

(Above) Dakshineswar Kali Temple near Kolkata, on the eastern bank of the Hooghly River. Source: Wikimedia Commons, by Asis K. Chatt, at https://tinyurl.com/y9e87l6u.

he Hooghly weaves through the Indian state of West Bengal from the Ganges, its parent river, to the sea. At just 460 kilometers (approximately 286 miles), its length is modest in comparison with great Asian rivers like the Yangtze in China or the Ganges itself. Nevertheless, through history, the Hooghly has been a waterway of tremendous sacred and secular significance.

Until the seventeenth century, when the main course of the Ganges shifted decisively eastward, the Hooghly was the major channel through which the Ganges entered the Bay of Bengal. From its source in the high Himalayas, the Ganges flowed in a broadly southeasterly direction across the Indian plains before descending to the loose alluvial soil of Bengal and charting a southward course through what would become known as the Hooghly basin.

Hindus revere the Ganges as a river descended from the heavens. According to the story narrated in the *Ramayana* and *Mahabharata*—among the most important of Hindu sacred texts—the king Bhagiratha, with the help of the god Shiva, brought its waters down to earth to nourish the land.<sup>1</sup> The

The Hooghly was venerated as the Ganges's original and most sacred route. Its alternative name—the Bhagirathi—evokes its divine origin and the earthly ruler responsible for its descent.

(Left) Detail from *The Descent of the Ganga*, life-size carved rock relief at Mahabalipuram, Tamil Nadu, India. Source: *Wikimedia Commons*, by Ssriram mt, at https://tinyurl.com/y8jspxmp.

Hooghly was venerated as the Ganges's original and most sacred route. Its alternative name—the Bhagirathi—evokes its divine origin and the earthly ruler responsible for its descent. Hindus from across India established temples on the river's banks, often at its confluence with other waterways, and used the river water in their ceremonies. Many of the temples became famous pilgrimage sites.

From prehistoric times, the Hooghly attracted people for secular as well as sacred reasons. The lands on both sides of the river were extremely fertile. Archaeological evidence confirms that rice farming communities, probably from the Himalayas and Indian plains, first settled there some 3,000 years ago. In the fourth century BCE, Bengal was brought under the control of the Mauryans, rulers from neighboring Bihar who adopted the emerging religion of Buddhism. Later, it was ruled by successive local Hindu kings who established trading stations on the Hooghly. By the eleventh century CE, the river was attracting merchants from China, Southeast Asia, Ceylon, western India and the near east, including Alexandria. Chinese Admiral Zheng He very

likely navigated the Hooghly on his diplomatic visits to the Sultan of Bengal in the early fifteenth century.<sup>2</sup> By this time, Satgaon, where the Hooghly was met by two smaller rivers, the Saraswati and the Jamuna, was the most significant port of the west Bengal delta.

When Europeans sailed up the Hooghly for the first time in the early sixteenth century, they found a diverse population of ethnicities and faiths living along its banks. Western Bengal had by this point fallen into the hands of the Mughals, Muslim dynastic rulers who had settled in northern India from Central Asia. The Hooghly and Ganges were vital arteries linking Bengal with the Hindustani heartland and the great imperial cities of Agra and Delhi. Muslim saints had settled in the Bengali countryside, where they intermingled with Hindu and Buddhist spiritual authorities, producing new, composite religious practices and beliefs.<sup>3</sup>

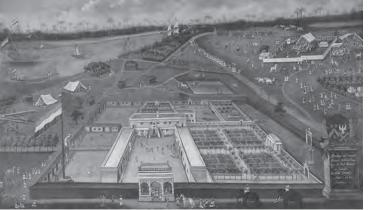
The principal attraction of Bengal to Europeans was the trading opportunities that it offered. At the close of the fifteenth century, Portuguese ships had first rounded the Cape of Good Hope at the southern tip of Africa and begun maritime

trade with Asia. A strong Portuguese commercial and military presence was established on the western coast of India at Goa before the capture of Malacca, in present-day Malaysia, which diverted Portuguese attention to the eastern Indian Ocean. The first-known European to arrive in Bengal by sea landed precisely 500 years ago on the ship of a Muslim merchant, and from the mid-1530s, annual trading expeditions were dispatched from Goa around the Indian coastline to the Bengal delta.4 Word spread quickly among Portuguese traders that Bengal was a land of abundant natural wealth and possibilities for trade. Rice and textiles were particularly sought after, along with other foodstuffs.

