

5 The Global and the Earthy

Taking the Planet Seriously as a Global Historian

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In the 2020s, it seems more obvious than ever that globalisation has a halting and reversible course. After a pandemic which had socially and culturally isolating effects, and as the geopolitics of superpower rivalry becomes manifest in what some see as a return to a Cold War, the mantra of connection giving rise to a world of utopian possibility and cosmopolitan oneness seems to have evaporated. If so, how should global history be characterised today?

In extant defences of the field, from one direction, everything, it is said, could have a global history. Such a claim sets its stall in opposition to the boundedness of national history and civilisational history before it.¹ This definition of global history continues to be politically important. From another direction, defenders argue that global history is as old as scholarship itself.² For intellectually cogent reasons, this view casts global history as a global practice rather than one which originated in early modern Europe, or even in the late-twentieth-century era of decolonisation or within the corridors of the American academe.³ This allows a response to the view that global history is imperialist or even telescopic with respect to the conditions of the Global South. Most would agree that global history involves attention to connection and comparison, divergence and integration, and transfer and exchange. But it also involves attention to disconnection and anomaly, disintegration and theft, and differentiation and mistranslation. In the midst of critiques of the field as obsessed with frictionless mobility, this second cluster of terms and other concepts which are

¹ For an excellent introduction to global history, see Sebastian Conrad, *What Is Global History?* (Princeton: Princeton University Press, 2016), 6: 'one way to approach global history is to equate it with the history of everything'.

² For the origins of global history, see Katja Naumann, 'Long-Term and Decentred Trajectories of Doing History from a Global Perspective', *Journal of Global History* 14, 3 (2019), 335–54.

³ For one recent exposition of the American origins of interest in globalisation and transnationalism, see Paul A. Kramer, 'How Did the World Become Global?: Transnational History, Beyond Connection', *Reviews in American History* 49, 1 (2021), 119–41. He reviews Isaac A. Kamola, *Making the World Global: US Universities and the Production of the Global Imaginary* (Durham: Duke University Press, 2019).

similar have become more salient.⁴ To make matters even more confusing, alongside the resonant power of the ‘global’ a series of other terms are arranged, including ‘world’, ‘transnational’ and ‘transcultural’.

In such a context of definitions and redefinitions, and a flourishing of so many mesmerising concepts, it would be unwise to offer one statement about what global history is. In order to interrogate the nature of this word – ‘global’ – I proceed by considering it as *a mode of cartography*. There are different ways of identifying the operative cartographic models. First, relationality is central to ‘global’ historiographical mapping: this includes, for instance, the relation between subjects and the world, the relation between objects and modes of consumption and collection, the relation between commodities and trading systems, and the relation between local traditions and universal ideologies of domination, homogenisation or differentiation. Second, a mapping impulse is evident in the scalar preoccupations of the field and in discussions about the ways to move from the small to the big, the micro to the macro, and to layer different scales in explanations of the past.⁵ Words such as ‘network’, ‘flow’ or ‘web’ bear out the need to model and map. Third, there is both a move towards detachment, to seeing the world from above, and a keenness to fill in geographical gaps in the search for completeness, and these are both characteristic of a cartographic impulse.

Historians describe modelling, of which mapping is one example, as central to knowledge-making. As a way of tabulating phenomena into a digestible and understandable form, modelling is compatible with the quest to theorise phenomena.⁶ Effective models can be non-linguistic means of summarising knowledge; models can generate disciplinary languages around them. They can play important roles in training practitioners in the field. They can support engagements with publics and funders. Models can become crucial where knowledge meets government, for instance around war or trade.

If this is the case for the widest category of models as they are used in geostrategy, physics or economics, it is also true of the way the word ‘global’, as a model, operates in history. Meanwhile maps are a particular class of models that represent and redefine territory. If so, global history is also linked with a cartographic impulse in attempting to reterritorialise the human past. Meanwhile, the modelled logics of global history have been driven in part by the way theoretical paradigms have weighed down on this sub-discipline of

⁴ For instance, see Zoltán Biedermann, ‘(Dis)connected History and the Multiple Narratives of Global Early Modernity’, *Modern Philology* 119, 1 (2021), 13–32.

⁵ John-Paul A. Ghobrial, ‘Introduction: Seeing the World Like a Microhistorian’, *Past & Present* 242, supplement 14 (2019), 1–22.

⁶ Soraya de Chadarevian and Nick Hopwood (eds.), *Models: The Third Dimension of Science* (Stanford: Stanford University Press, 2004), and Mary Morgan and Margaret Morrison, *Models as Mediators: Perspectives on Natural and Social Sciences* (Cambridge: Cambridge University Press, 1999).

history in order to make sense of the totality of history: this runs from Enlightenment science and orientalism to world-systems theory. It is a long-standing and often structuralist story.

This chapter has a set of discrete objectives. In its first section, it links the creation of the ‘globe’ as a model or map to the history of History. It also highlights how the elision of nature and the delimitation of subject areas were significant elements in the emergence of modern historiography. Both aspects were key to the emergence of the global historian as a modeller. The chapter then moves into a particular case study of mapping and historicism, namely the island of Taprobane. It does this with a view to reading beneath these intellectual impulses to the materiality of a particular and evolving island space. In other words, it makes room again for nature by claiming that signs of the Earth’s materiality are evident in the long historical narrations of Taprobane. The third section shifts into methodological reflections on current preoccupations in historical writing around environmental history, agricultural history, oceanic history, animal history and the history of medicine, and the extent to which they engage both the global and the Earth as matter. The chapter concludes with some views on the debate around the Anthropocene. In this way, the survey of historiography runs from the origins of humanist history to debates on posthumanism.

