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# Sir William Jones's Indian botany: Visual archive, natural history collections, and worldmaking in the British empire

Apurba Chatterjee

*Department of History, University of Reading Edith Morley Building, Shinfield Road, Reading, RG6 6EL, UK*

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ABSTRACT

In 1784, Sir William Jones arrived in India to serve on the Supreme Court in Calcutta, where he developed his long-standing interest in botany. This resulted in a plan for a treatise on Indian plants which remained unfulfilled due to his untimely death in 1794. Examining Jones's botanical endeavours, much less known compared to his literary, linguistic, and judicial overtures, helps us explore his colonial worldmaking. My article addresses this gap in scholarship with a focus on Jones's visual archive, specifically a collection of botanical illustrations by Indian artists whom he never acknowledged in his work. Presently at the Royal Asiatic society in London, these illustrations demonstrate how visuality was central to natural historical investigation and facilitated the extraction of India's vegetal world for the British Empire. Situating Jones as a 'centre of calculation', this article highlights the complexities of the relationship between science and society, as entangled with questions of race, power, and political authority. Jones's colonial worldmaking was paralleled by a process of 'worldlessness' in the marginalisation of local expertise. This double-movement, in turn, brings into sharper relief the differential premises of colonial knowledge formation, with implications for life and politics in late eighteenth-century India.

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This article examines Sir William Jones's practices of Indian botany and use of images by Indian artists, as part of his colonial worldmaking. While Jones is well-known as a linguist, philologist, and jurist, his botanical endeavours remain a much less known aspect of his life and career. Even less familiar is his archive of botanical illustrations, currently housed in London at the Royal Asiatic Society of Great Britain and Ireland with his personal papers. Together with his wife Lady Anna Maria's drawings, the archive features botanical illustrations commissioned by Jones from Indian artists whom he never acknowledged. This article aims to highlight the significance of these visual productions at the intersection of colonial science and society. I argue that these illustrations are an important means to understand how Jones conceptualised the role of natural history in the British Indian Empire. Taking his visual archive as a case study of the British Empire's emerging ascendancy over India's vegetal world, I show that Jones enacted the colonial politics of difference in late eighteenth-century India in his capacity as an amateur botanist. In so doing, the article addresses the deracinating dynamic of the European natural historical conventions within a colonial setting. Indian artists working within the confines of this new scientific paradigm nevertheless exercised a perceptible degree of agency in their artistic expression.

Postcolonial and decolonial scholarship has long drawn connections between colonialism, knowledge-making, and present-day legacies. As Adom Getachew argues, later worldmaking projects of anticolonial nationalism were determined by European imperialism's 'world-constituting force that violently inaugurated an unprecedented era of globality'.[1] Operating through global networks of circulation and exchange, colonial knowledge-making was based on asymmetrical power relations, exploitation of labour and expertise, and resource extraction.[2] Writing on India, Gayatri Chakravorty Spivak has suggested that British domination was a process of 'worlding' in which knowledge was central.[3] Drawing upon Edward Said's idea of the 'worldliness' of intellectual production, I interpret Jones's botanical interests in terms of the

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*E-mail addresses:* capurba009@gmail.com, a.chatterjee@reading.ac.uk.

[1] Adom Getachew, *Worldmaking After Empire: The Rise and Fall of Self-Determination* (Princeton: Princeton University Press, 2019), p. 2.

[2] David Livingstone, *Putting Science in its Place. Geographies of Scientific Knowledge* (Chicago: University of Chicago Press, 2003), pp. 135–178.

[3] Gayatri Chakravorty Spivak, 'The Rani of Sirmur: An Essay in Reading the Archives', *History and Theory*, 24 (1985) 247–272, https://doi.org/10.2307/2505169.

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priorities of the British Indian administration he served, which promoted his orientalist pursuits.[4] Jones's Indian knowledge was facilitated by native interlocutors. On this point, it would be useful to bring in Rolando Vazquez's idea of 'worldlessness', that is, 'the emptying of our historical site of experience and loss of human diversity, of alternative worlds'.[5] Understood here as the marginalisation of Indian expertise, this article posits worldlessness as complementary to Jones's instrumentalist worldliness.

In his self-presentation, Jones stressed political and cultural hegemony in his projects, while eliding their extractive aspects, as seen in his 1793 portrait by English artist Arthur William Devis (Fig. 1). Devis depicts Jones in Calcutta pointing at a volume of *Asiatick Researches*, the flagship journal of the Asiatic Society he had founded in 1784 after his arrival in India. The volume is flanked by a quill alongside some papers and a statue of Ganesha, the Hindu God of wisdom. While the statue acknowledges Jones's engagement with Indian life and culture, this connection is subsumed within the neoclassical façade before which he sits. Despite admiring the orient, Jones did not feel at home in India. He had striven for almost four years to become puisne judge at the Supreme Court of Judicature to improve his financial and social status. His ultimate ambition was a harmonious life in the English countryside with his wife, surrounded by pastoral bliss.[6] This did not materialise, as he passed away in 1795. Jones's career coincided with structural changes within the British East India Company (EIC) and its Indian administration.[7] According to Joshua Ehrlich, colonial knowledge allowed the Company to renegotiate its trading interests and political power.[8] The apparent nobility of these intellectual aspirations should not deter us from its inherent contradictions. By the 1780s, the British had begun to distance themselves from Indian life and society. Their self-understanding was based on abstract principles that suited their own imaginary of authority.[9] Colonial studies were premised on othering, and by the early nineteenth century produced ideas of India as primitive, static, and backward.[10] The subcontinent could only be rescued by the British as harbingers of modernity and progress.

**Fig. 1.** Arthur William Devis, *Sir William Jones* (F840, British library).

While ideas of the eighteenth century in India as an 'age of partnership' have long been questioned by scholars like Peter Robb and Miles Ogborn, a popular consensus still sees the period as one of positive, enthusiastic European engagement, contrasting with the racialised civilisational hierarchies of late-nineteenth century liberal imperialism.[11] For instance, as Jürgen Osterhammel posits that eighteenth-century 'Europeans ventured into Asia more as missionaries, traveling scholars, diplomats, and armed merchants than as colonial overlords'.[12] An important component of this view is that of colonial encounter as a disinterested, innocent quest for knowledge, which Mary Louise Pratt has termed 'anti-conquest'. Pratt's influential identification and criticism of this concept have had a great impact on studies of colonial knowledge-making.[13] Drawing upon Said, Javed Majeed and Kate Teltscher have argued that Jones's orientalist scholarship was part of his role within the colonial socio-political order.[14] For Kapil Raj, Jones was not a lone expert; rather, his expertise was based on networks of 'intercultural trust' that he had developed with native informants, most of whom he named.[15] Although Raj acknowledges asymmetries of power, his approach falls short of interrogating how these may have fed into Jones's practice of colonial knowledge and its impact. Recently, Joshua Ehrlich has addressed the complexities of Jones's positioning as a man of knowledge.[16] In order to secure patronage as a man of letters, Jones made himself agreeable to all governors-general and steered clear of identifying with any fixed political philosophy. Although in England he favoured the American Revo-

[4] H. A. Giroux, 'Edward Said and the Politics of Worldliness: Toward a "Rendezvous of Victory"', *Cultural Studies ↔ Critical Methodologies*, 4 (2004) 339–349, https://doi.org/10.1177/1532708603262783.

[5] Rolando Vazquez, 'Precedence, Earth and the Anthropocene: Decolonizing Design', *Design Philosophy Papers*, 15 (2017) 77–91(p. 85). https://doi.org/10.1080/14487136.2017.1303130.

[6] Garland Cannon, *The Life and Mind of Oriental Jones: Sir William Jones, the Father of Modern Linguistics* (Cambridge: Cambridge University Press, 1990), p. 334.

[7] Huw Bowen, *The Business of Empire: The East India Company and Imperial Britain, 1756–1833* (Cambridge: Cambridge University Press, 2006).

