

# 1 ‘The Same Diseases Here as in Europe’? Health and Locality Before 1700

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Toward the end of January, 1686, the London doctor, Hans Sloane wrote to the naturalist John Ray, reporting to him (among other things) the ways that unscrupulous merchants were currently seeking to fool unwary purchasers of the febrifuge known as Jesuit’s Bark. ‘[I]t being so good a drug, that they begin to adulterate it with black cherry and other barks dipped in a tincture of aloes, to make it bitter’. Sloane noted that anyone familiar with the substance might spot the trickery immediately, for ‘the bitterness of the adulterated bark appears upon its first touch with the tongue, whereas the other is a pretty while in the mouth before it is tasted’.<sup>1</sup> The letter included news that suggested Sloane might soon have considerable use for the drug himself. ‘I have talked a long while’, he wrote, ‘of going to Jamaica with the Duke of Albemarle as his physician, which, if I do, next to serving his grace and family in my profession, my business is to see what I can meet withal that is extraordinary in nature in those places. I hope to be able to send you some observations from thence, God Almighty granting life and strength to do what I design’.<sup>2</sup>

Although only twenty-six at the time, Sloane had already made a name for himself as a skilful collector of natural historical specimens.<sup>3</sup> Travelling through France while undertaking a medical degree (granted at the University of Orange in 1683), he spent a portion of his time gathering a sizeable collection of flora, which he then sent to Ray to make use of in his three-volume *History of Plants* (1686–1704). Sloane’s previous work was on Ray’s mind when he responded to the news that the young man might soon be working on an island that had only recently come into English possession. ‘Were it not for the danger and hazard of so long a voyage’, wrote Ray in April 1687, ‘I would heartily wish such a person as yourself might travel to Jamaica, and search out

<sup>1</sup> Dr Hans Sloane to Mr Ray, Jan 29, 1686. In John Ray, *The Correspondence of John Ray: Consisting of Selections from the Philosophical Letters Published by Dr. Derham: And Original Letters of John Ray in the Collection of the British Museum / Edited by Edwin Lankester* (London: Printed for the Ray Society, 1848), 190.

<sup>2</sup> *Ibid.*, 189.

<sup>3</sup> James Delbourgo, *Collecting the World: Hans Sloane and the Origins of the British Museum* (Cambridge, MA: Belknap Press, 2017).

and examine thoroughly the natural varieties of that island. Much light might be given to the history of the American plants, by one so well prepared for such an undertaking by a comprehensive knowledge of the European'.<sup>4</sup> In June, Ray got more detailed about the kinds of questions he hoped Sloane could answer. Great things were expected, 'no less than the resolving all our doubts about the names we meet with of plants in that part of America ... You may also please to observe whether there be any species of plants common to America and Europe'.<sup>5</sup> The largest number of specific queries derived from Ray's readings of a recent book by a Jamaican doctor, Thomas Trapham. Trapham's *Discourse of the State of Health in the Island of Jamaica* had appeared in 1679, and contained a number of natural historical observations.<sup>6</sup> Ray wanted the better-trained Sloane to determine the origin of ambergris (was it really the juice of a metal or aloe dropped into the sea?), the nature of the plant known as 'dumbcane', and precisely what Trapham meant when he described the 'shining barks of trees' that he had seen.<sup>7</sup>

Sloane had presumably already read Trapham's text, not least as preparation for the work expected of him as physician to Jamaica's new Governor.<sup>8</sup> Trapham's *Discourse* was the first English book written on the diseases of the West Indies. Indeed, today it is considered by some to be the first English monograph on tropical medicine more generally.<sup>9</sup> Sloane would soon meet Trapham in Jamaica, where the two butted heads over the Duke's medical treatment. The elite metropolitan physician was clearly irritated when Trapham was called in for a consultation as 'one who understood the country diseases having lived there several years'. By his own account, however, Sloane 'declined quarrelling with him. Thought my case hard enough in that I was blamed by some for want of success when his Grace would not take advice'.<sup>10</sup> Neither

<sup>4</sup> Mr Ray to Dr Hans Sloane, 1 April 1687. In Ray, 192.

<sup>5</sup> Mr Ray to Dr Hans Sloane (No date, presumably late June 1687). In *ibid.*, 194–5.

<sup>6</sup> Thomas Trapham, *A Discourse of the State of Health in the Island of Jamaica with a Provision Therefore Calculated from the Air, the Place, and the Water, the Customs and Manner of Living &C* (London: Printed for R. Boulter, 1679).

<sup>7</sup> Ray, 195.

<sup>8</sup> The charge was not necessarily a promotion. '[King] James knew that Albemarle was a profligate and irresponsible man who had squandered his fortune in England', writes Dunn. '[H]e sent him to Jamaica to get rid of him. The duke, for his part, was eager to go because he had an interest in Caribbean treasure hunting'. The Duke's eventual death in 1688 was apparently tied to his profoundly immoderate celebrations following the announcement of the birth of the queen's son. Richard S. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624–1713* (Chapel Hill and London: University of North Carolina Press, 2000), 160.

<sup>9</sup> M. T. Ashcroft, 'Tercentenary of the First English Book on Tropical Medicine, by Thomas Trapham of Jamaica', *British Medical Journal* 2 (1979).

<sup>10</sup> This story derives from Estelle Frances Ward, *Christopher Monck, Duke of Albemarle* (London: J. Murray, 1915). Ward refers to the doctor as 'Traphan'. Sheridan notes the exchange in Richard B. Sheridan, 'The Doctor and the Buccaneer: Sir Hans Sloane's Case History of Sir Henry Morgan, Jamaica, 1688', *Journal of the History of Medicine and Allied Sciences* 41 (1986): 84.

doctor would achieve a great deal. The Duke died in October 1688, after which Sloane returned to England, having spent only fifteen months away.

Sloane's interactions with both Ray and Trapham would profoundly shape the most substantial product of his brief sojourn in the West Indies, his two-volume *Voyage to the Islands Madera, Barbados, Nieves, S. Christophers, and Jamaica* (1707 & 1725). Prior to this English-language work, in 1696 (by which time he had been elected secretary of the Royal Society), Sloane had published a Latin catalogue of Jamaican plant life. In writing a 'short account' of the catalogue at Sloane's request, Ray answered a number of the questions he had first posed a decade earlier.<sup>11</sup> Sloane, he noted 'hath informed us that the Dumb-cane so called, which being tasted, inflames the tongue and jaws in that manner, that, for awhile, it takes away the use of speech, is not properly any species of reed or cane, but of arum, or wake-robin'.<sup>12</sup> More generally, 'we are assured by his work that there are some plants common, not only to Europe and America, but even to England and Jamaica, notwithstanding the great distance of place, and difference both of longitude and climate'.<sup>13</sup> The import of this statement appeared in Sloane's *Preface* to the 1707 volume of his *Voyage*. Responding to the potential retort that his discoveries in the West Indies were hardly surprising, since one might imagine that all the plant life in such a foreign clime was novel, Sloane wrote, 'I answer it is not so ... I find a great many plants common to Spain, Portugal, and Jamaica, more common to Jamaica and the East-Indies, and most of all common to Jamaica and Guinea'. The natural history he was offering, he argued, could 'reasonably be suppos'd' to describe not only the botanical world of the Americas, but even of Guinea and the East Indies and thus 'to contribute to the more distinct knowledge of all those parts'.<sup>14</sup>

The argument that related plants in America to those in England was important to Sloane's overall purpose, which was, in part, to encourage a kind of trade of plant life between the Old and New Worlds. If one of Sloane's aims was to teach those who lived in or near Jamaica the uses of plants growing wild or in their gardens, another was to educate those in England about the virtues – particularly the therapeutic virtues – of the materials that he brought back. 'It may be objected', he suggested, 'that 'tis to no purpose to any in these Parts of the World, to look after such [Jamaican] Herbs, &c. because we never see them; I answer, that many of them and their several Parts have been brought over, and are used in Medicines every day, and more may, to the great Advantage of physicians and Patients, were People inquisitive enough to look

<sup>11</sup> Mr Ray to Dr Hans Sloane (no date). In Ray, 464.

<sup>12</sup> 'Preface by Mr Ray to Dr. Hans Sloane's Catalogue of Plants', in *ibid.*, 465–8, on 67.

<sup>13</sup> *Ibid.*, 468.

<sup>14</sup> Sloane, *Preface*, 12.

after them'.<sup>15</sup> As he made this argument, Sloane could, presumably, count on his readership calling to mind the efficacy of Jesuit's (or Peruvian) Bark.<sup>16</sup> Now medicinal and other plants were thriving throughout Europe: in England and Ireland, Holland, Germany, and Sweden.<sup>17</sup>

An argument about the similarity between Jamaica and Europe was also central to the medical portion of *Voyage*, which made up roughly 40 per cent of the 154-page Introduction to Volume I.<sup>18</sup> Before leaving with the Duke, Sloane narrated, 'I was told that the Diseases of this place were all different from what they are in Europe, and to be treated in a differing Method. This made me very uneasie, lest by ignorance I should kill instead of curing'. Sloane went on to inform the reader that his own experiences had shown that the notion that diseases in Europe and the West Indies were very different was false. '[A]bating some very few Diseases, Symptoms, &c. from the diversity of the Air, Meat, Drink &c. any person who has seen many sick people will find the same Diseases here as in *Europe*, and the same Method of Cure'. In fact, Sloane continued, in an oft-quoted sentence:

For my own part, I never saw a Disease in Jamaica which I had not met with in Europe, and that in People who never had been in either Indies, excepting one or two; and such instances happen to people practicing Physik in England, or anywhere else, that they may meet, amongst great number, with a singular disease, that they had never seen before, nor perhaps meet after with a parallel instance.<sup>19</sup>

Most scholars who have written about this aspect of Sloane's work have tended to take the author's statements at face value, seeing Sloane as an outlier largely because he portrayed himself as one. Thus, Harrison has argued that: 'A few European physicians, such as Sir Hans Sloane (1660–1753), expressed scepticism about the distinctiveness of diseases in the tropics, but such opinions (as Sloane himself noted) were at variance with both lay and professional opinion in the West Indies'.<sup>20</sup> Wendy Churchill, similarly, has read Sloane as offering a 'challenge to the developing notion that illness manifested

<sup>15</sup> *Ibid.*, Preface, 11.

<sup>16</sup> On the history of the Peruvian bark, see Matthew Crawford, *The Andean Wonder Drug: Cinchona Bark and Imperial Science in the Spanish Atlantic, 1630–1800* (Pittsburgh: University of Pittsburgh Press, 2016).

<sup>17</sup> Sloane, Preface, 11.

<sup>18</sup> This section would later be translated into German and published as a work in its own right. Hans Sloane and Christoph L. Becker, *Johann Sloane ... von den Krankheiten, Welche er in Jamaika Beobachtet und Behandelt hat: aus dem Englischen Übersetzt und mit Einigen Zusätzen Begleitet* (Augsburg: Klett, 1784).

<sup>19</sup> Sloane, xc.