As a provocation, this argument moves from the globe as artifice in global history, a taken-for-granted signifier, to what lies beyond that sensibility: the Earth as a fissured, crusted, summited, atmospheric and terraqueous platform. In broad terms, it takes up Dipesh Chakrabarty’s invocation: ‘The global is a humanocentric construction; the planet, or the Earth system, decentres the human.’⁷ Critically, however, this analysis is not a call for a history determined by nature, nor should it be simplified as a call to replace the global with the Earthy. It is an exploration of a more multi-disciplinary and materially aware global history, in tune with that advocated elsewhere, which can include the Earth itself as a vital agent.⁸

Throughout, in order to illustrate points, the chapter uses literature with a focus on South Asia to moor the argument in a historiography which engages the world outside the West.

⁷ Dipesh Chakrabarty, *The Climate of History in a Planetary Age* (Chicago: University of Chicago Press, 2021), 19

⁸ One recent intervention in favour of vitalism is Amitav Ghosh, *The Nutmeg’s Curse: Parables for a Planet in Crisis* (Chicago: University of Chicago Press, 2021).

The Global, the Natural, the Human and the Origins of Modern History

The planet we inhabit is not globular: it is an oblate spheroid. I recently joked in print that global history should be renamed oblate spheroidic history.⁹ Such a proposal is useful at least simply to generate critical reflection on the taken-for-grantedness of this artificial concept, the ‘global’, in our thought and scholarship.

The production of the globe as object has a rich historiography, though often a Eurocentric one, linked to the Copernican Revolution and the use of the globe as a signifier of political and economic power in Europe.¹⁰ One influential view is that the theorising of the planet as rotund and the emergence of the modern were interrelated; but another view would be that the casting of pre-moderns as flat Earthers was itself a modern exaggeration.¹¹ Rather than sketching a teleology around modernity, it may be useful to follow Jerry Brotton, who writes:

It is precisely upon the figure of the globe, as both a visual image and a material object, that many of the social and cultural hopes and anxieties of the period came to be focused. For if the development of the terrestrial globe was coterminous with the geographical expansion of the horizons of the early modern world, then the intellectual and material transactions which went into its production were also symptomatic of the expanding intellectual, political and commercial horizons of this world.¹²

The globe spread with empires and with programmes of power and diplomatic exchange and slipped from the hands of elite patrons and monarchs to publics as the forms of its representation also changed. Indeed, it is a heavily represented idea and the frequency and varied modes of its representation have been the key to its taken-for-grantedness. To see it as quintessentially European is to forget the rich strands of counter-thought around the globe in other regions of the world.

For instance, when the globe was introduced into India in the late sixteenth century, as Sumathi Ramaswamy highlights, Mughal emperors were depicted with a globe in thirty or so images in the decades that followed. She astutely

⁹ Sujit Sivasundaram, ‘Making the Globe: A Cultural History of Science in the Bay of Bengal’, *Cultural History* 9, 2 (2020), 217–40.

¹⁰ See, for instance, Lesley Cormack, ‘The World at Your Fingertips: Renaissance Globes as Comographical, Mathematical and Pedagogical Instruments’, *Archives Internationales d’Histoires des Sciences* 59, 163 (2009), 485–97. Meanwhile, for ‘planetary consciousness’ see also Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London: Routledge, 1992).

¹¹ This point is made by Sumathi Ramaswamy, *Terrestrial Lessons: The Conquest of the World as Globe* (Chicago: University of Chicago Press, 2017).

¹² Jerry Brotton, *Trading Territories: Mapping the Early Modern World* (London: Reaktion Books, 1997), 21.

analyses this visual genre as indicative of an ‘assertion of difference and defiance’ rather than a simple mimicry of European meanings of increasing imperial reach. The globe may be cast as an icon, a replacement for sacred relics in the West. Yet in South Asia, gods and globes co-mingle to this day, suggesting that the routes through which the globe has become a common symbol are multiple rather than singular.¹³ A narrative of the role of a singular Renaissance, Enlightenment, imperial programme or indeed of the rise of European science must be avoided if we are to track the origins of the globe as object.

Another way of tracing the rise of the globe as signifier is to see it as linked to the consolidation of astronomical science. Simon Schaffer has paid attention to the relations between astronomy, orientalism and empire in South Asia.¹⁴ In this story the British East India Company’s astronomers were calibrating both rational science and rational religion. Hindu Puranic astronomy in the nineteenth century, caricatured for its commitment to flat Earth, milky oceans and moon-eating dragons, was seen as the degenerated version of a previously superior knowledge of the stars and the Earth. It was the same logic that framed orientalist engagement with Hinduism, which itself was seen to have declined into priesthood. What was needed, then, was for Newtonian men of science to resuscitate it, and for that task it was necessary to find Newtonian science in the Vedas. In other words, astronomical and religious studies were interconnected with the disciplinary foundations of history. As astronomers interrogated Indian historical texts, they would in turn sanctify and purify both true science and religion. The making of astronomical knowledge relied on being able to travel across times and places, but even as astronomy was made secure as a modern discipline its subject became clearer. The Earth and the heavens were separated from each other as intellectual subjects.

It is worth switching more directly to the history of History. In the European history of history, in place of a universal account which was tied to a Judeo-Christian narrative there arose a sense of the unity and connectedness of humankind which was natural. This unity and connectedness was first thought to be civilisational and then evolutionary.¹⁵ This natural ordering was then debated and even disputed as senses of race and racism as well as gender, language and climate started to structure knowledge in the modern era from stadial theory to eugenics. These debates became the province of the new

¹³ See Ramaswamy, *Terrestrial Lessons*, 291, and Sumathi Ramaswamy, ‘Conceit of the Globe in Mughal Visual Practice’, *Comparative Studies in Society and History* 49, 4 (2007), 751–82.

¹⁴ Simon Schaffer, ‘British Orientalism on Histories of Religion and Astral Sciences in Northern India’, in Bernard Lightman and Sara Qidwai, (eds.), *Evolutionary Theories and Religious Traditions* (Pittsburgh: University of Pittsburgh Press, 2023), 17–40.