[8] Joshua Ehrlich, *The East India Company and the Politics of Knowledge* (Cambridge: Cambridge University Press, 2023).

[9] Jon E. Wilson, *The Domination of Strangers. Modern Governance in Eastern India, 1780–1835* (Basingstoke: Palgrave Macmillan, 2008).

[10] David Washbrook, 'India, 1818–1860: The Two Faces of Colonialism', in *Oxford History of the British Empire*. Volume III: The Nineteenth Century, ed. by Andrew Porter (Oxford: Oxford University Press, 1999), pp. 395–421.

[11] Miles Ogborn, *Global Lives: Britain and the World, 1550–1800* (Cambridge: Cambridge University Press, 2008); Peter Robb, *Sentiment and Self: Richard Blechynden's Calcutta Diaries, 1791–1822* (New Delhi: Oxford University Press, 2011).

[12] Jürgen Osterhammel, *Unfabling the East: The Enlightenment's Encounter with Asia*. Translated by Robert Savage (Princeton: Princeton University Press, 2018), p. 10.

[13] Mary Louise Pratt, *Imperial Eyes. Travel Writing and Transculturation* (New York: Routledge, 1992).

[14] Javed Majeed, *Ungoverned Imaginings: James Mill's The History of British India and Orientalism* (Oxford: Clarendon Press, 1992), p. 19; Kate Teltscher, *India Inscribed: European and British writing on India, 1600–1800* (New Delhi: Oxford University Press, 1995), pp. 192–228.

[15] Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900* (New York: Palgrave Macmillan, 2007), pp. 95–138.

[16] Joshua Ehrlich, 'William Jones and the Politics of Knowledge', *Global Intellectual History*, 10 (2023) 1–5, https://doi.org/10.1080/23801883.2023.2184411.

lution's radicalism, he believed Indians must be 'governed with absolute power', based on an enlightened despotism derived from the principles of Mughal administration.[17] His orientalism depended on the continuity of British imperial power. Knowledge was Jones's path to fame and glory; but this was not simply knowledge for knowledge's sake. As this article suggests, Jones's botanical pursuits were both part of and responsive to the demands of colonial governance.

Jones's fascination with plant life dated back to his childhood. At Harrow, he maintained a garden and amused himself with botanical studies and fossil-collecting.[18] His botanical imagination became more pronounced when he accompanied the Spencers on their Grand Tour. The flora was often the first feature that he observed in a new place, which he would have read about beforehand. For example, in Nice, he was particularly captivated by winter-flowering plants and those not native to Britain, such as olives, pomegranates, and palms. Disembarking at the Indian Ocean island of Hinzuan (now Anjouan) on his passage to India in 1783, Jones delighted in Hinna or henna, with which he was already familiar from his study of Arabic poetry.[19] In India, botany provided Jones with intellectual stimulation following a bout of fever in 1784 when Dr John Fleming refused him every activity, excepting examination of flowers. Plants were brought to his bedside, and Fleming lent Jones Carl von Linnaeus' works, among which he considered *Philosophia Botanica* to be the most important.[20] This article reasserts the ubiquity and significance of Linnaean classification in Jones's Indian botany, as will be seen in style and format of the illustrations.

In his botanical ventures, Jones found a constant companion in his newlywed, Anna Maria. Anna was the daughter of Reverend Jonathan Shipley, brother of artist William Shipley, who helped establish the Society of Artists. Shipley's drawing academy was at the forefront of artistic education in London, training EIC draughtsmen.[21] Besides the Company's Botanical Gardens, many of the couple's observations were made at their cottage in Krishnanagar.[22]While regularly writing to her father about exotic animals, Anna collected plants during morning walks for her husband to examine.[23] Jones studied them for hours, though he found investigating small blossoms and grasses difficult due to his deteriorating eyesight. After the plants were dissected, Anna drew and coloured them.[24] As plants were brought to them and the couple visited neighbours' gardens, botany allowed the Joneses to participate in late-eighteenth-century Calcutta's social life. Scholarship on the sociability of botany in this period has drawn attention to the fact that skilled labour of the gardeners, suppliers and artists was consistently overlooked; here, I suggest that Indian natural historical illustrators were similarly relegated to obscurity.[25] While Jones is representative of the intellectual interests of his sociopolitical milieu, my own examination of his discourse is informed more by his influential status for the project of colonial knowledge-making. My intervention points to a productive field for exploring both the coherence of Jones's ideas about nature with his historical observations, and how European conceptions were imposed on India.

During his voyage to India, Jones had drafted a memorandum of the tasks that he intended to accomplish. His attention was 'particularly directed to those studies, by which he was to enlarge the requisite qualifications for discharging the duties of his public station, with satisfaction to himself and benefit to the community'.[26] Nature was one such study coinciding with wider colonial overtures, as Colonel Robert Kyd had proposed the establishment of a botanical garden in Calcutta. Kyd argued that research into the economic importance of 'known as well as unknown' plant, animal, and mineral resources in the Company's territories be prioritised over mere amusement with Indian exotica.[27] Natural historical interests, however, extended beyond official Company naturalists. In 1791, Kyd himself lauded private individuals for their endeavour 'to enlarge the sphere of the resources of the state', thereby leading to the advantage of the government without any detriment.[28] Jones's fascination with Indian environment as an amateur botanist advanced and glorified British administration.

Botanical practices also became instrumental in Jones's vision of India, which in turn found expression in native artists' images in his archive. I begin with an outline of the state of late eighteenth-century natural illustrations, moving on to an in-depth analysis of Indian artists' images in the second section. It may be argued that many features highlighted and discussed there, such as the conventions of Enlightenment-era natural history illustrations, were common or standard in the art of the time. However, in pointing out the contingency of the repertoire available to scientific patrons and artists, I indicate the potential significance of choices made by Jones and his atelier concerning content and format. Furthermore, in a context of resource extraction and labour exploitation, Jones's application of specific modes of representing nature take on additional meaning. His use of Linnaean binomialism, for example, was not only a colonial act but one that built upon the edifice of his Sanskritic scholarship, as taught to him by *pandits*. His use of elite Indian learning thus amounted to appropriation. The final section revisits Jones's interaction with Indian experts, including artists. Their interventions were more than just stylistic flourishes. Local draughtsmen carefully responded to contradictory pressures, from the expectations of a new ruling class, through indigenous traditions, to their subaltern position in Jones's scientific project.

## Illustrating nature in the late eighteenth century

The second half of the eighteenth century witnessed the promotion of the usefulness of natural historical knowledge in the British world. This ascent was reinforced by George III's fascination with the idea of improvement in agriculture and trade. Botany was crucial not only given its relevance to plantation economy, but also

[17] Ehrlich, 'William Jones and the Politics of Knowledge'. See also Michael Franklin, *Orientalist Jones: Sir William Jones, Poet, Lawyer, and Linguist, 1746–1794* (New York: Oxford University Press, 2011), pp. 1–42.

[18] Lord Teignmouth, *Memoirs of the Life, Writings and Correspondence of Sir William Jones* (London: John Hatchard, 1807), pp. 19 and 36.

[19] Teignmouth, *Memoirs*, p. 92; William Jones, 'Remarks on the Island of Hinzuan or Johanna', in Anna Maria Jones, *The Works of Sir William Jones* (London: G. G. and J. Robinson, etc., 1799), Vol. 1, p. 493.

[20] Cannon, *The Life and Mind*, p. 217.

[21] Mildred Archer, *British Drawings in the India Office Library*, Vol.1, Amateur Artists (London: HMSO, 1969), pp. 1–5.

[22] Letter from Jones to Patrick Russell, 28 September 1784 in *Letters of Sir William Jones* (Oxford: Oxford University Press, 1970) ed. by Garland Cannon, Vol. II, p. 707; Letter from Jones to Sir Joseph Banks, 18 October 1791, in Lord Teignmouth, *Memoirs*, p. 431, and Lady Jones's Notebooks at Royal Asiatic Society, London.

