

**“DISTEMPERS PECULIAR TO NEGROS”: COLONIAL PHYSICIANS,
ETIOLOGICAL INVESTIGATIONS, AND THE RACIALIZATION OF MEDICINE
IN THE EIGHTEENTH-CENTURY BRITISH WEST INDIES**

by

Hayley Rebecca Johnson

B.A., The University of New Brunswick, 2010
B.Ed., The University of New Brunswick, 2010

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

The Faculty of Graduate Studies

(History)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

August 2012

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Abstract

This thesis examines eighteenth-century colonial medical attitudes toward and discussions of human difference. By surveying five medical tracts written by physicians working in Britain's West Indian colonies, it contributes greater understanding to contemporary notions of human variation. In addition, it also produces a counter-narrative to scholastic depictions of eighteenth-century British medicine, which argue that medical debates over human variation were dominated by theologically-based theories promoting the homogeneity of "man." Intervening in this discussion, this paper posits that a number of contemporary colonial medical practitioners developed theories that were based not on theology or previous medical assumptions, but on empirical evidence. Through a series of clinical observations, these practitioners observed vast health disparities between their British and slave ("Negro") patients; though the bodies of each group responded negatively to transplantation to the West Indies, Britons and Negroes reportedly suffered distinctly from different forms of illness. In response to these observations, the highlighted physicians identified a set of diseases—including *Yaws*, the "Sleepy Distemper," and the Guinea Worm—which they determined must be exclusive to Negroes.

Past historical scholarship claims that eighteenth-century physicians overwhelmingly agreed that humans varied as a result of climatic influence. Here, however, I contend that the medical practitioners studied in this paper concluded that variations in health, disease, and physiology were the result of innate, racially-determined bodily and mental characteristics. By positing that there were a number of exclusively "Negro" diseases, they simultaneously suggested that the bodies of Negroes were racially pathological and that humanity was heterogeneous—two conclusions that historians of race argue were not reached until the works of nineteenth-century racial scientists. Throughout the following case studies, I argue that the racialization of medicine began as early as 1707 with the colonial writings of British physician Hans Sloane. While this initial racialization process did not overtly express any value judgements, it did suggest that Negroes should be treated differently—if only in medical terms. It also directly contributed to and influenced racist medical declarations made about Africans and other minority groups throughout the two preceding centuries.

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Acknowledgements

Although it is impossible to fully express my gratitude in words, the following is an attempt at doing so. I would like to thank my supervisor, Dr. Neil Safier, for his academic guidance and his many efforts at challenging me to improve upon my writing and to extend my historical knowledge. I would also like to thank Dr. Carla Nappi, who has helped me get through my M.A. with at least partial sanity in-tact (and with many more questions than I can ever possibly hope to know the answers to.) A big thank you must also go out to the entire staff and faculty of the History department—particularly Alejandra Bronfman and Gloria Lees—without whom I would have had absolutely no idea what I was supposed to do (or when I was supposed to do it) over the past two years.

Thank you to the Social Sciences and Humanities Research Council of Canada and the History department at UBC for their financial support. Without their funding, this project simply would not have been possible.

Finally, I would like to say a huge thank you to my friends and family, who have supported me throughout this entire mind-boggling journey. To my parents: thank you for continually supporting my decision to do yet another degree in the humanities. To my friends and colleagues in the History department: thank you for being a shoulder to fret on and for helping me become a more thoughtful historian. To my St. John's family: thank you for always being around and being unfailingly supportive when times got tough. And finally, a gigantic thank you must go out to my fellow Kleegarsons—my international support system and my home-away-from-home. Zelius Kleefstra and Mohamed Algarf: we did it!

Introduction: Health, Disease, and “the Negro”

“Ruptures, ringworms, elephantiasis...hydrocephalus, yaws, putrid or ulcerous sore throats, mortification of the fingers and toes, chronic aphthae, leprosy, and tetanus, may be ranked among the sporadic endemics of this country, and are certainly not the least tremendous of them; but fortunately they are confined to the negro race, or rarely occur.”¹

In 1795, British colonist Colin Chisholm published a detailed account of his experiences in the West Indian islands of Grenada. A seasoned surgeon with both a medical practice and plantation in the New World, Chisholm held an exclusive vantage point from which he observed daily life, interactions, and health and illness in the British Grenadines. Amalgamating two years of personal, colonial, and medical observations into a single volume, Chisholm developed what contemporaries considered his magnum opus, *An Essay on the Malignant Pestilential Fever Introduced Into the West Indian Islands*. While this report followed the framework of most eighteenth-century travel accounts in describing the “face of the country, its productions...and the state of its weather,” Chisholm’s narrative was unique in providing detailed descriptions of a much more fatal characteristic of Grenada: the endemic and epidemic diseases ravaging its islands.²

Like many contemporary medical tracts written in and about the British West Indies, Chisholm’s *Essay* represents an attempt to remark upon and make sense of the colonial medical situation through a series of etiological³ investigations. Noticing that British colonists in the West Indies suffered from alarmingly high mortality rates, colonial medical practitioners began the practice of publishing detailed accounts of the symptoms, course, and

¹ Colin Chisholm, *An Essay on the Malignant Pestilential Fever Introduced into the West Indian Islands from Boullam, on the Coast of Guinea, As it appeared in 1793 and 1794* (London: Printed for C. Dilly, 1795), 35 – 6.

² Chisholm, *An Essay*, 1. As their name suggests, travel narratives were accounts written by Europeans detailing their various travels to, and escapades and experiences in, new territories—most commonly Africa and the New World. Travel narratives were extremely popular from the sixteenth through eighteenth centuries during the Age of Exploration, when more lands were being discovered and cultivated, and, consequently, many new places, plants, and animals begged description. For an extended description of travel narratives, see: Peter C. Mancall, ed., *Travel Narratives from the Age of Discovery: An Anthology* (Toronto: Oxford University Press, 2006); Jean Vivies, *English Travel Narratives in the Eighteenth Century* (Burlington, VT: Ashgate Publishing, 2002); and Judy A. Hayden, *Travel Narratives, the New Science, and Literary Discourse, 1569 – 1750* (Burlington, VT: Ashgate Publishing, 2012).

³ Throughout this paper, I use the words “etiology” and “etiological” to refer to the theory or study of disease causation. Many colonial medical practitioners turned to theories of etiology to investigate the cause(s) behind the plethora of disorders affecting Britons and Negros in the West Indies. As such, a high proportion of their discussions of medical differences are etiological in nature.

treatment of diseases devastating the islands' British populations.⁴ Although many early tracts paid particular attention to the identification and avoidance of factors causing British morbidity—a facet of medico-historical literature that has received much scholarly attention—throughout the eighteenth century the study and elucidation of diseases demolishing the African slave population became increasingly popular and profitable.⁵ While Chisholm classified this demographic group as “the negro race,” noting that a number of diseases were “confined” to it, my project examines earlier eighteenth-century British etiological discussions to determine whether his predecessors made such rigid racial distinctions between their British and “Negro” patients.

