Introduction: Difference and Disease

One morning in late December, 1750, two physicians in Kingston, Jamaica fought a duel to the death. After an ever-more contentious debate, in print, over the preceding several months, the two confronted one another in person. Intemperate language led to blows, then to the offer and acceptance of a challenge. Very early on the 29th, Parker Bennet arrived at John Williams' house, armed with sword and pistols, and called his adversary out. Williams, according to a later report, loaded his pistols with 'Goose or Swan shot', affixed his sword to his wrist with a ribband, and opened his door enough to present his pistol, shooting Bennet in the chest. Bennet, by this version of events at least, was considerably more chivalrous and having delivered his own arms to his servant, reeled backwards under the force of the shot to get them. Pursuing him, Williams fired a second time, catching Bennet in the knee. By this point, Bennet had reached his sword, which he now found to be stuck so firmly in its scabbard that he could not draw it. Williams, drawing his own weapon, struck Bennet under the right arm and ran him through, before turning to make his exit from the scene. Bennet, somehow still alive, caught his opponent before he could make his escape. Having finally worked his own sword free, his thrust pierced Williams beneath his right clavicle, severed the jugular vein, and broke off in the body. Williams died almost instantly, while Bennet survived him by roughly four hours (one assumes just long enough to offer a story that reflects considerably better on his honour than his adversary's).[1]

Although the two had known one another for several years and had possibly harboured grudges for some time, the immediate cause of their dispute was a book Williams had published earlier in 1750, *An Essay on the Bilious,*

[1] John Williams and Parker Bennet, *Essays on the Bilious Fever: Containing the Different Opinions of Those Eminent Physicians John Williams and Parker Bennet, of Jamaica: Which Was the Cause of a Duel, and Terminated in the Death of Both* (Jamaica and London: T. Waller, 1752). The duel is discussed briefly in Richard B. Sheridan, *Doctors and Slaves: A Medical and Demographic History of Slavery in the British West Indies, 1680–1834* (Cambridge: Cambridge University Press, 1985), 68; and G. M. Findlay, 'John Williams and the Early History of Yellow Fever', *The British Medical Journal* 2, no. 4574 (1948).

or Yellow Fever of Jamaica.[2] On reading, the *Essay* seems insufficient to have produced such an effect, for it is a reasonably innocuous medical work, no more critical of other authors and physicians than most others of its time. What seems to have incensed Bennet, however, was a relatively brief passage in Williams' Preface, which drew a distinction between practitioners who had been in the West Indies for some time – and who hence possessed adequate local knowledge and experience – and those who had arrived more recently, having possibly been trained at an elite medical institution in one of Europe's metropolitan centres. 'It appears to me', wrote Williams, 'that no man, let his genius or stack of learning be what it will, can be a judge of the disorders of this country without faithful observation and experience; yet the passion for novelty is so great amongst us that some persons sacrifice life itself to it'. Williams appended a Latin tag from Virgil's 'Aenied' (*quae tanta insania cives?* 'Oh what great insanity is this, citizens?') before continuing:

> A new comer, whose head is filled with theory and darling hypotheses, by some will be trusted before a man who … hath made himself acquainted with the diseases of the country, and prudently follows the vestigial of nature; never sacrificing his patient to any favourite hypothesis.[3]

Bennet was precisely such a 'new comer', having obtained his medical degree in Edinburgh in 1745.[4] And his gloss on Williams remarks, published in *An Enquiry into the Late Essay on the Bilious Fever*, provides an idea of how quickly the discussion would devolve:

> The second paragraph in the 4th page is a very extraordinary one, and requires a small paraphrase … *Oh ye men of* Jamaica! *Are ye not a parcel of blockheads? To trust your lives in the hands of a NEW COMER! Of a man who has been at the University! Who has attended the nasty lectures of* Morgagni*,* Albinus*, or* Monroe*, whose head is filled with the whimsical notions of* Boerhaave*! And who knows no more of diseases than what he has learned by seeing the trifling practice of* European *hospitals! – Come to me! I am your faithful* Hippocrates *of* Jamaica![5]

If he was young and new to Jamaica, Bennet nonetheless also claimed relevant experience: 'some of us have been in *Africa*, on board *Guineamen*, and in other islands of the *West-Indies*, as well as he; consequently are equally entitled to write upon and cure the *yellow fever*'.[6] Yet Bennet would draw on relatively little of that experience in making a mockery of Williams' probity, competence, Latin, erudition, and – with repeated references to his opponent