[23] Letter from Jonathan Shipley to Benjamin Franklin, 1784 (unpublished) in the *Papers of Benjamin Franklin* http://franklinpapers.org/framedVolumes.jsp, last accessed 18 December 2018.

[24] Franklin, *Orientalist Jones*.

[25] Sarah Easterby-Smith, *Cultivating Commerce. Cultures of Botany in Britain and France, 1760–1815* (Cambridge: Cambridge University Press, 2017); Anna K. Sagal, *Botanical Entanglements. Women, Natural Science, and the Arts in Eighteenth-Century England* (Charlottesville: University of Virginia Press, 2021).

[26] Teignmouth, *Memoirs*, p. 239.

[27] India Office Records, IOR/P/3/33, pp. 191–193 (Asia, Pacific, and African Collections, British Library).

[28] Original Correspondence, No. 79, dated 4 November 1791, from Col. Robert Kyd to Mr. E. Hay. (National Archives of India, New Delhi).

for sourcing new plants with domestic, commercial, and medical uses. Long before becoming a public institution in the 1840s, the acquisition of colonial natural resources centred on the Royal Botanical Gardens at Kew. Kew spearheaded natural historical exchanges, which in turn connected to domination, profiteering, and 'biopiracy'.[29] By the mid-nineteenth century, Kew commanded a series of botanical gardens all over the British Empire. At the helm of these transformations stood Sir Joseph Banks. Following his *Endeavour* voyage, the king invited him to help in the Garden's reorganisation. Becoming President of the Royal Society in 1778, he sent out botanists around the globe in search of specimens.[30] Banks oversaw what Bruno Latour has called 'cycles of accumulation' of resources and data that involved distant networks and the joint processing of knowledge with the Board of Trade, Privy Council, EIC, and the British Museum. Banks achieved institutional status on par with these pillars of the establishment, and according to David Philip Miller, himself became an influential 'centre of calculation'.[31] The circulation and redistribution of plants alongside Britain's expansionist ambitions, however, went on to interfere with indigenous agriculture, leading to nutritional deficiencies and chronic illnesses in the longer term.[32]

Within India, the rhetoric of improvement resulted in the EIC's prioritisation of botany over other forms of natural knowledge, like zoology, signifying its interest in enhancing land revenue and extending commercial gains. Not only did botany aid territorial acquisition and provide access to natural wealth, but it also helped pay lip service to Indian welfare.[33] Botany encouraged colonialists to envision the non-European world as a wilderness to be explored, domesticated, and controlled. Central to imperial domination is extraction, as Pratt evocatively writes: 'one by one the planet's life forms were to be drawn out of the tangled threads of their life surroundings and rewoven into European-based patterns of global unity and order'.[34] In India as elsewhere, British imperialism generated narratives that represented the native populace as lazy and incapable of making productive use of natural resources.[35] Based on class-based property and game laws, British measures for environmental conservation in the nineteenth century denied sources of timber and fodder to local communities, while the number of wild animals in forests declined due to colonial *shikars* (hunting expedition).[36] Science was thus a major factor in the exercise of imperial power, fostering a politics of differentiation. The consequences of this aspect of our collective inheritance have been disproportionately negative towards the developing world.

Jones emerged as an alternative centre of calculation and facilitated the circulation of information and resources. Not only did he communicate with official EIC naturalists Johann Gerhard Koenig, Dr William Roxburgh, and Dr Patrick Russell, but also emerged as one of Banks' most valuable correspondents.[37] Jones believed that the lack of an active, traveling botanist was a major gap in knowledge production which he could only partially fill as a 'private man'.[38] Jones arranged for seeds and specimens to be sent to Banks. Banks oversaw Jones's collaboration with Secretary of War, George Yonge to transmit Indian medicinal plants and *Dacca* cotton to the West Indies.[39] While the Company consulted Banks, Jones worked with Colonel Kyd, who submitted a paper for the *Asiatick Researches*, 'Remarks of the Soil and Vegetation of the Western Side of River Hooghly'. Jones hoped to enrich the Botanical Gardens in Calcutta by introducing Chinese, Persian, and Arabic plants, together with all Indian ones.[40] Images from native artists were meant to illustrate Jones's treatise on botany, which remained unfinished due to his untimely death. They bring into focus imperial enterprise towards the investigation and in turn, use of Indian flora.

As flora and fauna around the world could not always survive arduous journeys to the metropole, visual representations became the best possible alternative. Artists were an important presence in colonial expeditions and voyages.[41] Besides being a form of elite sociability, images were prominent in natural knowledge-making to the extent that Banks considered them paramount.[42] Naturalists throughout Europe, according to Daniela Bleichmar, not only adhered to 'a prevailing iconography and style, but also the value they assigned to the visual, the way they produced and used images, and the criteria they used to judge the illustrations'.[43] Images catered to the identification of species for classification. Imperial expansion coincided with the excitement of re-ordering the natural world as a constituent of Carl von Linnaeus' binomial taxonomy. The fixing of India's environment to European command through imagery was complicated by the fact that majority of illustrations were by native artists. Professional British artists who visited India in this period did not consider such commissions as lucrative as portraiture and landscape art.[44] In identifying a 'Company School', Mildred Archer showed how native artists adjusted their styles to suit officials' taste.[45] Recently, her term has been replaced by William Dalrymple and Yuthika Sharma's phrase, 'Indian Export Art', emphasising artists' diverse backgrounds. Their landmark 2019 exhibition 'Forgotten Masters' was a much-needed celebration of

[29] Richard Drayton, *Nature's Government. Science, Imperial Britain, and the 'Improvement' of the World* (New Haven: Yale University Press, 2000), pp. 55–128.

[30] John Gascoigne, *Joseph Banks and the English Enlightenment: Useful Knowledge and Polite Culture* (Cambridge: Cambridge University Press, 1994). Recent research, however, understands Joseph Banks more as a facilitator than an agent of global science and empire. See Simon Werrett, 'Rethinking Joseph Banks', *Notes and Records. The Royal Society Journal of the History of Science*, 73 (2019) 425–29, https://doi.org/10.1098/rsnr.2018.0064.

[31] Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, MA: Harvard University Press, 1987), pp. 219–23; and David Philip Miller, 'Joseph Banks, empire, and "centers of calculation" in late Hanoverian London', in *Visions of Empire. Voyages, Botany, and Representations of Nature*, edited by David Phillip Miller and Peter Hanns Reill (Cambridge: Cambridge University Press, 2010), pp. 21–37.

[32] Lizzie Collingham, *The Hungry Empire: How Britain's Quest for Food Shaped the Modern World* (London: Penguin, 2017), pp. 239–48.

[33] Zaheer Baber, 'The Plants of Empire: Botanic Gardens, Colonial Power and Botanical Knowledge', *Journal of Contemporary Asia*, 46 (2016) 659–679, https://doi.org/10.1080/00472336.2016.1185796.

[34] Pratt, *Imperial Eyes*, p. 94.

[35] William Tennant, *Indian Recreations, Consisting Chiefly of Strictures on the Domestic and Rural Economy of the Mahommedans and Hindus* (Edinburgh: Printed by C. Stewart, 1803), Vol. 2, pp. 65 and 418.

[36] Vijaya Ramadas Mandala, *Shooting a Tiger: Big-Game Hunting and Conservation in Colonial India* (New Delhi: Oxford University Press, 2018), pp. 220–256.

[37] Garland Cannon, 'Sir William Jones, Sir Joseph Banks, and the Royal Society', *Notes and Records of the Royal Society of London*, 29 (1975) 205–230 (p. 209) https://doi.org/10.1098/rsnr.1975.0016; Teignmouth, *Memoirs*, pp. 409, 429–433, 435–436.

[38] Jones to Sir Joseph Banks, 18 Oct. 1791, in Cannon, ed., *Letters*, Vol. II., pp. 891–92.

[39] Cannon, *The Life and Mind*, pp. 277 and 289.

