BLOOD IS THICKER THAN WATER: A GENEALOGY OF WATER IN NATION-STATE BUILDING

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Introduction

On January 27, 2023, India announced that it would renegotiate the terms of the Indus Waters Treaty. This 62-year-old treaty has been the source of contention between India and Pakistan, but threats over revocation have emerged as a serious amplifier to the already tense conflict between the two nations.

In *Pakistan2025: One Nation - One Vision*, a report published in 2014, the Pakistani government stated that "[their] Vision today is to make Pakistan the next Asian Tiger" — a prosperous country with rapid economic growth, strong sustainability and self-sufficiency.² With only a few years left to accomplish such transformational goals, one cannot help but compare the current state of the country with its optimistic goals that situate hope in the future yet-to-come. Accordingly, it is important to analyze Pakistan's perspective on the Indus - one rooted in the region's historical memory and usage of the Indus River. In a 2017 interview, former President Pervez Musharraf asserted that "India must realize that if you stop our waters, it's a very serious issue...how can you stop Pakistan's waters?" It is important to consider the situational context of Musharraf's words in 2017, as Pakistan had faced several obstacles to its domestic security, with threats ranging from devastating natural disasters⁴ to violent border skirmishes along disputed territory. Sometimes, these concerns were accompanied by the inflammatory rhetoric of warfare, with foreign policy minister Sartaj Aziz claiming that India's

¹ Bhattacherjee, Kallol & Suhasini Haidar. "India Sends Notice to Pakistan to Amend 1960 Indus Water Treaty." The Hindu, January 27, 2023.

https://www.thehindu.com/news/national/india-notifies-pakistan-on-modification-of-indus-waters-treaty/article664387 80.ece.

² "Pakistan2025: One Nation - One Vision." Government of Pakistan Ministry of Planning Development & Special Initiatives, 2014. https://www.pc.gov.pk/uploads/vision2025/Pakistan-Vision-2025.pdf.

³ Musharraf, Pervez. "Reneging on Indus Waters Treaty Will Be a Serious Issue, Says Musharraf." World is One Global Leadership Series. YouTube, 2017. https://www.youtube.com/watch?v=yYGCuGUahBA.

⁴ "Pakistan: Floods and Heavy Snowfalls - Jan 2017." ReliefWeb, 2017. https://reliefweb.int/disaster/fl-2017-000017-pak.

⁵ O'Connor, Tom. "Pakistan Claims Killing of Indian Soldiers near Border." Newsweek, June 3, 2017. https://www.newsweek.com/india-pakistan-conflict-erupts-deadly-border-nuclear-620295.

decision would be perceived as an "act of war or a hostile act against Pakistan." Such threats invoke the language of war in understanding the disintegrating geopolitical relations between both countries, which is particularly concerning given both countries' status as nuclear powers. Given that 90% of Pakistan's food and fiber requirements come from the Indus Plain, and the country's impending status as a country facing "water scarcity by 2025," such conversations have devastating implications for millions of people living in the Indus River Valley.

It is no surprise that these threats to 'turn off the taps' are deeply imbricated in a power imbalance between both nations. In his interview, Musharraf argues that "accommodation has to come from the larger [country]...it cannot come from the smaller." Musharraf's appeal to "accommodation" is interesting, because both nations were designed to be equal in status from partition. If this is the case, the present imbalance in resources that has developed between the two countries complicates the initial vision of each country's identities in relation to each other. Some contend that India's decision was in response to Pakistan's move to challenge the technical designs of the Kishanganga and Ratle hydropower projects in the state of Kashmir - dams which Pakistan claims will "cut flows on the river, which feeds 80 per cent of its irrigated agriculture." Pakistan decided to settle this conflict through the Permanent Court of Arbitration in The Hague. This court, seated in the Netherlands, was established in 1899 as a neutral intergovernmental actor that could provide "a variety of dispute resolution services to the international community." ¹¹ The court, which had administered the Kishenganga Arbitration in 2013, has also increased its credibility in arbitrating other conflicts such as the China and Philippines dispute over the 'nine-dash line' South China Sea. ¹² Pakistan's appeal to

⁶ Jorgic, Drazen, and Tommy Wilkes. "Pakistan Warns of 'Water War' with India If Decades-Old Treaty Violated." Reuters. Thomson Reuters, September 27, 2016.

https://www.reuters.com/article/us-pakistan-india-water/pakistan-warns-of-water-war-with-india-if-decades-old-treaty-violated-idUSKCN11X1P1.

⁷ Kamal, Simi. "Use of Water for Agriculture in Pakistan: Experiences and Challenges." UNL Office of Research & Economic Development, May 3, 2009. https://research.unl.edu/events/futureofwater/ppt/SKNebraska.pdf.

⁸ Maqbool, Nazam. "PIDE Knowledge Brief." Pakistan Institute of Development Economics, March 4, 2022. https://file.pide.org.pk/uploads/kb-060-water-crisis-in-pakistan-manifestation-causes-and-the-way-forward.pdf.

⁹ Musharraf, Pervez. "Reneging on Indus Waters Treaty Will Be a Serious Issue, Says Musharraf." World is One Global Leadership Series. YouTube, 2017. https://www.youtube.com/watch?v=yYGCuGUahBA.

¹⁰ Iqbal, Nasir. "Arbitration on Kishanganga, Ratle Projects Gets Underway." DAWN.COM, January 28, 2023. https://www.dawn.com/news/1734060.

^{11 &}quot;News & Cases." Permanent Court of Arbitration, March 31, 2023. https://pca-cpa.org/en/home/.