[2] John Williams, *[an] Essay on the Bilious, or Yellow Fever of Jamaica* (Kingston, Jamaica: William Daniell, 1750).
[3] Williams and Bennet, iv.
[4] Brief biographical material on each man is offered in Findlay.
[5] Williams and Bennet, 60–1.
[6] Ibid., 61.

as *Mr*. John Williams – his lack of a degree.[7] Williams replied in print with a poem, describing '*Bennet*, whose trifling writings no point hit:/That fop in learning, and that fool in wit'.[8] Bennet in turn responded with an attack on Williams' 'bad poetry, false measure, and vile logic', referring to the poem as the 'idle nonsense of a conceited dunce' and its author as 'a forward cringing fop'.[9] Why Williams thought it would be helpful to reply at this point is not clear. Perhaps he saw that the alternative to words was a violence the end of which could not be predicted. In any case, reply he did, defending himself against charges that he had prescribed a deadly quantity of opium to some of his unfortunate patients by appending supportive letters from the apothecaries who had filled his prescriptions. He also responded to the central point of Bennet's original indignation.

> But you were pleased to take offence at the Preface, I hear; where I say, 'a new comer must be liable to more errors in his practice, than a person who hath had a great share of observation and experience', or words to that purpose. Pray, Sir, is not this Truth? Would doctor Mead deny this? And would not that great man be at a loss himself on his first arrival in a southern climate?[10]

The final document in Williams' *Letter to Doctor Bennet* was dated 27 November 1750. Both men would be dead a little over a month later.

The story of Bennet and Williams is a bizarre one. But it is also revealing, opening a door towards a more general set of questions that this book seeks to examine: what determined the social status of medical practitioners in the metropole and far-flung colonies? Which of several competing epistemologies and ontologies were correct? Was there something that bound the diseases of the tropics together and marked them as distinct to those of more temperate regions of the earth? How might one become habituated to a climate and a range of distempers radically different from that in which one was born? Let me elaborate on these questions before I turn, in the next section, to my historical and historiographical stakes.

At the heart of Bennet and Williams' deadly disagreement, we can see, were concerns over who had the appropriate training, social standing, and experience to speak to medical matters in the colonies. That socio-political question could not be resolved, of course, without simultaneously considering a second set of questions: to what extent were the diseases of the Indies really different to those of Northern Europe? If they were essentially the same, surely one might prefer the ministrations of a physician who had received a degree from

[7] E.g. ibid., 75.
[8] Ibid., 33–4.
[9] Ibid., 36, 39.
[10] Ibid., 48.

one of the leading universities in Europe, and who could claim – as Bennet did, practice in European hospitals? If the disease environments were radically different, on the other hand, one might well call in a doctor whose knowledge went beyond the ailments afflicting the inhabitants of London or Edinburgh.

The question sounds strange to our modern ears, for we are familiar with tropical medicine as a particular speciality. As a child in Australia, born to Indian parents, I remember well the trepidation that accompanied excitement at the thought of visits to relatives in Delhi. Foul-tasting quinine tablets and painful shots always diluted my enthusiasm for the journey, as did almost ritualised discussions between adults about the relative likelihood of us contracting cholera, typhoid, or malaria. But tropical medicine was born at the end of the nineteenth century, and in 1750 Bennet and Williams were on the cusp of a new understanding of illness between the tropics.

When, then, and why did Anglophone physicians begin to see the diseases of warm climates as different in kind, not merely degree, from those of cooler locations to the north? Relatedly, when and why did medically significant differences *within* northern Europe – which had been an object of considerable interest for some time – begin to pale in significance relative to a larger difference between Europe and the tropics? A sizeable part of the answers to these questions came in analyses of the disease that was the subject of Williams' first essay: yellow fever. It was an irony utterly lost on the two rancorous combatants that the fever in question gained much of its intellectual interest from the fact that it, like Williams, seemed to distinguish sharply between those who were habituated to the climate of the West Indies, and those who were new to it. The fever was particularly fatal, Williams noted, 'to strangers, *Europeans*, and *North Americans'*. If one survived the first attack, however, one was unlikely to be afflicted again. At the very least, a second bout of the fever would be considerably less violent. Today, when we point to the transmission of the yellow fever virus through the bite of mosquitoes, we invoke the body's production of antibodies to explain our acquired immunity. For eighteenth-century physicians, almost no part of this reasoning would have made sense.