<sup>20</sup> Harrison, "'The Tender Frame of Man": Disease, Climate and Racial Difference in India and the West Indies, 1760–1860', 70.

differently in different climates'.<sup>21</sup> It makes some intuitive sense to think of Sloane's as an unorthodox position, for it would seem to run counter to ideas dating back to antiquity that related climates and characteristic diseases. Andrew Wear, for example, has identified an early modern European tradition based on the Hippocratic text, *Airs, Waters, and Places*. That tradition, he has argued, 'contains both the constitution-shaping aspect of place and the belief that particular diseases reside in particular places' and 'acted in Europe as a conscious or unconscious template for views on the relationship between places, health, and disease'.<sup>22</sup> However, although it is clear that a Hippocratic lineage for eighteenth-century texts on diseases and places existed, one must also emphasise the fact that the lineage was neither continuous, straightforward, nor hegemonic.<sup>23</sup>

I argue in this chapter that Sloane's characterisation of medical understandings of the relationships between health and place were, if not wrong, at least rather selective. They served, at least in part, a particular set of social claims about the necessity, or not, for a doctor in Jamaica, to have expert, local knowledge of disease. Before making that case, however, it is necessary to capture the complexity of discourse about diseases and places prior to 1700. Section 2.1 explores the relative absence of references to *Airs, Waters, and Places* until the late sixteenth century, as well as the eventual deployment of the text in works such as Prosper Alpini's *De Medicina Aegyptiorum* (1591) and Jacobus Bontius' *De Medicina Indorum* (1645). Section 2.2 examines the flexibility and nuances of this neo-Hippocratic tradition from the seventeenth century onward, for Hippocrates' text was used as much to draw similarities between far-flung locations with common airs, waters, and places as it was to delineate differences. Far from solely being a resource for rote arguments about the peculiarity of afflictions in foreign locations (although it was this, too) the arguments of *Airs, Waters, and Places* could also be deployed to draw distant lands closer, allowing boosters for colonial settlement to cast new areas as new-found 'relations': sites seemingly designed for British settlement.<sup>24</sup> Different

<sup>21</sup> Wendy D. Churchill, 'Bodily Differences?: Gender, Race, and Class in Hans Sloane's Jamaican Medical Practice, 1687–1688', *Journal of the History of Medicine and Allied Sciences* 60, no. 4 (2005): 396.

<sup>22</sup> Andrew Wear, 'Place, Health, and Disease: The Airs, Waters, Places Tradition in Early Modern England and North America', *Journal of Medieval and Early Modern Studies* 38, no. 3 (2008): 445, 43. See also G. Miller, "'Airs, Waters, and Places" in History', *Journal of the History of Medicine* 17 (1962).

<sup>23</sup> L. J. Jordanova, 'Earth Science and Environmental Medicine: The Synthesis of the Late Environment', in *Images of the Earth: Essays in the History of the Environmental Sciences*, ed. L. J. Jordanova and Roy Porter (London: British Society for the History of Science, 1979).

<sup>24</sup> 'The perfect agreement of English constitutions and American Air', Kupperman notes, 'was even urged as proof that God had intended North America for the English nation'. Karen

climates resulted in different diseases, to be sure. But we should be wary of ascribing our contemporary conceptions of the marked differences between the climates of the West Indies and of Britain (for example) to eighteenth-century actors, who also found many connections between the two sites.

With both the complexity and flexibility of the Hippocratic tradition in mind, then, Section 3.1 turns to the simple fact that it is difficult to find many texts about the West Indies that make the claim that Sloane insisted was the standard. Instead, therefore, of reading Sloane as a single figure rebutting a consensus position, I suggest that we see his claims as having emerged, at least partly, from his disputes with Trapham and other local physicians. As in the deadly dispute between Williams and Bennet, at stake was not, or not merely, the ontological question of the nature of diseases in different places, but also the epistemological question of how one learned to diagnose and treat such diseases, and the social question – related to these others – of whom should be granted the authority and expertise to speak and act on such matters. When could local experience trump putatively generalisable scholarship and learning?

### 1.1 A Hippocratic Revival

By the early 1700s it was certainly not uncommon for medical works on the diseases of specific locations to invoke Hippocrates as their most illustrious classical forebear. Friedrich Hoffmann's 1705 *Dissertation on Endemial Diseases*, for example, opened by defining 'endemial' as 'an epithet of those Diseases which are peculiar to the Inhabitants of certain Nations, or Countries'. He then offered a long quotation (almost thirty lines) from the beginning of *Airs, Waters, and Places* to support his claim that 'With these diseases and their respective Natures the Physicians ought to well acquainted'.<sup>25</sup> Richard Towne, physician and author of *A Treatise of the Diseases Most Frequent in the West-Indies* (1726), was a world away from the illustrious Hoffmann, both geographically and professionally. The German was a professor at Halle, with an international reputation, while Towne – about whom we know little else – evidently had a medical practice in Barbados. Yet Towne too found it unproblematic to introduce his text by similarly suggesting that the idea that 'human Bodies are greatly influenced by the *Climate, Air, Soil, Diet &c.* of the

Kupperman, 'The Puzzle of the American Climate in the Early Colonial Period', *The American Historical Review* 87 (1982): 1283.

<sup>25</sup> Friedrich Hoffmann and Bernardino Ramazzini, *A Dissertation on Endemial Diseases or; Those Disorders Which Arise from Particular Climates, Situations, and Methods of Living; Together with a Treatise on the Diseases of Tradesmen ... The First by the Celebrated Frederick Hoffman ... The Second by Bern. Ramazini ... Newly Translated with a Preface and an Appendix by Dr. James* (London: Printed for Thomas Osborne and J. Hildyard at York, 1746), 1.

Places we inhabit, has been long ago judiciously and fully proved by the divine Hippocrates in his Book *de Aere, Aqua & Locis*'.<sup>26</sup>

Hippocrates was indeed a natural referent for those concerned with the relationship between environments and human health. His text admonished the physician to pay attention first to seasonality, then to winds, both hot and cold, distinguishing between those common in all places and those 'peculiar to each locality'. 'Whoever wishes to investigate medicine properly' needed to study the qualities of water – its taste and weight, whether it was marshy, soft or hard, whether it ran down from rocky heights, and if it was brackish and poorly suited for cooking. Was the soil well-watered or dry; locked within valleys or exposed on hilltops? Arriving in a city as a stranger the Hippocratic doctor needed to study its position relative to prevailing winds and the course of the sun. And the good physician must also be, in contemporary terms, something of an anthropologist, for he must consider 'the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given to indolence, or are fond of exercise and labour, and not given to excess in eating and drinking'.<sup>27</sup>

Most simply, certain locations gave rise to characteristic constitutions and illnesses. A city exposed to hot winds, but sheltered from cold, northern ones contained inhabitants with flabby bodies, who tended to eat and drink little, avoiding the excessive consumption of wine in particular. Women menstruated excessively, 'are unfruitful from disease, and not from nature', and suffered from frequent miscarriages. Children were prone to convulsions and asthma, men to 'dysentery, diarrhea, hepialus, chronic fevers in winter, of epinyctis, frequently, and of hemorrhoids about the anus'. On the other hand, they were largely spared diseases characteristic of cities with inverted exposure to prevailing winds: pleurisies, peripneumonies, ardent fevers, and acute diseases more generally.<sup>28</sup> Over all, Hippocrates' was a discourse concerned with differences, even small ones. A city that was turned to the rising sun was likely to be healthy, while one turned to the North would be less so, even if both were only a furlong from each other. Diseases in cities that lay to the east would be relatively rare and women would be both fecund and blessed with easy deliveries.<sup>29</sup> Climatic differences had even more profound effects. Asia and Europe, Hippocrates claimed, differed from one another 'in all respects'. Asia was much milder than Europe, its inhabitants concomitantly gentler, and its natural

<sup>26</sup> Richard Towne, *A Treatise of the Diseases Most Frequent in the West-Indies, and Herein More Particularly of Those Which Occur in Barbadoes* (London: J. Clarke, 1726), 1.

<sup>27</sup> Hippocrates. 'Airs, Waters, and Places', in *The Genuine Works of Hippocrates*, translated by Francis Adams (London: Printed for the Sydenham Society, 1849), 190.

<sup>28</sup> *Ibid.*, 192.

<sup>29</sup> *Ibid.*, 194–5.

products larger and more beautiful. The various seasons resembled one another in Asia, while in Europe, the year was marked by striking changes.<sup>30</sup> Asiatic equilibrium was not, however, to be envied. '[F]or a climate which is always the same induces indolence, but a changeable climate, laborious exertions both of body and mind; and from rest and indolence cowardice is engendered, and from laborious exertions and pains, courage'. If change – both temporal and spatial – mattered enormously in *Airs, Waters, and Places*, changeability mattered even more, the changes of the seasons being 'the strongest of the natural causes of difference'. Where the seasons changed little, as in Asia, one found comparatively little variation among peoples, so that Europeans, as well as being more warlike and harder, were also more varied among themselves than their eastern counterparts.<sup>31</sup>

The arguments of *Airs, Waters, and Places* remained well known to both medical and lay audiences in the Islamic Middle Ages.<sup>32</sup> But the same was not true in Europe. Nancy Siraisi suggests that we should regard the text as essentially 'new' to Renaissance audiences until the early sixteenth century.<sup>33</sup> *Airs, Waters, and Places* was not included in printed editions of Hippocratic works until 1515 and it was not until the second half of the sixteenth century that one could begin properly to speak of a Hippocratic revival, one that involved a detailed, dedicated, and direct engagement with more than a few of Hippocrates' works.<sup>34</sup> This is not to suggest, of course, that healers in the Middle Ages or Renaissance were unaware of or unconcerned with the relationship between environments and health. Of the six Galenic 'non-naturals' – those factors over which patients had some control – two (air and diet) depended at least in part on location. What is perhaps more significant about Hippocrates' text was that it examined the relationship between environments and the health of *groups*. Galenic therapeutics, on the other hand, was more concerned with

<sup>30</sup> Ibid., 205–7. 'Given the author's preoccupation with a Europe/Asia divide', Denise Eileen McCoskey has written, 'one that insists on the superiority of the Europeans in both climatic and political terms, some have suggested that the text functions in part to help justify the recent Greek defeat of the Persians during the Persian Wars (499–479 BCE)'. Denise Eileen McCoskey, 'On Black Athena, Hippocratic Medicine, and Roman Imperial Edicts: Egyptians and the Problem of Race in Classical Antiquity', in *Race and Ethnicity: Across Time, Space, and Discipline*, ed. Rodney D. Coates (Leiden: Brill, 2004), 320.

<sup>31</sup> Hippocrates. 'Airs, Waters, and Places', 219, 221.

<sup>32</sup> Peter E. Pormann and Emilie Savage-Smith, *Medieval Islamic Medicine* (Washington, DC: Georgetown University Press, 2007), 45.

<sup>33</sup> 'Among the parts of the Hippocratic corpus that were in some sense "new" in the early sixteenth century – that were little or only partially or indirectly known in the Middle Ages, were not commented on by scholastic authors, and were not standard in university curricula – were two works of especial significance for the relation between medicine and history: the *Epidemics* and *Airs, Waters, Places*'. Nancy Siraisi, *History, Medicine, and the Traditions of Renaissance Learning* (Ann Arbor: University of Michigan Press, 2007), 73.

<sup>34</sup> Vivian Nutton, 'Hippocrates in the Renaissance', *Sudhoffs Archiv* 27 (1989). A more precise meaning of neo-Hippocratism in the eighteenth century is taken up in Chapter 2.

the particular history, constitution, diet, and behaviour of a given patient than the characteristic diseases of whole cities or even countries.<sup>35</sup>

If one can thus speak of a Hippocratic revival beginning in the universities in the mid-sixteenth century, it would be some time before tracts on health in foreign climes drew upon *Airs, Waters, and Places* as a resource. One finds, for example, little trace of a 'Hippocratic heritage' in Garcia d'Orta's *Colloquies on the simples and drugs of India* (1563), another text often cited as the first on 'tropical medicine'.<sup>36</sup> Born in Portugal around 1500, d'Orta studied in Spain before returning home in 1523 and receiving his medical qualifications in 1526. In 1530, he was appointed to a lectureship in natural history at the University of Lisbon and four years later sailed to Goa as personal physician to M. A. de Sousa, who would go on to become the Portuguese Viceroy in India. D'Orta remained in Goa until his death in 1568, penning his most famous work after almost thirty years of medical practice in India.