¹² Graham, Euan. "The Hague Tribunal's South China Sea Ruling: Empty Provocation or Slow-Burning Influence?" Council on Foreign Relations. Council on Foreign Relations, August 18, 2016.

https://www.cfr.org/councilofcouncils/global-memos/hague-tribunals-south-china-sea-ruling-empty-provocation-or-slow-burning-influence.

an external actor runs counter to India's desire for the appointment of a neutral expert, as evidenced by India's refusal to attend the third-party arbitration.¹³

While the two countries dispute over their claims to the Indus River, the World Bank - often considered the architect of the Indus Waters Treaty - has resumed the once-suspended parallel proceedings "because it feared the stalemate endangered the historic Indus Waters Treaty."14 According to a World Bank spokesman, "[t]he treaty has been a profoundly important international agreement in support of peace and development for South Asia...its preservation has been among the World Bank's highest priorities." This spokesman's perspective reveals that the "peace" and stability of development is an attractive benchmark to measure the World Bank's success in intervening to resolve conflicts. This benign desire to preserve a notoriously successful treaty has been challenged by India's External Affairs Ministry Spokesperson Arindam Bagchi, who notes that "I do not think they are in a position to interpret the treaty for us. It is a treaty between our two countries." It is important to consider the context of Bagchi's remarks, particularly given India's use of the Indus River as an advantageous source of hydroelectric power needed to modernize and develop the country. Furthermore, the tense territorial conflict between Pakistan and India over Kashmir - evidenced by border skirmishes and ceasefire breaches – proves that India's stance as an 'Upper Riparian' is deeply intertwined with its own desire to preserve its identity and agency. This reassertion of state sovereignty to bilaterally negotiate the dispute is a stark contrast to the World Bank's original intervention and formulation of the treaty in 1960.

Using the current disputes over the Indus Waters Treaty as a departure point, this paper seeks to explore the various conversations surrounding the states' desire to control water. Specifically, I examine the formation of Pakistan and India as nation states during the 1947 partition, as well as the rhetoric of professionalism and 'neutral' scientific expertise that permeates both colonial engineering practices and the World Bank mediation of the Indus Waters Treaty. I also focus on the sub-state

¹³ World Bank Group. "World Bank Holds Hand-over Meetings with the Neutral Expert and the Chairman of the Court of Arbitration under the Indus Waters Treaty." World Bank. World Bank Group, November 21, 2022.

https://www.worldbank.org/en/news/press-release/2022/11/21/world-bank-holds-handover-meetings-under-indus-waters-treaty.

¹⁴ Kaushik, Krishn. "World Bank Resumed Parallel Proceedings on Concern over Indus Water Treaty - Spokesman." Reuters. Thomson Reuters, February 3, 2023.

 $https://www.reuters.com/world/asia-pacific/world-bank-resumed-parallel-proceedings-concern-over-indus-water-treaty-2023-02-03/\#: \sim: text=NEW\%20DELHI\%2C\%20Feb\%203\%20 (Reuters, the \%20 Indus\%20 Indus\%20 Water\%20 Treatworld New York (New York) (Reuters, the Water New York) (New York) (N$

¹⁵ Ibid

¹⁶ Press Trust of India. "'Can't Interpret It for Us': India's Jibe at World Bank on Indus Water Treaty." India Today. India Today, February 2, 2023.

https://www.indiatoday.in/india/story/india-pakistan-world-bank-stand-indus-water-treaty-2329807-2023-02-03.

conflicts over water – particularly focusing on Punjab as well as Jammu and Kashmir– in order to highlight water's role as a source of deriving national and subnational sovereignty. I hope to shed light on the ways in which water is intimately tied to the economic, cultural and social language that comprises the political imagination and identity.

Partition of Nations and Ecologies

After the official end of the British Raj in 1947, the Indian subcontinent underwent partition, during which it experienced massive amounts of violence that led to the creation of two countries: India and Pakistan. A primary factor driving the creation of these sovereign nations was a conflict of identity, with leaders such as Muhammad Ali Jinnah contending that "the question of a division of India, as proposed by the Muslim League, is based on the fundamental fact that there are two nations – Hindus and Muslims – and the underlying principle is that we want a national home and a national state in our homelands which are predominantly Muslim." The partition of the subcontinent highlighted the uniquely difficult process of identity formation, in which each country invoked separate claims to emotion versus scientific rationality in order to develop beyond their stark cultural differences.

Prior to independence and partition, the subcontinent bore witness to the severe interventions of the British Raj in knowledge formation - ones that have bequeathed a lasting colonial legacy. By contrast to the aforementioned emotional appeals to nation and identity, the harnessing of water's potential through an engineering deemed 'secular' and 'apolitical' is a repeated theme that informs issues including development, canal engineering, and the implementation of technocratic expertise leading up to the Indus Water Treaty. In Blood and Water: The Indus River Basin in Modern History, historian David Gilmartin notes that British colonial era conceptions of environmental engineering were closely linked to the state knowledge of nature as one that can be conquered and controlled for productive ends. This notion of technological mastery as a means of environmental transformation is closely associated with the rise of irrigation engineering as a profession in the late 19th century. The very vocabulary of canal engineering reflected the attitudes held toward nature. For example, Gilmartin focuses on the description of a particular canal's "command," which refers to the "area of land that could be reached through gravity flow from that canal. Water's 'duty' could only be

¹⁷ Jinnah, Muhammad. "Move to Partition Punjab and Bengal." The National Archives. The National Archives, May 4, 1947. https://www.nationalarchives.gov.uk/education/resources/indian-independence/jinnah-partition/.

fulfilled when the land was brought under canal 'command." The seemingly objective rhetoric reframes water away from natural phenomena and, instead, views it as an entity that could be moved from areas of abundance to areas of lack, and thus "command" the land to become productive.

This understanding of water as having a higher-order and rational "duty" that can be maximized reveals the true objective of colonial science using nature. Specifically, the field of irrigation engineering was built on the notion that humans can understand the environment in order to effectively control and harness nature's potential to work for the state. If humans could maintain power over natural resources, they could exert power through nature and make it conform with technical demands for productivity. Accordingly, this notion of engineering cemented a relationship between law and science: to control irrigation means to control the disorderly environment.