According to scholars of race, during the time of Chisholm's publication the word “race” began to take on vastly different connotations. While it was used in the Middle Ages and early modern period to discuss humans from the same lineage, stock, or nation with a great deal of fluidity, during the last quarter of the eighteenth century it came to represent fixed, biologically-determined disparities in physical and intellectual makeup.⁶ In their various projects tracing the history of race as a modern idea, social scientists Nancy Stepan, Ivan Hannaford, Dror Wahrman and David Skinner acknowledge the “historical significance of [European] science in the development of notions of racial difference.”⁷ Throughout these works, European scientists Carl Linnaeus (1707 – 1778), Pieter Camper (1722 – 1789), and Johann Friedrich Blumenbach (1752 – 1840) are cited as the earliest writers to systematically

⁴ It is estimated by Kenneth F. Kiple that Britons had mortality and morbidity rates at least 50% higher than those of slaves from Africa. For an explanation and elucidation of these statistics, see Kenneth F. Kiple, *The Caribbean Slave: A Biological History* (New York: Cambridge University Press, 1984), 35 and Kenneth F. Kiple and Virginia Kimmelsteib King, *Another Dimension to the Black Diaspora: Diet, Disease, Racism* (Cambridge: Cambridge University Press, 1981), 121.

⁵ Amongst these authors were Thomas Trapham, Richard Ligon, Hans Sloane, and Sir Henry Colt. For further information on these authors and their discussions about the medical needs of Britons on the islands, see Karen Ordahl Kupperman, “Fear of Hot Climates in the Anglo-American Colonial Experience,” *The William and Mary Quarterly* 41,2(April 1984): 213 – 240; Kenneth Kiple, *Another Dimension*; Richard S. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624 – 1713* (New York: W.W. Norton, 1973); Philip Curtin, *The Image of Africa: British Ideas and Action, 1780 – 1850* (Madison: University of Wisconsin Press, 1964); James C. Riley, *The Eighteenth-century Campaign to Avoid Disease* (London: Macmillan Press, 1987).

⁶ Nicholas Hudson, “From ‘Nation’ to ‘Race’: The Origin of Racial Classification in Eighteenth-century Thought,” *Eighteenth-century Studies* 29,3(Spring 1996): 247 – 238, pp. 247 – 48, 259; Dror Wahrman, *The Making of the Modern Self* (New Haven: Yale University Press, 2004), 87; Nancy Stepan, *The Idea of Race in Science: Great Britain, 1800 – 1960* (London: Macmillan Press, 1982), ix; Stephen Jay Gould, *The Mismeasure of Man* (New York: W.W. Norton & Company, 1981), 20; Ivan Hannaford, *Race: The History of an Idea in the West* (Baltimore: The Johns Hopkins Press, 1996), 6.

⁷ David Skinner, “Racialized Futures: Biologism and the Changing Politics of Identity,” *Social Studies of Science* 36,3 (June 2006): 459 – 488, 460.

place humans into categories based on physical, racial attributes.⁸ According to these scholars, this intellectual ordering became increasingly solidified in the nineteenth century as scientists took on projects that classified and distinguished humans based on supposed inherent physical, mental, and moral capacities.⁹ Through intricate systems of measurement and quantification, nineteenth-century scientists such as Robert Knox (1791 – 1862) and Charles Darwin (1809 – 1882) established race as the primary means to make sense of difference, often contrasting the white European with the black “Negro” to present humanity’s two biological extremes.¹⁰

Much like racial scientists in the nineteenth century, eighteenth-century physicians practicing in Britain’s West Indian colonies worked with two sets of patients whose geographic origins and physical features represented polar opposites. Noticing marked differences in the health experiences and disease susceptibilities of Britons and “Negros,” practitioners such as Colin Chisholm attempted to make sense of these differences through their medical writings, reaching varied conclusions. As John S. Haller argues, “the [colonial] physician was in a peculiar position...which allowed him not only to study the Negro as a biological ‘type’ but to draw conclusions and elaborate theories on the basis of these findings.”¹¹ Because of their close proximity to slaves and the nature of their work, colonial physicians offer a privileged viewpoint from which one can study contemporary notions of difference. Establishing medicine as a distinct and significant entity of intellectual history and practice, this paper addresses and asks a number of questions about these medico-historical conclusions.¹² How did eighteenth-century physicians account for physical

⁸ Curtin, *Image of Africa*, 41. As Curtin asserts, Linnaeus and Blumenbach placed humans into three separate categories based on skin colour and facial appearance: Caucasian, Ethiopian, and Mongolian. Later scientists—most notably Camper—used this information to rank categories of humans based on physical features such as facial angles. For a more detailed look into these works, see Hudson, “From ‘Nation’ to ‘Race,’”; Londa Schiebinger, “The Anatomy of Difference: Race and Sex in Eighteenth-century Science,” *Eighteenth-century Studies* 23,4(Summer 1990): 387 – 405, 389 – 92; Andrew S. Curran, *The Anatomy of Blackness: Science and Slavery in an Age of Enlightenment* (Baltimore: Johns Hopkins Press, 2011), 158 – 173.

⁹ As David Skinner acknowledges, nineteenth and twentieth-century science solidified racial categories as “natural, fixed, and absolute.” Skinner, “Racialized Futures,” 463.

¹⁰ Skinner, “Racialized Futures,” 463.

¹¹ John S. Haller, “The Negro and the Southern Physician: A Study of Medical and Racial Attitudes, 1800 – 1860,” *Medical History* 16(1972): 238 – 253, 238.

¹² This line of argumentation is influenced by the work of Norris Saakwa-Mante, whose study into eighteenth-century medical theories regards medicine as “a discrete component of intellectual and cultural practice.” See Norris Saakwa-Mante, “Western Medicine and Racial Constitutions: Surgeon John Atkins’ Theory of Polygenism and Sleepy Distemper in the 1730s,” in Waltraud Ernst and Bernard Harris, eds., *Race, Science and Medicine, 1700 – 1960* (New York: Routledge, 1999), pp. 29 – 57, 31.

differences between their British and African patients? Did they view these differences as fluid and malleable, or as concrete and fixed? Finally, what part, if any, did colonial medical discourse and contemporary etiological theories play in the establishment of notions of racial difference?

Historians of early modern British medicine argue that contemporary physicians turned to neo-classical theories of climate and environment rather than racial theories to account for physical and medical differences.¹³ According to these scholars, the Hippocratic theory of medical environmentalism, which asserted that the human body was formed over years and influenced by external factors such as climate and geographic location, remained medical “dogma” until well into the nineteenth century.¹⁴ Historians describe this theory not only as dogmatic, but incommensurable with theories of race because it asserted that humanity was homogeneous, stemming from one set of parents: Adam and Eve; differences in body and mind were therefore not fundamental, but fluid, resulting from external circumstances that were constantly in flux. Although I do not wish to argue against the immense impact of medical environmentalism on eighteenth-century British medical discourse, this paper make a two-fold argument: firstly, it refutes the “dogmatic” status of environmental theory in eighteenth-century British medicine, examining the works of a number of medical practitioners whose colonial observations led them to call its tenets into question. Secondly, it argues that a belief in environmental medical theory and conceptions of racial difference were not necessarily as mutually exclusive as historical scholarship contends. Through their colonial medical experiences, a number of British medical practitioners wrote tracts that exhibit a struggle between acknowledging the effects of environment on transplanted bodies and explaining the vast physical and medical differences they observed between their British and African patients. As the majority of health experiences on the West Indian islands differed in terms of disease susceptibility, some

¹³ The following is a list of works which posit that climatic medical theory remained the leading theory to the end of the eighteenth century: Andrew S. Curran, *The Anatomy of Blackness*; Mark Harrison, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India, 1600 – 1850* (New York: Oxford University Press, 1999), Clarence C. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought From Ancient Times to the End of the Eighteenth Century* (Berkeley: University of California Press, 1967), Frederick Sargent II, *Hippocratic Heritage: A History of Ideas about Weather and Human Health* (New York: Pergamon Press, 1982); Roxann Wheeler, *The Complexion of Race: Categories of Difference in Eighteenth-century British Culture* (Philadelphia: University of Pennsylvania Press, 2000).

