/6648, #15, UKNA.
111. 'Pakistan: The Struggle for Irrigation Water—and Existence' (issued by the embassy of Pakistan, Washington DC, 1 Nov. 1953), p. 11, enclosed with British embassy, Washington DC, to CRO, 24 Nov. 1953, DO 35/6623, #13, UKNA.
112. US ambassador to India to State Department, 10 July 1954, '322.2—Boundary Waters 1954', Karachi Classified General Records, 1949–1961, RG 84, NARA. It is not clear who the sources were. They could well have been Pakistani officials, who of course had a vested

interest in convincing American embassy staff of the strength of public feeling.

113. Indian deputy high commissioner, Lahore, to Indian high commissioner in Pakistan, 24 July 1954, P.III/54/28211/2, p. 26, External Affairs, Pakistan—III Branch, NAI. A *pir* is the descendant of a saint and hereditary guardian of his shrine. Rao's reference to the 'Islam League' might have been a mis-naming of the Muslim League.
114. For example, the government of India issued a press note refuting allegations that Zafarullah Khan had made in the UN General Assembly in 1949. Report by Reuters, New Delhi, 16 Sept. 1949, DO 142/231, #45, UKNA. The government of Pakistan issued a press note in 1953 alleging that 'Pakistan faces starvation and economic ruin' due to Indian water policy. Government of Pakistan Press Note, 13 Feb. 1953, DO 35/6648, #25, UKNA. An article in the London *Times*, by a journalist who visited the Firozpur headworks, caused a flurry of worry in New Delhi due to its adverse comments on Indian policy. See note by Nehru, 21 July 1954, P.III/54/28211/2, p. 1, External Affairs, Pakistan—III Branch, NAI. Pakistan's Ministry of Information and Broadcasting promoted the prime minister's statement in 1957 that India was trying to deprive Pakistan of canal waters. 'Fortnightly Summary 12 for Cabinet', Ministry of Information and Broadcasting, 13/CF/57 (13), National Documentation Centre, Islamabad (NDC). Iliff complained in 1958 that Indian officials had leaked details of World Bank negotiations to the press. Memo of conversation with Iliff, 3 Feb. 1958, enclosed with US embassy, Karachi, to State Department, 14 Feb. 1958, CDF 690D.91322/2-1458, RG 59, NARA. See also Majed Akhter, 'The Geopolitics of Infrastructure: Development, Expertise, and Nation on the Indus Rivers' (PhD, University of Arizona, 2013), 66–75.
115. For example, UK high commissioner in India to CRO, 25 Jan. 1950, DO 35/3044, #3, UKNA. US embassy, Karachi, to State Department, 3 July 1954, '322.2—Boundary Waters 1954', Karachi Classified General Records, 1949–1961, RG 84, NARA.

116. Memo of conversation between State Department and UK Foreign Office officials, 14 Sept. 1949, CDF 745.45F155/9–1449, NARA. Memo of conversation between State Department and John Laylin, counsel to Government of Pakistan, 3 Apr. 1958, ‘Pakistan—Economic 1958’, General Subject Files Relating to South Asian Affairs, A1 Entry 1306, RG 59 Lot Files, NARA.
117. Text of Q&A in Rajya Sabha, 19 Nov. 1957, ‘320 Pakistan–India Lok Sabha Reports 1957–65’, Karachi General Records, 1949–1961, RG 84, NARA.
118. Indian high commissioner in Pakistan, ‘Annual Political Report on Pakistan for 1957’, 14/22 Apr. 1958, 3/10/R&I/58-I, n.p.n., External Affairs, Historical Division (R&I Section), NAI.
119. Indian high commissioner in Pakistan to foreign secretary to Government of India, 10 Apr. 1959, 3(10)-R&I/59-I, #6, External Affairs, Historical Division (R&I Section), NAI.
120. US mission in Lahore to State Department, 22 May 1958, CDF 690D.91322/5–2258, RG 59, NARA. West Pakistan replaced the former provinces of the country’s Western wing—Punjab, Sind, Balochistan and the North-West Frontier Province—with one administrative unit under the aptly named One Unit scheme in 1955.
121. Kanwar Sain, *Reminiscences of an Engineer* (New Delhi: Young Asia Publications, 1978), 126.
122. Report by UK deputy high commissioner, Lahore, 13 June 1948, DO 142/231, no #, UKNA.
123. Report by UK deputy high commissioner, Lahore, 24 May 1948, DO 142/231, #19, UKNA.
124. Report by UK deputy high commissioner, Lahore, 24 May 1948, DO 142/231, #18, UKNA.
125. Note by Sir W. Jenkin, 20 July 1948, DO 35/2995, #18, UKNA.
126. Foreign and political minister, Bikaner State, to Ministry of States, Progs, Nos 10(35)-IA, 1948, p. 1, Ministry of

States, Internal 'A' Branch, NAI.