Silent in this conversation remains the perspective of water. The politics of partition may be one way to understand the movement of bodies and resources, but it also reveals that water could not be settled in the same containing way. The pursuit of scientific research for the purpose of practical applications – and not simply knowledge – understands water as merely a means to an end instead of as an entity with inherent value. Without a proper understanding of this nuanced perspective, nature remains relegated to the margins of discussions about harnessing its productivity.

While partition was a necessarily divisive concept, there remained appeals for both countries to maintain joint control of the Indus River. Gilmartin observes that Sir Cyril Radcliffe – the British lawyer who carved out the borders of India and Pakistan – viewed partition as "one of Britain's greatest moral and imperial legacies to the subcontinent." Despite his unfamiliarity with the region, Radcliffe suggested that Jinnah and Jawaharlal Nehru "should agree in advance to maintain the unity of the irrigation system by running it jointly after partition," a suggestion that was not received well because "it seemingly used the 'natural' river basin to denigrate their visions of nationhood." It appears that neither head-of-state was interested in the idea of cooperation over the neutral irrigation system built on the Indus River, as it could transcend the divisive process of identity-formation associated with state-building.

¹⁸ Gilmartin, David. *Blood and Water:The Indus River Basin in Modern History*. Oakland, California: University of California Press, 2015, 150.

https://search-ebscohost-com.ezproxy.cul.columbia.edu/login.aspx?direct=true&AuthType=ip&db=e025xna&AN=980759&site=ehost-live&scope=site.

¹⁹ Ibid, 205.

²⁰ Ibid, 205-6.

Rising tensions between the two nations reached a breaking point on April 1, 1948, when India turned off the water supply to the Upper Bari Doab and Dibalpur Canals along the Radcliffe Line. This water was critical to the agricultural backbone of major cities, such as Lahore. As Sunil Amrith writes in *Unruly Waters*, Pakistan responded by building the Bambanwala-Ravi-Bedian-Dibalpur, or 'BRBD canal.' He notes that the building of the canal mobilized "a volunteer corps of laborers [who] rallied to the cause of the new canal as an act of national defense—it came to be known as the Martyrs' Canal." Such rhetoric of "national defense" as a justification for development suggests a reactionary, patriotic response to encroachments on Pakistan's national security. The nation's conception of identity, one that has persisted through countless wars and territorial skirmishes over the last 7 decades, continues to inform Pakistan's rather militaristic approach to viewing water as critical to security. This militarism is also intimately tied to Pakistan's claims to the Indus — ones that center historical usage of the waters as vital to self-preservation.

As the two countries struggled over issues of sovereignty, the rest of the world stood watching from afar. The Cold War anxieties of these external actors sentiments only heightened by the Korean War - permeated their view of the conflict on the subcontinent. Such sentiments are most evident in the writings of David Lilienthal, an American bureaucrat who was the first chairman of the Tennessee Valley Authority.²² In his 1951 article entitled "Kashmir: Another Korea in the Making," written after his touring of the subcontinent as a consultant, Lilienthal explains his understanding of the Indus conflict in the wake of partition. He explains that "partition, a politico-religious instrument, fell like an ax...it merely made [professional principles among engineers] secondary, for a time, to politics and emotion."23 For Lilienthal, the colonial-vision of the river basin is justified because it uses rationality to transcend the "politics and emotion" of partition. Viewing the river basin as a unified entity that transcends national boundaries reframes the material relationship between man and nature. This relationship of cooperation, he argues, has been brutally devastated by the "ax" of partition, which forcefully overcame the seemingly neutral engineering principles. This technical universalism, which appeals to humanity's broader relationship to nature, provides a high level understanding of the conflict of the basin. Lilienthal's naive and blanketing antidote of cooperation may have worked in developing the Tennessee Valley Authority, but it fails to address the competing visions of sovereignty that complicated tensions on the subcontinent.

²¹ Amrith, Sunil. Unruly Waters: How Mountain Rivers and Monsoons Have Shaped South Asia's History. Penguin, 2020, 312.

²² "David E. Lilienthal." Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed April 22, 2023. https://www.britannica.com/biography/David-E-Lilienthal.

²³ David E. Lilienthal, "Kashmir: Another 'Korea' in the Making?," Collier's 128, no. 5 (1951): 58.

After the partition of the Indian subcontinent, there remained a developmental focus on remaking nature in a way that united citizens under a common sovereign imagination. Unlike previous British claims to objective rationality, the independent India justified the control of nature by appealing to an emergent nationalism that derived power from uniting Indian citizens. This sentiment is best exemplified in Prime Minister Jawaharlal Nehru's speech at the opening of the Nangal Canal in 1954. When describing Bhakra-Nangal, he makes it clear that "Bhakra-Nangal [is] where a small village stood, but which today is a name ringing in every corner of India...because this is a great work, the mark of a great enterprise." Nehru's invocation of size, in which he compares the "small village" with the newer and infamous "great enterprise," enables him to justify the small sacrifices of displacement for the sake of larger productive returns to the country.

Nehru, who is delivering this speech at the border of Punjab and Himachal Pradesh, is cognizant of the "grievous wound" that Punjab suffered during the partition following India's freedom. However, he notes that "despite the shock and the wound, freedom brought a new strength, a new enthusiasm...[Bhakra-Nangal] is a landmark because it has become the symbol of a nation's will to march forward with strength, determination and courage."²⁵ In his appeal to the value of freedom, Nehru uses Bhakra Nangal - an inanimate object - as a testament to the rising power of an independent India that has overcome local divisiveness. This sentiment is echoed in his description of the dam as the highest secular authority, one which is "greater and holier" than "the biggest temple and mosque and gurdwara." This understanding of a man-made dam being considered among the holy "temples of the new age" suggests that India's conquest over nature serves as a religio-political mechanism around which the country can organize in order to propel itself into modernity. Nehru is trying to transition from the divisive religious rhetoric of partition, and uses the same power of religious language to promote a vision of secularism aided by science.