¹⁴ Kupperman, “Fear of Hot Climates,” 239.

practitioners advanced etiological observations accounting for health disparities on a constitutional level—an understanding of difference that was not itself rooted in theories of environment.¹⁵

The first medical tract I will examine is British physician Hans Sloane's *Voyage to the Islands Madera, Barbadoes, Nieves, St. Christopher's, and Jamaica* (1707),¹⁶ which provides a detailed account of his fifteen-month stay on the island of Jamaica. "The best known European doctor who practiced in the West Indies during the age of slavery," Sloane was the first British physician to treat a large number of African patients and to record clinical observations on the effects the West Indian climate had on both European and "Negro" bodies.¹⁷ These clinical observations, discussed in the first volume of his *Voyage*, led Sloane to question the influence of environment on the health and bodies of European and "Negroes," rejecting environmental medicine in favour of etiological theories suggesting that the minds and bodies of his European and African patients were pre-disposed to act in certain ways.¹⁸ According to Sloane, socio-cultural differences such as the British tendency

¹⁵ Although a number of eighteenth-century physicians practicing in the British West Indies treated peoples of Amerindian descent, for the sake of brevity and contrast this paper will focus exclusively on their treatment of Negroes, whose bodies and appearance were discussed in far greater detail than those of their Amerindian counterparts. As well, in the eighteenth century on a number of islands the Amerindian population had been completely decimated for at least half a century—a consequence of Spanish rule.

¹⁶ In the interest of brevity, hereafter Sloane's work will be referred to in short as his *Voyage to Jamaica* or, in a shortened version, as his *Voyage*. A second volume of Sloane's *Voyage* was published in 1725, detailing the animals and insects he met with on the island. Although this second volume is a fascinating contemporary work, its contents will not be discussed as only the first volume discusses his medical practice and treatment of Negroes.

¹⁷ 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* 30,4(October 2005): 391 – 444, 391. Churchill also notes that Sloane's tract was the first to discuss significant numbers of female patients, including a number of female African patients.

¹⁸ Richard B. Sheridan, *Doctors and Slaves: A Medical and Demographic History of Slavery in the British West Indies, 1680 – 1834* (New York: Cambridge University Press, 1985), 21. In 1687, at the age of 27, Sloane was elected a Fellow of the Royal Society of London, serving as its secretary four years later. From 1727 – 1741, he succeeded Sir Isaac Newton as its president – the highest intellectual honour in contemporary England at the time. He was also appointed the President of the Royal College of Physicians from 1719 – 1735, and in 1714 attended Queen Anne in her last illness. In 1716, he was named a baronet, receiving the honorary title "Sir" – the second medical man in history to receive this honour. Serving in his presidential years as the primary physician to King George II, Sir Hans Sloane became one of the wealthiest physicians of his day, using his wealth and connections to build a collection of New World curiosities which, after his death in 1753, became the foundation for the British Museum. For more information on Sloane's remarkable life, see Arthur MacNalty, "The Royal Society and its Medical Presidents," *The British Medical Journal* 2,5193 (July 1960): 171 – 181; Jack A. Clarke, "Sir Hans Sloane and Abbe Jean Paul Bignon: Notes on Collection Building in the Eighteenth Century," *The Library Quarterly* 50,4(October 1980): 475 – 482; and G.R. de Beer's seminal work, *Sir Hans Sloane and the British Museum* (Toronto: Oxford University Press, 1953).

to overindulge in alcohol and the Negro tendency toward “debauch’d” behaviour caused them to be more susceptible to certain diseases.

The second set of works I will examine are John Atkins’ *The Navy Surgeon* (1734) and his *Voyage to Guinea, Brasil, and the West-Indies* (1735). As a naval surgeon deployed to Western Africa and the British West Indies on a series of voyages from 1719 to 1723, Atkins encountered and treated many Negroes travelling to and from Africa. Although he initially attributed visible and clinical differences to the effects of Africa’s hot and humid climate, Atkins’ work reveals that during his voyages he came to question the fluidity of human differences. A closer examination of Atkins’ medical observations conveys that he concluded that Negroes suffer not only from a set of diseases that were peculiar to the Negro body, but that Europeans and Africans came from an entirely different stock and were, therefore, fundamentally different.

The theme of characterizing diseases as peculiarly “Negro” continued throughout the final two medical texts this paper examines, James Grainger’s *An Essay on the more common West-India Diseases and the Remedies which that Country itself Produces* (1764) and John Hunter’s *Observations on the Diseases of the Army in Jamaica* (1788). As a physician and plantation owner on the West Indian island of St. Kitts, Grainger had ample opportunity to treat and care for Britons and slaves. Although the first two chapters of his *Essay* display his belief in the contribution of environmental factors to similarities and disparities in the health of these two groups, the third section of Grainger’s tract discussed a number of “diseases of blacks” such as elephantiasis and yaws that he believed resulted not from environmental factors, but from constitutional ones.¹⁹ Similar conclusions were made in physician/surgeon John Hunter’s *Observations*. As superintendent of the military hospitals in Jamaica, Hunter determined through a series of colonial observations that British soldiers suffered from such high rates of morbidity because of climatic factors such as heat and humidity. While his position did not allow him to treat a great number of slaves, he dedicated an entire chapter of his tract to remarking upon the “Diseases of Negroes.”²⁰ Although his treatment of British

¹⁹ James Grainger, *An Essay on the More Common West-India Diseases; and the Remedies which that Country itself Produces. To which are added, Some Hints on the Management &c. of Negroes* (London: Printed for T. Becket and P.A. De Hondt, 1764), vi.

²⁰ John Hunter, *Observations on the Diseases of the Army in Jamaica; And on the Best Means of Preserving the Health of Europeans in that Climate* (London: Printed for G. Nicol, Pall-Mall, 1788), 305. These observations

soldiers was firmly rooted in theories of environmental etiology, this chapter reveals that Hunter's clinical observations led him to account for the presence of "Negro" diseases not in terms of environmental factors, but, rather, ingrained mental and physical disparities.