D'Orta's book is structured in the form of a series of dialogues between a character named for the author and a fictitious Spanish doctor named Ruano. Having known one another in their university days, the two meet again in Goa, as the newly arrived Ruano visits d'Orta and expresses his 'great desire to know about the medicinal drugs (such as are called the drugs of pharmacy in Portugal) and other medicines of the country, as well as the fruits and spices'.<sup>37</sup> Ruano continues with a longer list of his interests (and hence a fuller description of the contents of the non-fictitious d'Orta's book):

I further wish to learn of their names in different languages, and the trees or herbs from which they are taken. I also desire to know how the native physicians use them; and to learn what other plants and fruits there are belonging to this land, which are not medicinal; and what customs will be met with; for all such things may be described as having been seen by you or by other persons worthy of credit.<sup>38</sup>

<sup>35</sup> On the 'harnessing of the non-naturals to the "airs, waters, and places" approach' in the eighteenth century, see L. J. Jordanova, 'Earth Science and Environmental Medicine: The Synthesis of the Late Enlightenment', in *Images of the Earth: Essays in the History of the Environmental Sciences*, ed. L. J. Jordanova and Roy S. Porter (London: The British Society for the History of Science, 1979), 125.

<sup>36</sup> Harrison, *Medicine in an Age of Commerce and Empire: Britain and its Tropical Colonies, 1660–1830*, 33–4. Harrison notes that 'd'Orta had nothing to say about the effects of climate on European bodies', *Climates & Constitutions: Health, Race, Environment and British Imperialism in India, 1600–1850* (New Delhi and New York: Oxford University Press, 1999), 27.

<sup>37</sup> Garcia de Orta, Francisco Manuel de Melo Ficalho, and Clements R. Markham, *Colloquies on the Simples and Drugs of India* (London: H. Sotheran and Co., 1913), 1. Timothy Walker, 'Acquisition and Circulation of Medical Knowledge within the Early Modern Portuguese Colonial Empire', in *Science in the Spanish and Portuguese Empires, 1500–1800*, ed. Daniela Bleichmar, Paula De Vos, and Kristin Huffine (Stanford: Stanford University Press, 2008), 251–2.

<sup>38</sup> Orta, Ficalho, and Markham, 1–2.

The focus of the *Colloquies*, then – as with later works by Nicolás Monardes and Cristobál Acosta – was less on the distinctiveness of disease environments outside Europe and considerably more on the description of natural historical products that could be put to use in grappling with familiar ailments.<sup>39</sup> D’Orta’s book is credited with offering the first Western description of the symptoms of Asiatic cholera, yet D’Orta himself made little of the disease’s novelty, noting that it was known in the Latinate world as *Colerica Passio*, although the Indian form ‘is more acute than in our country, for it generally kills in twenty-four hours’.<sup>40</sup> He offered no explanation for this difference and his discussion of the disease’s aetiology made no mention of climatic differences between Goa and Europe. To Ruano’s question: ‘What men are most liable to take this disease, and at what time of the year is it most prevalent?’, d’Orta’s answer was as much moral as medical, pointing to excesses of the flesh:

Those who eat most, and those who consume most food. I knew a young priest here who died of eating cucumbers. Also those who have much intercourse with women. The disease is most prevalent in June and July, which is the winter in this country. As it is brought on by over-eating, the Indians call it MORXI, which means, according to them, a disease caused by much eating.<sup>41</sup>

Among the first physicians to write in what we should probably term a neo-Hippocratic *Airs, Waters, and Places* tradition was Prosper Alpini (1553–1616), who published a work on Egyptian medicine (*De Medicina Aegyptiorum*) in 1591. Alpini completed a medical degree at Padua in 1578. Two years later, after becoming physician to Giorgio Emo, Venetian Consul to Cairo, he accompanied Emo to Egypt, where he stayed for three years before returning to Venice. In 1603 he became Director of the botanical garden at Padua.<sup>42</sup> *De Medicina Aegyptiorum* was written, like D’Orta’s book, as a dialogue between the author and a friend; in this case Alpini’s master at Padua and a former director of the Botanical Garden, Melchior Guilandino. An introduction detailed Alpini’s adventures with Emo on their way to Alexandria. (As a nineteenth-century commentator noted, dryly: ‘When a man undertakes a voyage, and afterward writes a book, one may be pretty sure that he meets with a storm in which he is

<sup>39</sup> On Monardes’ *Historia medicinal de las cosas que se traen de nuestras Indias Occidentales que sirven en medicina* (1565–74), see Daniela Bleichmar, ‘Books, Bodies, and Fields: Sixteenth-Century Transatlantic Encounters with New World Materia Medica’, in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, ed. Londa Schiebinger and Claudia Swan (Philadelphia: University of Pennsylvania Press, 2005). Cook describes Acosta’s (1578) *Trata de las drogas y medicinas de las Indias Orientales* as ‘almost entirely derivative of Orta’. Harold J. Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven and London: Yale University Press, 2007), 200.

<sup>40</sup> Orta, Ficalho, and Markham, 155.

<sup>41</sup> *Ibid.*, 158.

<sup>42</sup> Jerry Stannard, ‘Alpini, Prospero’, in *Complete Dictionary of Scientific Biography* (Detroit: Charles Scribner’s Sons, 2008).

nearly shipwrecked. Alpinus forms no exception to the general rule.’)<sup>43</sup> Of the four books into which the main text was broken, the latter three were largely concerned with a description of Egyptian medical practices. Alpini was, for the most part, a critical witness, believing, for example, that Egyptian physicians bled too much and too often. In the first book, however, he described the climate and characteristic diseases of the country. To Guilandino’s question as to whether there were many diseases ‘which the Greeks call endemic’,<sup>44</sup> Alpini answered that there were, and proceeded to offer a long list, including ‘what the Greeks call ophthalmia’ (caused by a local ‘nitrous dust’ that inflamed the eyes); leprosy (explained by an Egyptian diet that involved, he claimed, the consumption of salted and rotten fish); and elephantiasis (another illness the physician ascribed to dietary causes, brought on by the consumption of local fish, by bad water, and by vegetables like yams and cabbages, which Alpini argued generated a thick and viscous phlegm that gravitated to the feet, producing the malady’s characteristic tumours.)<sup>45</sup> Among the most oft-referenced parts of Alpini’s text was his discussion of the plague, which he claimed had taken half a million lives in Cairo alone in the year he arrived. The physician sought to refute common notions about the disease, which had killed so many in Europe, first in the fourteenth century and intermittently thereafter. It was a very rare occurrence, Alpini argued, for the plague to be produced in Egypt itself. Such an event required unusually large flooding of the Nile. Certainly, the disease was neither produced nor reproduced in the country every seven years, as some had claimed. Instead, it spread contagiously from Greece, Syria, and the Barbary Coast.<sup>46</sup> For European readers with much more than an academic interest in questions of the origin and means of transmission of the plague, Alpini’s views remained points of reference and contention well into the nineteenth century.

Alpini’s was, of course, a scholarly medical text, filled with learned references to classical sources. But the association between places and diseases was accepted far beyond the university’s walls. Travelling through the Middle East in 1596–7, Fynes Moryson encountered an area on the road toward Constantinople where a ‘Fenny Plaine lies, and the mountains, though more remote, doe barre the sight of the Sunne, and the boggy earth yielding ill vapours makes Sanderona infamous for the death of Christians’.<sup>47</sup> At roughly

<sup>43</sup> Joseph Ince, ‘Prosper Alpinus, de Medicina Aegyptiorum Libri Quatuor. A. D. 1591’, *Pharmaceutical Journal and Transactions* II (1860): 368.

<sup>44</sup> Prosper Alpinus and Jacobus Bontius, *Prosperi Alpini, Medicina Aegyptiorum ... Ut Et Jacobi Bontii, Medicina Indorum* (Apud Lugduni Batavorum: Gerardum Potvliet, 1745), 49; Prosper Alpini, *La Médecine Des Egyptiens*, trans. R. de Fenoyl (Paris: Institut français d’archéologie orientale, 1980), 87.

<sup>45</sup> Alpini, *La Médecine Des Egyptiens*, 93, 99.

<sup>46</sup> *Ibid.*, 104–24.

<sup>47</sup> Wear, 445.

the same time, 'G.W'. – identified in the 1915 reproduction of his 1598 text as 'the poet and swashbuckler, George Whetstone' – penned a work on *The Cures of the Diseased in Forraine Attempts of the English Nation*.<sup>48</sup> The dedication, to Queen Elizabeth, mentions Whetstone's 'iniust imprisonment in *Spainne*', the illness he contracted, and his cure 'by an especiall Phisition of that King', from whom he learned 'his methode for the same, and such other Diseases, as have perished your Maiesties people in the *Southerne* parts'. The same disease that had laid him low, Whetstone claimed, was the means by which 'whole Kingdomes in both the *Indias* have been depopulated'.<sup>49</sup> One finds no reference to Hippocrates, Galen, or any other medical writers in the short work, but the force of the *Airs, Waters, and Places* tradition seems clear in afflictions such as the 'Erizipila', 'a Disease very much rainging in those Countries, the rather proceeding of the unwholesome aires and vapours, that hot Climates doo yield, whereof many people doo perish'.<sup>50</sup>

It does seem to me, however, that it requires too much of a stretch to associate all comments that relate health to location with the arguments in *Airs, Waters, and Places*. Where the Hippocratic text was concerned with the relationship between specific afflictions and the locations in which they were found, much of the non-medical discourse – unsurprisingly, since it was often written by explorers, current or prospective settlers, or those more interested in geography than the physician's arts – seems concerned with the more general and rather simpler question of whether particular sites were healthy or not. More specific and widespread references to this specific Hippocratic work would appear to be the product of the mid-seventeenth century onward. We should also be wary of assuming that even such weakly Hippocratic ideas were uncontested. Among early modern sailors seeking to circumnavigate the globe, for example, the insistence on the differences between lands took a back seat to the more profound distinction between the earth's terrestrial and aqueous surfaces. They believed, Chaplin has argued, 'that all humans suffered from being removed from land and that any land was sufficient to recover them; this was an especially strong countercurrent against the airs, waters, places tradition, and at odds with other beliefs that differentiated among human bodies in place-specific ways'.<sup>51</sup>

This maritime counter-narrative lasted until at least the mid-eighteenth century. From that point sailors' beliefs that any land – and only land – could cure

<sup>48</sup> G. W., 'The Cures of the Diseased in Forraine Attempts of the English Nation, London, 1598. Reproduced in Facsimile', ed. Charles Joseph Singer (Oxford: Clarendon Press, 1915), 'Introduction', 5.

<sup>49</sup> *Ibid.*, 10.

<sup>50</sup> *Ibid.*, 17.