The nation's desire to advance is one that Nehru emphasizes must be done expeditiously, noting that "the nation is marching forward and every day the pace becomes faster...Bhakra-Nangal is not a work of this moment only, because the work which we are doing at present is not only for our own times but for coming generations and future times." Nehru's emphasis on forward progress and pace is important, as it emphasizes that nothing can obstruct the nation's "march" towards progress. Unlike the colonial attitude toward engineering development that reaped

²⁴ Nehru, Jawaharlal. "Temples of the New Age." *Jawaharlal Nehru's Speeches: Volume Three*, Publications Division Ministry of Information and Broadcasting Government of India, August 1958, 1. https://ignca.gov.in/Asi_data/59309.pdf.

²⁵ Ibid, 2.

²⁶ Ibid, 3.

²⁷ Ibid, 3.

immediate productive benefits, Nehru is clear in highlighting the intergenerational benefits of building such infrastructure. In contrast to Pakistan's historical claims to water based on memory and usage, India's justifications lie in forward development using science and technology. Nevertheless, we see continuities in the methods and justifications of exerting power through water – a process of cultivating nationalism that has proven crucial to the construction of India's identity.

The Indus Waters Treaty of 1960

The tenuous geopolitics marking the period after partition ultimately set the preconditions for the signing of the Indus Waters Treaty. According to the World Bank, the Indus Waters Treaty is "one of the most successful international treaties" that reflects the World Bank's "commit[ment] to act in good faith and with complete impartiality and transparency while continuing to assist the countries and fulfilling its responsibilities under the Treaty." However, such rhetoric of "impartiality" and "good faith" is challenged by the history of events leading up to the signing of the treaty. It is important to analyze the World Bank's motives for their reconstruction efforts during the Cold War. In a 1951 address to the Board of Governors, World Bank President Eugene Black states that "economic development can be one of the most significant and constructive activities of our time...[it] is an indispensable tool for providing the richness of alternatives that makes up a world of free men."28 It is clear that Black's vision for the World Bank is to promote "a world of free men" that best stabilizes the chaotic world order. In 1951, Black sent a letter to Pakistani Prime Minister Liaquat Ali Khan, in which he reflected on the article published by Lilienthal, which had "attracted a great deal of interest in the United States." He continues by noting:

"Since the matter is therefore of interest to the Bank and since the Bank's name has now been publicly mentioned in this connection, I should like to ask you whether you are disposed to look with favor upon Mr. Lilienthal's proposal. If so, I can assure you that, if your Government and the Government of India desired to approach the development of the Indus water resources along the lines suggested by Mr. Lilienthal, I should be most happy to recommend that the Bank lend its good offices in such directions as might be considered appropriate by the two

²⁸ "Address by Eugene R. Black, President of the Bank, in Presenting the Sixth Annual Report of the Bank to the Board of Governors," World Bank, September 1951, 10.

https://documents1.worldbank.org/curated/en/934831524572636181/pdf/Address-by-Eugene-R-Black-President-of-t he-Bank-in-presenting-the-sixth-annual-report-of-the-Bank-to-the-Board-of-Governors-September-10-1951.pdf ²⁹ Black, Eugene. "Letter from the World Bank President, Eugene Black, to the Prime Minister of Pakistan, Liaquat Ali Khan," September 6, 1951. Found in Alam, Undala "Water Rationality: Mediating the Indus Waters Treaty," September 1998, 292. http://etheses.dur.ac.uk/1053/1/1053.pdf?EThOS%20(BL)

governments, make available qualified members of its staff and consider any financing proposals that might develop as a result of joint planning."³⁰

Here, Black's vision of development around the Indus Basin strongly supports Lilienthal's advocacy for cooperation that unleashes practicality and economic development in the region. However, the stake of the World Bank's "name," or reputation, plays a significant role in their interests in the region. By conditioning the World Bank's technical support on joint planning and cooperation in the subcontinent, Black reveals his partiality to the interests of Lilienthal and the United States – a partiality that has severe material consequences for both countries' cooperation. This partiality reflects the World Bank's broader function as a Cold War institution that acts on behalf of the United States' geopolitical interests in South Asia. The emphasis on science and expertise, proven by mandating the appointment of a "qualified engineer of high standing," served as benchmarks for the World Bank's understanding of progress and development in the 1960s. The World Bank's authority to arbitrate – enabled by the creation of uncertainties and contingencies – is powerful because it allowed the institution to continue existing relationships without resolving the underlying issues that still divided the subcontinent.

Nevertheless, India and Pakistan agree to the World Bank's terms and conditions. On September 19, 1960, Indian Prime Minister Jawaharlal Nehru and Pakistani President Ayub Khan met in Karachi to sign the Indus Waters Treaty. The International Bank for Reconstruction and Development allocated the "Western Rivers" of the Indus, Jhelum, and Chenab to Pakistan, and the "Eastern Rivers" of the Sutlej, Beas, and Ravi to India. From 1960-1970, India was obligated to limit withdrawals for agricultural use and storage while making deliveries to Pakistan, and neither country could interfere in the unrestricted use of the others' rivers.³¹

An addendum to the treaty was the Indus Basin Development Fund Agreement, which was an agreement between Australia, Canada, Germany, New Zealand, United Kingdom, United States of America, and Pakistan. This fund, administered by the World Bank, provided millions of support for development in the Indus Basin in the forms of concessionary finance and loans, with \$177,000,000 in funding provided by the United States. There were many deliberations leading up to the establishment of the Fund, including discourse in British Parliament over the "Indus Basin Development Fund Bill." It is important to note that the United Kingdom is one of the primary actors in this consortium, as it shows that the perception of the subcontinent has dramatically changed over the course of 15 years.

³⁰ Ibid.

³¹ "The Indus Waters Treaty 1960." United Nations Treaty Collection, September 19, 1960. https://treaties.un.org/doc/Publication/UNTs/Volume%20419/volume-419-I-6032-English.pdf.