¹⁵ For a valuable account of the origins of universal history and then global history which this paragraph and the next draw on, see Franz L. Fillafer, ‘A World Connecting: From the Unity of History to Global History’, *History and Theory* 56, 1 (2017), 3–37.

sciences. While nature had been seen as timeless and eternal prior to 1800, the rise of new scientific disciplines of empiricism, including geology or comparative anatomy, tied in turn to sprawling enterprises of data collecting that increasingly stretched to all corners of the planet, generating newer senses of the changes of nature and humans in time. Concomitantly, the modelling of the globe was an act of statistical manipulation, tied to longitude and latitude but reaching into the air as well as into the water and underground. It also depended on this data collecting and facilitated trade.

It was in this ferment that modern historiography was born. If the new disciplines of science had taken over the subject of nature, the heavens, as well as of long time, the definition of history changed in response to that. The nineteenth century's Western historicism began with Europe and was no longer generally a universal history of humankind. Indeed, non-European history was cast into a series of other new disciplines outside the strict confines of history per se. With the rise of new empires and nations, which needed historical tellings, it was also necessary to delimit the specialisations of modern historians. Of course, this story looks rather different if the perspective we take shifts from Europe to the writing of history in other regions of the world, but there too the modern saw a delimiting of subject area and a separation of the terrain of memory and so-called 'myth' or 'religion' from history. In other words, history everywhere, by the nineteenth century, was much narrower on many counts. It was also increasingly human-centred.

In the South Asian world, for instance, there was a rich set of diverse histories in the early modern era, including dynastic narrations and traditions connected to all kinds of lineages, running across gods, humans, demons and the natural world. Kumkum Chatterjee skilfully explored these histories in Bengal in the seventeenth and eighteenth centuries and into the period of the advent of British colonialism and the impact of orientalist historiography.¹⁶ Of relevance here is the fact that they had long and often cyclical or otherwise shaped senses of time and wide geographies; they blurred the factual and the fictional and they stretched across Sanskrit as well as Persian traditions in addition to various regional vernaculars. They could take verse form. They had a sense of authority, expertise and function. This means, following Chatterjee, that British and European histories in India should not be seen as the first to be scientific and rational, despite the centrality of such latter histories to conceptions of nationalism, literacy and middle-class sensibility in India by the end of the nineteenth century. Relatedly and for Sri Lanka, I have argued that its palm-leaf manuscript

¹⁶ Kumkum Chatterjee, *The Cultures of History in Early Modern India: Persianization and Mughal Culture in Bengal* (Oxford: Oxford University Press, 2009). Another vital and important contribution for another region of South Asia, is Velcheru N. Rao, David Shulman and Sanjay Subrahmanyam, *Textures of Time: Writing History in South India, 1600–1800* (New York: Other Press LLC, 2003).

histories held their popular power and resonance into the era of printed-colonial histories.¹⁷ It is not that palm-leaf gave way to print. Rather, history came to be defined by printed and supposedly ‘empirical’ narrations; palm-leaf texts were cast outside the discipline.

It is useful to consider today’s global history as a mode of modelling and mapping which reaches beyond this historiographical drawing of the curtains of the nineteenth and twentieth centuries. Yet in contesting the delimited foundations of modern historiography, which global historians aim to do, it is also necessary to challenge the disciplinary specialisms which generated a separation between the right subject of history and the right subject of science.

Behind Map and Model: The Changeable Earth

Working from the premise that mapping, modelling and global history are interrelated, some alternative fragments of cartography of the wider world will be followed to see what lies beneath this relation and whether it is possible to work towards nature.

A good site for me to focus attention on is the gigantically proportioned island of ‘Taprobane’, which is often said to come from Claudius Ptolemy’s *Geographia*. The cartographic rendition of this island, said to be today’s Sri Lanka, occupies approximately twelve times the extent of present-day Sri Lanka.¹⁸ This late-fourteenth- or early-fifteenth-century version is from the British Library, and arrived there through the collections of the eighteenth-century classical and musical scholar Charles Burney (Figure 5.1).¹⁹ The reason for the exaggerated cartographic rendition continues to confound recent historians: did Ptolemy mistake a part of India as belonging to the island of present-day Sri Lanka? One response to the problem is that Ptolemy inherited this idea of Taprobane from sailors arriving in Alexandria, who knew the coast of west India well but not the island of Sri Lanka and especially the island’s eastern coast, which could only be reached after going around the island.²⁰ Much more recently, after the tsunami of 2004, accounts of the gigantic

¹⁷ Sujit Sivasundaram, ‘Materialities in the Making of World Histories: South Asia and the South Pacific’ in Ivan Gaskell and Sarah Anne Carter (eds.), *The Oxford Handbook of History and Material Culture* (Oxford: Oxford University Press, 2020), 513–34.

¹⁸ There has been some debate about whether Ptolemy’s Taprobane refers to Sri Lanka or Sumatra. For more on this, see R. L. Brohier, *Land, Maps and Surveys: Descriptive Catalogue of Historical Maps in the Surveyor General’s Office, Colombo* (Colombo: Ceylon Government Press, 1951), vol. 2, 23; and John Whitchurch Bennett, *Ceylon and Its Capabilities* (London: W. H. Allen & Co., 1843), 11. Taprobane is equated with Sri Lanka in J. Lennart Berggren and Alexander Jones, *Ptolemy’s Geography: An Annotated Translation of the Theoretical Chapters* (Princeton: Princeton University Press, 2000), 6.

¹⁹ Berggren and Jones, *Ptolemy’s Geography*, 20.

²⁰ Ananda Abeydeera, ‘The Geographical Perceptions of India and Ceylon in the *Periplus Maris Erythraei* and in Ptolemy’s *Geography*’, *Terrae Iconognitae* 30, 1 (2013), 1–25.



Figure 5.1 Map labelled ‘Taprobana insula’, with the lowest horizontal line representing the equator. British Library, Burney 111 f1v. British Library.

Taprobane, including this map, were utilised on the island to tell stories of the resizing of Sri Lanka by repeated tidal waves, as part of the gods’ judgement for bad government today.