<sup>51</sup> Joyce E. Chaplin, 'Earthsickness: Circumnavigation and the Terrestrial Human Body, 1520–1800', *Bulletin of the History of Medicine* 86, no. 4 (2012): 517.

scurvy, that classic naval disease, came under increasing criticism. A belief in 'earthsickness' (a need and longing for the land that paralleled homesickness) seems to have faded quickly in the wake of James Cook's voyages and his much popularised cures for scorbutic illnesses. Considerably before that, of course, the age of exploration had given way to the age of empire, and for the majority of those who concerned themselves with events beyond the bounds of Europe, Hippocrates' text increasingly provided a template for new ways of discussing novel locations for trade and conquest. In 1645, slightly more than fifty years after its first appearance, Alpini's book was republished, bound together with a work on the diseases of the East Indies: Jacob Bontius' *De Medicina Indorum*.<sup>52</sup>

Born in 1591, the son of the first professor of medicine at the University of Leiden, Bontius obtained his medical degree in 1614 and began to try and build a practice. By the mid-1620s, however (as he later noted in a letter to his brother), he had decided that the competition in his native land was too great. 'The profits of physic were small on account of the multitude of medicasters', he wrote, acknowledging the perspicacity of his sibling's counsel to 'make for the fertile plains of Java, where, to speak ingenuously, virtue is held in some higher esteem'.<sup>53</sup> In 1627 he sailed with his family to the East Indies. Bontius was, however, to be no mere physician. He was appointed to oversee all the medical operations of the Dutch East India Company, tasked with running the hospital in Batavia, supervising the medical outfitting of the Company's ships, inspecting the settlement's physicians and surgeons, and providing medical care for the most eminent men in the Company's service.<sup>54</sup>

Apart from these many medical duties, Bontius was also expected to provide a natural history of Holland's oriental holdings. He seems to have revelled in this latter task. As soon as he arrived in the East Indies, he wrote to his brother, 'I applied myself not only to attain a knowledge of the herbs growing here in Java, but likewise to acquire a more perfect idea of the aromatics in which our part of the country is the most fruitful'.<sup>55</sup> Illness plagued his family's first few years. He lost his first wife before he reached the Indies, his second in 1630 (less than three years after their marriage), and his eldest son in 1631. Bontius himself had fallen dangerously ill twice, both times while Batavia was being (unsuccessfully) besieged by Sultan Agung, king of the Mataram Sultanate.

<sup>52</sup> Prosper Alpinus and Jacobus Bontius, *P. Alpini, De Medicina Aegyptiorum & Jacobus Bontii, De Medicina Indorum* (Paris: Nicalaus Redelichuysen, 1645).

<sup>53</sup> James Bontius, *An Account of the Diseases, Natural History, and Medicines of the East Indies* (London: John Donaldson, 1776), 169.

<sup>54</sup> Harold J. Cook, 'Global Economies and Local Knowledge in the East Indies: Jacobus Bontius Learns the Facts of Nature', in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*, ed. Londa Schiebinger and Claudia Swan (Philadelphia: University of Pennsylvania Press, 2005).

<sup>55</sup> Bontius, 167.

Botany apparently occupied his mind even through his afflictions. '[W]ould to God', he wrote in 1629, 'that the disease, by which I have been confined these four months, still permitted me, as for long after I arrived here, to roam thro' the delightful circumambient woods of Java, and attain a more perfect knowledge of the many noble herbs which are to be met with in this country'.<sup>56</sup>

As with earlier writers about the New World, Bontius was very explicit about the connection between his medical and natural historical interests. Where diseases were endemial, he noted, 'there the bountiful hand of nature has profusely planted herbs whose virtues are adapted to counteract them'.<sup>57</sup> These endemial diseases were many; so profuse in fact that Bontius claimed that his discussion was limited only to those maladies whose manifestation or cure was different to that known in Europe. Like Alpini, he placed great stress on certain climates' capacities to promote putrefaction. At pains to refute the notion that the air in this part of the 'torrid zone' was hot and dry, Bontius argued that the island's warm and moist atmosphere was the principal cause of the cholera morbus, a potentially deadly disease, aggravated by locals' excessive consumption of fruit.<sup>58</sup> The airs, waters, and places of the country, that is, had a profound effect on its characteristic illnesses. How strongly indebted Bontius was to a neo-Hippocratic tradition may be seen from the following long discussion of the fever known as 'Tymorenses, peculiar to the Indies'.

This fever arises from various causes, of which the principal are these: the smell of the saunders tree when newly felled; which (on the testimony of the inhabitants of the country) sends out from its bark some vapours of I know not what poisonous quality, and noxious to the brain ... Besides, the constitution of the air is thick, and extremely heavy: for, the dwellings of the inhabitants are on the highest mountains, where on account of the situation, clouds and watery vapours prevail. The cold, likewise, is sometimes as severe as in Holland: all which concur to produce thick humours and turbid spirits. Add to these several causes, the custom, in this country, of eating a great deal of fruits, which as they are for the most part green, and on account of their moisture, obnoxious to putrefaction, generate bad juices in people whose constitutions have been altered by the sea, hard labour, gross diet, and intemperature of the air.<sup>59</sup>

This is a Hippocratic litany: local plants, the patient's geographic and altitudinal situation, the temperature of their surroundings, their diet, and habits.

## 1.2 The Flexibility of the Hippocratic Tradition

And yet, even in this passage, one also sees the problem in associating Hippocratic ideas with the notion of which Sloane was apparently critical: that

<sup>56</sup> *Ibid.*, 24.

<sup>57</sup> *Ibid.*, 27.

<sup>58</sup> *Ibid.*, 52.

<sup>59</sup> *Ibid.*, 66–7.

diseases were all different in different places. For, as often as not, *De Medicina Indorum* sought to draw parallels between European nations and the Indies. One might note above that one of the causes of the Tymorenses was not, in fact, the humid climate for which Java was famed, but rather the cold of its mountains, which was 'sometimes as severe as in Holland'. Indeed, the passage quoted above continued with a longer comparison:

I had almost omitted to subjoin, as another cause, the sudden change of air which our people experience when they descend from the cold mountains to the shore and the ships, where they are scorched with heat ... What are also greatly to be guarded against, are the winds which blow from the mountains after midnight, in Java and the circumadjacent islands: just as in some of the southern parts of France and Italy, especially in the kingdom of Naples, and the territory of the Pope, the cold wind which blows from the hills, and is called the serene, produces pleurisies, peripneumonies, and other acute disorders.<sup>60</sup>

Nor are these invocations of similarity solely to be found in discussion of cold-weather afflictions. The consumption of fruit, Bontius argued, contributed greatly toward the production of dysentery. Were a person incautious, eating the local produce 'without rice, or bread, or a little salt, he scarcely can escape the disorder'. Yet, the same thing happened in France and Spain, 'where people, who eat much grapes without bread, are immediately seized with a Diarrhoea or Dysentery'.<sup>61</sup> The myriad constructions of both similarity and difference in fact follow from the logic of Hippocrates' own text. To be sure, where climates were diametrically opposed, one found radically different diseases. But such oppositional climates were largely abstractions. 'It is not everywhere the same with regard to Asia',<sup>62</sup> Hippocrates acknowledged of Europe's counterpart. Indeed, the opposition between a uniform East and a changeable West might be read as much as pedagogic as literally descriptive, for *Airs, Waters, and Places* concluded by noting that the text had largely concerned itself with extremes: 'Thus it is with regard to the most opposite natures and shapes; drawing conclusions from them, you may judge of the rest without any risk of error'.<sup>63</sup>

This flexible aspect of the Hippocratic tradition in fact proved to be of crucial importance in the discussion of the New World. Few writers in British North America, for example, had an interest as portraying their climate as antithetical, and hence potentially inimical, to that found at home. Colonists

<sup>60</sup> Ibid.

<sup>61</sup> Ibid., 15. Harrison suggests that '[t]his mention of France and Spain – both Catholic countries – is perhaps significant, in as much as the Dutch Protestant Bontius may be equating dietary indulgence with the supposed laxity of these nations'. Harrison, *Climates & Constitutions: Health, Race, Environment and British Imperialism in India, 1600–1850*, 49.

<sup>62</sup> Hippocrates. 'Airs, Waters, and Places', 206.

<sup>63</sup> Ibid., 222.

declared America to be England's sister or mother, and emphasised those parts of each country that lay within the same latitudinal bounds. George Peckham, describing America's appearance on Mercator's map, claimed that the 'Counterey dooth (as it were with arme advaunced) above the climats both of Spayne and Fraunce, stretche out it selfe towards England onlie'.<sup>64</sup> For some, America's climate was not only not detrimental, it was positively salutary for the sons and daughters of Albion. For Francis Higginson, in 1630, 'the Temper of the Aire in *New-England* is one speciall thing that commends this place. Experience doth manifest that there is hardly a more healthfull place to be found in the World that agreeth better with our English Bodyes'.<sup>65</sup> A 'sup' of this air, he suggested, 'is better than a whole draft of old England's ale'.<sup>66</sup> *Airs, Waters, and Places* certainly suggested that different diseases were to be found in different climates. But there was considerable disagreement over whether climates in very different geographical locations were, in fact, radically distinct.

One found fewer defenders of the climate in Africa, where discussions turned on the slave trade rather than settlement. If Asia had been Europe's foil for Hippocrates, Africa increasingly took on that role after the discovery of the New World. In the late seventeenth century, Willem Bosman spent more than a dozen years as Chief Factor for the Dutch on the Guinea Coast. In 1704 he wrote a description of that time in the form of a series of letters to a physician friend (now identified as Dr Havart, who had served as a surgeon in the service of the Dutch West India Company).<sup>67</sup> The book was rapidly translated into other European languages: English and French in 1705; German in 1708; Italian in 1752. The book's popularity presumably stemmed from the fact that Bosman was largely correct in declaring that:

[T]he Coast of Guinea, which is part of Africa, is for the most part unknown, not only to the Dutch, but to all Europeans, and no particular description of it is yet come to light; nor indeed any thing, but a few scraps, scattered in books written upon other subjects, most of which are contrary to truth, and afford but a sorry sketch of Guinea.<sup>68</sup>

<sup>64</sup> Joyce E. Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500–1676* (Cambridge, MA: Harvard University Press, 2001), 134.

<sup>65</sup> *Ibid.*, 154.

<sup>66</sup> Wear, 454.

<sup>67</sup> Willem Bosman, *A New and Accurate Description of the Coast of Guinea, Divided into the Gold, the Slave, and the Ivory Coasts ... Illustrated with Several Cutts. Written Originally in Dutch by William Bosman ... To Which Is Prefix'd, an Exact Map of the Whole Coast of Guinea* (London: Printed for James Knapton, and Dan. Midwinter, 1705). Albert Van Dantzig, 'Willem Bosman's "New and Accurate Description of the Coast of Guinea": How Accurate Is It?', *History in Africa* 1 (1974). I use the English edition in the discussion below, but see: 'English Bosman and Dutch Bosman: A Comparison of Texts', *History in Africa* 2 (1975).

<sup>68</sup> Bosman, Preface, 1.