As the Duke of Devonshire notes, participation in the Fund gives the United Kingdom "an opportunity to express our readiness—indeed, our enthusiasm—to join in a unique example of international co-operation, together with seven other Governments, five of them our partners in the Commonwealth, and to enter into partnership with the International Bank."³²

Also present at these conversations was Lord Frederick William Pethick-Lawrence, a progressive ex-bureaucrat for the Labour government who served as a secretary of state for India and Burma between 1945 and 1947.³³ Late in his career, the baron responded to Duke of Devonshire by stating his amazement at the power of international cooperation:

"Now it is a very remarkable thing, I think, that a matter of war or peace was in fact decided by a financial body, the International Monetary Fund. When the International Monetary Fund was set up, many of us who supported it had great hopes for its future, and believed that it might serve a very useful, if prosaic, purpose in the finances of the world. Few of us would have expected that it would solve a great political question—but that is what it has done. But it could not have done that without the goodwill of all the parties concerned."³⁴

Here, Pethick-Lawrence naively asserts that a fund can swiftly and effectively solve a structural crisis – a matter of "war or peace" – between two countries. He concedes that the dispute over the Indus basin is fundamentally a "great political question," but that the goodwill of external countries – that is, beyond India and Pakistan – has decisively pacified tensions on the subcontinent. Without undervaluing the material impact of such a massive flow of capital from Western countries, it is nevertheless important to critically examine the assumptions and justifications behind the foreign countries' benevolence and expectations.

In the subsequent years, foreign development groups intervened to build dams in Pakistan. A 1968 *New York Times* article highlights that an Italian-French syndicate won a \$623 million contract to build the world's largest earth dam in Pakistan. In outbidding American, British, German and Swiss competitors, the group was granted the opportunity to build a project "three times bigger than the Aswan High Dam on the Nile, [and] will produce 2.1 million kilowatts of power and will provide irrigation for a vast arid region of Pakistan...the largest regional

³² "Indus Basin Development Fund Bill." UK Parliament, November 29, 1960.

https://api.parliament.uk/historic-hansard/lords/1960/nov/29/indus-basin-development-fund-bill.

³³ "Frederick William Pethick-Lawrence, Baron Pethick-Lawrence." Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed April 22, 2023.

https://www.britannica.com/biography/Frederick-William-Pethick-Lawrence-Baron-Pethick-Lawrence-of-Peaslake. ³⁴ Ibid.

development program in history."³⁵ While such lucrative projects were attractive to foreign investors, Pakistan had to pay local costs of \$335 million. This suggests that such investments were not risk-free, but bore massive domestic costs in the country hosting such projects.

It appeared that Lilienthal's invincibly practical compromise was finally implemented. The success of the treaty was lauded by the world, with President Dwight D. Eisenhower describing it as "one bright spot" in "a very depressing world picture that we see so often." With the treaty signed, and backed by the seemingly impermeable institutions of the West, each nation state could develop along the river basin and cohere its power. Having 3 rivers under each of their control, and some opportunities for joint engagement, both nations could now focus on creating new ecosystems on the basis of water sovereignty and territorial sovereignty.

Since the Cold War debates between capitalism and communism, the World Bank became increasingly sold to privatization, particularly during the 1990s. Accordingly, the World Bank's modern motives for intervention in South Asia has also been criticized as a tool of corporate control. This institutional transition has also shifted the scope of its impact. Instead of nation-states bearing witness to reconstruction, individual citizens and local communities depend on the institution's actions for their survival. In *Water Wars: Privatization, Pollution, and Profit*, environmental activist and ecofeminist Vandana Shiva analyzes the World Bank's increased commodification of water markets and lack of effectiveness. Shiva represents the marginalized voices of civil society, specifically the women situated in agricultural communities that are most threatened by the increased presence of corporations. She cites the World Bank's push for market-based privatization and distribution of water, evidenced by a "\$28.4 million water supply project" that "failed to provide water" and only resulted in "depleting water sources." She concludes by arguing that:

"abstract arguments miss the most crucial point-when water disappears, there is no alternative. For Third World women, water scarcity means traveling longer distances in search of water. For peasants, it means starvation and destitution as drought wipes out their crops. For children, it means dehydration and death. There is simply no substitute for this precious liquid, necessary for the biological survival of animals and plants." ³⁸

³⁵ "Italian-French Group Wins Job To Build Big Dam in Pakistan." *The New York Times*, March 7, 1968. https://timesmachine.nytimes.com/timesmachine/1968/03/07/issue.html.

³⁶ "97. Editorial Note." Foreign Relations of the United States, 1958-1960, South and Southeast Asia. U.S. Department of State. Accessed April 22, 2023. https://history.state.gov/historicaldocuments/frus1958-60v15/d97.

³⁷ Shiva, Vandana. Water Wars: Privatization, Pollution, and Profit. Reprint. North Atlantic Books, 2016, 13.

³⁸ Ibid, 15.

Shiva's analysis emphasizes a simple but crucially important point: millions of lives depend on water as essential for survival. Such an apocalyptic description of displacement, devastation, and death are the reality of communities that are often overlooked among broader conversations around development. Accordingly, costs should not be measured in terms of returns or productivity, but rather the social costs associated with lack of water access for various communities. Considering that India is one of the largest recipients of World Bank aid, future development should be critically aware of these social consequences.³⁹

Regionalism and Sub-State Sovereignty'

Beyond the national conflicts over sovereignty, however, lies an often overlooked aspect in current conversations about water – issues of sub-state interests and regional sovereignty. One such example is the state of Punjab, situated in the northwest region of India. 83% of the state's area is dedicated to agriculture, and 65% of the population depends on farming as a means of life. 40 Accordingly, water is critical to the region's economic and political stability as well as its development as a region.