In Sebastian Münster’s Latin translation and amplification of Ptolemy’s *Geographia*, from 1540, there appears a further version of the map of ‘Taprobane’ (Figure 5.2). In Münster’s hand, the island is marked with mountains, rivers and cities. The equator – that marker of the globe – is shown running through the island. Alongside the map appears a ferocious tusked elephant as ornamentation, derived from the sketches of mapmaker Giacomo Gastaldi, who also produced his version of Ptolemy’s *Geographia*. The



Figure 5.2 *Tabula Asiae XII*; hand-coloured map by Sebastian Münster, c.1552. From Ptolemy's *Geographia universalis*, 1540 ed., rev. & ed. by Sebastian Münster. Sri Lanka is labelled 'Taprobana' on the map, a name which was given to Sumatra on maps in later editions of the *Geographia*. MIT.

elephant's angry eyes and serpentine trunk immediately attract the reader's attention. The way in which this elephant is depicted is in keeping with earlier European mapping traditions which sometimes represent elephants as looking like wild boars with trumpet-like trunks.²¹ Ludovico di Varthema, who visited Lanka, is then cited. The island, we are told, 'exports elephants that are larger and nobler than those found elsewhere'.²² Taprobane becomes known here for its anomalous natural history; its unusual elephants make a stand on the map. The description from Varthema continues: 'Its yield of the long pepper is likewise richer, indeed wonderful in its abundance.'²³ Soon the map was edited once again, and the elephant was made less fierce (Figure 5.3). Even while tracing the reverberations of Ptolemy's 'Taprobane' like this, one important caveat is that the idea, together with the knowledge of sailors and merchants

²¹ See Donald F. Lach, *Asia in the Making of Europe*, vol. 2: *A Century of Wonder* (Chicago: The University of Chicago Press, 1970), Book 1, 124–31.

²² Brohier, *Lands, Maps and Surveys*, 22.

²³ Brohier, *Lands, Maps and Surveys*, 22.



Figure 5.4 Muhammad al-Idrisi's map of Sarandib, reproduced from R. L. Brohier and J. H. O Paulusz, *Land, Maps and Surveys* (Ceylon Government Press: Colombo, 1951), Vol. 2, Plate 1A. Needham Research Institute, University of Cambridge.

leaf narrations of past tidal waves on the island, which once again point to how mappers across cultures struggled to historicise this piece of Earth. Orientalist accounts of the island's submersion borrowed heavily from what travellers were told by Indigenous peoples.

Most clearly, the elite chronicles of the *Mahavamsa*, the *Thupavamsa* and the *Rajavaliya* provide a context for appreciating often retold tales of past tidal waves and resizing of the island. The *Mahavamsa*, a Buddhist chronicle written in the sixth, thirteenth and eighteenth centuries, is today the most cherished nationalist source of Sri Lankan history.²⁴ The account of how the sea encroached on the kingdom based in Kelaniya, during the reign of Kalanitissa, illustrates the genre perfectly.²⁵ The reader is told of the foolishness of Kalanitissa's brother, Ayya-Uttika, who sleeps with the queen, and therefore rouses the wrath of his brother. Having fled Kalanitissa's kingdom, Ayya-Uttika sends a man disguised as a Buddhist priest with a secret letter to the queen. This is discovered by the king, who slays the man and throws him into the sea. The author of the *Mahavamsa* presents this as a fitful deed of anger unsuitable for a monarch. After all, the priest and his attendant were innocent; it was the king's brother who was guilty. The *Mahavamsa* continues: 'Wroth at this the sea-gods made the sea overflow the land.'²⁶ Another chronicle, the seventeenth century *Rajavaliya*, records: 'on account of the wickedness of Kelanitissa, 100,000 seaport towns, 970 fishers' villages, and 470 villages of pearl-fishers making altogether eleven-twelfths of Lanka, were submerged by the great sea'.²⁷

This story draws on a rich pre-colonial and oral historical consciousness which itself was cartographic. For instance, Charles Pridham, a mid-nineteenth-century colonial and orientalist British historian, in writing of the flood in the reign of Kalanitissa, does not mention the *Mahavamsa*; he notes that his account of the flooding emerges from 'Singalese topographical works' such as the 'Kadainpota and Lanka-Wistric'.²⁸ Pridham refers here to a set of sources that were far more accessible than the elite chronicles and which were kept safe by village elders and recited at public ceremonies. The *kadain pot* and *vitti pot* did not attract as much

²⁴ For discussions of how to interpret Buddhist chronicles, see: Steven Kemper, *The Presence of the Past: Chronicles, Politics and Culture in Sinhala Life* (Ithaca: Cornell University Press, 1991); Gananath Obeyesekere, 'The Myth of the Human Sacrifice: History, Story and Debate in a Buddhist Chronicle', *Social Analysis* 25, 25 (1989), 78–93; Ronald Inden et al., *Querying the Medieval: Texts and the History of Practices in South Asia* (New York: Oxford University Press, 2000), 99–16.

²⁵ This appears in William Geiger (transl.), *The Mahāvamsa, or the Great Chronicle of Ceylon* (London: Frowde, 1912, reprinted London: Luzac, 1964), ch. XXII, lines 13–22.

²⁶ Geiger, *The Mahavamsa*, ch XXII, line 20.

²⁷ Bandusena Gunasekera (ed.), *The Rajavaliya or a Historical Narrative of Sinhalese Kings* (Ceylon: George J. A. Sheen, Government Printer, 1900; reprinted Colombo: Skeen, 1954), 23.