[40] Cannon, *The Life and Mind*, p. 332.

[41] Geoff Quilley, 'By cruel foes oppress'd': British naval draughtsmen in Tahiti and the South Pacific in the 1840s, *Journal of Historical Geography*, 43 (2014) 71–84, https://doi.org/10.1016/j.jhg.2012.10.003.

[42] Dumbarton Oaks Research Library and Collection's Online Exhibition on the *Botany of Empire* https://www.doaks.org/resources/online-exhibits/botany-of-empire/illustration-and-representation (Accessed 6 October 2017).

[43] Daniela Bleichmar, *Visible Empire. Botanical Expeditions and Visual Culture in the Hispanic Enlightenment* (Chicago: University of Chicago Press, 2012), pp. 8–9.

[44] Mildred Archer, *Natural History Drawings in the India Office library* (London: HMSO, 1962), p. 54.

[45] Mildred Archer, *Company Drawings in the India Office Library* (London: HMSO, 1972).

Indian artistic excellence under colonial rule.[46] However, we must also account for the socio-political impact of British imperialism on Indian art and artists, and how they coped with the new balance of power.

Writing on botanical illustrations in colonial India, Beth Fowkes Tobin and Romita Ray have focused on British intentions to dominate and manage nature. According to Tobin, Indian plants' alienation from their local settings aestheticised them for a British audience. For Ray, this natural environment represented an excess that the colonisers attempted to master through visuality. Tobin highlights the idea of resistance in Indian artists' defiance of Western botanical conventions as they took inspiration from their Mughal heritage.[47] Scholarship has since re-evaluated this patron-client relationship, away from seeing resistance to imagining a more congenial interaction between the British and Indians in natural historical enquiry. While Tobin and Ray focus on the complexities of socio-political existence in plant imagery, Hermione de Almeida and George H. Gilpin address the British romanticisation of nature.[48] Theresa Kelley emphasises that Britons viewed Indian flora not only based on their own knowledge, but also that supplied by native artists and informants. Botany thus became a realm of conducive dialogue and collaboration that surpassed colonialism. For Kelley, the presence of even anonymised Indian artists resounds in the colonial archive through their art.[49] Kelley draws upon botanist Henry Noltie, who suggests that drawing and painting were an important avenue, wherein Indians contributed natural historical practices in their own right.[50]

However, asymmetrical power relations resulted in condescension. For British patrons, Indians' lack of perspective made them good copyists at best. They gave native artists European natural historical manuals as models to follow.[51] Pre-colonial Indian art was characterised by appreciation of the varieties of flora and fauna in the subcontinent and their relevance to their ritual and cultural aesthetics in everyday life. While Hindu and Buddhist sites pictured natural efflorescence, Mughal and Rajput painting represented politico-social institutions using environmental symbolism.[52] Mughal artists had long been familiar with European natural historical conventions, but did not directly replicate them; instead, they adapted western modes to suit the representation of imperial authority. Under British rule, however, artistic self-expression as championed in Mughal art since Jahangir, was to be replaced with the need to fit the European order.[53] Besides an unsurpassable economic gulf with their patrons, the precedence of naturalists' vision over that of the artist and draughtsman resulted in a classic instance of what Lauren Daston and Peter Galison have termed 'four-eyed sight'.[54] Most native artists remain anonymous, which we may interpret in terms of racialised, epistemic violence.[55] The specific implication of this imbalance for Jones's archive will be explored in the final section of this article.

Fuller acknowledgement of the differential politics of knowledge-making is a necessary step in advance of identifying native artists' contribution, aesthetic agency, and their limits. Between the extremes of resistance and collaboration, here I consider how Indian artists both versed themselves in European natural historical illustrations and transformed them based on local conventions. Such artistic interventions reveal contradictions within the British command over India's natural environment. Jones's Indian botanical illustrations show how colonial extraction was made possible by classification and contributed to what Banu Subramaniam has recently called the 'deanimation of the natural world'.[56] Jones was apprehensive of the quality of any kind of botanical image which perhaps explains why he placed a premium on universal standards.[57] He turned out to be no exception in providing Indian artists with European illustrations for emulation; images embedded visions of nature within the culture of imperialism.

## Indian illustrations in Jones's botanical archive

There are sixteen botanical illustrations by Indian artists in Jones's botanical archive at Royal Asiatic Society: all of these are preserved in folders and boxes, except for two that have been framed and are displayed in the corridors. Here, I examine four images which have been selected on the basis of their representative features and distinctive characteristics. The interplay between worlding and worldlessness is clear in visual representations that served an imperial purpose but relied on indigenous effort. Representation is central to colonial worldmaking through what Vazquez calls 'modernity's anthropocentric hubris and its drive towards earthlessness'.[58] The deracination necessarily involved in image-making not only facilitated the circulation of knowledge across the British Empire, but also transformed nature's vitality into immutable, timeless non-entities. These abstractions could then be examined, understood, and reorganised as part of western scientific rationality.

Given the unfinished nature of Jones's botanical project – and the images' removal from his discussions – textual information on the drawings is indicative of data and aspects that were prioritised. The image of *Eugenia malaccensis* (Fig. 2), identified as *Syzgium aqueum* by Noltie), for example, demonstrates this partial and hierarchical approach.[59] The unsigned image, since attributed to Zain-al-Din, carries only the Latinate Linnaean name of the plant, together with the fact that it bloomed in March 1790. Zain-al-Din signed only two images but drew at least eleven. The artist from

[46] *Forgotten Masters: Indian Painting for the East India Company*, ed. by William Dalrymple (USA: Bloomsbury, 2019).

[47] Beth Fowkes Tobin, *Picturing Imperial Power: Colonial Subjects in Eighteenth-century British Painting* (Durham: Duke University Press, 1999), pp. 174–201; Romita Ray, *Under the Banyan Tree: Relocating the Picturesque in British India* (New Haven: Yale University Press, 2013).

[48] Hermione de Almeida and George H. Gilpin, *Indian Renaissance. British Romantic Art and the Prospect of India* (Aldershot: Ashgate, 2005).

[49] Theresa M. Kelley, *Clandestine Marriages: Botany and Romantic Culture* (Maryland: The John Hopkins University Press, 2012), 162–209.

[50] Henry J. Noltie, *Robert Wight and the Botanical Drawings of Rungiah & Govindoo* (Edinburgh: Royal Botanical Garden, 2007). Book 2.

[51] Archer, *Company Drawings*, p. 6.

[52] *Flora and Fauna in Mughal Art, ed. by* Som Prakash Verma (Mumbai: Marg, 1999).

[53] Ebba Koch, 'Jahangir as Francis Bacon's Ideal of the King as an Observer and Investigator of Nature', *Journal of the Royal Asiatic Society*, 19 (2009) 298–300, https://doi.org/10.1017/S1356186309009699; J. P. Losty, 'Further Light on Mughal Flower Studies and their European Sources', Working Paper, 2014, from: https://www.academia.edu/6285901/Further_Light_on_Mughal_Flower_Studies_and_their_European_Sources (Accessed 29 December 2018).

[54] Lorraine Daston and Peter Galison, *Objectivity* (Zone Books, 2010), pp. 84–96; Deepak Kumar, 'Botanical Explorations and the East India Company: Revisiting 'Plant Colonialism'', in *The East India Company and the Natural World*, ed. by Vinita Damodaran, Anna Winterbottom, and Alan Lester (New York: Springer, 2015), p. 29.

[55] Gayatri Chakravorty Spivak, 'Can the Subaltern Speak', in *Marxism and the Interpretation of Culture*, ed. by Cary Nelson and Lawrence Grossberg (Basingstoke: Macmillan Education, 1988), pp. 279–283.

[56] Banu Subramaniam, *Botany of Empire. Plant Worlds and the Scientific Legacies of Colonialism* (Seattle: University of Washington Press, 2024), p. 55.