During the partition of Punjab, the Radcliffe Award granted many Muslim-majority areas to India, such as Ferozpur, Batala, Amritsar and Gurdaspur. However, no Hindu-majority area was granted to Pakistan. The Radcliffe line also severed Upper Bari Doab canal, which left the source of the water supply and canal systems in India and the dependent agricultural communities in West Pakistan. With this newfound control, Bhatti argues that India emerged as an "Upper riparian" that could control the irrigation supply.⁴¹ This power imbalance between two nation states that relied on the same natural source informs current threats to turn off the taps at will.

While Punjab can be seen as a borderland witnessing national conflicts over water, it also experienced state-level disputes over control of water. This is seen in a 1977 *Hindustan Times* article entitled "Waters Going Waste," in which the Punjab Assembly refused to share the Ravi and Beas rivers with Haryana, because they are not a riparian state. Punjab argues that farmers will lose critical water allocations to

³⁹ Mallapur, Chaitanya. "India Largest Recipient of World Bank Loans over 70 Years." Business Standard, January 13, 2016.

https://www.business-standard.com/article/specials/india-largest-recipient-of-world-bank-loans-over-70-years-1160113 00637 1.html.

^{40 &}quot;Annual Report Draft 2010-11," 2010.

https://agri.punjab.gov.in/sites/default/files/ANNUAL_REPORT_DRAFT_2010-11.pdf.

⁴¹ Bhatti, Muhammad Nawaz. "Politics of Water Resource Management in the Indus River Basin: A Study of the Partition of Punjab." *Liberal Arts and Social Sciences International Journal (LASSIJ)* 4, no. 2 (November 14, 2020): 60–70. https://doi.org/10.47264/idea.lassij/4.2.6.

the "limited irrigation potential" of its neighboring state.⁴² The article suggests that the inter-state quarreling highlights India's "continued wastage of natural resources," because it is delaying hydro-electric projects.⁴³ This article invokes the familiar rhetoric of both productivity and "waste" at both a state and national level. In 1991, farmer associations in the Pakistani region of Punjab rejected water apportionment between Punjab and the Sindh province, stating that they "reject allocation of 32.6 MAF water to Punjab which contributes 75 percent to the country's agriculture production and 29.9 MAF water to Sindh province that contributes only 20 percent to the agriculture sector."⁴⁴ The perceived unfairness in water allocation exists at a regional level on both sides of the border, suggesting that there is an asymmetric imbalance between state, local, and national priorities.

Another state of focus is Jammu and Kashmir, which has been a microcosm of broader national conflicts over state sovereignty. In The Times of India article written in 2001, journalist Parul Chandra interrogates the potential threat of abrogating the Indus Waters Treaty in response to a flare in tensions between India and Pakistan. While the first half of the article details a history of the Treaty, the second half focuses on the perspective of the Jammu and Kashmir government. The Indus River, along with other rivers such as the Jhelum, flow directly through this state that is frequently contested by India and Pakistan. Chandra notes that "the Jammu and Kashmir government has been demanding that the treaty either be abrogated or at least be reviewed...the state government has estimated that, in terms of power generation alone, it has incurred losses worth Rs 6,000 crore a year."45 Chandra's article, likely geared towards urban and middle-class Indians with an interest in domestic and foreign affairs, highlights an important regional perspective regarding the control of water. Specifically, Jammu and Kashmir's ire at the Indus Waters Treaty focuses on the fact that arbitrary decisions over river control have created barriers to domestic power generation. This regional government voice, which is laden with language depicting massive economic losses, highlights a vital domestic perspective and demonstrates that national interests of India and Pakistan often trade off with the local interests for self-sufficiency and autonomy.

⁴² "Waters Going Waste." The Hindustan Times (1924-), Apr 02, 1977, 7.

http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/historical-newspapers/waters-going-waste/docview/2726432512/se-2

¹³ Ibid.

⁴⁴ "Punjab Farmers Reject 1991 Water Accord Without Kalabagh Dam." Business Recorder, April 3, 2010. https://fp.brecorder.com/2010/04/201004031039261/.

⁴⁵ Chandra, Parul. "Indo-Pak Tension Puts Indus Water Treaty Under Pressure." *The Times of India (1861-2010)*, Dec 27, 2001, 7.

http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/historical-newspapers/indo-pak-tension-puts-indus-water-treaty-under/docview/759772153/se-2.

During the more contemporary rise of Indian Prime Minister Narendra Modi in 2014, India-Pakistan tensions in Jammu and Kashmir have re-sparked threats over the Indus Waters Treaty. After Pakistani militants executed a strike that killed 18 Indian soldiers - an event now referred to as the 2016 Uri attack - discussions renewed about reneging the Indus Waters Treaty as a means of pressuring Pakistan. In a 2016 article written in Dawn, an 82-year-old Pakistani newspaper, Khaleeq Kiani describes the conversations as "anti-Pakistan rhetoric following Islamabad's recent diplomatic effort to highlight the Kashmir issue."46 The popular newspaper, whose primary audience is a literate middle-class population in Pakistan, interviewed Ahmer Bilal Soofi – a former federal law minister. Soofi argues that "states are entitled to suspend treaties...if India considers revoking the treaty, it is itself signalling the same to be an act of war or a hostile act against Pakistan."⁴⁷ The perception of India's "hostile act", contrasted with Pakistan's "diplomatic efforts," is described as a warring conflict between two nation's identities. Kashmir, however, is situated as the territorial epicenter of such conversations. One cannot help but wonder if renewed conflicts over water could instantly unravel the lengthy negotiations and cease-fire in Kashmir.

It is important to examine how such complicated dynamics manifest in interactions between state and national governments. In a 2016 speech following the Uri attack, Indian Prime Minister Narendra Modi proclaimed "Now every drop of this water will be stopped and I will give that to farmers of Punjab and J&K."48 Despite the low probability of stopping and redistributing water, Modi's rhetorical emphasis on prioritizing the needs of local farmers in "Punjab and J&K" - two states that depend on these river waters - reflect the different vocabularies evoked in such national concessions that are used to pacify such historically and politically complicated environments. Specifically, Kashmir's status as a historically contested area serves as a proxy critical to India's larger goal of securing its own national identity and sovereignty. Moreover, the constant uncertainty surrounding India's actions as the upper Riparian only magnifies the existing tensions along the borders and contact zones between India and Pakistan. Both Punjab and Kashmir highlight the dual challenge of sub-national states: they must prioritize regional interests for water sovereignty while remaining contested battlegrounds of warring national identities.