²⁸ Charles Pridham, *A Historical and Statistical Account and Statistical Account of Ceylon and Its Dependencies* (London: Boone, 1849), vol. 1, 18.

attention from the orientalist translators of the nineteenth century, who were critical in popularising texts such as the *Mahavamsa*, yet they reveal how accounts of flooding and changes to the land were transmitted in the indigenous historical memory and in geographical texts on palm-leaf.²⁹ The account of the fate of Kalanitissa's kingdom seems to have been something of a staple in this set of texts.³⁰ One of them retells the story thus:

during the days of Kalanitissa, since the king caused the death of an innocent therā by putting him into a cauldron of boiling oil, the grief-stricken gods, in their anger with their divine powers, submerged the king's territory with the waves of the ocean in order to destroy the world. At that time nine islands surrounding Lamka, twenty-nine *mudal ratas*, thirty-five thousand five hundred and four villages together with great port villages, tanks and fields and gem mines and numerous beings, without feet, two legged, four legged, many legged and structures such as cetiyas, shrine rooms, residential quarters of monks were eroded to the sea.³¹

This cross-contextualisation of sources on the geographical shape, size and casting of the island of what is now Sri Lanka and was once Taprobane is an attempt to think beyond the rise of the European map and, indeed, the globe. For the globe's artificiality and detachment as an object makes it often bypass the Earth; in symmetry, history can do so too, and the challenge for global history is to ensure it does not. These Sri Lankan sources – from all perspectives, orientalist as well as Indigenous – are trying to come to terms with how to simultaneously map and historicise a changeable island. In a place where there were tidal waves and where there has recently been a tsunami, in a site where there are elephants and pepper, how is it possible to chart the size of an island and its past?

Reconsidering global history, viewed in light of the geographical construction and stabilisation of Sri Lanka, may be about engaging with what lies beneath and behind the mapping impulse. In the case of Lanka/Taprobane/Ceylon, this is the vexed materiality of an island which is always becoming and which is set in a watery terrain beyond human control. It is about waves, animals and peoples as world-makers. These might be the building blocks of an Earthy historiography, a historical literature that accepts the instability of the ground on which history happens. Such a history will respond to the elision of nature and the delimitation of subject area which were at the heart of the origins of modern historiography, and, indeed, Enlightened sensibilities about what counts as a good source. It will also contend with the artificiality of the global.

²⁹ For more on this geographical knowledge, see Sujit Sivasundaram, 'Tales of the Land: British Geography and Kandyan Resistance in Sri Lanka, 1803–1850', *Modern Asian Studies* 41, 5 (2007), 925–65.

³⁰ H. A. P. Abeyawardana, *Boundary Divisions of Mediaeval Sri Lanka* (Colombo: Academy of Sri Lankan Culture, 1999), 121.

³¹ Abeyawardana, *Boundary Divisions*, 208.

The Natural in Recent Historiography

In what follows, in order to assess the state of present rather than long passed historiography, I turn to *environmental history*, *agricultural history*, *the history of oceans*, *animal histories* and the *history of medicine*. In taking late-twentieth-century and early-twenty-first century historiography into view, it is worth emphasising that nature has not been absent, even if it has arguably never been dominant. Each of these fields has been interlinked with global history, and increasingly so. What might a further conversation between the two sides yield if we move from the global to the Earthy?

Environmental history, like global history, is traditionally said to have been born in the USA, yet it too can be said to be as old as scholarship itself.³² Early environmental histories often proceeded on the basis of natural determinism. Theorists such as Alexander von Humboldt or Pierre Poivre played critical roles in the origins of this field in responding to the changes in nature that they witnessed in colonial territories.³³ Meanwhile, later men of science, including Charles Darwin, were curious about transformations of nature in time and history. One might follow the global environmental historian, Alfred Crosby, in tracking a demarcation of subject areas as key to why environmental history was seen, in the nineteenth century, to rightly belong with science, rather than in historiography narrowly construed: '[Historians] were trained to specialise, to devote their lives to the minute study of small patches of history; environmental historians must be generalists because environmental changes are rarely affairs of days, weeks or even years and are often only discernable regionally, even continentally.'³⁴ Environmental history's entry into historiography came via geography. By the era of decolonisation, with fears of nuclear catastrophe and pollution, and with a visual image of the Earth as an object viewed from space motivating it, environmental history went global.

Among the debates in the field is how to write 'nature-centred' rather than 'anthro-centric' histories.³⁵ Yet this relies on a distinction between humans and nature which itself is increasingly disputed. Additionally, the question assumes that nature has been untouched, whereas many scholars highlight the creation of what is wild – 'wilderness', for instance – through human engagement with nature over centuries. Epidemics, floods and fires have redirected historical energy towards the environment, and this in turn raises a second perennial

³² Harriet Ritvo, 'History and Animal Studies', *Society and Animals* 10, 4 (2002), 403–6.

³³ Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge University Press, 1996).

³⁴ Alfred Crosby, 'The Past and Present of Environmental History', *American Historical Review* 100, 4 (1995), 1177–89.

³⁵ For a start in further exploring points in this paragraph, see Joachim Radkau, *Nature and Power: A Global History of the Environment* (Cambridge: Cambridge University Press, 2008).

question about the agency of nature. But here too, a recourse to assembly and co-constitution is one of the preferred routes rather than a strict prescription of robust agency to the non-human or the separation of humans from their environments.

The environmental crisis frames environmental history, but scholars continue to push against a presumed teleology that leads into the present moment, through turning points and transitions caused by empires, modernisation, states or developmental projects. There is indeed a danger in seeing the pre-colonial era as one of ecological harmony, but also a danger of erasing the violent scalar environmental changes generated by European empires, their wars and their plantation systems. More broadly, key concerns in global history, such as capitalism, industrialisation, inequality, divergence and marketisation, have all generated significant environmental history literatures.³⁶ Yet in many standard global history text books, the environment can go missing and become an afterthought. C. A. Bayly's last book was critiqued for this reason.³⁷ This is despite the fact that some key practitioners – such as William H. McNeill – were pioneers in both fields. A fundamental conversation between environmental history and global history has long been in prospect.³⁸

Now that the problematic dichotomy of human/nature is being overcome it may be possible for global historians too to take soil, air and water, among other elements, more seriously as part of the story and to begin with these subjects. *Agricultural history* used to be the purview of economic historians interested in demography and trade. In the context of South Asian history, it drew further strength from subaltern studies and from the foregrounding of the marginal peasant. Subaltern studies scholars illustrated how peasant politics had ramifications for wide political ideologies as well as for governance. But the turn to culture as well as to globalisation saw a move away from these interests and, indeed, the rural peasant. In this context, recent work, for instance by Neeladri Bhattacharya, has reconsidered the status of the agrarian frontier, not simply as one of social stratification or of economic inequality, but also as one generated by knowledge, culture and the law. Indeed, it is the very normalisation of the status of agriculture as rural and peasant-based which needs critiquing.³⁹ Just as

³⁶ For one key debate, divergence, as approached via the environment and South Asia, see Prasannan Parthasarathi, *Why Europe Grew Rich and Asia Did Not: Global Economic Divergence, 1600–1850* (Cambridge: Cambridge University Press, 2011).