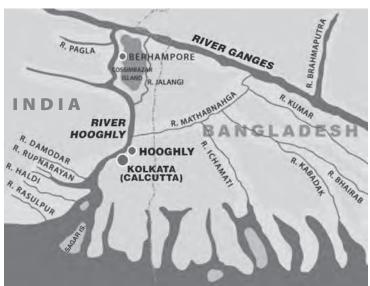
The earliest Portuguese traders on the Hooghly arrived each spring with a shipload of produce—usually spices from across the Indian Ocean—to unload on the markets of Bengal. After exchanging their goods for the delta's riches, they waited for the monsoon winds to change before returning to the western Indian coast. In 1580, however, permission was secured from the Mughal Emperor Akbar for the foundation of a Portuguese settlement at the highest point on the river that seafaring vessels could safely reach before it became too shallow. The settlement



Shah Jahan on Horseback, folio from the Shah Jahan Album ca. 1630. Painting by Payag (Indian, active ca. 1591–1658). Source: Wikimedia Commons at https://tinyurl.com/ybz2c4hv.



Trade lodge of the Dutch East India Company in Hooghly, Bengal, by Hendrik van Schuylenbergh (ca. 1620–1689), oil on canvas, 1665. Source: Wikimedia Commons at https://tinyurl.com/yanuscdb.



River Hooghly (not to scale). Source: Adapted map for this purpose by Willa Davis. Original map can be found on the Murshidabad. net website at https://tinyurl.com/ychh8vax.

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flourished into a city—Hooghly—that shared its name with the river. (The most likely origin of the name "Hooghly" is the Portuguese word *gola*, a term denoting the storehouses that would have been found on the river's banks.<sup>5</sup>)

As Portuguese trade at Hooghly grew, the city flourished, attracting wealthy merchants and their families, less prosperous traders, and Catholic priests. A succession of imposing stone mansions looked out upon the river on the approach to the commercial center. The boom of Portuguese Hooghly would last just fifty years. Emperor Shah Jahan, the grandson of Akbar, viewed with concern the growth of Portuguese influence in the Bay of Bengal, and in particular the trafficking of Bengali slaves on Portuguese

ships. In 1632, his forces attacked and destroyed the city, forcing its inhabitants to flee. However, a precedent had been set for the establishment of European trading stations on the river. By the close of the seventeenth century, Dutch, French, and English settlements had been founded. Mughal rulers after Shah Jahan tolerated the presence of Europeans as long as they paid taxes to the imperial treasury.

Europeans arriving on the Hooghly were fascinated by the position that the river occupied in local life, and in particular its significance in Hindu religious practices and beliefs. In many contemporary accounts, sacred rituals conducted using river water are described. The water was considered so valuable that it was bottled, transported, and sold to devotees across India who could not visit and bathe in the river. Many Hindus believe that to die on the banks of the Hooghly or Ganges is a way of achieving moksha (spiritual liberation). Bodies are cremated on riverside ghats, and the ashes are scattered in the water. Early European observers often remarked on the sight of the dead or dying exposed on the waterfront or of partially cremated bodies floating downstream.6

The English settlement of Calcutta was founded at the close of



Engraving of the British Fort William by Jan Van Ryne, 1754. Source: Puronokolkata, Calcutta as She Was website at https://puronokolkata.com/recent/.

the seventeenth century on the site of an earlier village, Kalikata, on the Hooghly's left bank. After the Seven Years' War (1756–1763), which brought Britain and France into conflict across five continents, the English East India Company emerged as the dominant European power on the river. Calcutta began a period of growth that would transform it into one of India's great-

est cities and second only to London among the most important cities of the British Empire. Explanations of the growth of Calcutta usually focus on the forces of capitalism. Following the upheavals of the eighteenth century, it is suggested, Bengal entered a period of relative stability and peace under British colonial rule; the East India Company's monopoly on trade between India and Britain was lifted and replaced by free trade, as a result of which Calcutta was integrated into global networks of commercial exchange.

There is much truth in accounts of this kind—Calcutta attracted merchants, laborers, and investors because of the commercial opportunities it offered. What often goes unremarked is that the city's rise was wholly dependent on the Hooghly. The river was essential for the transport of people and goods, the provision of food and water, and the health and hygiene of inhabitants. As such, British authorities made concerted efforts to tame the ancient waterway and turn it to productive use.

The earliest navigational and topographical charts of the river had been produced around the time of the English settlement at Calcutta. In the early nineteenth century, a more comprehensive survey of its currents and depths was made. It confirmed what many British officials already knew: that, in places, the Hooghly was dangerously unpredictable and shallow. At the mouth of the river, where it entered the sea, a series of sandbanks made the passage of large ships perilous. Above Calcutta, the river was silting up, the operation of tidal flows and deposit of freshwater from smaller tributaries insufficient to prevent sediments building up. To arrest the river's decline, European engineers were shipped out to Bengal. They experimented with the latest techniques of irrigation and river control, using bamboo

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spurs to divert the course of currents and rake the riverbed.