⁴⁶ Kiani, Khaleeq. "Interview: 'Indus Treaty Can't Be Revoked Unilaterally'." Dawn.com, September 27, 2016. https://www.dawn.com/news/1286307.

⁴⁷ Ibid.

⁴⁸ Times of India. "River Waters to Be Stopped from Going Waste in Pakistan: PM Modi on Indus Water Treaty." *The Times of India*, November 25, 2016.

https://timesofindia.indiatimes.com/india/river-waters-to-be-stopped-from-going-waste-in-pakistan-pm-modi-on-indus-water-treaty/articleshow/55621280.cms.

Conclusion

Thus, the current situation of the Indus Waters Treaty – a respected hallmark on the subcontinent – reflects the complicated history of the relationship between nature and nation. This history is informed by the violent legacies of partition, issues of security, and competing visions of state identity and sovereignty – issues that maintain contemporary resonance and transcend local and national borders. Such obstacles were met with different approaches, as emotional appeals for control often conflicted with technological solutions that sought to reshape and modernize the natural landscape. These complex particularities of India-Pakistan relations were met with sweeping solutions imposed by foreign actors with starkly different motivations – such as the World Bank.

It is universally acknowledged that water is vital for survival. I hope to have shown that proximity to water necessarily conditions the power, security, and territorial control of both nation-states and regional sub-states. As newly contested cartographies deliberately divide, demarcate, and commodify nature, they subsequently destroy formerly flourishing ecosystems and livelihoods. The relationship between nature and humanity has transformed from a nurturing form of mutual cooperation to an evacuated one of displacement and bureaucracy – one which harnesses the unbridled use of technology to master nature.

Water, however, remains the captive and eternal witness to all of the strife and bureaucratic intervention that has plagued the region over the last few centuries. While society contests who has the power to redesign spaces for investment and speculative development, nature and ecology remains victim to the slow violence that results from such imaginations. The resulting chaos and anxieties surrounding nature's capacity and disruptive potential are channeled through the legal and social rhetoric of technical productivity, sentimental politics, and universal practicality. As the subcontinent lies on the frontlines of various environmental catastrophes, it is imperative to emphasize interdependence at the core of re-framing hydrological imaginaries and their material realities. A resolute and deliberate recognition of the state's sovereign entanglement with ecology is necessary to understand water's material presence and absence — both in and beyond the political imagination. Starting from epistemology allows society to navigate the uncertain circumstances associated with water as a political, social, and environmental entity.

- "97. Editorial Note." Foreign Relations of the United States, 1958-1960, South and Southeast Asia. U.S. Department of State. Accessed April 22, 2023. https://history.state.gov/historicaldocuments/frus1958-60v15/d97.
- "Address by Eugene R. Black, President of the Bank, in Presenting the Sixth Annual Report of the Bank to the Board of Governors," World Bank, September 1951, 10.

 <a href="https://documents1.worldbank.org/curated/en/934831524572636181/pdf/Address-by-Eugene-R-Black-President-of-the-Bank-in-presenting-the-sixth-annual-report-of-the-Bank-to-the-Board-of-Governors-September-10-1951.pdf/f
- Amrith, Sunil. Unruly Waters: How Mountain Rivers and Monsoons Have Shaped South Asia's History. Penguin, 2020, 312.
- "Annual Report Draft 2010-11," 2010. https://agri.punjab.gov.in/sites/default/files/ANNUAL_REPORT_DRAFT_2010-11.pdf.
- Black, Eugene. "Letter from the World Bank President, Eugene Black, to the Prime Minister of Pakistan, Liaquat Ali Khan," September 6, 1951. Found in Alam, Undala "Water Rationality: Mediating the Indus Waters Treaty," September 1998, 292. http://etheses.dur.ac.uk/1053/1/1053.pdf?EThOS%20(BL)
- Bhattacherjee, Kallol & Suhasini Haidar. "India Sends Notice to Pakistan to Amend 1960 Indus Water Treaty." The Hindu, January 27, 2023. https://www.thehindu.com/news/national/india-notifies-pakistan-on-modification-of-indus-waters-treaty/article66438780.ece.
- Bhatti, Muhammad Nawaz. "Politics of Water Resource Management in the Indus River Basin: A Study of the Partition of Punjab." *Liberal Arts and Social Sciences International Journal (LASSIJ)* 4, no. 2 (November 14, 2020): 60–70. https://doi.org/10.47264/idea.lassij/4.2.6.
- Chandra, Parul. "Indo-Pak Tension Puts Indus Water Treaty Under Pressure." *The Times of India (1861-2010)*, Dec 27, 2001, 7. http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/hist

- <u>orical-newspapers/indo-pak-tension-puts-indus-water-treaty-under/docview</u> /759772153/se-2.
- "David E. Lilienthal." Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed April 22, 2023. https://www.britannica.com/biography/David-E-Lilienthal.
- David E. Lilienthal, "Kashmir: Another 'Korea' in the Making?," Collier's 128, no. 5 (1951): 58.
- "Frederick William Pethick-Lawrence, Baron Pethick-Lawrence." Encyclopædia Britannica. Encyclopædia Britannica, inc. Accessed April 22, 2023. https://www.britannica.com/biography/Frederick-William-Pethick-Lawrence-Baron-Pethick-Lawrence-of-Peaslake.
- Gilmartin, David. Blood and Water: The Indus River Basin in Modern History. Oakland, California: University of California Press, 2015, 150.