According to Williams, newcomers from the North were particularly vulnerable to the disease because they possessed tense fibres and were 'plethoric', having a comparative surfeit of blood, which was also heated upon arrival in the Indies. The warmth caused the blood to expand and become 'rarefied', pressing upon the rigid vessels that contained it. The rarefied blood travelled more quickly through the body, increasing all secretions 'recrementitious and excrementitious' except those by urine and stool. Yet these last two were the body's means of removing excess bile. '[A] redundance of bile', Williams declared, 'together with that stiffness of the fibres, and richness of the blood, are obvious and sufficient causes of their proneness to this fever'. For Williams, then, the best treatment was to bleed strangers on their arrival, reducing their

excess blood, a process to be continued until their bodily fibres relaxed, and their 'juices assimilated to the air of the country'.[11] At that point, in common parlance, they could be said to be 'seasoned' to the climate.

Associated, then, with questions concerning socio-political status, conceptual foundations, and geographical taxonomies, another strand that runs through this book is the history of the idea of seasoning. The term dates back to at least the fifteenth century, when one finds the verb *to season* used in a sense very similar to the most common modern understanding: 'to render (a dish) more palatable by the addition of some savoury ingredient'. The word derives from the Old French *saisonner*, meaning 'to ripen, to render (fruit) palatable by the influence of the seasons'. A second, somewhat different and later English term flows from this original French usage, for one also speaks of seasoned timber, or seasoned metal. In this case, a particular treatment, usually related to the way in which the material will later be used, brings it to a kind of maturity or ripeness. The analogous use of the term for people – to be inured to rough conditions by training and experience – appears already in the early seventeenth century.[12] It seems commonplace to speak of seasoned soldiers, in particular, by the 1680s.

The idea of a 'seasoning sickness', however, meaning an illness that habituates the body to a particular environment or climate – and which, crucially, is only experienced once – seems to be a product of the late seventeenth century.[13] Certainly, eighteenth-century travellers, doctors, soldiers, and sailors all paid a great deal of attention to an illness that seemed to be a disease of *place*. Seasoning affected neither 'natives' nor those who had spent a good deal of time in a specific locale. Only those habituated to one location who ventured to another in which they were strangers fell ill. If they survived their affliction, their bodies were then inured to the novelties of the environments in which they now found themselves. And increasingly through the eighteenth century, yellow fever was seen by many as the seasoning sickness *par excellence*.

Bennet and Williams' dispute, then, turned on a number of the differences alluded to in my title. Both men, however, were silent – perhaps because it was beyond dispute? – on what may have been the most important distinction for social life in the West Indies: that between populations enslaved and free. For much of the eighteenth century, that social and legal distinction mattered more for physicians interested in the diseases of the Islands than did questions of race. Doctors treated black slaves, and noted that they often suffered disproportionately from the same diseases that afflicted whites, and sometimes from

[11] Ibid., 30.
[12] *Oxford English Dictionary*, 'season, *v*'. Meanings 1a. 4a. 4c.
[13] The *Oxford English Dictionary* cites Daniel Denton's *A Brief Description of New York* (1670) as the first usage of the word 'seasoning' with this meaning.

diseases that seemed distinctive to them. Yet most put those differences down to factors derived from their patients' position as slaves – poor diet, inadequate clothing and housing – or else to different beliefs about the causes and cures of their afflictions. White and black bodies – neither of which were deemed 'native' to the Indies – responded in similar ways to the climate. Matters would begin to change, however, beginning in the 1760s. In later chapters, then, *Difference and Disease* explores the relationship between the theories of what has become known as 'race-science' – and has been examined, particularly for the eighteenth century, almost exclusively within the European metropole – and the theories of medicine and science within a colonial, racially mixed population. The history of medicine, I hope to show, provides an ideal way of exploring the history of an empire defined as much by its structuring differences as by its putative unity, while the history of empire allows us to tease out the locatedness of medical discourse about specific locations.