Few who read the text could envy Bosman his time in the region. With rare exceptions – and most of those in the past – the country was described as unwholesome and deadly. Better care and cultivation might improve it, but at present Guinea bore a 'dreadful mortal name'.<sup>69</sup> The Isle of St Thomé, he claimed, was known in Europe as 'the Dutch Church-Yard', and even the Portuguese, to whom the Dutch had ceded the island, were, 'tho' more used to this scorching Air', dying in huge numbers.<sup>70</sup> The first time Bosman visited the Kingdom of Benin, he noted, 'we lost half our men'.<sup>71</sup> He wrote to Havart during his second voyage there, observing that an equal number of men were now dead, that most of the rest were sick, and that this had 'struck such general terrour into the Sailors, that the oldest of them is afraid of his life'. The problem was the place itself. Sudden changes between the heat of the day and the cold of the night induced diseases in European bodies. Even worse was the 'thick, stinking, and sulphurous' mist which spread through the valleys. '[I]f this odious Mixture of noisome stench very much affects the state of health here', wrote Bosman, 'it is not to be wondered, since 'tis next to impossibility, not only for new Comers, but those who have long continued here, to preserve themselves intirely from its malign Effects'. The only people to be spared the ravages of the destructive mist were the 'Natives', since they were 'bred up in the Stench' and hence, presumably, were unaffected by it.<sup>72</sup> Yet they had their own diseases, in particular small pox and the worm named for the region. Worst for their health were their moral sensibilities, about which Bosman was vicious. 'The Negroes are all without exception, Crafty, Villanous, and Fraudulent, and very seldom to be trusted', and their 'too early and excessive venery' was given as the reason that, despite otherwise healthy lives, natives 'seldom arrive to a great Age'.<sup>73</sup>

The difference between this early eighteenth-century description of the disease environment of Africa, and those given of the West Indies at the same time is striking. Clearly no sense of a disease environment common to the tropics yet existed. But perhaps nothing makes clearer the relative health of the two parts of the world in European eyes than the changing claims about the origins of a disease that had been associated with the Americas almost since the time of Columbus: syphilis. By the 1530s, the new disease was laid at the feet of America's Indians, a new people who were unfamiliar with the word of Christ and who were portrayed as without any moral restraint. 'They have as many wives as they desire', wrote Amerigo Vespucci, 'they live in promiscuity without regard to blood relations; mothers lie with sons, brothers with sisters;

<sup>69</sup> *Ibid.*, 17.

<sup>70</sup> *Ibid.*, 414.

<sup>71</sup> *Ibid.*, 429.

<sup>72</sup> *Ibid.*, 105–6, 108.

<sup>73</sup> *Ibid.*, 117, 10.

they satisfy their desires as they occur to their libidos as beasts do'.<sup>74</sup> Against this orthodoxy, however, Daniel Turner, in a 1717 text on the disease, noted that no less a figure than Thomas Sydenham (soon to become known as the English Hippocrates) denied the New World origin of syphilis.<sup>75</sup> Sydenham acknowledged the (by then) common explanation, which traced the disease from the West Indies to Europe the year after Columbus' discovery: 'But it seems rather to me', he argued, 'to have taken its rise from some Region of the Blacks near *Guinea*, for I have learn'd from many of our People of good Credit, who live in the *Caribbee-Islands*, that the Slaves brought from *Guinea*, even before they land, and also those that live there, have this Disease without impure Copulation'.<sup>76</sup> As we will see in Chapter 2, the idea that it was African slaves who were ultimately responsible for many virulent West Indian diseases, and not the country's own climate, would become a central trope from the mid-eighteenth century onwards.

Like America and unlike Guinea, the West Indies had many settlers who served as boosters and propagandists, unwilling to have the islands dismissed as intrinsically unhealthy. And, perhaps more generally, as Bontius' example shows, writers had become somewhat leery of classical distinctions, particularly those among the frigid (or polar), temperate, and torrid (or tropical) zones. From the late fifteenth century, scholars and explorers had argued that there was clearly a problem in the division between a habitable 'temperate' region below the Polar Circle and above the Tropic of Cancer and the uninhabitable areas that were supposed to bound it.<sup>77</sup> As Tomaso Giunti noted in 1563: '[I]t is clearly able to be understood that this entire earthly globe is marvelously inhabited, nor is there any part of it empty, neither by heat nor by cold deprived of inhabitants'.<sup>78</sup> Increasingly, the areas between the Tropics were portrayed not

<sup>74</sup> Anna Foa, 'The New and the Old: The Spread of Syphilis (1494–1530)', in *Sex and Gender in Historical Perspective*, ed. Edward Muir and Guido Ruggiero (Baltimore: Johns Hopkins University Press, 1990), 31–2.

<sup>75</sup> Daniel Turner, *Syphilis. A Practical Dissertation on the Venereal Disease ... In Two Parts* (London: Printed for R. Bonwicke, Tim. Goodwin, J. Walthoe, M. Wotton, S. Manship, Richard Wilkin, Benj. Tooke, R. Smith, and Tho. Ward, 1717).

<sup>76</sup> Sydenham continued: 'It seems therefore probable to me, that the *Spaniards*, that first brought the Disease into *Europe*, were infected with it by the Contagion of the Blacks bought in *Africa*, to some Nation whereof it may be Endemial; for there are many People that border upon *Guinea*, among whom that barbarous Custom of changing Men for Ware prevails'. Thomas Sydenham, *The Whole Works of That Excellent Practical Physician, Dr. Thomas Sydenham Wherein Not Only the History and Cures of Acute Diseases Are Treated Of ... But Also the Shortest and Fastest Way of Curing Most Chronical Diseases*, 9th ed. (London: Printed for J. Darby, A. Bettesworth, and F. Clay, in trust for Richard, James, and Bethel Wellington, 1729), 247–8.

<sup>77</sup> See, in general, Nicolás Wey Gómez, *The Tropics of Empire: Why Columbus Sailed South to the Indies* (Cambridge, MA: MIT Press, 2008).

<sup>78</sup> Quoted in John M. Headley, 'The Sixteenth-Century Venetian Celebration of the Earth's Total Habitability: The Issue of the Fully Habitable World for Renaissance Europe', *Journal of World History* 8, no. 1 (1997): 3.

as searing deserts, but as seasonally constant versions of climates with which Europeans were familiar. The Bermudas were, for the poet Edmund Waller in 1645 (playing on the name of the company that had held the charter for the islands at the time) the 'summer isles'. Switching seasons in the main text, he contrasted the idyllic region – 'so moderate the clime' – with England: 'For the kind Spring which but salutes us here/Inhabits there and courts them all the year'.<sup>79</sup> In 1682, Abraham Cowley lyricised about the 'temperate summer' to be found in the tropics: 'More rich than Autumn and the Spring more fair'.<sup>80</sup> Nor was this merely a poetic trope. In 1679, the Jamaican doctor, Thomas Trapham described Jamaica approvingly as 'a summer country' with a 'whole summer year'.<sup>81</sup>

It should be noted, of course, that although such claims demonstrated a cosmopolitan enthusiasm for places beyond one's home, they were not devoid of Eurocentrism. For their effect was to render England, in particular, a micro-cosm for the globe. The seasons experienced over the course of a year in Britain were mapped on to the climates of other parts of the world, at all times. The analogy between European seasons and foreign climates had been in Hippocrates. Asia, it was claimed in *Airs, Waters, and Places* 'both as regards its constitution and mildness of the seasons, may be said to bear a close resemblance to the spring'.<sup>82</sup> The point was much more systematically enunciated, however, in the late seventeenth and early eighteenth centuries: indeed, almost precisely at the same time that Sloane published the first volume of his *Voyage*. In 1696, William Cockburn related 'hotter constitutions, hot Countries, or a warmer Season'.<sup>83</sup> A dozen years later, in 1708, John Polus Lecaen published a work purporting to offer advice to aid English forces in southern Europe, and 'all other hot Climates, as our Plantations in the West Indies, &c'. 'If then the difference of Season produces in our Bodies different Effects', he wrote, 'no

<sup>79</sup> 'The Battel of the *Summer-Islands*' in Edmund Waller, *The Works of Edmund Waller, Esq., in Verse and Prose: Published by Mr. Fenton* (London: J. and R. Tontton and S. Draper, 1744), 52–4.

<sup>80</sup> Abraham Cowley, *The Poetical Works of Abraham Cowley in Four Volumes* (Edinburgh: Apollo Press, 1784), 203.

<sup>81</sup> Trapham, 3 & 59. 'Drawing upon the early Spanish promotion of the Caribbean', Parrish notes, 'writers promoting the British "Sugar-Isles" painted a world always green and fertile while ignoring the more distempered facts of earthquakes and hurricanes'. Parrish, *American Curiosity*, 32.

<sup>82</sup> Hippocrates, 'Airs, Waters, and Places', 206. In this, Asia was, therefore, also like an East facing city, which 'resembles the spring as to moderation between heat and cold', 194.

<sup>83</sup> W. Cockburn, *An Account of the Nature, Causes, Symptoms, and Cure of the Distempers that are Incident to Seafaring People with Observations on the Diet of the Sea-Men in His Majesty's Navy: Illustrated with Some Remarkable Instances of the Sickness of the Fleet During the Last Summer, Historically Related* (London: Hugh Newman, 1696), 51. Cf. 109–10: 'These, by the bye, are the fatal, but almost perpetual, consequences of a diaphoretical practice in Fevers; especially on young people, in a hot season of the year, or a warm climate'.

doubt but the Difference of Climate, and Change of Diet, will likewise alter our Constitutions'.<sup>84</sup> Earlier, he had made a similar point in more detail:

As in other countries the Differences of Seasons produce different Effects in our Bodies; for by the more or less Heat the Pores of our Bodies are more or less open, the Air more or less pure, Food more or less spirituous; so without doubt great Difference of Climate, or of Heat or Cold, is very prejudicial to all Strangers, and the cause of numerous Distempers, especially to the *English*, who are very Irregular and Careless in their way of Living.<sup>85</sup>

The following year, J. Christie, in his *Abstract of Some Years Observations Concerning such General and Unperceived Occasions of Sickliness in Fleets and Ships of War*, was considerably less prolix, both in title and text: 'as the Season or Climate are varied', he stated simply, 'so do all our Distempers vary to the very same kinds'.<sup>86</sup>

### 1.3 Local Knowledge and Medical Expertise

The analogy between seasons and climates had a rather clear corollary. If the West Indies were, like other warm climates, just like Europe in a given season, it should follow that the diseases found in such climates should be similar to seasonal distempers in Europe. That is – even as a good Hippocratic – one would not necessarily expect to find that diseases were, as Sloane intimated he had been told, 'all different from what they are in Europe'. Richard Ligon's brief remarks in his *True and Exact History of the Island of Barbadoes* might function as one example, although it is not quite clear whether he regarded the differences between the diseases of England and Barbados as those of degree or kind. '[S]icknesses are there more grievous', he wrote, 'and mortality greater by far, than in *England*, and these diseases many times contagious'. In terms of treatment, Ligon encouraged physicians to learn about the 'simples' to be found in the Caribbean: 'For certainly every Climate produces Simples more proper to cure the diseases that are bred there, than those that are transported

<sup>84</sup> John Polus Lecaen, *Advice to the Gentlemen of the Army of Her Majesty's Forces in Spain and Portugal: With a Short Method How to Preserve Their Health; and Some Observations Upon Several Distempers Incident to Those Countries, and All Other Hot Climates, as Our Plantations in the West-Indies, &c. To Which Are Added the Medicinal Virtues of Many Peculiar Plants Growing Naturally in Those Parts, and Not Wild in England*. (London: P. Varenne, 1708), 20.

<sup>85</sup> *Ibid.*, 4.