As these medical practitioners traveled to particular West Indian islands at different times throughout the eighteenth century and had vastly different colonial experiences and clienteles, I treat their tracts as a series of case studies, each making related but distinct arguments about colonial health, environmental theory, and human variation. Despite the disparities in their geographical and temporal locations, the texts I examine were all written by British medical practitioners who were educated in European universities that followed a Hippocratic curriculum.²¹ Although their education exalted the Hippocratic tradition, the clinical observations and colonial experiences of these particular medical men led them to question the theoretical basis of their European education. In particular, their contact with a number of new diseases that seemed to afflict Negroes exclusively—including yaws, elephantiasis, "the sleepy distemper" and "the Joint-Evil"—caused them to look beyond the immediate environment for answers, determining that these diseases resulted instead from immutable factors within the Negro body. Although Colin Chisholm's *Essay* is significant for its discussion of diseases confined to the "negro race," I contend that its observations and classifications are by no means unique for the eighteenth century; despite the arguments set out by scholars of race, a hundred years before Knox, Morton, and Darwin published their works a number of colonial medical practitioners began establishing etiological theories that played an independent role in developing the racial²² distinctiveness of "the Negro."

Throughout the eighteenth century, the Negro played a pervasive role in European colonial travel and medical literature. Early eighteenth-century depictions conjured up fifteenth-, sixteenth-, and seventeenth-century images that accused the Negro of barbarism, idolatry, bestiality, and sexual debauchery; although all eighteenth-century narratives

take up ten pages of his volume, which, although seemingly insignificantly, is a large percentage of a word dedicated to discussing diseases affecting soldiers specifically.

²¹ Andrew Wear, *Knowledge and Practice in English Medicine, 1550 – 1680* (Cambridge: Cambridge University Press, 2000), 130.

²² By racial here and throughout the remainder of the paper I am referring to the nineteenth-century definition of the term; that is, the suggestion that different groups of people—"races"—were divided mentally and physically by a number of characteristics that were essential, fixed, and unalterable. By using the nineteenth-century connotation of the term, I do not, however, intend to convey that the distinctions made by eighteenth-century physicians were in any way racist.

considered Negroes human, some of the earliest accounts by Portuguese travelers described Africans as “beastly” and “monstrous” cannibals that were either man-like apes or ape-like men.²³ While many later eighteenth-century works disputed the moral and mental characteristics of Negroes, they all agreed on two defining characteristics: their black skin and African origination. Many earlier eighteenth-century accounts discussed the Negro as an individual, with his or her own appearance and personality. As the slave trade reached unprecedented heights in the mid-eighteenth century, however, so, too, did categorizations and generalizations. British colonial accounts began to consider “the Negro’s place in nature,” abstracting qualities from the individual in order to discuss a collective, black-skinned Negro who was gendered male.²⁴ He became representative of a whole host of slaves, whose appearance, customs, and bodies were considered to be of identical custom and stock, despite the fact that they were from a number of different countries and regions in Africa.²⁵ Although the Negro was of African origin, rarely was he referred to as African; more often than not, categorizations of “Negro[s],” “black[s],” or “slave[s]” were put into place, all evoking a collective image.

While colonial travelers initially offered the most numerous and detailed descriptions of Negroes, similar categorizations were perpetuated by British medical practitioners working in the West Indies. By the late seventeenth century, as Britain’s West Indian islands became more populous, physicians and surgeons began practicing on the islands.²⁶ Although they initially came to treat colonists, military and naval men, and government personnel, as the number of African slaves rose throughout the eighteenth century, so, too, did their need for

²³ Anthony J. Barker, *The African Link: British Attitudes to the Negro in the Era of the Atlantic Slave Trade, 1550 – 1807* (London: Frank Cass and Company, 1978), 17; 121; James H. Sweet, “The Iberian Roots of American Racist Thought,” *The William and Mary Quarterly* 54,1(January 1997): 143 – 166, 147, 161; Alvin O. Thompson, “Race and Colonial Prejudices and the Origin of the Trans-Atlantic Slave Trade,” *Caribbean Studies* 16,3/4(1996): 29 – 59, 43 - 47. Although cannibalism in any form was looked down upon, these Portuguese accounts noted that Africans ate the flesh not only of their enemies, but also of their family and friends—one of the most evident signs of their incivility.

²⁴ Curtin, *Image of Africa*, 34; 36. According to Curtin, the Negro was often gendered male because the majority of African slaves shipped to the West Indies were male. As such, it only made sense that the prototypical “Negro” was a black, male African slave.

²⁵ Most of the slaves came from Guinea, as well as regions in Western African from Sierra Leon to Benin. Sheridan, *Doctors and Slaves*, 108.

²⁶ Mark Harrison, *Medicine in an Age of Commerce and Empire: Britain and its Tropical Colonies, 1660 – 1830* (New York: Oxford University Press, 2010), 13.

medical attention.²⁷ By the 1720s, the process of amelioration—spending money on existing slaves in the form of medical care, and “breeding” them instead of buying new ones—was put into place.²⁸ As a result, it became practice on many West Indian plantations to have physicians on salary; in some cases, medical practitioners even resided on plantation estates, coming into daily contact with Negroes, whom their publications referred to in an increasingly collective sense.

Treating slaves was an incredibly profitable venture for many medical men, who received a great deal of work due to the injuries, illnesses, and diseases brought on by the nature of the slave trade and plantation work. Poor sanitary conditions and overcrowding on the Middle Passage and sugar plantations led slaves to become ill at increasingly high rates. Working six days a week, ten or eleven hours a day, the slave population retained workplace injuries and diseases such as dysentery, scurvy, and lockjaw, as well as burns and lacerations that resulted from overwork, close contact, and ill-developed immune systems.²⁹ As slave mortality rates rose to double those of British colonists, far surpassing slave birth rates, the economic incentive to provide slaves with proper medical care increased and plantation owners hired physicians and surgeons to treat slaves at unprecedented rates.³⁰ These practitioners were generally paid six shillings a head per annum for all slaves on each estate and were given extra money for amputations, inoculations, and difficult cases of childbirth.³¹ Finding further profit in their treatment of slaves, a number of practitioners, such as Grainger, published manuals that provided an outline “for those who are intrusted [sic] with

²⁷ By 1675, Jamaica’s slave population surpassed that of its white population, rising to 80% by 1707; by the middle of the eighteenth century, the remainder of West Indian islands reached similar demographics. Throughout the period of the late seventeenth through eighteenth centuries, 1.5 million African slaves were imported to Britain’s West Indian islands alone. Sheridan, *Doctors and Slaves*, 5; Dunn, *Sugar and Slaves*, 224.

²⁸ Harrison, *Medicine in an Age*, 13. During this period, slave prices reached unprecedented heights due to increased demand and competition.

²⁹ Dunn, *Sugar and Slaves*, 248; 305.

³⁰ Harrison, *Medicine in an Age*, 13; Kenneth M. Stampp, *The Peculiar Institution: Slavery in the Ante-Bellum South* (New York: Alfred A Knopf, 1967), 320; Richard B. Sheridan, “Africa and the Caribbean in the Atlantic Slave Trade,” *The American Historical Review* 77,1(February 1972): 15 – 35, 21. It is estimated that one third of slaves died from diseases within three years of their arrival. George W. Roberts, *The Population of Jamaica* (London: Conservation Foundation at the University Press, 1957), 174.