Difference and the Postcolonial History of Colonial Medicine

For some time, imperial historians have contested the idea that a sense of being British was first created at home and then diffused to the colonies. As scholars including Linda Colley, Christopher Bayly, and others have argued, the colonies and other far-flung places in which Britons found themselves were among the sites in which Britishness was born.[14] It was, at least in part, in the periphery that the centre as we know it was brought into being. In recent years, historians of eighteenth-century medicine have similarly turned away from a near exclusive attention to the metropole and towards a broader analysis of what might be termed 'medicine in a global context'. Among historians of imperial medicine, Mark Harrison's work has been pre-eminent and my own book draws upon and seeks to complement arguments made in his *Medicine in an Age of Commerce and Empire* (2010).[15] Harrison's study aims to provide a history of medicine within the British Empire as a whole, not merely in select colonies, and to describe the circulations of people, knowledge, and practices within and between the centre and peripheries. The book rightly works to diminish differences long critiqued

[14] Linda Colley, *Britons: Forging the Nation, 1707–1837* (New Haven and London: Yale University Press, 2009); C. A. Bayly, *Imperial Meridian: The British Empire and the World, 1780–1830* (London and New York: Routledge, 1989). Catherine Hall, *Civilising Subjects: Colony and Metropole in the English Imagination, 1830–1867* (Chicago: University of Chicago Press, 2002). Kathleen Wilson, *The Island Race: Englishness, Empire and Gender in the Eighteenth Century* (London: Routledge, 2003); (ed.) *A New Imperial History: Culture, Identity, and Modernity in Britain and the Empire, 1660–1840* (Cambridge: Cambridge University Press, 2004). See also Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900* (Basingstoke: Palgrave Macmillan, 2007).

[15] Mark Harrison, *Medicine in an Age of Commerce and Empire: Britain and its Tropical Colonies, 1660–1830* (Oxford: Oxford University Press, 2010).

within the secondary literature on the history of colonial science. Medical men in the colonies were not derivative drones following the lead of their colleagues in the metropole, but rather proponents of creative 'dissent' – that word used by Harrison to denote not merely a religious position common to many of the leading physicians in the colonies, but also a willingness to work against long-held traditions. Practitioners working in hospitals in the Indies 'rejected the genteel, text-based medicine of the physician elite for an avowedly empirical form of medicine supported by the twin pillars of bedside observation and post-mortem dissection'. Similar changes were occurring in Britain, but they proceeded at a more rapid pace overseas, where colonial practitioners could take 'advantage of unparalleled opportunities for dissection and the correlation of morbid signs with symptoms in living patients'.[16] Physicians in the 'peripheries', then, were *ahead* of those at the so-called centre. As a result, the rational medicine that emerged at the end of the eighteenth century should be understood as being 'as much a product of the colonies as of the infirmaries of revolutionary Paris; or, for that matter, of the hospitals and anatomy schools of Britain'.[17] The difference between metropole and colony is thus at the heart of Harrison's work, as it was for earlier studies, but the advantage is now given to the latter.[18]

I have considerable sympathy for this inversion, and where Harrison and I overlap topically, I have gratefully made use of his many insights and turned my attention towards those differences – in theories, for example, or social status – that are less relevant to the eventual emergence of so-called 'Paris medicine'. But the dominance of the distinction between practitioners in Europe and those in the colonies tends to lead to the diminution of other forms of difference that I try to stress.[19] The role of eighteenth-century medicine in the construction of race, for example, receives a much fuller treatment here than in any previous work.[20] The book's geographic scope is broad, tracking

[16] Ibid., 27.
[17] Ibid., 9.
[18] Pratik Chakrabarti, *Materials and Medicine: Trade, Conquest and Therapeutics in the Eighteenth Century* (Manchester: Manchester University Press, 2011).
[19] In paying so much attention to difference, I am drawing from recent work in the 'new imperial history'. For a discussion, see Kathleen Wilson, 'Introduction: Histories, Empires, Modernities', in *A New Imperial History: Culture, Identity, and Modernity in Britain and the Empire, 1660–1840*, ed. Kathleen Wilson (Cambridge: Cambridge University Press, 2004). See also Linda Colley, 'Britishness and Otherness: An Argument', *Journal of British Studies* 31 (1992). Hall. Wilson, *The Island Race: Englishness, Empire and Gender in the Eighteenth Century*.
[20] In Harrison's book, the discussion of race is largely limited to the period after 1790, in spite of the book spanning the years from 1660 to 1830. An earlier essay is more concerned with the period after 1780 and especially with the early nineteenth century. It is in the 1820s, it is argued there, that 'biological explanations … began to appear in medical texts'. As one reason for this, Harrison points to the abolition of the slave trade in 1807, which 'may have served to focus medical attention more closely on questions of racial difference'. Mark Harrison, '"The Tender Frame of Man": Disease, Climate and Racial Difference in India and the West Indies,

materials derived not only from Britain's 'tropical colonies' – largely the East and West Indies – but also from areas maintained by British representatives of the African slave trade as well as North America. I have also chosen to focus on a long-term, diachronic study of Britain's imperial holdings, rather than a shorter-term synchronic account of exchanges between and across empires in a given location, such as the Caribbean.