127. 'Diversion of Sutlej', *Times of India* 5 Oct. 1951.
128. UK trade commissioner's office, New Delhi, to CRO, 15 Apr. 1950, DO 35/2995, #85, UKNA.
129. Report by UK deputy high commissioner, Lahore, 24 May 1948, DO 142/231, #18, UKNA.
130. 'Water Dispute Stirs People and Government of West Punjab to Action to End Dependence on East', *Dawn* 12 May 1948.
131. Central Waterpower, Irrigation and Navigation Commission to Ministry of Works, Mines and Power, Progs, Nos 10(35)-IA, 1948, p. 7, Ministry of States, Internal 'A' Branch, NAI.
132. On the idea of territorial states as containers, see Peter Taylor, 'The State as Container: Territoriality in the Modern World-System', *Progress in Human Geography* 18, no. 2 (1994).
133. Elisabeth Leake, *The Defiant Border: The Afghan–Pakistan Borderlands in the Era of Decolonization, 1936–65* (New York: Cambridge University Press, 2016), chs. 3–5.
134. Ian Talbot, *Pakistan: A Modern History* (London: Hurst, 1998), 134, 163–4.
135. Haines, *Building the Empire*, 216–21.

3. SOVEREIGNTY ENTANGLEMENTS IN KASHMIR

1. Ayesha Siddiqi, 'Kashmir and the Politics of Water', *Aljazeera.com* 1 Aug. 2011, <http://www.aljazeera.com/indepth/spotlight/kashmirtheforgottenconflict/2011/07/20117812154478992.html> [accessed 10 Oct. 2015]. Muhammad Akbar Notezai, 'Interview [with Amit Ranjan]: The India–Pakistan Water Dispute', *The Diplomat* 21 Nov. 2014, <http://thediplomat.com/2014/11/interview-the-india-pakistan-water-dispute> [accessed 16 Nov. 2015]. Kamran Haider and Natalie Obiko Pearson, 'Even China Won't

- Finance This Dam as Water Fight Looms', *Bloomberg Business* 23 Apr. 2015, <http://www.bloomberg.com/news/articles/2015-04-22/even-china-won-t-finance-this-pakistan-dam-as-water-fight-looms> [accessed 16 Nov. 2015]. Partha Pratim Basu, 'Kashmir and the Indus', *The Statesman* 30 May 2015, <http://www.thestatesman.com/news/opinion/kashmir-the-indus/66246.html> [accessed 16 Nov. 2015].
2. Ian Talbot, *Pakistan: A Modern History* (London: Hurst, 1998), 113–14. Ayesha Jalal, *Democracy and Authoritarianism in South Asia: A Comparative and Historical Perspective* (Cambridge: Cambridge University Press, 1995), 158, 170. Lawrence A. Ziring, *Pakistan in the Twentieth Century: A Political History* (Karachi: Oxford University Press, 1997), 95–8. Navnita Chadha Behera, *Demystifying Kashmir* (Washington DC: Brookings Institution Press, 2006), 22. Alastair Lamb, *Kashmir: A Disputed Legacy, 1846–1990* (Hertingfordbury: Roxford Books, 1991), 148–9.
 3. Robert Wirsing, *Kashmir in the Shadow of War: Regional Rivalries in a Nuclear Age* (Armonk, NY, and London: M.E. Sharpe, 2003), 8.
 4. Victoria Schofield, *Kashmir in the Crossfire* (London: I.B. Tauris, 1996), 131. Talbot, *Pakistan*, 114. Hasan-Askari Rizvi, 'Islamabad's New Approach to Kashmir', in *Kashmir: New Voices, New Approaches*, ed. Waheguru Pal Singh Sidhu, Bushra Asif and Cyrus Samii (Boulder, CO: Lynne Rienner, 2006), 142. Lamb, *Kashmir*, 234–5.
 5. Aloys Arthur Michel, *The Indus Rivers: A Study of the Effects of Partition* (New Haven and London: Yale University Press, 1967), 8.
 6. Robert Wirsing, Christopher Jasparro and Daniel C. Stoll, *International Conflict over Water Resources in Himalayan Asia* (Basingstoke: Palgrave Macmillan, 2013), 51.
 7. Sumantra Bose, *Kashmir: Roots of Conflict, Paths to Peace* (Cambridge, MA, and London: Harvard University Press, 2003), 167–8.