Improving the river's navigability was all the more important with the arrival of steam technology in Bengal from the 1820s. In 1825, the inaugural journey of a steam-powered ship from Britain to India was completed, the *Enterprise* arriving in Calcutta to great fanfare

and media attention. Three years later, the first steamship expedition upriver from Calcutta was attempted. A specially designed flat-bottom vessel was constructed for the purpose at the Kidderpore docks, on the edge of Calcutta, and christened the *Hooghly*. It struggled against the strong currents of the Hooghly and Ganges and twice became grounded in shallow waters but successfully made it to Allahabad and back, a return voyage of some 800 miles over a couple of months. During the following decades, improvements in steam technology would significantly cut journey times for passenger and cargo transport. Regular steamer services were launched to ports across the Bay of Bengal and through the waterways of the Bengal delta to Assam.

Another significant way in which British authorities sought to make productive use of the river was in the construction of a drainage system and the provision of a regular supply of water to service the ever-growing number of households in Calcutta. The city's municipal government considered drainage and water supply essential to the well-being of its inhabitants. Successive officially commissioned studies linked mortality rates and the outbreak of infectious diseases to the absence of a sewage network and means of delivering clean water. During the 1860s, action was finally taken: A series of sewers was dug beneath street level to replace the earlier open drains. The sewers connected to the Hooghly; river water was periodically admitted to flush them out so that they drained efficiently into the salt lakes to the city's east. In that same decade, a pumping station was constructed for the collection, cleaning, and distribution of river water through the city and into a growing number of homes.<sup>8</sup>

## Water and Asia



The Hooghly River, Calcutta. View on the Hooghly, from the Elgin Collection: "Spring Tours 1894–1898." Looking north over the rooftops toward the Hooghly River at Calcutta, with the floating pontoon bridge in the distance. Source: Taylor Empire Airways website at https://tinyurl.com/yc2dkqbb.

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The technological achievements through which the Hooghly was controlled and utilized were a source of pride for colonial authorities: the progress of science and industry in Calcutta confirmed to European contemporaries the superiority of the West over Asia and the capacity of human beings to overcome the forces of nature. At no point, however, was British mastery of the river complete. Despite the efforts of engineers, water levels in the Hooghly's upper reaches continued to decline, so much so that attempts to pilot large steam ships up the river to the main branch of the Ganges, and onward to northern India, were abandoned altogether from the 1850s. Closer to the sea, strong currents and changing tidal patterns continued to confuse officials and jeopardize ships. During the rainy season, the river frequently spilled over its banks, spreading disease and ruining crops.

As such, the confidence of British officials in their capacity to manage the river was interspersed with moments of doubt. By the close of the nineteenth century, a growing number of colonial administrators acknowledged that the Hooghly, and the wider natural environment of Bengal, could never be fully predicted or controlled, an impression reinforced by the disastrous cyclones and floods that periodically struck the delta. Some

observers began to wonder if the human manipulation of India's natural environment was in some way contributing to ecological problems. Concerns were expressed about the unintended consequences of redirecting the natural flow of rivers and streams, clearing forests, and fishing on a large scale.<sup>9</sup>

Throughout the colonial period, it was not, of course, only European parties who relied upon the Hooghly in their everyday lives. Bengalis and other local peoples made use of the river to wash, drink, farm, fish, travel, and trade, as they had done for millennia. Most large-scale industries, like the jute and cotton mills that lined the Hooghly's banks, were managed by European firms, but every so often, the British domination of commerce and trade would be challenged. In the 1830s, Dwarkanath Tagore

shot to prominence as an enterprising Bengali businessman who became wealthy trading in silk, indigo, and sugar before investing in ocean shipping and beginning a steamer service on the Hooghly to rival the British steam navigation firms. <sup>10</sup> Later, as Indian nationalist opposition to colonial rule gathered momentum, the Swadeshi movement was launched—an economic boycott of British and other foreign goods and services in favor of indigenous alternatives. It included the launch of new Bengali-run steamer services that once again turned the Hooghly into an arena of commercial competition. <sup>11</sup> In the twentieth century, Calcutta was one of the most significant ports for migration across the Bay of Bengal, welcoming migrants from East and Southeast Asia in particular—not least during the tumultuous upheavals of World War II. <sup>12</sup>

The economic and strategic importance of the Hooghly in no way detracted from its sacredness to many local peoples. While to Europeans the waterway was appreciated for its material and practical value, to most Bengalis, it also possessed inestimable religious significance. The temples and spiritual centers at the most auspicious points on the river attracted an ever-growing number of devotees. Kalighat, in southern Calcutta, for example, became the focal point of the worship of Kali, the four-armed god-

dess of time, creation, destruction, and power believed by some Hindus to be *Brahman*, the ultimate reality. The turn of the twentieth century witnessed a remarkable flourishing of Bengal literature and art, epitomized above all by the writings of Rabindranath Tagore, one of Dwarkanath Tagore's grandsons in the Tagore

family's celebrated Jorasanko branch, named after the ancestral home in Calcutta that Dwarkanath established, in which Rabindranath was born. In his creative outputs, and those of many contemporaries, the Hooghly was revered and endowed with a powerful, otherworldly quality. <sup>13</sup> It remains a central focus of contemporary Bengali literature and art.