Perhaps as a result of its wide geographical scope, which includes but goes beyond the 'Atlantic world', relationships between medicine, slavery, and abolitionism are key elements of this study. I have tried, too, to be attentive to the differences between all of these locations. Among the implications of this attention is the fact that I cannot quite agree with those who have argued that military medical texts are the most important sources for understanding medicine outside of the British Isles in the eighteenth century.[21] The claim might be accurate for India, but it does not seem applicable to the West Indies for much of the century. While tracts on the diseases of soldiers and sailors focused on British bodies in locations described broadly as those 'nearer, or under the line' as William Cockburn phrased it in 1696, or in 'hotter Countries' as he put it in *Sea Diseases* a decade later, 'location-specific' works tended to stress the particularity of their location, radically distinguishing between lands located between the tropics. An over-emphasis on military rather than civilian works can thus also over-emphasise the similarities assumed between locations. In addition, medical men treating soldiers and sailors, as J. D. Alsop has noted, had a rather restricted group of patients under their care: for the most part, they ministered to younger, European men.[22] John Hunter was interested in the question of 'race', writing a dissertation on the varieties of human kind in 1775 before being appointed physician to the army and, from 1781 to 1783, superintendent of the military hospitals in Jamaica. However, in the text that he wrote based on his experiences, *Observations on the Diseases of the Army in Jamaica* (1788), he noted that '[t]he diseases of Negroes fell seldom under my

1760–1860', *Bulletin of the History of Medicine* 70, no. 1 (1996): 82, 83. Curtin, similarly, emphasises the period after 1780: Philip D. Curtin, '"The White Man's Grave": Image and Reality, 1780–1850', *Journal of British Studies* 1 (1961); 'Epidemiology and the Slave Trade', *Political Science Quarterly* 83, no. 2 (1968); *The Image of Africa: British Ideas and Action, 1780–1850* (Madison: University of Wisconsin Press, 1964). On relationships between medicine and slavery, I am indebted to the works of Richard B. Sheridan: 'Africa and the Caribbean in the Atlantic Slave Trade', *The American Historical Review* 77, no. 1 (1972); 'The Guinea Surgeons on the Middle Passage: The Provision of Medical Services in the British Slave Trade', *The International Journal of African Historical Studies* 14, no. 4 (1981); *Doctors and Slaves: A Medical and Demographic History of Slavery in the British West Indies, 1680–1834*.

[21] J. D. Alsop, 'Warfare and the Creation of British Imperial Medicine, 1600–1800', in *British Military and Naval Medicine, 1600–1830*, ed. Geoffrey L. Hudson (Amsterdam: Rodopi, 2007), 23. Harrison, *Medicine in an Age of Commerce and Empire: Britain and its Tropical Colonies, 1660–1830*, 14.

[22] Alsop, 37.

observation'.[23] This is to be contrasted to the testimony concerning the slave trade of Dr John Quier and others the same year, in which all three (civilian) physicians noted that they had under their care three to four *thousand* slaves a year as part of their practice.[24] Civilian surgeons and physicians also – unsurprisingly – paid much more attention to the afflictions of women than their military counterparts. One might note, finally, that attention to the many different kinds of patients outside of the metropole makes one rather less sanguine about the 'opportunities' for dissections and other more novel medical practices, for dissections and experimentation were often carried out on the bodies of those – soldiers, perhaps, and often slaves – who could not always easily resist.[25]

At its core, this book is about the mutual shaping of medicine and the eighteenth-century British Empire.[26] As such, I put it forward as an example of the *postcolonial history of colonial medicine*.[27] Such histories were once fairly common,[28] but today historians of science, medicine and colonialism seem loath to engage with postcolonial approaches. Indeed, two recent essays by prominent historians of science and colonialism have been markedly critical of postcolonial methods and their potential utility.[29] Where the issue is antipathy rather than apathy, however, such critiques seem rooted in misunderstandings of the state of postcolonial science studies as it is today. For, in the last few decades, histories of science and colonialism have followed many of the same paths as postcolonial studies. Historians of the colonial past, like postcolonial

[23] John Hunter, *Observations on the Diseases of the Army in Jamaica; and on the Best Means of Preserving the Health of Europeans, in That Climate* (London: G. Nicol, 1788), 305.