³⁷ Sunil Amrith, 'The Anthropocene and the Triumph of the Imagination: An Environmental Perspective on C. A. Bayly's *Remaking the Modern World, 1900–2015*', *Journal of Asian Studies* 78, 4 (2019), 837–48.

³⁸ Edmund Burke III and Kenneth Pomeranz (eds.), *The Environment and World History* (Berkeley: University of California Press, 2009).

³⁹ Neeladri Bhattacharya, *The Great Agrarian Conquest: The Colonial Reshaping of a Rural World* (New York: SUNY Press, 2019); see also David Gilmartin, *Blood and Water: The Indus River Basin in Modern History* (Oakland: University of California Press, 2020).

much as in other areas where the historiographies of the global and the agrarian have met – for instance, around plantation complexes or the genetic manipulation of nature – it is important for this new mode of writing about the agrarian not to take categories for granted.⁴⁰ The older structuralist perspectives, often supercharged by the schema of Marxism, have given way to radical alternatives which are more critical about singular understandings of what constitutes nature as opposed to the human, and also what constitutes the local and the global.

Turning again to South Asian history, there are several examples of works which look beyond such dichotomies. Debjani Bhattacharyya has focused on tides and recast the history of Calcutta in a deltaic and moveable geography as a result.⁴¹ Sunil Amrith has written a history of South Asia as a history of water and rivers, while Sudipta Sen has used the river Ganges to organise a long history of Indic civilisation.⁴² Rohan D'Souza has argued for the role of floods as a 'biological pulse' in eastern deltaic India, since it is made up of 'soil and water admixtures rather than neatly separated into distinct domains of land and river flow'.⁴³

One of the weaknesses of environmental history is that it has often-times, and certainly in its twentieth-century incarnations, been determinedly terra-centric and connected to questions, for instance, of land use, agriculture and demography. In this mode it can fold back into national history. The splurge of recent work in *oceanic history* arose partly in response and it has had an increasingly visible place in what is considered global history today. After all, oceans necessarily cross areas, regions and nations. Oceanic history also relocates long-standing maritime and naval history to an environmental landscape of shipwreck and weather events or of whales, seals and other creatures. Here, too, the lineage of the sub-discipline is a matter of debate: on the one

⁴⁰ For some other works in agricultural history, colonialism and globalisation, see Rebecca Woods, *The Herds That Shot around the World: Native Breeds and the British Empire, 1800–1900* (Chapel Hill: University of North Carolina Press, 2017); Giovanni Federico, *Feeding the World: An Economic History of World Agriculture, 1800–2000* (Princeton: Princeton University Press, 2005); and Sven Beckert, *Empire of Cotton: A New History of Global Capitalism* (London: Allen Lane, 2014).

⁴¹ Debjani Bhattacharyya, *Empire and Ecology in the Bengal Delta: The Making of Calcutta* (Cambridge: Cambridge University Press, 2018); Debjani Bhattacharyya, 'Almanac of a Tide Country', *items*, 20 November 2010, <https://items.ssrc.org/ways-of-water/almanac-of-a-tide-country>. See also the set of short reflections by Surabhi Ranganathan, 'The Law of the Sea: 7 Essays on the Interfaces of Land and Sea', www.lcil.cam.ac.uk/blog/law-sea-dr-surabhi-ranganathan. These essays were first published on the Joint Center for History and Economics website at Harvard University (January 2020).

⁴² Sunil Amrith, *Unruly Waters: How Mountains, Rivers and Monsoons Have Shaped South Asia's History* (London: Penguin Books, 2018); and Sudipta Sen, *Ganges: The Many Pasts of an Indian River* (New Haven: Yale University Press, 2019).

⁴³ Rohan D'Souza, 'Events, Processes and Pulses: Resituating Floods in Environmental Histories of South Asia', *Environment and History* 26, 1 (2020), 31–50.

hand, it is traced to the Annales school and the formative influence of Fernand Braudel, yet the argument is made that Pacific Ocean and Indian Ocean histories have much longer genealogies beyond both Mediterranean and Atlantic studies.⁴⁴ The encounter between oceanic and global history is now beginning to burst the boundaries of artificial schemas – for instance, the ‘Atlantic system of slavery’ or the ‘Indian ocean trading world’ – to yield intra-oceanic histories as well as the histories of straits, basins and bays and a rich set of diverse geographies beyond whole ocean studies. The World Ocean itself is becoming a subject of historical narration.

This augurs well for a history of the sea which is no longer constrained by human epistemologies and geographical classifications but which is, in the sense of this chapter, more Earthy and less modelled. Oceanic histories are also taking the movement of natural things more seriously, from molluscs to salmon, and the underwater itself is emerging as a site of history. Migration is being cast within, for instance, the monsoon; the hajj pilgrimage is being understood within the material conditions of travel; labour is being interrogated with respect to knowledge of nature and the tragic experience of the sea journey.⁴⁵ Both oceanic and environmental history by default centre large geographical zones and work beyond human understandings and classifications of nature. *Animal history*, the next historiographical focus point, can have the same geographic range but it intensively studies and problematises species boundaries more than geographic or political ones.