³¹ For more information on the process of amelioration, see Richard B. Sheridan, “Mortality and Medical Treatment of Slaves in the British West Indies,” in *Race and Slavery in the Western Hemisphere: Quantitative Studies*, ed. Stanley L. Engerman and Eugene D. Genovese (Princeton: Princeton University Press, 1975), pp. 285 – 310, 287 - 298; see also Sheridan, *Doctors and Slaves*, p. 45.

the management of Negroes” of how to treat slave injuries and diseases in instances where they were far removed from proper medical care.³²

I examine works written in the eighteenth-century British West Indies for two reasons: firstly, the medical experiences of Britons in these colonies were far different from those in Britain, resulting in a new branch of literature detailing the medicine of “hot” or “warm” climates.³³ While life in the West Indian islands was “startlingly different” from that in Britain, providing opportunities to observe new plants, animals, birds, and insects, what was most striking for colonial British medical practitioners was not the islands’ flora and fauna, but their “strange climate, strange food, and strange diseases.”³⁴ Physicians observed that the blazing heat, humidity, storms, winds, and heavy rainfall of the West Indies proved extremely volatile to European bodies, attaching a sense of “otherness” to the West Indian environment.³⁵ The otherness of Britain’s West Indian islands afforded physicians opportunities unparalleled in Great Britain, giving them the chance to investigate the relationship between environment and disease first-hand, rather than from textbook study.³⁶ The frightening levels of morbidity and mortality of colonial Britons in this particular disease environment led to the publication of numerous colonial medical tracts attempting to determine the causes of these diseases in order that they may be avoided.³⁷ Each of the medical texts I examine fall under this category, considering the relationship between environment and disease in an attempt to identify and prevent the so-called “tropical” diseases plaguing their British patients.

³² Grainger, *An Essay*, i. Although this may initially seem like an unprofitable venture, Grainger’s manual specifically states that if a plantation owner treated his slaves when qualified medical practitioners were in close proximity, he would be guilty of attempted murder—and murder in cases where his slave(s) died from his treatment. As Grainger explained, “Planters should remember the sixth commandment. Those who presume to prescribe to the sick, and are not qualified by study and experience, must be murderers.” At the end of his manual, he suggests that all plantations, regardless of their locality, should be visited by a proper medical authority at least once per week—more so “if occasion require.” Grainger, *An Essay*, 73.

³³ Harrison, *Medicine in an Age*, 8.

³⁴ Dunn, *Sugar and Slaves*, xiii; Susan Dwyer Ambussen, *Caribbean Exchanges: Slavery and the Transformation of English Society, 1640 – 1700* (Chapel Hill: University of North Carolina Press, 2007), 43 – 44. These included, but were not limited to, lizards, crabs, gnats, pelicans, figs, oranges, lemons, pomegranates, papayas. For a longer list of these peculiarities, see Dunn, *Sugar and Slaves*, 5 – 6.

³⁵ David Arnold, “Introduction: Tropical Medicine before Manson,” in *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500 – 1900*, ed. David Arnold (Atlanta: Editions Rodolpi B.V, 1996). pp. 1 – 19, 6; Dunn, *Sugar and Slaves*, 40 – 42.

³⁶ Harrison, *Medicine in an Age*, 3.

³⁷ Sargent II, *Hippocratic Heritage*, 223; Harrison, *Medicine in an Age*, 1.

The second reason I have chosen to study medical texts written in the eighteenth-century British West Indies is that, as a result of sugar production and exportation, the population of Britain's Caribbean colonies expanded exponentially during the 1700s. As the British West Indies became one of the greatest contemporary exporters of sugar, they also became the leading importers of African slaves, with whom many colonial Britons—particularly medical practitioners—had daily professional contact.³⁸ Through discursive accounts of their encounters with Africans, many British medical practitioners began considering the physical and medical characteristics of the Negro. As physicians observed that British and African bodies responded differently to life in the West Indian tropics, Sean Quinlan notes that they “sought to explain these variations through contemporary theories of disease causation and avoidance.”³⁹ Although contemporary publications considered diseases that were common to both their British and Negro patients, a set of new diseases arose that had not yet been discussed by metropolitan writers and seemed to solely affect the Negro. Through the study of “Negro” diseases, a discursive line of colonial medical investigations into the physiological and etiological peculiarity of the Negro developed, insinuating that the Negro body was, to some degree, inherently distinct and pathological. The four case studies I will discuss represent a subsection of eighteenth-century medical literature that investigated the origins and implications of so-called “Negro” diseases, coming to similar, yet separate, conclusions about the medical idiosyncrasies of the Negro.

By looking at issues of human variation through a medico-historical lens, I suggest that eighteenth-century colonial British medicine—etiological theories in particular—had a distinct role in the development of ideas of racial difference that would come to dominant European intellectual thought in the nineteenth century. My project not only suggests the significance of medical tracts in this history—it also asserts the uniqueness of colonial medicine by positing that medical practitioners in Britain's eighteenth-century West Indian colonies held an exclusive vantage point from which they could, and did, assess human variation. These practitioners noted that the bodies of Negroes suffered from biological disparities that ranged from a socio-cultural disposition toward “lustiness” to a constitutional

³⁸ 1.5 million slaves were imported in the British West Indies from 1627 to 1775; 18% of these in the seventeenth century, 19% in the first quarter of the eighteenth century, and 37% after 1725. Sheridan, “Africa and the Caribbean,” 29.

³⁹ Sean Quinlan, “Colonial Bodies, Hygiene and Abolitionist Politics in Eighteenth-century France,” *Historical Workshop Journal* 42(1996): 106 – 125, 107.

immaturity resulting from an unalterably, naturally weak brain. Although the theories of these medical men suggest that Africans were naturally diseased, their writings do not represent an attempt to make political claims about Africans or their bodies, but a personal and professional effort to rationalize the colonial situation and the different health experiences of Britons and Africans.

Airs, Waters, Places: Historiography and the Hippocratic Heritage

Because the identification of illness and maintenance of health were major eighteenth-century concerns for both social and economic reasons, contemporary etiological investigations—particularly those conducted in the West Indies—have received much historical consideration. In 1964, Philip Curtin suggested for the first time that theories of climate, disease, and human variation were inextricably linked. Focusing on attitudes toward Africans under the “South Atlantic System,” Curtin argued that eighteenth-century Britons attributed socio-cultural variation to environmental factors, rather than racial ones.⁴⁰ Examining contemporary demographical analyses of British and African mortality rates in the Caribbean, he concluded that colonial Britons also considered health disparities a result of living in the “tropical environment” of the New World—an environment which the numbers revealed Britons were ill-adapted to, and one in which Negros, coming from another tropical environment, thrived.⁴¹ Although his work provided important insights, Curtin’s medico-historical discussion was little more than a footnote in his larger project on early modern attitudes toward the Negro.