<sup>86</sup> J. Christie, *An Abstract of Some Years Observations Concerning Such General and Unperceived Occasions of Sickliness in Fleets and Ships of War* (1709), 3. See also Stubbes: 'in hot Countreys, as well as in hot seasons, the rule of *Hippoc.* takes place'. Henry Stubbes, 'An Enlargement of the Observations, Formerly Publish'd Numb. 27, Made and Generously Imparted by That Learn'd and Inquisitive Physician, Dr. Stubbes', *Philosophical Transactions* 3 (1668): 709.

from any other part of the world: such care the great Physitian to mankind takes for our convenience'.<sup>87</sup> It is worth noting, however, that Sloane knew of at least one major source (and the number of such sources was small)<sup>88</sup> in large agreement with his own position, namely that the diseases of the West Indies were essentially the same as those familiar to a European physician.<sup>89</sup> The text was Hickeringill's *Jamaica Viewed*, which had appeared first in 1661. A new edition of the work, of which Sloane owned a copy, was published in 1705.<sup>90</sup> The discussion of the disease environment in the West Indies was short, but one suspects that the following passage, rich with analogies to the growth of plants, would have caught Sloane's eye:

That though *Infant-Settlements*, like *Infant-Years*, are usually most fatal; yet their *Blossoms* once set, are not so easily *Blasted*. Happily experimented in *Jamaica*, whose blooming hopes now thrive so well, and their *Stocks* so well *Rooted*, that they are not easily *Routed*. The Major part of the Inhabitants being old *West-Indians*, who, now *Naturalized* to the Country, grow better by their *Transplantation*, and flourish in Health equivalently comparable to that of their *Mother-Soil*. For which I need not beg Credit, since there is no *Country Disease* (as at *Virginia* and *Surinam*) endemically raging throughout the Isle; nor any new and unheard of Distempers that want a *name*.<sup>91</sup>

Given how few sources were available at the time on diseases in Jamaica, and given that they clearly do not all argue that the diseases there were all different to those found in Europe, it seems likely that Sloane had something rather specific in mind when he sought to counter this claim. Indeed, I would

<sup>87</sup> Richard Ligon, *A True and Exact History of the Island of Barbados* (London: Humphrey Moseley, 1657), 117, 18. The idea that cures of local afflictions were to be found nearby was common enough that it was often referenced through a Latin tag: *ubi morbus, ibi remedium*. See James Lind, *A Treatise of the Scurvy. In Three Parts. Containing an Inquiry into the Nature, Causes, and Cure of That Disease. Together with a Critical and Chronological View of What Has Been Published on the Subject* (London: A. Millar, 1753), 263.

<sup>88</sup> It was not merely that the number of *medical* writings about the West Indies was small. '[T]he island colonists', notes Dunn, 'publicized their doings very little. Back in the Elizabethan era, when English sailors knew the Antilles far better than the North American coast, reports from the New World centered on the Caribbean. But after 1607 the focus shifted decisively north ... None of the islands boasted a printing press, nor did the islanders use the London presses. During the entire course of the century eight or ten promotional tracts designed to lure immigrants to the Caribbean colonies were issued in England, whereas the Virginia Company sponsored some twenty propaganda pieces in the period from 1609 to 1612 alone'. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624–1713*, 23–4.

<sup>89</sup> Stubbes does not suggest that there are diseases peculiar to the West Indies in his Henry Stubbes, 'Observations Made by a Curious and Learned Person, Sailing from England, to the Caribe-Islands', *Philosophical Transactions* 2 (1666); 'An Enlargement of the Observations, Formerly Publisht Numb. 27, Made and Generously Imparted by That Learn'd and Inquisitive Physician, Dr. Stubbes'.

<sup>90</sup> Churchill, 398.

<sup>91</sup> Edmund Hickeringill, *Jamaica Viewed with All the Ports, Harbours, and Their Several Soundings, Towns, and Settlements Thereunto Belonging.*, 3rd ed. (London: Printed and sold by B. Bragg, 1705), 41–2. Cf. Churchill, 427–8.

suggest that we do not read Sloane's claims as transparent descriptions of the medical consensus in the late seventeenth century, but rather as a fairly pointed response to another text: Trapham's. For Trapham had made the argument that Sloane opposed very clearly in his *Discourse*. Due to its climate, Trapham claimed, Jamaica was a much more salubrious country than England, being largely free of many of the diseases that plagued the colder country. 'As for diseases usually found here', he suggested:

they are far short of the long beadroll [beadroll] which infest our native country: No small Pox or very rarely, saving sometimes brought from *Guinny* by Negroes, terrify or remark us; no Scurvy that almost universal contagion of our native country is got here, or continued if brought; no depopulating Plague that ere I have heard of in the West *Indies*; Consumption nothing so frequent, and when, never so piningly tedious. As for Venereal Affects their symptoms are all lessened, and their discharge more easy far than in colder climes[.]<sup>92</sup>

And just as local conditions affected the manifestations of diseases, they also affected their treatment.

For that the place alters much the cure of the Disease, I question not; wherefore Holland which is cold and moist requires a double dose generally of that Physick, whereof in France single will well work and serve the turn. And in a confirmed Pox, they generally remove from one to the other place, from heavier phlegmatick low Countries to the more brisk and drier Air of *France*, placing much of cure in the nature of the Region. And ours of Jamaica being so sweatingly warm, and the air from its Nitre piercingly cleansing, assists much our ready cure[.]<sup>93</sup>

Reading Sloane against Trapham opens the text to a much more natural interpretation than is commonly accorded it. For Sloane's claim was *not* that climate had no effect on disease. As a protégé of the famed London physician, Thomas Sydenham, such a position would be profoundly odd. Indeed, to determine what Sloane's argument was, it is useful to keep the dicta of Sydenham in mind, as we will see below.

We should, I think, take both seriously and literally Sloane's clear claim that he encountered virtually no *new* diseases in Jamaica. As Churchill has shown, more than a third of the 128 case histories that made up the section of *Voyage* entitled 'Of the Diseases I observed in Jamaica, and the Method by which I used to cure them', are made up of three kinds of illness then all too familiar to the European doctor: twenty-six intermittent fevers, nine cases of 'belly-ach', and eleven of venereal afflictions.<sup>94</sup> One reads of 'tertians', 'dropsies',

<sup>92</sup> A beadroll was, originally, 'a list of persons to be specially prayed for', and hence, later, 'a list or string of names'. The OED gives the first usage with this latter meaning in 1529. Trapham, 68–9.

<sup>93</sup> *Ibid.*, 122–3.

<sup>94</sup> Churchill, 407.

and lethargy; of miscarriages and attempted abortions; of 'hectics' and 'fluxes' and the effects of excessive alcohol consumption. Sloane includes only one disease seemingly peculiar to 'Blacks' on the Island, a flesh-eating illness that appeared to be governed by the phases of the moon:

The virulency of the Humour was such, as that after it had eaten into the Bone, the joints of the fingers and toes would drop off, and they die, as I have been assur'd by those who have lost several Negros of this Disease, I was assur'd was peculiar to Blacks ... So soon as this Disease again appear'd, I thought, that perhaps this was proper to Blacks, and so might come from some peculiar indisposition of their Black skin ... This was a very strange Disease not only in itself, but that it followed very regularly the Full and New Moon.<sup>95</sup>

Even here, however, one suspects that Sloane, who – generally, in this text – downplayed any physiological differences between Blacks, Indians, and Europeans, might well have placed this 'strange Disease' into the category of those 'singular disease[s]' that one encountered even in England.<sup>96</sup>

Overall, Sloane was greatly loath to ascribe any oddities in diseases to general climatic causes. Thus, discussing a fever that lasted less than a day, but caused a degree of weakness that one normally associated with illnesses that lasted months, he wrote: 'This was, I think, peculiar to this Fever, though at first I suspected it was to all diseases here, by reason of the hot climate, but I found all other diseases accompanied with the same symptoms as in Europe, and therefore look on this symptom as a thing particular to this fever, and such uncommon symptoms now and then attend Endemic diseases everywhere'.<sup>97</sup> Without mentioning him by name, Sloane rather pointedly refuted Trapham's claim that venereal diseases were more easily treated in the West Indies. 'It is generally believed in Europe', he claimed, 'that Gonorrhoea and the Pox are with more ease and sooner, cured in Jamaica and hot countries than in Europe'. Sloane admitted that he himself 'was of the opinion of the

<sup>95</sup> Sloane, cvi–cvii.

<sup>96</sup> As Cristina Malcolmson has recently shown, Sloane's views on race were complex. While it is generally true, as Churchill has argued, that Sloane 'transgressed categories of gender and race' in the *Voyage*, the same was not true in material presented to the Royal Society. For the Society in the 1690s, Malcolmson shows, members were interested in skin colour generally and the skin of 'Negroes' particularly. In their discussions, Sloane spearheaded the drive to investigate the possibility of race-difference as he attacked the climate theory. At a meeting in March, 1690, Sloane argued that there was a 'Specifick Difference' between 'Negrow' and white skin, which made curing skin diseases and ulcers in the former more difficult than the latter. Sloane also claimed that 'woolly' hair was another characteristic of 'the Negro race of Mankind' and suggested that there were racial differences between skulls, although this latter point seems to have been met with little enthusiasm among the Society's members. Cristina Malcolmson, *Studies of Skin Color in the Early Royal Society: Boyle, Cavendish, Swift* (Farnham: Ashgate, 2013), 65, 76, 7. Sloane's complex and even contradictory positions are elegantly summarised on 189–90.

<sup>97</sup> Sloane, xcvi.

generality of the world when I went to Jamaica'. But he found himself mistaken: Gonorrhoeas 'have the same symptoms as in Europe ... [I] found as the Disease was propagated there the same way and had the same symptoms and course among Europeans, Indians, and Negroes, so it requir'd the same remedies and time to be cur'd'.<sup>98</sup>

Yet, that one found almost no novel diseases in Jamaica did not mean that one found there all the diseases commonly treated in London, and certainly not that they were as prevalent in a warm climate as a cold one. Such a claim would, in fact, be very peculiar for a follower of Sydenham, who had insisted on the *seasonality* of diseases.<sup>99</sup> If Sloane argued with Trapham's claims about venereal diseases he was notably silent about Trapham's observations concerning the virtual absence of small pox, scurvy ('that almost universal contagion of our native country'), and plague. Small Pox is mentioned once amongst Sloane's cases (and not as the current affliction of the patient being treated);<sup>100</sup> scurvy and the plague not at all. All three of these were commonly associated with cold weather and, in general, winter afflictions are notably absent from Sloane's cases.<sup>101</sup> In a number of cases, in fact, where patients exhibited the symptoms of common cold-weather afflictions, Sloane made a point of explaining their occurrence. Thus, for example, the case of Sir Francis Watson, who suffered from asthma. Sloane pointed out that Watson lived in a location known as 'the Seven Plantations'. 'This place is cooler than the town of St Jago de la Vega and Sir Francis Watson, who lived here used to be more troubled with the *Asthma* than when in town. For this purpose, he had made a chimney in one of the rooms of his house, which was the only one I ever saw on this Island, except in Kitchens'.<sup>102</sup> Elsewhere, Sloane noted the oddity of having to treat patients for consumption in such a sultry climate: 'Although this Climate be very hot, some of these were troubled with true Consumptions, for which I ordered them some easie Opiates, and other Medicines. I have

<sup>98</sup> *Ibid.*, cxxviii.