[57] William Jones, 'The Design of a Treatise on the Plants of India' in Anna Maria Jones, *The Works of Sir William Jones* (London: G. G. and J. Robinson, etc., 1799), Vol. 2, p. 8.

[58] Vazquez, 'Precedence', 79.

[59] Henry Noltie, *Jones Collection of Botanical Drawings at the Royal Asiatic Society, London*, unpaginated and unpublished catalogue at the library of the Royal Asiatic Society, London.

**Fig. 2.** Zain-al-Din, *Eugenia malaccensis*, now identified as *Syzgium aqueum* (Inventory Number: RAS 025.084).

Patna must have been introduced to the Joneses by their neighbours and Zain-al-Din's previous patrons, Sir Elijah Impey and Lady Impey.[60] Jones was certainly interested in the Indian names of plants, but did not include them on the images by native artists. In the incomplete image of another unnamed plant (Fig. 3) – later identified as *Aegle marmelos* or *Sriphala* in Sanskrit – only the right side of the paper was illustrated. The rest was left blank to make space for observations, we can reasonably infer, in common with many other contemporary works of the genre.[61] Furthermore, a top-right cartouche focuses only on the fructifying parts and features the caption: 'A. The Flower from Nature a viewed thro' a single Lens. B the Fruit'. This key clearly anticipates an annotative and dissecting pattern, as flowering parts were the focus of images in Linnaean thought.[62] Elsewhere, in an image of *Butea superba* (Fig. 4)

[60] For more information on Lady Impey's natural historical practices, see Andrew Topsfield, 'The Natural History Paintings of Shaikh Zain-ud-Din, Bhawani Das, and Ram Das' in *Forgotten Masters: Indian Painting for the East India Company*, ed. by William Dalrymple (London: Bloomsbury, 2019), pp. 40–75; Apurba Chatterjee, 'A Memsahib's Natural World: Lady Mary Impey's Collection of Natural History Paintings' in *Women, Collecting, and Cultures beyond Europe*, ed. by Arlene Leis (New York: Routledge, 2022), pp. 100–18.

[61] Noltie, *Jones Collection of Botanical Drawings*.

[62] Kärin Nickelsen, *Draughtsmen, Botanists and Nature: The Construction of Eighteenth-Century Botanical Illustrations* (Dordrecht: Springer, 2006), pp. 71–105.

**Fig. 3.** Zain-al-Din, *Unnamed Plant*, now identified as Aegle marmelos (Inventory Number: RAS 025. 086).

discussed below, leaves that almost filled the paper have been left uncoloured.[63] Signed by Zain-al-Din, here the absent but projected musings of Jones the botanist were given precedence over the artist's Mughal aesthetic training, which typically ensured that the entire page was filled. Jones foregrounded his European learning piece-by-piece, in black-and-white, and removed from the realities of plant-life in India.

This end to Jones's journey into Indian botany had begun with Linnaeus' *Philosophia Botanica*. Together with Anna, he identified around 170 genera, and prioritised binomial nomenclature as a tool for classifying natural diversity into universal, hierarchical categories. Jones was far more committed to Linnaean thoughts than recent scholarship has suggested. Jones linked his appreciation of the Linnaean classificatory system to his aesthetic enjoyment as an amateur. In the Tenth Anniversary Discourse (1793) of the Asiatic Society delivered in the presence of governor-general Lord Cornwallis, Jones claimed, '[W]e cannot employ our leisure more delightfully than in describing all new Asiatick plants in the Linnaean style and method, or in correcting the descriptions of those already known, but of which dry specimens only or drawings, can have been seen by most European botanists'.[64] Jones called Linnaeus a northern Brahmin, and performed a Linnaean persona in his promotion of Indian plants for their utility.[65] Not only did he echo an interest in oeconomy and progress in knowledge in his Second Anniversary Discourse (1785), but also Linnaeus' playful sense of floral metaphor and classificatory schema in his rhetoric:

> 'If Botany may be described by metaphors drawn from the Science itself, we may justly pronounce a minute acquaintance with plants, their classes, orders, kinds and species to be its flowers, which can only produce fruit by application of that knowledge to the purposes of life …'[66]

[63] Noltie, *Jones Collection of Botanical Drawings*.

[64] William Jones, 'The Tenth Anniversary Discourse of the Asiatic Society' in Jones, *The Works*, Vol. 1, p.155.

[65] Lisbet Koerner, *Linnaeus: Nature and Nation* (Cambridge, MA: Harvard University Press, 1999), pp. 33-55 and 113-129.

[66] William Jones, 'The Second Anniversary Discourse of the Asiatic Society' in Jones, *The Works*, Vol. 1, p. 14.

**Fig. 4.** Roxburgh artist, *Butea superba* (Inventory Number: RAS 025.070).

The commingling of Linnaean botany with the expansion of the British Indian Empire also manifests in Jones's poem *The Enchanted fruit, or The Hindu Wife*, as Britannia emerges all-pervasive, sustaining life and vegetation 'In British, or in Indian Air!'[67] Similar sentiments were later echoed in Robert Thornton's celebration of Britain's botanical empire in *The Temple of Flora,* published between 1807 and 1812. In employing literary categories within natural history, Jones adhered to what Tita Chico calls the experimental imagination.[68] Jones drew upon his poetic talents to think closely about Indian botany while promoting scientific terminology. With Ehrlich, I suggest that Jones positioned himself as a man of letters and science in tandem, partly because botany and rhetoric helped him occupy a position as a public intellectual without taking a contentious political position. It is precisely because of this mercurial quality that I emphasise Jones's worldliness.

Jones's imbuing and over-writing of his visual archive with Latin nomenclature itself had deeper scriptural and literary significance, going back to Genesis. The act of encompassing natural diversity through hierarchical categories echoed Adam's naming of the animals in the Bible as a symbol of his authority.[69] Europeans' search for Paradise elsewhere, as Richard Grove shows, fed into old ambitions to strive for a lost Eden in the east, which were vital for imperial expansion into the nineteenth century.[70] Given Jones's parallel fascination with nature and language in the Mediterranean and Indian Ocean worlds, he chose to express this idea in Classical terms. Writing from Krishnanagar in 1787, Jones described his idyllic surroundings to Lady Georgiana Spencer,

> it would bring to your mind what the poets tell us of the golden age; for not to mention our flocks and herds that eat bread out of our hands you might see a kid and a tiger playing together at Anna's feet.[71]

Jones's appropriation of tradition allowed him to reimagine India's wilderness as domesticated. As British agriculture at home and in plantations abroad became more intensive through property concentration and unfree labour, increasingly ideas of a rustic countryside were elevated above these realities, which translated to India in complex ways.[72] Such imaginings also fed into the representations of the picturesque: when Jones's return was speculated in the London press in 1790s, it was believed that he would bring with him landscape paintings featuring the ruins in India.[73]

The images' incompleteness and tendency towards restraint suggest deracinating conventions more than the curtailment of Jones' plans. Scientific images were not exempt from eighteenth-century concepts of taste and philosophical appreciation but idealised the examination of nature. In their immediate documentation of foreign lands and curious flora and fauna, unfinished drawings visualised the exploratory spirit of colonial expeditions.[74] Botanical images in Jones's archives take an approach widely used by official naturalists like Benjamin Heyne. To expedite and maximise production, Heyne recommended that Indian artists paint only a plant's flower and leaf to completion first and attend to the rest afterwards.[75] Jones's visual archive consistently omits plants' native environment and setting through a plain background. European natural historical illustrations used neutral backgrounds to highlight the characteristic features of plants; however, in British India, such a measure constitutes a colonial displacement.[76] The implication of detachment is even more pronounced in the *Butea* image, one of two by an artist who also worked for William Roxburgh. In this case, the flower pod has not been shown on the plant but detached from it. The sizes of both the dissected flower and the pod have been enlarged, giving the impression that these might have already been examined. In contrast to *Eugenia/Syzgium* image,

**Fig. 5.** Hand-coloured European print representing Acanthus (Inventory Number: RAS 025).

[67] William Jones, 'Sir William Jones, 'The Enchanted fruit, or The Hindu Wife', in Anna Maria Jones, *The Works of Sir William Jones* (London: G. G. and J. Robinson, etc., 1799), Vol. 6, pp. 198–199.