Continuing the trend of historical demography, in the early 1980s Kenneth Kiple studied records of the Royal African Company, the British military, and the British navy to compare British and African mortality rates in the eighteenth-century West Indies and Africa.⁴² Placing an emphasis on the role of disease throughout these records, Kiple asserted that contemporary demographics led eighteenth-century British colonists to conclude that their susceptibility and the Africans’ immunities to West Indian diseases resulted from “the effect[s] of climate.”⁴³ Comparing these beliefs with nineteenth-century conclusions, Kiple noted a shift in medical convictions as physicians began studying demographic patterns in a more scientific way; according to Kiple, after the 1830s they grew increasingly convinced that the black body had a “built-in” ability to resist tropical diseases.⁴⁴ By examining and comparing disease demographics and morbidity rates, Kiple’s work added another dimension

⁴⁰ Curtin, *Image of Africa*, 71.

⁴¹ Curtin, *Image of Africa*, 57, 65; Philip D. Curtin, “Disease and Imperialism,” in *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500 – 1900* (Atlanta: Editions Rodopi B.V., 1996), pp. 99 – 107, 100 – 102.

⁴² Kiple determines that 37% of white troops died from fever, while less than 5% of black ones did, and that blacks overall had a 50% lower death rate. Kiple and King, *Another Dimension*, 37 – 38.

⁴³ Kiple and King, *Another Dimension*, 60.

⁴⁴ Kiple and King, *Another Dimension*, 61.

to Curtin's thesis. Through his investigation of military, naval, and medical demographics, Kiple highlighted the role nineteenth-century British morbidity played in the "ever-growing white conviction that blacks were a distinctly different species of man."⁴⁵

Providing yet another facet to this branch of historical investigation, Richard B. Sheridan's *Doctors and Slaves* (1985) examined the medical and demographic experiences of slaves in the West Indies from 1680 to 1834. Although his work focused more than previous demographical studies on recreating the life (and death) of slaves in the British West Indies, Sheridan's main concern was providing an answer for how and why slave mortality and infertility rates were so high. Though he discussed the presence of certain "Negro" diseases such as yaws, elephantiasis, and the Guinea Worm, his analysis of them was limited to their contribution to the demographics of the slave trade, rather than any contribution they had to contemporary intellectual, social, or cultural debates.⁴⁶

The interrelationship between the body, disease, and the tropical environment was promoted in another subset of historical literature that focused on social trends, rather than demographic interpretations. The first work to relate this intellectual trend to social phenomena was Clarence J. Glacken's *Traces on the Rhodian Shore* (1967). Throughout this encyclopedic study, Glacken argued that from Greek antiquity through the nineteenth century, "Western thought" was dominated by questions about the influence of humans on nature and the influence of nature on humans.⁴⁷ Emphasizing the contribution of Hippocrates' *Airs, Waters, Places* to these discussions, Glacken concluded that until the end of the eighteenth century "Westerners" maintained the Hippocratic heritage which taught that human bodies were shaped first and foremost by their environment.⁴⁸

The social influence of the Hippocratic tradition on the life of Britons residing in the New World was discussed in two works published in the mid-to-late 1980s. The first, an article by Karen Kupperman in the *William and Mary Quarterly*, argued that British colonists living in seventeenth- and eighteenth-century North America and the Caribbean feared the

⁴⁵ Kiple, *The Caribbean Slave*, 28. According to Kiple, throughout the eighteenth century it was believed that certain races had inborn qualities that fitted them for certain environments and climate-types.

⁴⁶ Sheridan, *Doctors and Slaves*, xv; 187.

⁴⁷ Glacken, *Traces on the Rhodian Shore*. For full citation, see footnote 13.

⁴⁸ Glacken, *Traces on the Rhodian Shore*, 451. Because this concept insisted that variation was determined by surrounding geographic or environmental factors, it is often referred to as "geographic" or "environmental" determinism.

deleterious effects of “hot climates” on their bodies.⁴⁹ Resulting from a contemporary belief in Hippocratic environmental theory, this widespread fear forced colonists to cope with life in these warm climates by adapting their lifestyles and social habits to life in a tropical environment. James C. Riley’s *Eighteenth-Century Campaign to Avoid Disease* (1987) advanced Kupperman’s thesis by discussing the effects of eighteenth-century etiological beliefs on everyday life in Britain and its colonies.⁵⁰ Arguing that Hippocratic environmentalism dominated British medical theory until the end of the eighteenth century, Riley concluded that life for contemporary Britons was greatly affected by attempts to recognize and avoid environmental factors leading to morbidity.⁵¹ While the works of Glacken, Kupperman, and Riley added a socio-historical dimension to earlier demographic studies, their investigations failed to incorporate a significant aspect of eighteenth-century colonial life: the impact of these environmental theories on the lives, bodies, and contemporary perceptions of non-“Western” peoples.

The impact of environmental medical theory on contemporary notions of racial difference is considered in a series of works written during the 1990s and 2000s that link Hippocratic environmental etiology to contemporary discussions of human difference. The most comprehensive of these cultural histories are the works of Mark Harrison, which assert that the interconnectedness of contemporary British notions of health, environment, and physical difference had enormous implications for colonial rule and settlement patterns.⁵² Through the study of colonial travel and medical tracts written in India and the West Indies, Harrison argues that sixteenth-, seventeenth-, and early eighteenth-century Britons held an unwavering belief in the Hippocratic notion of environmental determinism; as such, he maintains, they could and did not conceive of differences between Britons, Indians, and Africans in racial terms. Beginning in the 1780s, however, as pessimism grew about the

⁴⁹ Kupperman, “Fear of Hot Climates.” For full bibliographical information, see footnote 13.

⁵⁰ Riley, *Eighteenth-century Campaign*, x – xi. For full bibliographical information, see footnote 13. Riley’s work provides a fascinating investigation into the epidemiological studies of eighteenth-century British medical practitioners. According to Riley, the conclusions made by these studies resulted in a series of campaigns to avoid diseases that were believed to result from environmental factors such as stagnant waters in marshes and poor ventilation.

⁵¹ According to Riley, this process significantly diminished mortality and morbidity rates as the century and awareness progressed. Riley, *Eighteenth-century Campaign*, xiii.

⁵² Harrison, *Climates and Constitutions*, 2. See also Mark Harrison, “‘The Tender Frame of Man’: Disease, Climate, and Racial Difference in India and the West Indies, 1760 – 1860,” *Bulletin of the History of Medicine* 70,1(1997): 68 - 93; Harrison, *Medicine in an Age*.

possibility of British adaptation to tropical environments, etiological theories began to entertain the possibility that the disease immunities of Indians and Africans were the result of essential, racial qualities.⁵³

Similar studies have been conducted in the colonial French context by historians Sean Quinlan and Andrew S. Curran, whose works examine the extent to which eighteenth-century French physicians, anthropologists, and scientists thought of “*le Nègre*” as a distinct category of humanity.⁵⁴ According to Quinlan, seventeenth- and eighteenth-century French physicians also participated in the neo-Hippocratic revival; as a result of this enduring environmental belief, Quinlan argues that contemporaries proclaimed, firstly, that the Caribbean climate was pathological for European bodies and, secondly, that the climate of Africa had caused African bodies to “degenerate” (i.e., become black) over generations.⁵⁵ Curran’s *Anatomy of Blackness* (2011) presents a similar argument, noting that eighteenth-century French philosophical, scientific, and medical texts emphasized the “unity of man.”⁵⁶ As revolution and abolitionist politics reached their apex near the end of the eighteenth century, however, both authors demonstrate that notions of race began to solidify in France and its colonies; after 1780, French scientists, physicians, and intellectuals began to reject Hippocratic environmental theory, referring to “blackness” not only as a descriptor, but as a marker of innate, unalterable difference.