8. The maharaja's rule was subject to the government of India's control over particular matters, implying that the latter had only limited sovereignty there—perhaps analogous to the principle of British suzerainty over States. 'Instrument of Accession of the State of Jammu & Kashmir Signed by Maharaja Hari Singh on 26 October 1947', in A.G. Noorani, ed., *Article 370: A Constitutional History of Jammu and Kashmir* (New Delhi and Oxford: Oxford University Press, 2011), 37–41.
9. Christopher Snedden, *The Untold Story of the People of Azad Kashmir* (London: Hurst, 2012), ch. 2. The violence in Poonch was, he argues, part of a broader story of Kashmiri Muslim reactions against the maharaja's rapacious and discriminatory administration, and communal riots in Jammu. Zutshi had previously made the same argument, though in much less detail. Chitralkha Zutshi, *Languages of Belonging: Islam, Regional Identity, and the Making of Kashmir* (New York: Oxford University Press, 2004), 306.
10. Important Muslim League leaders such as Abdul Qayyum Khan, the premier of the North-West Frontier Province, enabled the Pashtun incursions into Kashmir. Ian Copland, 'The Princely States, the Muslim League, and the Partition of India in 1947', *International History Review* 13, no. 1 (1991), 62. Abdel Haq, the district commissioner of Rawalpindi, imposed a blockade of petrol and other essential supplies into Kashmir, contravening the standstill agreement in which Pakistan had guaranteed to keep communications and trade routes open. UK high commissioner in Pakistan to secretary of state for Commonwealth Relations, 22 Oct. 1947, in Lionel Carter, ed., *Partition Observed: British Official Reports from South Asia, 16 October—31 December 1947*, vol. 2 (New Delhi: Manohar, 2011), 532. It is less clear whether the League's top leadership, Jinnah and Liaquat Ali Khan, understood the scale of their subordinates' actions. Schofield, *Kashmir in the Crossfire*, 142–3.
11. For example, 'No Conspiracy Involved in Kashmir Accession: Pakistan Allegations Refuted by Mr Rau', *Times of India* 11 Mar. 1951.

12. 'India and Kashmir', *Eastern Economist* (New Delhi) 15 July 1955, transcribed in US embassy, Colombo, to State Department, 25 July 1955, General Subject Files, Officer-in-Charge India-Nepal-Ceylon, 1947–1959, File '515.2 Kashmir, 1955', RG 59 Lot Files, National Archives and Records Administration, College Park, MD (NARA).
13. Ministry of External Affairs, 'A Brief on Kashmir', July 1957, UI/551–55/67, NAI.
14. Zutshi, *Languages of Belonging*, 315–16.
15. 'Jammu's Link with Kashmir', *Times of India* 23 Sept. 1953.
16. N.A., *Kashmir in the Security Council* (Srinagar: Lalla Rook Publications, 1952), 48.
17. See Schofield, *Kashmir in the Crossfire*, 146–50.
18. Ministry of Kashmir Affairs, six monthly summary for period ending 30 September 1956, 13/CF/57 (14), National Documentation Centre, Islamabad (NDC).
19. 'By the afternoon Indian troops were already in action in Kashmir State territory'. 'Indian Troops Rolling Back Kashmir Rebels: Delhi Rushes Military Aid by Air', *Times of India* 28 Oct. 1947.
20. 'Azad Kashmir Territory: Judgement on Issue of Suzerainty', *Times of India* 18 Feb. 1950. That the article used the word 'suzerainty' rather than 'sovereignty' hints at the continuing influence of the colonial legacy on post-independence India's relationship to Kashmir.
21. Schofield, *Kashmir in the Crossfire*, 165.
22. UK Foreign Office to UK ambassador to the United States, 1 Oct. 1949, DO 35/2995, United Kingdom National Archives, Kew (UKNA). Anonymous note for CRO file, 22 September 1949, DO 35/3044, UKNA.
23. 'Indian Militarism a Threat to All Neighbours', *Dawn*, 6 January 1962.
24. Ananya Jahanara Kabir, *Territory of Desire: Representing the Valley of Kashmir* (Minneapolis: University of

Minnesota Press, 2009), esp. 7, 27.