The study of animals in history arose out of work on agrarian history before taking off amid the enthusiasm for cultural history at the end of the last century. However, cultural histories of animals were often about human representations and attitudes to animals; they were regularly focused around European zoos and exhibitions.⁴⁶ In contrast, recent work in animal studies has benefitted from the methodological foundations of postcolonial history and global history and their attention to marginal agents, for at the heart of animal history is a desire to be inclusive about historical subjectivity. Recent historians have highlighted the role played by capitalism; ideas of class, race and gender; scientific knowledge and empires in organising the category of the animal. Jonathan Saha, in new work on Burma/Myanmar at the rim of British India, for instance, claims both that ‘empire was always an interspecies phenomenon’ and that ‘species was a category that was articulated with race, class and gender’.⁴⁷ The

⁴⁴ For further study on the points made in this paragraph, see David Armitage et al. (eds.), *Oceanic Histories* (Cambridge: Cambridge University Press, 2017).

⁴⁵ See, for instance, Eric Tagliacozzo, *The Longest Journey: Southeast Asians and the Pilgrimage to Mecca* (Oxford: Oxford University Press, 2013).

⁴⁶ Ritvo, ‘History and Animal Studies’.

⁴⁷ Jonathan Saha, *Colonizing Animals: Interspecies Empire in Myanmar* (Cambridge: Cambridge University Press, 2021).

challenge for animal historians is the same as that for environmental historians: not to lose sight of the human in focusing on animals. Rather, an agenda that demonstrates how modes of hierarchy, ideology and politics are crystallised around the policing and articulation of the boundary between the human and the non-human is more compelling.

Indeed, if an Earthy perspective is adopted, the next step is to place the human/non-human collective within a broader environmental and material context. The zoonotic disease of Covid-19 is a case in point. In addition to intensive contact between humans and animals and new styles of meat consumption in East Asia, the wildlife frontier of China is likely also to have played a role in the origins of the recent pandemic. It is now thought that Covid-19 also arose due to rapidly changing uses of land and the march of deforestation.⁴⁸ If so, one needs to bring land, life and unseen viruses together rather than working solely at the intersection of the human and the animal. The *history of medicine* seems uniquely placed to respond to such an agenda and will surely see a resurgence in the next decades.

Though it has traditionally been concerned with histories of state-making, institutionalisation, the social context of ideas of disease, the history of the body and the relations between patients and doctors, the history of medicine is showing signs of placing the triad of disease, medicine and the body into a more complex dialectic. Vernacular traditions and indigenous ideas of medicine have increasingly come into focus and have done so amidst the rise of a desire for alternative therapies and, more problematically, a nationalist authorisation of culturally particular traditions of cure. Turning once again to a historiography which begins with South Asia, Projit Mukharji's work comes to the history of Ayurveda from the technologies and material objects used to practice it and how these in turn changed views of the body and the meaning of modernity.⁴⁹ Rohan Deb Roy, in writing a history of malaria, also follows a route which is more materially aware, in being acutely conscious of the shifting significations of cinchona, quinine, fever and the body and their sprawling transnational creation.⁵⁰

What each of these five approaches demonstrates is the already vibrant conversations afoot which include both nature and materiality within global history. An Earthy perspective would be one that builds on each of these avenues and others, such as the history of energy, waste or technology. It would contest the historiographical and historical reasons for the elision of

⁴⁸ See Sujit Sivasundaram, 'The Human, the Animal and the Prehistory of Covid-19', *Past and Present* 249, 1 (2021), 295–316.

⁴⁹ Projit Mukharji, *Doctoring Traditions: Ayurveda, Small Technologies and Braided Sciences* (Chicago: University of Chicago Press, 2016).

⁵⁰ Rohan Deb Roy, *Malarial Subjects: Empire, Medicine and Nonhumans in British India, 1820–1909* (Cambridge: Cambridge University Press, 2017).

nature from mainstream history and take up the promise of global history as a method which bursts various boundaries. These boundaries should of course carry on being geographical, political, agentic and cultural. But they may also now include the boundaries of human/non-human, seen/unseen, underwater/overwater, overground/underground and other such divisions in global understanding which are not in keeping with the way the Earth works.

This is not to call for an erasure of the global, but rather to say that the makings of the global depend in turn not only on the local, but also on all those material and natural contexts which are often at the sidelines of global historiography. Such contexts can also involve a range of different scales, from oceans to airs or from insects to tigers. Such an approach would generate a more robustly multcentred set of subjects, objects and geographies for global history. In one possible path forward one might imagine that features such as waves, earthquakes or tides; garbage pits, oil spills and fire-storms; islands, oases and deltas could be used to organise histories around specific material features and planetary events without needing a naturally deterministic framework of explanation.

On the Anthropocene

There is an important debate that is worth addressing in closing these reflections about an Earthy historiography. Is the call for a global history attuned to seas and mountains, waves and rivers, and viruses and bacteria, a history of the environmental present? And, if so, is it worth casting it under the contested label, first proposed in 2000, of the ‘Anthropocene’?⁵¹

I have consciously not engaged with the ‘Anthropocene’ thus far because the ‘Anthropocene’ itself is a universalising concept that takes the uniformity of the planet for granted. It may easily be critiqued for many of the same reasons set out here against the global. Additionally, it rests on a teleology and assumes a very narrow view of periodisation, through the assumption that environmental transformation can be precisely dated to a particular era. It is in many ways a nostalgic concept, casting everything prior to the era when humans became ‘geological agents’ into a sustainable prehistory. Meanwhile, it assumes a global convergence in extinction, the growth of cities and population, farming and agriculture or deforestation. It also rests on a geohistorical framework. Pratik Chakrabarti’s recent work, based out of South Asia, is useful here in showing how the debate over the Anthropocene arises out of the longer disciplinary history of geology, a discipline which naturalised and lengthened

⁵¹ Originating from Paul Crutzen and Eugene Stoermer.

historical time.⁵² In this sense the Anthropocene still inherits the problems of disciplinary specialism highlighted earlier rather than contesting them. It can easily see a wholesale ceding, once again, of the ground of historical scholarship to science.