While I do not wish to argue against the dominance of environmental medical theory in eighteenth-century British medical thought, I do contest that notions of racial difference were, indeed, present in a number of British colonial medical tracts. Although past historical studies provide a comprehensive examination of eighteenth-century investigations into the effects of environment on British disease susceptibilities and African disease immunities, with the exception of Sheridan they fail to elaborate on the role played by discussions of African disease susceptibilities in British West Indian medical literature and debates. This subset of literature is important not only because it provides insight into contemporary discussions of slave health, but also because the presence of such high levels of African

⁵³ Harrison, *Climates and Constitutions*, 110.

⁵⁴ Quinlan, “Colonial Bodies,” 107; Curran, *The Anatomy of Blackness*. According to both authors, until this time there was not yet a need to determine the origination of “blackness.” Prior to this, both men agree that environmental theory pervaded French and European thought, accounting for blackness as a result of overexposure to the sun’s rays.

⁵⁵ Quinlan, “Colonial Bodies,” 108; 112.

⁵⁶ Curran, *The Anatomy of Blackness*, 57.

morbidity in the West Indian climate caused colonial medical practitioners to question the role environment played in pathology. Though the tracts I will examine explain that some of these illnesses resulted from the hazards of slave life, each practitioner lists and confronts a number of diseases which he describes as peculiar to the Negro and does not explain using Hippocratic theory. While two of the medical practitioners studied in the following cases deny the influence of climate on British and African bodies—and, thus, human difference—almost altogether, the latter two accept the impact of the West Indian environment on British pathology while denying its agency in the onset of “Negro” diseases. Observations from these latter texts by James Grainger and John Hunter also suggest that belief in environmental medicine and racial differences were not necessarily as incommensurable as previous scholarship contends. They also represent a departure from the canonical belief in Hippocratic environmentalism that pervaded the British medical discourse of earlier centuries.

Because fifteenth, sixteenth, and seventeenth-century medicine was highly indebted to the Hippocratic treatise *Airs, Waters, Places*, before delving into the above-mentioned case studies it is crucial to address two questions.⁵⁷ Firstly, what, precisely, did this treatise claim about the relationship between bodies, environment, and disease? Secondly, how and why were these texts resurrected and reinterpreted in the early modern period? In answering these questions, the remainder of this section provides important insight into the theories, concepts, and literature that Hans Sloane, John Atkins, James Grainger, and John Hunter read and became undoubtedly familiar with during their formal European training, prior to their voyages to the West Indies.

Throughout *Airs, Waters, Places*, Hippocrates explained that bodies were highly influenced by the surrounding environment. According to this treatise, the world was made up of four elements: air, fire, earth, and water, which corresponded to four bodily humors: yellow bile, black bile, blood, and phlegm.⁵⁸ Consequently, environment and climate were the chief causes of both health and physical disorder. Health and illness were “peculiar to each particular region” of the earth, differing as a result of geographic and climatic

⁵⁷ Glacken, *Traces on the Rhodian Shore*, 5; Kupperman, “Fear of Hot Climates,” 214.

⁵⁸ Wear, *Knowledge and Practice*, 37; Hippocrates, “Airs, Waters, Places,” in *Loeb Classical Library, Hippocrates: Volume I*, Trans. W.H.S. Jones (Cambridge, Mass: Harvard University Press, 1923), pp. 65 – 137, 75.

characteristics.⁵⁹ The diseases brought on by “health and unhealthy winds,” “the properties of the [surrounding] waters,” and local geographical features included agues, pneumonia, and fevers.⁶⁰ Although good health was maintained by a proper balance between and blending of the four humors, Hippocrates noted that each climate created its own characteristic balance in its inhabitants that was dominated by one particular humor; when one moved to a drastically different climate, humoral distress would inevitably proceed, resulting in illness and a high susceptibility to “local diseases.”⁶¹

Although health was Hippocrates’ main concern, in this treatise he also argued that environment greatly influenced national character and disposition—an assertion that held similar weight in early modern European travel and medical literature. As Hippocrates maintained, “the inhabitants of one [nation] differ entirely in physique [and character] from those of the other.”⁶² Environmental conditions such as the direction of winds, dampness, sunlight and the sun’s position accounted for differences in physiology, as well as physical and moral qualities; civility was attainable only in temperate climates such as Greece, while wildness was a result of “the severe climate and the bareness of the land” experienced in dry, tropical countries such as Africa.⁶³ Those from cold areas were dull and of lighter complexion because of “winter’s storms,” while those from tropical regions tended to be overly passionate, indolent, and dark-skinned because overexposure to hot air and hot waters caused an excess of fiery black bile.⁶⁴ Although one’s physical and mental characteristics reflected the dominant features and humors of his or her region of origin, Hippocrates noted that upon relocation, one’s humoral balance began to change. According to his treatise, “you will find assimilating to the nature of the land both the physique and the character of the inhabitants.”⁶⁵ When one traveled to a new climate, then, they not only became sick, but began taking on characteristics particular to the new locale.

As Europeans began traveling to new regions of the earth during the fifteenth century, they started adopting and adapting the tenets of Hippocratic environmentalism to account for

⁵⁹ Hippocrates, “Airs, Waters, Places,” 71; 73.

⁶⁰ Hippocrates, “Airs, Waters, Places,” 71; 75; 83.

⁶¹ Glacken, *Traces on the Rhodian Shore*, 11.

⁶² Hippocrates, “Airs, Waters, Places,” 105; 133.

⁶³ Hippocrates, “Airs, Waters, Places,” 121; Glacken, *Traces on the Rhodian Shore*, 8; Harrison, *Medicine in an Age*, 108.

⁶⁴ Hippocrates, “Airs, Waters, Places,” 135 - 7.