 https://search-ebscohost-com.ezproxy.cul.columbia.edu/login.aspx?direct=true&AuthType=ip&db=e025xna&AN=980759&site=ehost-live&scope=site
- Graham, Euan. "The Hague Tribunal's South China Sea Ruling: Empty Provocation or Slow-Burning Influence?" Council on Foreign Relations. Council on Foreign Relations, August 18, 2016.

 https://www.cfr.org/councilofcouncils/global-memos/hague-tribunals-sout h-china-sea-ruling-empty-provocation-or-slow-burning-influence.
- "Indus Basin Development Fund Bill." UK Parliament, November 29, 1960. https://api.parliament.uk/historic-hansard/lords/1960/nov/29/indus-basin-development-fund-bill.
- Iqbal, Nasir. "Arbitration on Kishanganga, Ratle Projects Gets Underway." DAWN.COM, January 28, 2023. https://www.dawn.com/news/1734060.
- "Italian-French Group Wins Job To Build Big Dam in Pakistan." *The New York Times*, March 7, 1968.

 https://timesmachine.nytimes.com/timesmachine/1968/03/07/issue.html.

- Jinnah, Muhammad. "Move to Partition Punjab and Bengal." The National Archives. The National Archives, May 4, 1947.

 https://www.nationalarchives.gov.uk/education/resources/indian-independence/jinnah-partition/.
- Jorgic, Drazen, and Tommy Wilkes. "Pakistan Warns of 'Water War' with India If Decades-Old Treaty Violated." Reuters. Thomson Reuters, September 27, 2016.

 https://www.reuters.com/article/us-pakistan-india-water/pakistan-warns-of-water-war-with-india-if-decades-old-treaty-violated-idUSKCN11X1P1.
- Kamal, Simi. "Use of Water for Agriculture in Pakistan: Experiences and Challenges." UNL Office of Research & Economic Development, May 3, 2009.
- Kaushik, Krishn. "World Bank Resumed Parallel Proceedings on Concern over Indus Water Treaty Spokesman." Reuters. Thomson Reuters, February 3, 2023.

 https://www.reuters.com/world/asia-pacific/world-bank-resumed-parallel-proceedings-concern-over-indus-water-treaty-2023-02-03/#:~:text=NEW%2 0DELHI%2C%20Feb%203%20(Reuters,the%20historic%20Indus%20Water%20Treaty.
- Kiani, Khaleeq. "Interview: 'Indus Treaty Can't Be Revoked Unilaterally'." Dawn.com, September 27, 2016. https://www.dawn.com/news/1286307.
- Mallapur, Chaitanya. "India Largest Recipient of World Bank Loans over 70 Years." Business Standard, January 13, 2016. https://www.business-standard.com/article/specials/india-largest-recipient-of-world-bank-loans-over-70-years-116011300637_1.html.
- Maqbool, Nazam. "PIDE Knowledge Brief." Pakistan Institute of Development Economics, March 4, 2022. https://file.pide.org.pk/uploads/kb-060-water-crisis-in-pakistan-manifestatio n-causes-and-the-way-forward.pdf.
- Musharraf, Pervez. "Reneging on Indus Waters Treaty Will Be a Serious Issue, Says Musharraf." World is One Global Leadership Series. YouTube, 2017. https://www.youtube.com/watch?v=yYGCuGUahBA.

- Nehru, Jawaharlal. "Temples of the New Age." *Jawaharlal Nehru's Speeches: Volume Three*, Publications Division Ministry of Information and Broadcasting Government of India, August 1958, 1. https://ignca.gov.in/Asi_data/59309.pdf.
- "News & Cases." Permanent Court of Arbitration, March 31, 2023. https://pca-cpa.org/en/home/.
- O'Connor, Tom. "Pakistan Claims Killing of Indian Soldiers near Border." Newsweek, June 3, 2017.https://www.newsweek.com/india-pakistan-conflict-erupts-deadly-border-nuclear-620295.
- "Pakistan2025: One Nation One Vision." Government of Pakistan Ministry of Planning Development & Special Initiatives, 2014. https://www.pc.gov.pk/uploads/vision2025/Pakistan-Vision-2025.pdf.
- "Pakistan: Floods and Heavy Snowfalls Jan 2017." ReliefWeb, 2017. https://reliefweb.int/disaster/fl-2017-000017-pak.
- Press Trust of India. "'Can't Interpret It for Us': India's Jibe at World Bank on Indus Water Treaty." India Today. India Today, February 2, 2023. https://www.indiatoday.in/india/story/india-pakistan-world-bank-stand-indus-water-treaty-2329807-2023-02-03.
- "Punjab Farmers Reject 1991 Water Accord Without Kalabagh Dam." Business Recorder, April 3, 2010. https://fp.brecorder.com/2010/04/201004031039261/.
- Shiva, Vandana. Water Wars: Privatization, Pollution, and Profit. Reprint. North Atlantic Books, 2016, 13.
- "The Indus Waters Treaty 1960." United Nations Treaty Collection, September 19, 1960.

 https://treaties.un.org/doc/Publication/UNTs/Volume%20419/volume-41 9-I-6032-English.pdf.

- Times of India. "River Waters to Be Stopped from Going Waste in Pakistan: PM Modi on Indus Water Treaty." *The Times of India*, November 25, 2016. https://timesofindia.indiatimes.com/india/river-waters-to-be-stopped-fromgoing-waste-in-pakistan-pm-modi-on-indus-water-treaty/articleshow/556212 80.cms.
- "Waters Going Waste." *The Hindustan Times (1924-),* Apr 02, 1977, 7.

 http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/hist-orical-newspapers/waters-going-waste/docview/2726432512/se-2
- World Bank Group. "World Bank Holds Hand-over Meetings with the Neutral Expert and the Chairman of the Court of Arbitration under the Indus Waters Treaty." World Bank. World Bank Group, November 21, 2022. https://www.worldbank.org/en/news/press-release/2022/11/21/world-bank-holds-handover-meetings-under-indus-waters-treaty.