[68] Tita Chico, *The Experimental Imagination. Literary Knowledge and Science in the British Enlightenment* (Stanford: Stanford University Press, 2018).

[69] Staffan Müller-Wille, 'Walnuts at Hudson Bay, Coral Reefs in Gotland The Colonialism of Linnaean Botany', in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, ed. by Londa Schiebinger and Claudia Swan (Philadelphia: University of Pennsylvania Press, 2005), pp. 34–48; Susannah Gibson, *Animal, Vegetable, Mineral? How Eighteenth-Century Science Disrupted the Natural Order* (Oxford: Oxford University Press 2015).

[70] Richard Grove, *Green Imperialism. Colonial expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge University Press, 1995).

[71] As quoted in S.N. Mukherjee, *Sir William Jones: A Study in Eighteenth-Century British attitudes to India* (Cambridge: Cambridge University Press, 1968), p. 114.

[72] Ray, *Under the Banyan Tree*, pp. 1–30.

[73] *General Evening Post*, February 1790.

[74] Bernard Smith, *Imagining the Pacific: In the Wake of the Cook voyages* (New Haven: Yale University Press, 1992), pp. 2–3.

[75] Archer, *Natural History Drawings*, p. 28.

[76] Nickelsen, *Draughtsmen, Botanists and Nature*, p. 265.

which is dated and includes signs of natural wear, the ideal-type *Butea* has been removed even from its own lifecycle.

In these visual respects, Jones imitated other natural historical sources besides Linnaeus. As well as treatises by Rumphius and Hendrik Van Rheede, Jones also possessed Alexander Russell's *Natural History of Aleppo*.[77] Among Jones's images is a European, hand-coloured print of *Acanthus* (Fig. 5) that he referred to as *Haricusa* in his *A Catalogue of Indian Plants, comprehending their Sanscrit, and as many of their Linnaean Generic Names as could with any degree of precision be ascertained*. The full Latinate name, *Acanthus Sativus vel Mollis Virgilis* is beneath the plant along with different versions. The image, also featuring in Giorgio Bonelli's *Hortus Romanus juxta systems Tournefortianum Paulo*, shows a detailed study of the roots. Above, the seed and the flower have both been dissected. Representation of dissected plant parts was a prominent and recurring feature of the images in Jones's archive. This is again partly due to Linnaeus' influence, since he established a principle that natural historical discussion and illustration should attend to the distinctive attributes of specimens under examination. The exaggeration of differentiating features was privileged over exactitude. These abstractions had reduced resemblance to plant and animal species in their natural settings and turned out largely 'unrealistic'.[78] The *Acanthus* print can be assumed to be a model for what Jones wanted images to look like for his own treatise.

Jones not only shared his peers' general epistemic and aesthetic outlook but aspired to propagate a specific vision of botany as integral to British imperial power and wealth. Earlier in the 1785 discourse, he proclaimed,

> 'A minute geographical knowledge, not only of Bengal and Bihar, but for evident reasons, of all kingdoms bordering on them, is closely connected with an account of their many revolutions: but the natural productions of these territories, especially in the vegetable and mineral systems, are momentous objects of research to an imperial, but which is a character of equal dignity, a commercial people.[79]

Far from wandering from the EIC's official emphasis on Indian plants' economic usefulness, the amateur Jones's natural historical practices were responsive to his times.[80] Jones's research coincided with the rise of socio-economic models premised on an idealised rationale of means and ends; the trend would eventually culminate with Utilitarianism, which had its greatest political impact in India in the 1820s. The racial double-think of this imposition long preceded this movement, however, as indicated in Jones' justification of British absolutism as juxtaposed with his support for American Revolution. Appeals to prosperity and order were double-edged: agenda to alleviate food shortage, starvation, and poverty were proposed even as experiments to maximise land revenues continued unabated. As early as 1766, Reza Khan, the *Naib Nazim* and *Naib Diwan* of Bengal, stated that it was the EIC's duty to be considerate towards Indians, having derived revenues from them.[81] To the Company, however, any measure for the natives' benefit remained secondary to its interest in maintaining profitability. For instance, despite its self-professed claims to address the problem of hunger, EIC mulberry plantations encroached upon cultivable lands in Alindoor and Nundumbaukam, depriving their inhabitants of their livelihood.[82]

The colouration of images is a salient aspect of processes of reification and alienation. Consideration of pigment reinforces points already made above: for example, how the blankness of the *Butea*'s surrounding leaves creates the effect of reducing the plant's size in the viewer's perception. Likewise, only the flowers and leaves on the top of the *Aegle/Sriphala* image (Fig. 3) have been coloured, together with a leaf at the bottom left and only a fragment of the branch. Not only has the plant been completely detached from its natural environment, but also its different parts have been segregated from each other under the naturalist's discerning eye. Although Jones's description of the plant in his *The Design of a Treatise on the Plants of India* refers to its significance in Hinduism, such details do not feature in the image.[83] More subtly, the partial colouration of the *Eugenia/Syzgeum* image aims to sharpen the focus of enquiry by downplaying incidental details of the specimen, such as a half-eaten leaf, directing the viewer's eye towards coloured sections. Jones's visual archive follows a spare and analytical scheme, considered appropriate to sober Enlightenment-era reflection. Where illustrations were painted, watercolours were favoured for the speed with which they could be put down and dried on the paper, chiming with Heyne's premium on productivity in image-making. The paint's translucent quality also probably meant that sharp pen-lines could continue to direct audience attention without unwanted distraction.

Beyond a commonsense connection between colour and "liveliness", the choice employment of muted tones finds further meaning when contrasting British and Indian aesthetics are considered. Mughal art's use of gouache led to bold, bright or deep hues; emphasis on colour and the full use of space was often combined with a rich profusion of features. In this tradition, closely related to longstanding Persian forms and ultimately the wider history of Islamic art, the vegetal environment has special significance as '*Jannah*' (Arabic: 'garden' and 'Paradise'). As James Fox evocatively describes the backdrop of a scene by sixteenth-century Persian miniaturist Sultan Muhammad, 'Every plant is flourishing, every flower blossoming, and every single leaf – of which there are thousands – is individually delineated'.[84] The close attention to detail and inclusion of ecological settings as backdrops to live natural subjects is particularly relevant here. A vibrant, holistic view of the environment carried through to Mughal art. While Europeans shared with the Mughals an Abrahamic understanding of humans' role in nature as one of dominion, the interpretation and emphasis were vastly different. Qu 'uranic authority identified plant life with the sustenance provided by rain and oases. *Jannah* was described in terms of four gardens reserved for believers: 'But for him who fears the station of the Lord are gardens twain … furnished with branching trees … flowing springs … every fruit … And besides these are gardens twain … with dark green foliage … in each fruit and palms and pomegranates.'[85] For the Mughals, plants were also a matter of order: the *chahārbāgh* (Persian: 'four garden') model of dividing one's garden with watercourses in imitation of this vision reached its height at Shan Jahan's Taj Mahal in th seventeenth century.[86] The myriad differences in outlook

[77] *Catalogue of the Library of Late Sir William Jones … sold by auction* (London, 1831), p. 16.
[78] Nickelsen, *Draughtsmen, Botanists and Nature*, pp. 5 and 17.
[79] Jones, 'The Second Anniversary Discourse', p. 14.
[80] Kelley, *Clandestine Marriages*, pp. 180–1.
[81] *Proceedings of the Select Committee*, Vol. 1. 9 January to 31 December 1766 (West Bengal State Archives), p. 366.
[82] IOR/P/274/69, pp. 1271–1354.
[83] Jones, 'The Design of a Treatise' in Jones, p. 6.
[84] James Fox, *The World According to Colour. A Cultural History* (London: Allen Lane, 2021), pp. 208–9.
[85] *The Koran*, trans. E. H. Palmer, 'LV: Chapter of the Merciful', suras 45–65, (London: Watkins Publishing, 2007), pp. 847–488.
[86] Fox, *World According to Colour*, pp. 205–210.