<sup>99</sup> 'Lastly, the seasons of the year that principally promote any particular kind of diseases, are to be carefully remarked. I own that some happen indiscriminately at any time, whilst many others, by a secret tendency of nature, follow the seasons of the year with as much certainty, as some birds and plants. And indeed, I have often wondered, that this tendency of some distempers, which is very obvious, has been hitherto observed but by a few ... [C]ertain it is that knowledge of the seasons in which diseases ordinarily arise is of great use to a physician towards uncovering the species of the disease, as well as the method of curing it; and that the consequence of slighting this piece of knowledge is ill success in both'. 'The Author's Preface' in Thomas Sydenham and Benjamin Rush, *The Works of Thomas Sydenham, M.D., on Acute and Chronic Diseases with Their Histories and Modes of Cure: With Notes, Intended to Accommodate Them to the Present State of Medicine, and to the Climate and Diseases of the United States* (Philadelphia: B. & T. Kite, 1815), xxvi.

<sup>100</sup> A patient's mother notes that the ulcers and other symptoms with which her daughter was currently afflicted 'had come on after the small pox'. Sloane, cxx.

<sup>101</sup> Sloane notes the seasonality of small pox in *ibid.*, 1.

<sup>102</sup> *Ibid.*, lx.

observed the same disease about Montpellier, among the Inhabitants of that Place, though the air be esteemed a remedy for it'.<sup>103</sup>

This reference to the warm weather and concomitant diseases that one might experience in Europe was telling, for part of Sloane's overarching argument was that the climates of Jamaica and parts of Europe were not as different as might be imagined. Hence, presumably, the similarity of plant life between the West Indies and 'the South Parts of France'. Sloane took some pains to note that, although Jamaica lay in the 'torrid zone' between the tropics of Cancer and the Equator, 'yet the air of it may very well be affirm'd temperate, in that the heat of the days is qualified by the length of the nights'.<sup>104</sup> Indeed, 'I never found more heat here than as in some valleys near *Montpelier* where the situation of the Hills in their neighbourhood occasioned excessive heat'.<sup>105</sup> On this point one finds Sloane echoing Hickeringill once again. The self-styled 'Jolly Captain' could find little to criticise in Jamaica's weather, claiming that 'I have found the air as sulphurous and hot in *England*, in the months of *June, July, and August* ... as in the hottest seasons in *Jamaica*'.<sup>106</sup> Indeed, for Hickeringill, it was Jamaica that deserved the title 'temperate' more than any location in the Old World: 'Yet as the extremities of cold in these Regions betwixt the *Tropicks* are indisputably more remiss than in *England*, and the rest of *Europe*, so the Heat qualified with the benefit of Breezes, more justly styles them *Temperate*, than those *Climates* that have already falsly, (tho' with vulgar consent) *usurp'd* the title'.<sup>107</sup> Throughout his text, Sloane similarly sprinkled comments that, 'notwithstanding the heat', downplayed the environmental and atmospheric differences between Europe and the West Indies. Hence, for example, 'The Rainbow here is as frequent as any where in times of Rain';<sup>108</sup> 'Falling stars are as common as elsewhere', and thunder had the same effects as in Europe.<sup>109</sup>

It could not be gainsaid, however, that the island's heat had medically significant effects. Those who travelled there from colder climes needed to be seasoned to higher temperatures. It is worth noting, in fact, that while Trapham used neither the term nor the concept of seasoning, Sloane devoted no small amount of attention to it. One suspects that for Trapham, a discussion of the ill effects that might greet a newcomer's arrival would have gone against the boosterism that pervades most of his text. Thus, while he did acknowledge that

<sup>103</sup> *Ibid.*, 14.

<sup>104</sup> *Ibid.*, vii. Cf. Hickeringill.

<sup>105</sup> *Ibid.*, ix. In making this point, Sloane was in agreement with Trapham, for both regarded the climate of Jamaica as a very salubrious one. 'The air here', Sloane wrote, 'notwithstanding the heat, is very healthy. I have known Blacks one hundred and twenty years of age, and one hundred years old is very common amongst temperate livers', *ibid.*, ix.

<sup>106</sup> Hickeringill, 2.

<sup>107</sup> *Ibid.*, 4.

<sup>108</sup> Sloane, xxxii.

<sup>109</sup> *Ibid.*, xlv.

those who were newly come to Jamaica might wish to avoid the area around the port for some time, he also suggested that they regard the diarrhoea or flux that they were likely to experience as ‘a friendly rather than injurious motion of Nature, caused either by a new sort of Drink & Diet, which falls out in most places more or less, the which ceaseth without prejudice or any other remedy than a little time; or else the same may arise from rejoicing intemperance, too often welcoming the new arriviers’.<sup>110</sup> Sloane had his own criticisms of the intemperate, but in describing the afflictions of newcomers to Jamaica, he tended to stress the direct effect of the action of a blazing sun.<sup>111</sup> Furthermore, whatever the discomfort felt, the body’s response was a salutary one.<sup>112</sup>

I did not at all doubt that these eruptions were the effect of the Sun Beams, which throwing into our blood some fiery parts, put it into brisker motion, whereby it was purg’d of those *heterogenous* and unaccustom’d Particles it had from the warm sun, and perhaps by that fermentation was likewise clear’d of some other parts might be hurtful to it ...<sup>113</sup>

The climate of Jamaica, then, was indeed different from that found in Europe – different enough that those coming from squally England needed to undergo an uncomfortable seasoning in order to inure them to a warmer part of the globe. One might expect – and indeed, found – that the winter diseases of cold climates were relatively or entirely absent. But it was not so bizarrely and extremely different that profoundly different disease environments might be expected. The key point for Sloane was that when diseases manifested themselves, they were to be identified and cured in precisely the same ways as they were in Europe. Intermittent fevers, to take merely one example, did not exhibit one variety in the temperate zone and another between the tropics and hence did not require different cures in each place. This was a claim at once ontological and social. Ontologically, one may note its similarity to doctrines espoused by Sydenham. ‘Every specific disease’, he wrote, ‘arises from a specific exaltation, or peculiar quality of

<sup>110</sup> Trapham, 71. Trapham is one of the few authors I have come across who reverses the logic of seasoning, suggesting that new arrivals from chilly Europe might be *better off* than locals: ‘It may not be improper to remark that those Brezes of the night do less injury to new comers from the colder Europe than to the more antient inhabitants, whose pores being as it were moulded into the bore of the Indian Air, are of larger size and more receptive of the chilling Brezes than such as come from the northern parts: hence also such as pass directly out of Europe hither are not so easily assaulted with feverish attracts as those from the *Carib* Isles: for those little tracts of land of *Barbadoes*, *Nevis*, *Monserat* &c being well opened, and therefore affording nothing so much of night Brezes as the large woody mountains of Jamica do, hath not inured them thereto, while their greater diurnal heat hath sufficiently disposed them to a most ready reception of the night cold Invaders’, *ibid.*, 10–11.

<sup>111</sup> On the case of a ‘Captain Nowel’ and his excessive drinking, see James Delbourgo, ‘Slavery in the Cabinet of Curiosities: Hans Sloane’s Atlantic World’, [www.britishmuseum.org/research/news/hans\\_sloanes\\_atlantic\\_world.aspx](http://www.britishmuseum.org/research/news/hans_sloanes_atlantic_world.aspx) (2007), last accessed 15 Jan. 2018.

<sup>112</sup> Sloane, xciv–xcv.

<sup>113</sup> *Ibid.*, 25.

some humour contained in a living body'. Diseases were not, that is, merely the 'confused and irregular operations of disordered and debilitated nature'. Instead, they arose when humours were retained in the body too long, either because Nature could not remove them, because of atmospheric effects, or because they had been infected by some sort of poison. By these, or related causes:

these humours are worked up into a substantial form or species, that discovers itself by particular symptoms, agreeable to its peculiar essence; and these symptoms, notwithstanding they may, for want of attention, seem to arise either from the nature of the part in which the humour is lodged, or from the humour itself before it assumed this species, are in reality disorders that proceed from the essence of the species, newly raised to this pitch[.]<sup>114</sup>

This specificity in the *cause* of diseases led to a specificity of both symptoms and methods of cure. Although Sydenham was willing to acknowledge that the age or constitution of a patient might cause some minor variations in the appearance of a given disease, he made no mention at all of differences that might be due to race or (perhaps more tellingly) geographic location. 'The same disease appears attended with the like symptoms in different subjects; so that those which were observed in Socrates, in his illness, may generally be applied to any other person afflicted with the same disease'.<sup>115</sup> Sloane appears to have had the same idea, for although he might often have mentioned the age or humoral constitution of a patient in his case notes, he rarely notes their location (even within the West Indies) except to suggest an environmental explanation for the manifestation of a disease seemingly out of season.

The social or professional significance of Sloane's arguments flows from this insistence on a common ontology for diseases in Jamaica and England. For if diseases differed due to climate, requiring distinct dosages according to place, as Trapham argued, then it would seem to follow that those, like Trapham, who possessed local knowledge, would be at an advantage in curing local manifestations of illnesses. Despite his connections, his training, and his experience in Europe, Sloane could be considered at a disadvantage, since he did not understand 'the country diseases having lived there several years'. Where diseases were identical in both places, however, Sloane's status could be deservedly transferred from England to the West Indies. Sloane's was not at all an argument that denied that Jamaica and Europe were different disease environments. It was an argument, rather, that insisted that the opinions of a high-status metropolitan doctor trumped the views of a Jamaican physician, however much the latter knew of local conditions.<sup>116</sup>

<sup>114</sup> Sydenham and Rush, xxx.

<sup>115</sup> *Ibid.*, xxvii.

<sup>116</sup> One can see that this kind of argument would be particularly devastating to any knowledge claims made by local, non-European practitioners.

Again, despite Sloane's (rhetorically powerful) claims to the contrary, he was hardly alone in his views. The debate between those who claimed a kind of universal, or at least easily transferrable, medical knowledge and those claiming superior, locally-based empirical and experiential skills was one that shaped medical practice and socio-professional life throughout the growing empire. We have seen that the debate continued until at least 1750, when it culminated in a duel between two Jamaican physicians. One finds it in print, however, even before Sloane's *Voyage* was published, in a text with which he was probably familiar. In 1696, William Cockburn, a Baronet who would be elected a Fellow to the Royal Society the following year, published the first edition of his *An Account of the Nature, Causes, Symptoms, and Cure of the Distempers that are Incident to Seafaring People*. The work was based on his experiences, beginning in 1694, as one of the first physicians to an English naval fleet. Its aims were, in his words, 'to discover such sicknesses as may be peculiar to people that use our narrow Seas' and to distinguish these both from illnesses on land and those more common closer to the Equator.<sup>117</sup>

While such sicknesses might be peculiar, however, Cockburn concluded that the physician needed to know comparatively little that was new in order to practice in foreign climes: 'the reasoning will hold somewhere else'. After all, a sailor's diet was similar in most places, and diseases that followed from 'victualling' might therefore be supposed to be familiar. The main difference would lie in the air 'which we know is more serene and warm in those places' near the equator. That said, the physician familiar with the mechanical philosophy could determine the effects of this air on the human frame without stirring from his chair. '[B]ecause of its gravity (which is always greatest in a serene Air)', Cockburn opined, 'the blood and all that's carried along in it, are more minutely broken and divided in the lungs ... and therefore is more apt to separate its small and fine parts, and so to have a greater motion and all the consequences that follow upon that'.<sup>118</sup> The second edition of the work appeared under an altered title in 1706, but Cockburn had not changed his views on the ease with which a suitably trained metropolitan physician might diagnose and treat tropical diseases from a distance.<sup>119</sup> So confident of his own analysis was he, that he declared himself 'convinced that this matter does admit of such certainty, as such Surgeons of an indifferent Education might be able to Practise in those

<sup>117</sup> Cockburn, 3.