[24] Assembly. Jamaica., *Two Reports (One Presented the 16th of October, the Other on the 12th of November, 1788) from the Committee of the Honourable House of Assembly of Jamaica, Appointed to Examine into … The Slave-Trade … Published, by Order of the House of Assembly, by Stephen Fuller … Agent for Jamaica.* (London: B. White and Son; J. Sewell; R. Faulder; and J. Debrett, and J. Stockdale, 1789).

[25] Londa Schiebinger, 'Human Experimentation in the Eighteenth Century: Natural Boundaries and Valid Testing', in *The Moral Authority of Nature*, ed. Lorraine Daston and Fernando Vidal (Chicago: University of Chicago Press, 2004); *Secret Cures of Slaves: People, Plants, and Medicine in the Eighteenth-Century Atlantic World* (Stanford: Stanford University Press, 2017).

[26] For a somewhat similar project, from a different perspective, see Alan Bewell, *Romanticism and Colonial Disease* (Baltimore: Johns Hopkins University Press, 1999).

[27] For a fuller discussion of the relationship between postcolonial science studies and the history of science and colonialism, see Suman Seth, 'Colonial History and Postcolonial Science Studies', *Radical History Review* 127 (2017).

[28] See, for example, Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness* (Stanford: Stanford University Press, 1991); David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993); Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton: Princeton University Press, 1999).

[29] Kapil Raj, 'Beyond Postcolonialism … And Postpositivism: Circulation and the Global History of Science', *Isis* 104 (2013); James McClellan III, 'Science & Empire Studies and Postcolonial Studies: A Report from the Contact Zone', in *Entangled Knowledge: Scientific Discourses and Cultural Difference*, eds. Klaus Hock and Gesa Mackenthun (Münster: Waxmann, 2012).

theorists today, are sceptical of the telos and boundaries of the nation state; have called into question the dichotomies and divisions of the colonial age as analytic, rather than actors' categories; have stressed the global setting as a way to understand the flows and movement of sciences and technologies; and are fascinated by hybridity and heterogeneity.

In particular, much of the literature in postcolonial science studies has been concerned with the troubling of binaries and boundaries. 'We have to be sensitive', Warwick Anderson and Vincanne Adams have written in a particularly important formulation, 'to dislocation, transformation, and resistance; to the proliferation of partially purified and hybrid forms and identities; to the contestation and negotiation of boundaries; and to recognizing that practices of science are always multi-sited'.[30] A similar move is common in the history of colonialism and science. Indeed, for scholars like Kapil Raj, this is one of the appeals of a circulatory model of knowledge exchange, since such a model does not reify the categories of knowledge into those of coloniser and colonised.[31] Sujit Sivasundaram has made a similar claim, arguing that a focus on the global may allow us to think beyond such binaries and 'fragment traditions of knowledge on all sides'.[32] An excellent recent collection accepts 'it may make sense to conceptualise encounters between Europeans and other peoples as dualistic and antagonistic', but that there is no reason to assume '*essentially* confrontational relations'.[33] Instead, one may look at the go-betweens in exchanges, those who allowed boundaries to be blurred and exchanges to occur, even as they sometimes maintained and objectified the boundaries they transgressed. The volume is thus concerned with people whose tasks involve the *intra* and the *trans:* 'those tricky and often elusive characters who seemed newly important in networks linking cultures and, as often, confusing their boundaries'.[34] There is a good argument to be made that histories of science, medicine, and colonialism are remarkably methodologically close to being postcolonial studies of medicine and technoscience done in the past, and vice versa. And in that situation, there seems little reason for each field not to borrow from and engage with one another more.

[30] Vincenne Adams and Warwick Anderson, 'Pramoedya's Chickens: Postcolonial Studies of Technoscience', in *The Handbook of Science and Technology Studies*, ed. Edward J. Hackett et al. (Cambridge, MA: MIT Press, 2007), 183–4.

[31] Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900*.

[32] Sujit Sivasundaram, 'Sciences and the Global: On Methods, Questions, and Theory', *Isis* 101 (2010): 154. At times, however, Sivasundaram seems to fall into the trap of seeing globalisation as a force of history in its own right, arguing, for example, that '[g]lobalization enabled the precolonial, the colonial, and the postcolonial to fit together', ibid., 156.

[33] Simon Schaffer et al., eds., *The Brokered World: Go-Betweens and Global Intelligence, 1770–1820* (Sagamore Beach: Science History Publications, 2009), xv.

[34] Ibid., xvii.