25. Darshan Lall, 'The Call of Beautiful Kashmir Valley', *Times of India* 3 Jan. 1954.
26. Jawaharlal Nehru, *The Discovery of India* [1946] (Delhi: Oxford University Press, 1985), 61, 236.
27. The others letters stood for Punjab (P), 'Afghanistan' (A, that is, the North-West Frontier Province), Sindh (S), and Balochistan (-STAN). The acronym handily also translates as 'Land of the Pure'.
28. Sisir Gupta, *Kashmir: A Study in India–Pakistan Relations* (London: Asia Publishing House, 1966), 131.
29. Copland, 'The Princely States', 67.
30. Weekly report for the week ending 26th Apr. 1950 from the deputy high commissioner, Lahore, 26 Apr. 1950, DO 35/3044, pp. 46–6, United Kingdom National Archives, Kew (UKNA).
31. Memo by Niranhan Das Gulhati, 13 Aug. 1949, Progs, Nos 13(9)-K, 1949, p. 1, Ministry of States, Kashmir Branch, NAI.
32. Ministry of States to Bakshi Ghulam Mohammed, 14 May 1954, Progs, Nos 6(12)-K, 1954, p. 1, Ministry of States, Kashmir Branch, NAI.
33. Ministry of Irrigation and Power to Ministry of Home Affairs, 5 Nov. 1955, Progs, Nos 6 (17)-K, 1954, p. 88, Ministry of States, Kashmir Branch, NAI.
34. Nehru to Bakshi Ghulam Mohammed, 13 Mar. 1955, in Ravinder Kumar and H.Y. Sharada Prasad, eds., *Selected Works of Jawaharlal Nehru*, vol. 28 (New Delhi: Jawaharlal Nehru Memorial Fund, 2001), 239.
35. Schofield, *Kashmir in the Crossfire*, 168.
36. Jalal, *Democracy and Authoritarianism*, 176–8.
37. Ministry of External Affairs, Government of India, 'Monthly Summary no. 209 for the Cabinet', Oct. 1963,

118(67)WII/63, Ministry of States, Kashmir Branch,
National Archives of India, New Delhi (NAI).

38. Liaquat Ali Khan to President Truman, 7 Sept. 1949, enclosed with memo for acting secretary of state, 5 Oct. 1949, FW 501.BC KASHMIR/9–749, RG 59, National Archives and Records Administration, College Park, MD (NARA).
39. Text of Pakistani communiqué (supplied by the Government of India), enclosed with US embassy, New Delhi, to State Department, 11 Sept. 1951, CDF 690D.9132/9–1151, RG 59, NARA.
40. UK High Commission in Pakistan to Commonwealth Relations Office, London (CRO), 3 Sept. 1953, pr.5, FO 371/106940, #18, UKNA.
41. The idea of a plebiscite first arose with the Indian government in October 1947. At that point Jinnah, Pakistan's governor-general, was hostile to the idea because he felt that Sheikh Abdullah, the India-friendly leader of the Kashmir National Conference, would use his powerful position within Indian-held Kashmir to manipulate a plebiscite in India's favour. Yet subsequent Pakistani leaders reversed Jinnah's position, hoping that Kashmir's Muslim majority would choose their Pakistani co-religionists. Following a 1948 UN resolution calling for a plebiscite, India–Pakistan talks in August 1953 affirmed the principle of holding one. UK high commissioner in India to CRO, 20 Aug. 1953, DO 35/6646, UKNA. But successive UN efforts actually to bring about a plebiscite failed, and by 1962 the issue had gone into permanent abeyance. On the plebiscite issue, see Lamb, *Kashmir*, 137, 159–60, 166–7, 170–1. D.N. Panigrahi, *Jammu and Kashmir, the Cold War and the West* (New Delhi: Routledge, 2009), 92–8.
42. Foreign Office to His Excellency the Rt Hon. Sir Oliver Franks, Washington DC, 1 Oct. 1949, DO 35/2995, #56AA, UKNA.