<sup>118</sup> Ibid., 72–3. On Cockburn and his circle of 'Tory Newtonians', see Anita Guerrini, 'Archibald Pitcairne and Newtonian Medicine', *Medical History* 31 (1987); 'The Tory Newtonians: Gregory, Pitcairne, and Their Circle', *Journal of British Studies* 25 (1986); 'James Keill, George Cheyne, and Newtonian Physiology, 1690–1740', *Journal of the History of Biology* 8 (1985); Theodore M. Brown, 'Medicine in the Shadow of the Principia', *Journal of the History of Ideas* 48, no. 4 (1987).

<sup>119</sup> William Cockburn, *Sea Diseases: Or, a Treatise of Their Nature, Causes, and Cure. Also, an Essay on Bleeding in Fevers; Shewing, the Quantities of Blood to Be Let, in Any of Their Periods. The Second Edition Corrected and Much Improved* (London: Geo. Strahan, 1706).

Fevers, in the E. and W. Indies with as great success, as Physicians commonly have in *England* and other temperate Countries'.<sup>120</sup>

As Harold Cook has shown, arguments like Cockburn's were increasingly common within the British armed forces after the Glorious Revolution. In the larger army and navy after 1688, what was prized was a form of medicine that was 'more universalistic and empirical, less individualistic and learned'.<sup>121</sup> This contrasted with the more traditional and scholarly methods of the Royal College of Physicians, resulting in heated debates between the College and the Admiralty. 'A crucial difference in attitudes towards medicine itself divided the two groups', Cook writes. 'The military wanted quick and efficacious cures for specific diseases that would be good for any soldier or sailor in any circumstance, while the learned physicians wished to maintain the importance of learned physic, with its emphasis on the individual'.<sup>122</sup> Part of this latter emphasis, of course, involved knowledge about location. It was thus perhaps inevitable that Cockburn's attempts to operationalise his insights met with limited success, precisely because leading medical men in England found it difficult to accept that greater personal knowledge of the particulars of practice in the Indies might not be useful. Cockburn had conceived of a plan whereby surgeons overseas might produce a more easily standardised record, so that 'by their having a good number of Orderly Observations, it might be easy for any one to find the right method of these Fevers in the W. Indies'. Cockburn laid the scheme before the Admiralty, who were apparently enthusiastic, but proposed forwarding the matter for the approval of the College of Physicians. Protesting that this was unnecessary, Cockburn, somewhat disingenuously, sought to portray his proposal as one that had little to do with his own views: 'because I did not direct any particular Method to be followed, but only foretold the different success of each method in general use'. The College failed to come to a conclusion on the matter, but their reasons for doing so were illuminating. 'I perceive they were at a loss what Judgment to make of those Particularities which differ from our practice in these Parts of the World', wrote Thomas Millington, the College President, 'As being perfect Strangers to what does, or does not succeed in the *West Indies*'.<sup>123</sup>

One can see from Cockburn's failure to convince members of the College that Hippocratic arguments were a two-edged sword. What social work they might do depended upon location. In the metropole, elite physicians might insist on the applicability of the arguments of *Airs, Waters, and Places* in the

<sup>120</sup> *Ibid.*, 105.

<sup>121</sup> Harold J. Cook, 'Practical Medicine and the British Armed Forces after the "Glorious Revolution"', *Medical History* 34 (1990): 26. See, similarly, Alsop, 30.

<sup>122</sup> Cook, 'Practical Medicine and the British Armed Forces after the "Glorious Revolution"', 14.

<sup>123</sup> All quotations, including that from Millington's letter in Cockburn, *Sea Diseases: Or, a Treatise of Their Nature, Causes, and Cure. Also, an Essay on Bleeding in Fevers; Shewing, the Quantities of Blood to Be Let, in Any of Their Periods. The Second Edition Corrected and Much Improved*, Preface.

face of claims that sidelined or rejected their scholarly expertise in favour of an emphasis on simplicity, universality, and efficacy. For Sloane in the West Indies, however, the practice that flowed from Hippocratic logics gave the advantage to those who were *not* metropolitan elites. Thus, in spite of the fact that Richard Towne dedicated *A Treatise of the Diseases Most Frequent in the West-Indies* to Sloane, one suspects that on this issue, at least, his sympathies were with Trapham. When the text appeared in 1726, one year after the publication of the second volume of Sloane's *Voyage*, Towne could boast of 'seven years practice' in Barbados.<sup>124</sup> The introduction to his short book was well crafted, showing Towne to be well-versed in current mechanical theories, but more committed to located empiricism. 'I have introduced no more Philosophy into this Treatise', he noted, 'than what was necessary to explain the Reasonableness of the Practice, and to guide those into a right Application of it, for whose Use it was principally calculated'.<sup>125</sup> And from the outset, although Towne did not acknowledge the point explicitly (indeed, he implicitly sought to play it down) the text was framed in opposition to Sloane's, arguing that the same diseases manifested differently in different places, and that illnesses existed in the West Indies that had never been seen in Europe.

It is no wonder then that the *Alterations* made in our *Constitutions* should be conformable to the Causes from whence they arise, and consequently that *Diseases* should be in some Places more or less frequent than they are in others, and attended with Symptoms as different as the *Qualities* of the *Countries* where they are produced. This Variety in the Degrees of *Violence*, and Diversity of *Types*, by which Distempers are distinguished from each other, must necessarily require the peculiar Attention of the Physician in his Management of them, and therefore no one *Methodus Medendi* can be framed so general and absolute as to tally with every *Climate*.<sup>126</sup>

Few of Towne's readers could have perused this last sentence without thinking of Sloane, who only the year before had defended his decision to publish the names of his patients when describing their case histories by suggesting that he only did so 'to prove that the Diseases there were the same as in *England*'. But Towne took some of the sting out of his implied criticism of Sloane's 'one method fits all' approach to the practice of medicine in warm climates by suggesting that Sloane himself had been interested, like Towne, in the particularities of place. Both men were, Towne claimed, part of a lineage of 'learned Physicians' that included Alpinus, William Piso, and Bontius, all of whom had 'employ[ed] their Pens upon such Diseases as are *endemic* or *popular*, in those Places where their Practice afforded them the greatest Opportunity for *Observation*'.<sup>127</sup>

<sup>124</sup> Towne, 3.

<sup>125</sup> *Ibid.*

<sup>126</sup> *Ibid.*, 1–2.

<sup>127</sup> *Ibid.*, 2–3.

In spite of this effort to construct a commonality with a powerful patron, it nonetheless seems clear that Towne, like Trapham and unlike Sloane, saw the diseases of the West Indies as entities different to those found in Europe and hence requiring treatment modified to local conditions.<sup>128</sup> Towne, in fact, even identified two illnesses 'to which the blacks are no strangers, but as far as I can be informed they are utterly unknown in Europe: I mean the Elefantiasis under the circumstances it occurs in the West Indies, and a distemper called there the *Joint-Evil*'.<sup>129</sup> For those whose careers were to be made in the colonies, an emphasis on geographical specificity played to their strengths. For the sojourning Sloane, lack of local knowledge was a potential liability, one to be removed by rejecting the putatively Hippocratic premise of his opponents.

### Conclusion

In a now-classic article about the ways that the 'torrid zone' functioned within the European imaginary, Karen Kupperman offered a valuable periodisation. Whereas before the seventeenth century, English would-be travellers to the southern parts of North America 'expressed profound anxiety over the effect hot climates would have on them', from the 1630s, 'propagandists for southern colonies' began to argue that their regions provided an ideal middle zone between extremes of cold and heat.<sup>130</sup> A number of scholars have since nuanced the first part of this claim, pointing to both positive and negative responses to America, even in the earliest periods of its European exploration and settlement.<sup>131</sup> But most have tended to affirm the second part, stressing the strategic importance of promotional attitudes to imperial desires. Portraits of fecundity, verdancy, and the peacefulness of native inhabitants, Susan Parrish has noted, 'had everything to do with attracting settlement and investment in the face of negative reports of starvation, disease, hurricanes, intemperate weather, and Indian massacres'.<sup>132</sup> I believe we can assume a similar periodisation for the West Indies, although their later dates of English settlement (1627 for

<sup>128</sup> In terms of diagnosis, for example, one could not rely on an examination of the urine as one could in Europe. The warm weather changed the fluid too dramatically, so that 'Prognosticks taken from an examination of the urine are much more precarious here than in Europe'. 61–2. In terms of treatment, Towne called attention to the practice of Paracethesis or 'tapping': 'How frightful soever this Undertaking may appear in Europe, yet it is practiced almost every day in Barbadoes with good success', 135.

<sup>129</sup> Towne, 184.

<sup>130</sup> Karen Kupperman, 'Fear of Hot Climates in the Anglo-American Experience', *William and Mary Quarterly* 41 (1984): 213–40, 213, 217.

<sup>131</sup> Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500–1676*. Parrish, Jan Golinski, 'American Climate and the Civilization of Nature', in *Science and Empire in the Atlantic World*, ed. James Delbourgo and Nicholas Dew (New York and London: Routledge, 2008).

<sup>132</sup> Parrish, 33.

Barbados; 1655 for Jamaica) suggest that periods in which attitudes about their climates were negative would have been short. Certainly, by 1679, Trapham was serving as a booster for a climate he and others were happy to portray as eminently suitable for British bodies. Eight years later, Richard Blome's *Present State of His Majesty's Isles and Territories in America*, declared that 'it is confirmed by a long experience, that there is no such antipathy betwixt our *Britanick* Temper and the Climate of Jamaica, as to necessitate them to any Distemper upon their arrival there, or occasion Diseases to prove mortal or contagious more than in other parts'.<sup>133</sup> It is possible, then, that Sloane – if he had been thinking of specific works when he claimed to have been led to believe that diseases were all different in Jamaica – had considerably older texts in mind. More up-to-date volumes, as we have seen, all tended to portray the West Indies as a summer version of England, and hence as a location that possessed many of the same diseases as England, and very few completely new ones. Where Trapham and Sloane disagreed – publicly – was not over diagnosis, but over therapeutics. And there, Sloane was indeed in a minority, at least among civilians, in insisting that what he had learned in Britain and France could be transferred directly to Jamaica.

In terms of the history of medicine, the stakes involved in not taking Sloane as simply a faithful barometer of medical opinion concerning the diseases of the New World are high. Among the tasks of this book is the attempt to explain how it came to be believed to be a fact that the latitudes between the tropics contained radically different disease environments compared to northern Europe. If Sloane accurately captured the tenor of the times, then the problem for the historian involves explaining how such attitudes spread from the West Indies to other imperial holdings where such understandings of fundamental difference were not common.<sup>134</sup> If Sloane's claims are to be nuanced in the ways I have suggested, the task is a different one. It amounts to asking about eighteenth-century events and processes that led to the *emergence* of conceptions both of similarity within the tropics and conceptions of difference between the tropics and the so-called temperate zones. It is to this latter question that we turn in subsequent chapters, beginning in the next with the emergence of a belief that we saw traces of in Trapham's writings: the notion that the movement of peoples via the slave trade was *producing* a disease environment in the West Indies resembling that in Africa, where no such commonality had existed before.

<sup>133</sup> Quoted in *ibid.*, 87.

<sup>134</sup> As we shall see, geographical specification is required here. West Africa had a much poorer reputation as a disease environment than the East Indies in the early eighteenth century. Curtin, '“The White Man's Grave”: Image and Reality, 1780–1850'; 'Epidemiology and the Slave Trade'; *The Image of Africa: British Ideas and Action, 1780–1850*.