The concept of the Anthropocene has also been critiqued for erasing histories of racism, enslavement and dispossession, and there has been a call for a ‘Billion Black Anthropocenes’.⁵³ The alternative terms of the ‘Capitalocene’ or the ‘Plantationocene’ are proposed to foreground capital’s role in creating an abstracted nature and the exploitation of unfree labour as a racialised commodity via imperial systems in the multispecies assembly of the plantation.⁵⁴ A concomitant debate which runs through these three terms – ‘Anthropocene’, ‘Capitalocene’, ‘Plantationocene’ – along with others which include ‘Technocene’ or ‘Chthulucene’, is whether or not the human/non-human binary should be bridged or not in new material approaches such as those discussed in this chapter.⁵⁵ For all these reasons, the sketch of an Earthy historiography that I present here does not fit within the conception of the ‘Anthropocene’. Rather, it is an invitation towards plurality and assembly and a multiplicity of scales, forces and periodisations as constitutive of historical change.

One aspect of the debate about the ‘Anthropocene’ that calls for attention is temporality. Making the concept of the global more Earthy is fundamentally about its terrain and materiality, but what about the temporalities of history? A less human-centred view of time would require attention to the long-term. Indeed, the drawing of the curtains of modern historiography allowed time itself to be compressed, even as the sciences were expanding time.⁵⁶ But it may be the case that we should no longer approach temporality as a linear scale: this was part and parcel of the rolling out of the humanist and Enlightened history across the world. More cyclical views of temporality may be in order in a historiography attuned to the terrain of the Earth; attention to the rise and fall of life forms, or indeed to processes of descent, kinship and evolution, could frame quite distinct modes of historical writing. Indigenous peoples

⁵² Pratik Chakrabarti, *Inscriptions of Nature: Geology and the Naturalization of Antiquity* (Baltimore: Johns Hopkins University Press, 2020).

⁵³ Kathryn Yusoff, *A Billion Black Anthropocenes or None* (Minneapolis: University of Minnesota Press, 2018).

⁵⁴ For ‘plantationocene’ see, for instance, Michael Warren Murphy and Caitlin Schroering, ‘Refiguring the Plantationocene: Racial Capitalism, World-Systems Analysis and Global Socioecological Transformation’, *Journal of World-Systems Research* 26, 2 (2020), 400–15.

⁵⁵ See, for instance, Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso Books, 2015) and Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (London: Verso Books, 2016) and his ‘Geology of Mankind? A Critique of the Anthropocene Narrative’, *Anthropocene Review* 1, 1 (2014), 62–9.

⁵⁶ For temporality, see, for instance, Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time* (New York: Columbia University Press, 2004).

continue to practice modes of genealogy which orient pasts and futures in different ways to professional historians.⁵⁷ Meanwhile, deep history and attention to changes in the Earth's temperature or pollution levels could also provide interesting routes towards alternative modes of periodisation to those determined by calendrical systems. In all these ways, it may be necessary to be more 'pluri-temporal' in historical writing.

The environmental crisis that we are living through is undeniable, and it is therefore understandable that a concept such as the 'Anthropocene' is needed to do urgent scholarly work. To take one thread within this moment, we are living in an age of mass extinction. Yet even with such a claim, philosophical debates have arisen about how to define the concept of extinction and how to come to terms with programmes of de-extinction which are already afoot, as well as techniques of rewilding.⁵⁸ New technologies, encompassing frozen arks of specimens, are opening up a middle ground between the categories of 'endangered' and 'extinct'.⁵⁹ Historians of extinction are conducting work which usefully links the horrific account of violence against Indigenous peoples with that against non-human species: programmes of genocide were linked in history across the human/non-human dichotomy, especially when they occurred in the midst of settlement colonisation. To overstate the teleological march of extinction is to prevent the possibilities of resistance, persistence and return by targeted species. It takes the crisis narrative at face value, without presenting a more nuanced story with the chance of a future encompassing diverse peoples and life forms. It minimises the agentic status of nature and the dominated.

Conclusion

This chapter started out from the premise that the Earth is a material space rather than a modelled globular entity. At the same time, the production of the globe as object and history as discipline can be jointly interrogated as endeavours that have had the tendency to detach the human from the materiality of the planet and its life forms; the origins of modern historiography saw an elision of nature. Precisely for this reason, however, human attempts at mapping may be re-read and peeled back. Working with 'Taprobane' was an attempt to read the genealogy of mapping differently – to show how

⁵⁷ See, for instance, Warwick Anderson and Miranda Johnson (eds.), *Pacific Futures* (Honolulu: University of Hawai'i Press, 2018).

⁵⁸ This follows the ongoing work of Sadiya Qureshi. See, for instance, her presentation to the Anthropocene Histories seminar, London, www.ucl.ac.uk/anthropocene/projects-and-seminars/seminar-series/anthropocene-histories.

⁵⁹ Joanna Radin, *Life on Ice: A History of New Uses for Cold Blood* (Chicago: Chicago University Press, 2017); Cal Fyn, *Islands of Abandonment: Life in a Posthuman Environment* (London: William Collins, 2021).

Indigenous as well as colonial authors, cartographers and historians were wrestling with the question of how to size, historicise and represent a changeable island in the midst of the ocean and over the long term. Maps can be read not only for detachment and ornamentation, but also for clues to the materiality of the Earth bursting through.

And it is in this spirit that a proposal is made here for an Earthy historiography – a more materially aware global history which can move across many scales and boundaries without reducing itself to a new series of classifications or singularities. It may not be a purist post-human history, but rather one which places the human within a series of other assemblies. It would open up the possibility of a future which is more conscious of materiality yet not solely determined by a crisis narrative or by modes of reductionism. To quote Donna Haraway: ‘I am a compost-ist, not a posthuman-ist: we are all compost not posthuman.’⁶⁰

⁶⁰ Donna Haraway, ‘Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin’, *Environmental Humanities* 6, 1 (2015), 159–65.