43. Minutes of cabinet meeting, 21 Aug. 1953, 48/CF/51-II, NDC.
44. UK high commissioner in Pakistan to CRO, 3 Sept. 1953, pr.2, FO 371/106940, #18, n.p.n., UKNA.
45. Acting UK high commissioner in Pakistan to CRO, 31 Aug. 1953, DO 35/6646, #38, n.p.n., UKNA.
46. The flyer made its way into the collection of the US secretary of state, John Foster Dulles, possibly sent directly by the march's organisers, dated 3 Oct. 1957, 'Kashmir 1957, 2 of 2', Subject Files relating to Pakistan, 1953–1957, A1 Entry 1306, RG 59 Lot Files, NARA.
47. US embassy, New Delhi, to State Department, 11 Sept. 1951, CDF 690D.9132/9–1151, RG 59, NARA.
48. Memo of conversation, 17 July 1957, 'India–Pakistan—Indus Basin Development', General Subject Files Relating to South Asian Affairs, A1 Entry 1306, RG 59, NARA.
49. Indian high commissioner in Pakistan's political report for August 1959, 9 Sept. 1959, 6/30/R&I/59, External Affairs, Historical Division (R&I Section), NAI.
50. UK High Commission in India to CRO, 5 Oct. 1948, DO 142/231, pp. 81–3, UKNA.
51. Jawaharlal Nehru to Eugene Black, 25 Sept. 1951, enclosed with Ernest Rowe-Dutton, International Bank for Reconstruction and Development, to UK Treasury, 10 Oct. 1951, DO 35/2996, pp. 89–91, UKNA.
52. Government of India press communiqué, enclosed with US embassy, New Delhi, to State Department, 11 Sept. 1951, CDF 690D.9132/9–1151, RG 59, NARA.
53. Extract, UK high commissioner in India, May[?] 1948, DO 142/231, p. 9, UKNA.
54. See correspondence enclosed with UK trade commissioner, New Delhi, to UK High Commission in Pakistan, 14 Aug. 1951, DO 35/2996, p. 107, UKNA.
55. US embassy, New Delhi, to State Department, 28 Apr. 1953, CDF 891.211/4–2853, RG 59, NARA.

56. Extract from fortnightly summary for India and Pakistan for second half of June, 1948, DO 142/231, p. 23, UKNA.
57. Saiyid Ali Naqvi, *Indus Waters and Social Change: The Evolution and Transition of Agrarian Society in Pakistan* (Oxford: Oxford University Press, 2013), 391. 'Mangla Dam', <http://www.wapda.gov.pk/htmls/pgeneration-dam-mangla.html> [accessed 23 June 2015].
58. Michael M. Cernea, 'Public Policy Responses to Development-Induced Population Displacements', *Economic and Political Weekly* 31, no. 24 (1996).
59. 'Life of Mangla Reservoir', *Dawn* 23 Nov. 1965.
60. 'Brisk Arrangements for Mangla Dam Work', *Dawn* 6 Mar. 1961.
61. US embassy, Karachi, to State Department, 24 Apr. 1964, 'E 2-2 PAK', RG 59 Subject-Numeric Files, 1964-6, NARA.
62. Michel, *Indus Rivers*, 291.
63. Mir Bashir Khan, 'Mangla Makes History', *Dawn* 23 Nov. 1967.
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14. Neuse, *David E. Lilienthal*, p. xx, 324. Klingensmith, *One Valley and a Thousand*, 53–60.

15. David E. Lilienthal, *TVA: Democracy on the March* (New York and London: Harper & Bros., 1944), 2.
16. Lilienthal, *Journals Vol. 3*, 86–8.
17. Lilienthal, *Journals Vol. 3*, 88.
18. See Nick Cullather, *The Hungry World: America's Cold War Battle against Poverty in Asia* (Cambridge, MA, and London: Harvard University Press, 2010). George Rosen, *Western Economists and Eastern Societies: Agents of Change in South Asia, 1950–1970* (Baltimore: Johns Hopkins University Press, 1985). Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, MA, and London: Harvard University Press, 2008).
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22. Lilienthal, *Journals Vol. 3*, 65. Lippmann had also been partly responsible for the fact that Lilienthal visited Pakistan. He convinced Lilienthal that he should visit Karachi as well as New Delhi to avoid snubbing Pakistani leaders.
23. David E. Lilienthal, 'Kashmir: Another "Korea" in the Making?', *Collier's* 128, no. 5 (4 Aug. 1951), 23.
24. Lilienthal, 'Kashmir', 23.
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26. Quoted in Odd Arne Westad, *The Global Cold War: Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2007), 118.
27. Benjamin Siegel, "'Fantastic Quantities of Food Grains': Cold War Visions and Agrarian Fantasies in Independent India', in *Decolonization and the Cold War: Negotiating Independence*, ed. Leslie James and Elisabeth Leake (London: Bloomsbury, 2015).