The Hooghly today faces a number of critical challenges. Though the river remains an artery for the transport of people and goods, and an

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Hindu goddess Durga is returned to the Hooghly River to mark the end of Durga Puja (festival) in Kolkata, Bengal. Source: © Shutterstock.

important base for Indian naval ships, industrial activity has stagnated, as the epicenter of India's economy has shifted away from heavy industry to information technology and services and, geographically, to Mumbai and other cities in the south. Water levels have continued to diminish; since the 1970s, the Hooghly has relied on a controversial barrage and canal diverting water from the Ganges before it enters neighboring Bangladesh. Like most rivers on the subcontinent, the Hooghly has suffered hugely from the effects of pollution, in particular the discharge of

untreated sewage and industrial waste. <sup>14</sup> One Indian court recently took the almost-unprecedented step of granting the Ganges and Hooghly the same legal rights as a human in the attempt to prevent further damage being done. <sup>15</sup> For many, however, the river remains a divine as much as a secular force. Each year, millions complete the pilgrimage to Sagar Island, where it enters the Bay of Bengal, and bathe in the spot where the waters meet. It is here that the Hooghly's sacred and secular journey across the Bengal delta comes to an end. ■

## NOTES

- 1. The story is recounted in Diana L. Eck, *India: A Sacred Geography* (New York: Harmony Books, 2012), 138–140. For a modern retelling, see R. K. Narayan, *The Indian Epics Retold: The Ramayana, the Mahabharata, Gods, Demons, and Others* (New Delhi: Penguin Books India, 1995), 28–31.
- See Louise Levathes, When China Ruled the Seas: The Treasure Fleet of the Dragon Throne 1405–1433 (New York: Simon & Schuster, 1994) on Chinese maritime activity in the Indian Ocean at this time.
- On the influence of Muslim saints in rural Bengal, see Richard Eaton, The Rise of Islam and the Bengal Frontier, 1204–1760 (Berkeley: University of California Press, 1996), 228–267.
- 4. The early Portuguese presence in the Bay of Bengal is most fully explored in Sanjay Subrahmanayam, *Improvising Empire: Portuguese Trade and Settlement in the Bay of Bengal*, 1500–1700 (Delhi: Oxford University Press, 1990).
- Joachim Campos, History of the Portuguese in Bengal (Calcutta: Butterworth, 1919),
  65.
- 6. The most revealing contemporary European account is found in the *Travels of Fray Sebastien Manrique*, vol. 1 (London: Hakluyt Society, 1927), 54–79.
- 7. G. A. Prinsep, An Account of Steam Vessels and of Proceedings Connected with Steam Navigation in British India (Calcutta: Government Gazette, 1830).
- 8. S. W. Goode, Municipal Calcutta: Its Institutions in their Origin and Growth (Calcutta: T. and A. Constable, 1916), 177–184.
- 9. Imperial Gazetteer of India: Provincial Series: Bengal, vol. 1 (Calcutta: Superintendent of Government Printing, 1909), 69–73.

- 10. On his life and career, see Blair B. Kling, *Partner in Empire: Dwarkanath Tagore and the Age of Enterprise in India* (Berkeley: University of California Press, 1976).
- 11. Sumit Sarkar, *The Swadeshi Movement in Bengal 1903–1908* (Ranikhet: Permanent Black, 2014), 92–93.
- 12. See Sunil Amrith, Crossing the Bay of Bengal: The Furies of Nature and the Fortunes of Migrants (Cambridge: Harvard University Press, 2013).
- 13. For example, in "Snatched by the Gods" in Rabindranath Tagore, Selected Poems (London: Penguin, 2005), 62–66.
- On the Hooghly's contemporary challenges, see Laura Bear, Navigating Austerity: Currents of Debt along a South Asian River (Stanford: Stanford University Press, 2015)
- 15. Anupam Trivedi and Kamal Jagat, "Uttarakhand HC Declares Ganga, Yamuna Living Entities, Gives Them Legal Rights", *Hindustan Times*, last modified March 22, 2017, http://tinyurl.com/y8fs9cda.

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