**Fig. 6.** Unknown artist, *Morinda Sp*, now identified as *Morinda citrifolia* (Inventory Number: RAS 025.081).

between European patron and Indian artist is one basis for inferring and conjecturing a degree of agency by the latter.

## The art of exclusion: Jones's dynamics with Indian expertise

The world-less/worldly interaction of idealising and controlling environments provides a critical way of thinking about Jones and his contemporaries. However, Zain al-Din and his peers' tendency to stress the particularity and exuberance of specimens offset their conformity to European scientific imaginaries of Indian nature. The image of *Morinda Sp.* (Fig. 6) (identified as *Morinda citrifolia*) by an unknown artist, is a case in point.[87] The gnarled, drying leaves with brown edges hint at the length of time that the plant had been cut or uprooted before being depicted. The image also follows the pattern of dissection, as the plant's leaves, petals and seedpod are each shown alongside the extant sprig. The artist, however, brings a degree of individuality, including by accurately rendering its decay over time: the illustrator's faithfulness to the plant's lifecycle over time diverged from the ideal-type objectification of European convention. While meeting technical European standards, on a more symbolic level we may perceive in the charming addition of a single outlying flowering growth from the separated pod an indication of new life, regeneration and hope. A careful reading of this image against the grain allows us to consider the inflection of indigenous traditions in native artists' exercise of artistic influence. However, we risk grossly overestimating this contribution if this analysis leads us astray, into celebrating confines as collaboration.

This section discusses Jones's attitude to Indian informants, given his reliance on them, to draw implications for interpreting his botanical visual archive. Historical accounts of Jones's botanical research have centred on whether – and if so, how far – he diverged from Linnaean models in taking onboard Indian insights. Alan Bewell, Theresa Kelley, and Minakshi Menon have considered Jones's active interest in traditional Indian natural and medical knowledge to indicate scope for flexibility in his accommodation of other cultural perspectives; Menon, in particular, acknowledges the limitations of Linnaean botany in the colonial context.[88] Taken together, they claim that Jones differed from Linnaeus in four ways: he criticised the idea of the plants' nuptials as indecent; he used an experimental framework; he rejected the notion of twenty-four classes; and, finally, he preferred Sanskrit names of plants.[89] Yet we have seen that Jones's archive supports the reality, extent and significance of the Linnaean background to his colonial botany. Taking these objections in turn, we find that, though Jones can be viewed as adapting his botanical practice to Indian settings, he often did so in ways that mutually reinforced its colonial contexts and purposes, including with regard to Indian expertise.

Bewell, Kelley, and Menon assert that Jones's divergence from Linnaeus resulted from his encounter with oriental scholarship. Jones's linguistic proficiency enabled him to consult native experts, physicians, scholars, and texts regarding plants. Botany was one means of maintaining and extending his linguistic interests. When the names of plants emerged in texts like the *Dravyavidhana*, *Medini*, and *Amarakośa*, he was keen to find out if they still grew. He believed, 'Infinite advantage may be derived by *Europeans* from the various medical books in Sanscrit, which contain the names and descriptions of Indian plants and minerals, with their uses, discovered by experience, in curing disorders'.[90] The search for Sanskrit names was as important as that for the plants themselves. He prioritised Sanskrit names: Latin names, when available, were only placed after native names and uses for plants in his writings.[91] However, botanical images by Indian artists did not contain any Indian names despite their presence in his Catalogue. Even as the late eighteenth-century colonial state drew upon the voices of the colonised, it set limits to their agency. Native knowledge was at the disposal of Britons like Jones, to be integrated or cast aside, so long as it served the purposes of power.[92] Linnaean, Latin-based thought remained inextricable to Jones's colonial worldmaking as he explained that the idea of preserving local names for Indian plants was derived from Linnaeus himself.[93] His later rejection of the nuptials of plants echoed Banks' conservatism, which resonated with a domestic agenda of keeping radical tendencies at bay in the 1790s.[94]

Jones's experimental attitude to botany was bound up with a scepticism that grew from his underlying distrust of Indian scholars.[95] Kelley argues that Jones did not question the reliability of his native botanical informants, as he did in his legal research.[96] However, science vested in him an ability and desire to scrutinise information provided by local experts. In *The Design of a Treatise*, Jones largely credited his experiments or his own critical reasoning.[97] He recognised local knowledge, but potential non-cooperation and misinformation on the part of indigenous population concerned him equally, as seen in the acquisition of the specimens of *Jatamanasi* (spikenard) from Bhutan.[98] Jones acknowledged Anna's contribution, despite her failure to delineate features of plants and mix paints properly.[99] He inscribed 'Lady Jones' on native artists' images, crediting her for collecting and identifying the plants. Such enthusiasm is absent regarding Indian artists. He was prompt in declaring that art in Asia was at the infancy of civilisation.[100] The incompleteness of images, combined

[87] Noltie, *Jones Collection of Botanical Drawings*.

[88] Minakshi Menon, 'What's in a name? William Jones, 'philological empiricism' and botanical knowledge making in eighteenth-century India', *South Asian History and Culture*, 13 (2022) 1–25, https://doi.org/10.1080/19472498.2022.2037826.

[89] Alan Bewell, 'William Jones and cosmopolitan natural history', *European Romantic Review*, 16.2 (2005): 167–180 (pp.173-174), https://doi.org/10.1080/10509580500123365; Kelley, *Clandestine Marriages*, p. 182; Minakshi Menon, *Making Useful Knowledge: British Naturalists in Colonial India, 1784–1820* (Unpublished PhD Thesis, University of California, San Diego, 2013), pp. 51–119.

[90] Cannon, *The Life and Mind of Oriental Jones*, p. 309.

[91] Alan Bewell, 'William Jones and cosmopolitan natural history'; Kelley, *Clandestine Marriages*, p. 182; Minakshi Menon, *Making Useful Knowledge: British Naturalists in Colonial India, 1784–1820*, unpublished PhD Thesis (San Diego: University of California, 2013), pp. 51–119.

[92] Robert Travers, *Ideology and Empire in Eighteenth-Century India. The British in Bengal* (Cambridge: Cambridge University Press, 2007).

[93] Jones, 'Botanical Observations on Select Indian Plants', p. 47. See also, Staffan Müller-Wille and Karen Reeds, 'A Translation of Linnaeus' Introduction to Species Plantarum (1737)', *Studies in History and Philosophy of Biological and Biomedical Sciences*, 38 (2007) 563–572, https://doi.org/10.1016/j.shpsc.2007.06.003; and Henry Noltie, 'On Pandanus leram and the other botanical binomials of Sir William Jones', *Taxon*, 62 (2016)1268–1274. https://doi.org/10.12705/626.10.

[94] Edwin Rose, 'Publishing Nature in the Age of Revolutions: Joseph Banks, George Förster, and the Plants of the Pacific', *The Historical Journal*, 63 (2020) 1132–1159. https://doi.org/10.1017/S0018246X20000011.

[95] Rosane Rocher, 'British Orientalism in the Eighteenth Century: The Dialectics of Knowledge and Government', in *Orientalism and the Postcolonial Predicament. Perspectives on South Asia*, ed. by Carol A. Breckenridge and Peter van der Veer (Philadelphia: University of Pennsylvania Press, 1993), pp. 215–249.

[96] Kelley, *Clandestine Marriages*, p. 191.

[97] Jones, 'The Design of a Treatise', and 'Botanical Observation on Select Indian Plants' in Jones, *The Works*, Vol. 2, p. 5, and p. 111, respectively. See also Ray Desmond, *European Discovery of Indian Flora* (Oxford: Oxford University Press, 1992), p. 65.