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29. Robert McMahon's analysis suggests that it was American intervention, spurred by a chimerical fear of communist expansion, that drew South Asia into the Cold War rather than the other way around. However, there is no reason to believe Lilienthal's concern was insincere. McMahon, *Cold War on the Periphery*, 343.
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31. Lilienthal, 'Kashmir', 58 (italics in original).
32. Lilienthal, 'Kashmir', 58.
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43. Klingensmith, *One Valley and a Thousand*, 56.
44. Lilienthal, *TVA: Democracy on the March*, 58.
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46. Ministry of External Affairs to Apa B. Pant, political officer, Sikkim, 7/10 Oct. 1960, Progs, Nos 4 (75)-T, 1960, Ministry of External Affairs, Tibet Branch, National Archives of India, New Delhi (NAI).
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78. N.D. Gulhati, *Indus Waters Treaty: An Exercise in International Mediation* (Bombay: Allied Publishers, 1973), 113–15.
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6. NEGOTIATING INTERNATIONAL POLITICS

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3. After his coup Ayub largely governed from Rawalpindi, the city near Islamabad that hosted the army headquarters. Islamabad was actually constructed during the early 1960s.
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8. Alam, 'Water Rationality', 200.
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21. Memorandum of conversation, 8 Oct. 1957, CDF 690D.91322/10–857, NARA.
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- Press, 2000), 55–61. Lawrence A. Ziring, *Pakistan in the Twentieth Century: A Political History* (Karachi: Oxford University Press, 1997), 251–77. Ishtiaq Ahmed, *Pakistan, the Garrison State: Origins, Evolution, Consequences, 1947–2011* (Oxford: Oxford University Press, 2013), 117.
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41. Jayasri Ray Chaudhuri, *An Introduction to Development and Regional Planning: With Special Reference to India* (Hyderabad: Orient Longman, 2001), 270–80. Ayesha Jalal, *Democracy and Authoritarianism in South Asia: A Comparative and Historical Perspective* (Cambridge: Cambridge University Press, 1995), 129–31. Sunil Khilnani, *The Idea of India* [1997] (London: Penguin, 1998), 82.
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Bérénice Guyot-Réchart, ‘Nation-Building or State-Making? India’s North-East Frontier and the Ambiguities of Nehruvian Developmentalism, 1950–1959’, *Contemporary South Asia* 21, no. 1 (2013).
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56. McMahon, *Cold War on the Periphery*, 338. Rotter, *Comrades at Odds*, 64.
57. Memorandum of conversation, 4 May 1955, '322.2—Boundary Waters. Pollution', Karachi Classified General Records, 1949–1961, RG 84, NARA.
58. Assistant secretary, NEA, to under-secretary of state, 28 Mar. 1956, CDF 690D.91322/3–23856, NARA.
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61. Rudra Chaudhuri, *Forged in Crisis: India and the United States since 1947* (Noida, UP: HarperCollins India, 2014), 67–9.
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the majority of fertile plains irrigable from the Indus, gave it a strong moral claim within that bilateral dispute. By contrast, East Pakistan only constituted 10 per cent of the basin's catchment area, the remaining 90 per cent of which it shared with four other countries: Nepal, Bhutan and China, as well as India. By independence in 1947, India was already making major uses of Ganges water, especially on its Hugli tributary. Brichieri-Colombi and Bradnock, 'Geopolitics, Water and Development in South Asia', 43–8. China and Nepal were much more active on the Ganges–Brahmaputra–Meghna system than were China and Afghanistan on the Indus during this period. Nepal began a collaboration with India to build a dam on the River Kosi, tributary of the Ganges, near their mutual border in 1958. I have not, however, seen any evidence that Indian or Pakistani officials considered Nepal or China while negotiating about the Farakka and Karnafuli projects.

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CONCLUSION

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