[98] William Jones, 'The Spikenard of the Ancients', in Jones, *The Works*, Vol. 2, p. 15.

[99] See, for example, RAS 025. 064 (Plumeria rubra) and RAS 025.068 (Dendrophthoe falcate).

[100] Jones, 'The Second Anniversary Discourse', in Jones, *The Works*, Vol. 1, p. 14.

with their empty backdrop and exaggeration of classificatory features, signify the entrenchment of colonial domination.[101] This was further exacerbated by the oversight of native artistic labour. As unacknowledged native artists worked to meet European standards, images bore witnesses less to transcultural interaction, than the discrimination inherent in such encounters.[102] The hierarchy between scientists and artisans is thus evident in Jones's botanical visual archive.[103]

The recent publication of a hitherto unknown 1785 letter to John Macpherson confirms that Jones primarily saw his informants as repositories of exotic knowledge. Jones refers to Indian scholar Ramalachona Kanthavarna, his Sanskrit teacher as a 'greater Asiatick curiosity than the rarest production of nature or the oldest manuscript'.[104] This is the same person whom he had referred to in his correspondence as a 'pleasant man' in the same period.[105] Jones's acknowledgement of Indians was thus largely based on British interests. Membership of the Asiatic Society was not open to Indians until 1829. Jones did encourage scholarly contributions from Indians, but in a condescending manner:

> 'Much may, I am confident, be expected from the communications of learned natives, whether lawyers, physicians, or private scholars, who would eagerly, on the first invitation, send us their *Mekamat* and *Risalahs* on a variety of subjects; some for the sake of advancing general knowledge, but most of them a desire, neither uncommon nor unreasonable, of attracting notice, and recommending themselves to favour. With a view to avail ourselves of this disposition, and to bring their latent science under our inspection, it might be advisable to print and circulate a short memorial, in Persian and Hindi, setting forth, in a style accommodated to their own habits and prejudices, the design of our institution; nor would it be impossible hereafter to give a medal annually, with inscriptions, in Persian on one side, and on the reverse in Sanscrit, as the price of merit, to the writer of the best essay or dissertation. To instruct others is the prescribed duty of learned Brahmans, and if they be men of substance, without reward; but they would all be flattered with an honorary mark of distinction; and the Mahomedans have not only the permission but positive command, of their law-giver, to search for learning even in the remotest parts of the globe.'[106]

Hence Jones could only understand native knowledge as valuable once brought into the purview of European intellectuals, until which point it would remain an inert 'latent science'. Cultural mechanisms to preserve tradition would ensure it ended up in good hands. Despite counting on this dissemination, Jones was prejudiced against Indians whom he thought too fixated on currying favour with the British. Reliance on informants in knowledge-making was primarily based on the consideration of their moral fibre. Jones's view of Indians, in this regard, was inconsistent at best.[107] His appreciation of local learning thus should not be simply understood as an admiration of India, but as illustrative of his zest for ending the native monopoly on knowledge.[108] While Jones's native legal informants were incorporated within the British Indian administration, Indian artists were altogether erased.

## Conclusion

Writing to Nathaniel Smith in 1785 regarding Charles Wilkins's translation of the *Bhagavad Gita*, Warren Hastings suggested that the accumulation of knowledge, 'lessens the weight of the chain by which the natives are held in subjection'.[109] Instead of mitigating subjugation, however, knowledge reproduced colonial relations of power. Imperialism went beyond the bilateral relationship between the coloniser and the colonised and resulted in an unequal world order.[110] Sir William Jones's botanical practices were part of an inequitable knowledge system that served the British Empire. He may have shifted the hub of orientalist scholarship to India,[111] yet this did not mean that he had ceased to be Eurocentric. Jones's adherence to Linnaeus even while drawing upon native knowledge and expertise affirmed his botanical endeavours as a project of mastering India's natural environment. Nowhere does this manifest more strongly than in the botanical images by Indian artists discussed above. A host of artistic adjustments worked to prioritise colonialist mode of observation. The plants' properties and features were made less visible in the images than Jones's own explanation of them. That Indian plants had to be known in the way Jones wanted, for use by Europeans, shows how colonial nature was abstracted. As much as giving expression to Jones's worldmaking, his visual archive is accordingly intertwined with earthlessness and worldlessness.

If Jones was caught between love for India and British imperial interests, we must remember that what is dominated cannot be loved and revered, at least not in the long run. His relationship to Indian knowledge was more complex than Kapil Raj's idea of intercultural trust would have us believe. Contrary to Raj's assertion that Jones had mostly named his informants, an examination of his visual archive demonstrates that Indian artists remained unacknowledged. His Indian botanical illustrations were intended to fit into an organon of imperial power, playing on contemporary standards of taste, politeness, and respectability. The hierarchical foundations of Jones's natural knowledge come to light, as the hues and contours of unfinished illustrations of Indian plants marked colonial deracination's progress. Indian illustrations bring into focus his exercise of epistemic exploitation and control over the subcontinent. Even if limited by European worldview and by extension colonial erasure, Indian artists' agency comes to the surface as Zain-al-Din's talent nevertheless emerges from within

[101] This is a contrast to some of the earlier artistic traditions, see, for example, Kapil Raj, 'Surgeons, Fakirs, Merchants, and Craftspeople: Making L' Empereur's Jardin in Early Modern South Asia', in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, ed., by Londa Schiebinger and Claudia Swan (Philadelphia: University of Pennsylvania Press, 2005), pp. 252–69; and Richard Coulton, 'Picturing the fora of China. Early Qing dynasty plant paintings in Britain', *Journal of the History of Collections* (2024) 1–21, https://doi.org/10.1093/jhc/fhae024.

[102] Monica Juneja, '"A very civil idea …" Art History, Transculturation, and Worldmaking – With and Beyond the Nation', *Zeitschrift für Kunstgeschichte*, 81 (2018) 461–85, https://doi.org/10.1515/ZKG-2018-0036. See also Duygu Yıldırım, 'Ottoman plants, nature studies, and the attentiveness of translational labor', *History of Science*, 61 (2023) 497–521 https://doi.org/10.1177/00732753231191340.

[103] Anne Secord, 'Corresponding interests: artisans and gentlemen in nineteenth-century natural history', *The British Journal for the History of Science*, 27 (1994) 383–408, https://doi.org/10.1017/S0007087400032416.

[104] Letter from Jones to John Macpherson, published in Joshua Ehrlich, 'Empire and Enlightenment in three letters from Sir William Jones to Governor-General John Macpherson', *The Historical Journal*, 62 (2019) 550–551. https://doi.org/10.1017/S0018246X1800050X.

[105] Ehrlich, 'Empire and Enlightenment in three letters', 550.

[106] Jones, 'The First Anniversary Discourse of the Asiatic Society' in Jones, *The Works*, Vol. 1, p. 17.

[107] Livingstone, *Putting Science in its Place*, pp. 151–2.; and Teltscher, *India Inscribed*, p. 199.

[108] Letter from Jones to Arthur Lee, dated 1 October 1786 in Cannon, ed., *Letters*, Vol. 2, pp. 712–13; and James A. Boon, 'An Endogamy of Poets, and Vice Versa: Exotic Ideals in Romanticism/Structuralism' *Studies in Romanticism*, 18 (1979) 333–361, https://doi.org/10.2307/25600194.

[109] *Bhagavad Gita, or Dialogues of Krĕĕshnă and Ărjŏŏn*, Translated by Charles Wilkins (London, 1785), p. 13.

[110] Getachew, *Worldmaking*, pp. 100–4.

[111] Franklin, *Orientalist Jones*, p. 205.

the archive. Even while working in a European format, artists evoke a sense of life as evident in the illustration of *Morinda*. Indian artists' creative reworking of the natural history genre itself constituted a form of worldmaking, one which offers an avenue for questioning Jones's subsuming and systematising approach.

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