⁶⁵ Hippocrates, “Airs, Waters, Places,” 137.

the different peoples and sicknesses they came into contact with. By the 1550s Hippocrates was considered an unquestioned and unquestionable authority on all medical matters by Portuguese, Spanish, and Dutch physicians and travelers, many of whom made reference to the interrelatedness of disease and climate.⁶⁶ While physician Garcia da Orta (1490 – 1570) cited the ill effects of the humid Indian air on his fellow Portuguese in Goa, in the 1570s Spanish traveler Francisco Hernandez acknowledged a fear of European “degeneration” in the New World, noting that its hot, humid climate had impeded the growth of facial hair amongst Amerindians.⁶⁷ Dutch physicians Willem Piso (1611 – 1678) and Jacobus Bontius (1592 – 1631) also applied the works of Hippocrates to health experiences in Brazil and India, arguing that Europeans became sick in these regions as a result of the heat and humid air.⁶⁸ *Da Orta’s Colóquios dos Simples, e Drogas he Cousas Mediçinais da Índia* (1563) and Bontius’ *De Medicina Indorum* (1642), which also discussed the relationship between climate and human character, became an essential part of European medical school curriculum.⁶⁹

As Britons began expanding their empire in the sixteenth and seventeenth centuries, they, too, found themselves becoming increasingly ill upon entering tropical climates, accounting for these illnesses in environmental terms. The first English textbook devoted to discussing and describing tropical diseases, published in 1598 by George Watson, warned Britons of the dangers engendered by traveling to so-called “intemperate climats [sic].”⁷⁰ Reflecting upon his travel to Jamaica in 1647, British merchant Richard Ligon recorded similar anxieties, positing that bodies accustomed to living in temperate regions such as Britain could not “endure such scorching without being suffocated.”⁷¹ Feeling tropical

⁶⁶ M.N. Pearson, “First Contacts between Indian and European Medical Systems: Goa in the Sixteenth Century,” in *Warm Climates and Western Medicine*, ed. David Arnold (Atlanta: Editions Rodopi B.V., 1996), pp. 20 – 41, 22; George M. Foster, “On the Origin of Humoral Medicine in Latin America,” *Medical Anthology Quarterly* 1,4(December 1987): 355 – 393, 362.

⁶⁷ Harrison, *Medicine in an Age*, 33. Da Orta lived in India for a total of 36 years, from 1534 until his death in 1570.

⁶⁸ Harrison, *Medicine in an Age*, 37, 50; Sargent II, *Hippocratic Heritage*, 228.

⁶⁹ Harrison, *Medicine in an Age*, 37; Arnold, “Introduction,” 11. According to Harrison, they were so popular that they were translated into numerous languages in many editions.

⁷⁰ Kupperman, “Fear of Hot Climates,” 213.

⁷¹ Kupperman, “Fear of Hot Climates,” 214; Richard Ligon, *A True & Exact History of the Island of Barbadoes. Illustrated with a Map of the Island, and also the Principal Trees and Plants there, set forth in their due Proportions and Shapes, drawn out by their several and respective scales. Together with the Ingenio that makes the Sugar, with the Plots of several Houses, Rooms, and other places, that are used in the whole process of Sugar-making; viz. the Grinding-room, the Boyling-room, the Filling-room, the Curing-house, Still-house, and*

regions such as Africa and the West Indies unwholesome places for British bodies, accounts by travelers such as Watson and Ligon suggested that Britons should avoid travel to the tropics unless it was of absolute necessity.

Anxieties about the effects of hot air and humidity on British bodies were echoed by seventeenth-century British medical tracts, which cited Hippocrates' *Airs, Waters, Places* as proof that travel to tropical environments had deleterious consequences.⁷² Physician Sir Thomas Browne dedicated an entire chapter of his *Pseudodoxia Epidemica* (1646) to "A digression concerning Blacknesse," warning Britons that living in tropical climates with "astringent humidity" and excessive sun exposure might turn their skin black.⁷³ English physician Thomas Sydenham, who earned the title "the English Hippocrates" after publishing his *Medical Observations Concerning the History and Cure of Acute Diseases* (1668), likewise argued that "the qualities of the atmosphere have a predisposing [often negative] effect upon our bodies."⁷⁴ Expanding upon Sydenham's thesis, in 1679 Thomas Trapham published his *Discourse of the State of Health in the Island of Jamaica*, which was the first British medical treatise to study "the Tropicks of *Hippocrates*" in a West Indian context.⁷⁵ Throughout *Discourse*, Trapham determined the "very nitrous" air of Jamaica to be the cause of the "Pestilent Feavours," dry bellyache, dysentery, "Frenzies...and other hot cholericke [sic] sicknesses" attacking British colonists.⁷⁶ Although Trapham determined that the West Indian climate was pathological for Britons, unlike his predecessors he believed that after a

Furnaces; All cut in Copper (London: Printed for Peter Parker, 1673), 9 – 10. According to Ligon, no one should travel to the West Indies because it was essentially a death trap. Much has been written on the effects of these writings and their medical claims on early modern travel and tourism to the West Indies. For more information, see Kupperman, "Fear of Hot Climates," and Mark Carey, "Inventing Caribbean Climates: How Science, Medicine, and Tourism Changed Tropical Weather from Deadly to Healthy," *Osiris* 26,1(2011): 129 – 141.

⁷² Sheridan, *Doctors and Slaves*, 17.

⁷³ Sir Thomas Browne, *Pseudodoxia Epidemica*, ed. Robin Robbins (Oxford: Clarendon Press, 1981), 524, 526, 528.

⁷⁴ Thomas Sydenham, "Medical Observations," in *The Whole Works of the Excellent Practical Physician Dr. Thomas Sydenham, Wherein Not only the History and Cures of Acute Diseases are treated of, after New and Accurate Method; But also the Shortest and Safest Way of Curing most Chronical Diseases*, trans. John Peely (London: Printed for Richard Wellington, 1696), 34. Although Sydenham's *Medical Observations* was limited to discussing diseases specific to the different regions of Britain, it became the first English textbook outlining the aims of environmental pathology and an influential manual for later textbooks written on diseases of the tropics. Riley, *Eighteenth-century Campaign*, 10 – 11.

⁷⁵ Sheridan, *Doctors and Slaves*, 19; 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 Custom and Manners of Living, &c.* (London: Printed for R. Boulter, 1679), 2, 17 – 38. This treatise described six years of Trapham's medical experiences on the island. He lived and practiced in Jamaica from 1673 to 1702.

⁷⁶ Kupperman, "Fear of Hot Climates," 224; Trapham, *Discourse on the State of Health*, 101 – 103.

“seasoning” period—in which British bodies became acclimatized to the West Indian climate through a series of sicknesses—they could live healthfully and happily in the West Indies.⁷⁷

As British physicians began to reside in the West Indies at unprecedented rates throughout the eighteenth century, historians Mark Harrison and David Arnold argue that they continued to perpetuate the Hippocratic tradition. Although they cited and revered the works of Hippocrates and his “English” successor, eighteenth-century British medical men had a new idol: Dutch physician Hermann Boerhaave (1668 – 1738), whose work on the “diseases of warm climates” was itself heavily indebted to Sydenham’s.⁷⁸ Boerhaave was a professor at the University of Leiden, where more than one third of the students were British. While he spent his entire professional career in the Netherlands, his writings also dominated the medical curriculum at Edinburgh University—where most physicians traveling to the West Indies were educated—well into the 1760s.⁷⁹ Although his work did not discuss the Caribbean, his ideas pervaded what historians consider three of the most influential pieces of British West Indian medical literature: John Arbuthnot’s *An Essay Concerning the Effects of Air on Human Bodies* (1733),⁸⁰ William Hillary’s *Observations on the Changes of the Air...in the island of Barbados* (1759),⁸¹ and James Lind’s *An Essay on the Diseases Incidental to Europeans in Hot Climates* (1768).⁸² Following the Hippocratic tradition, each of these pieces determined that “the Effects of Air” greatly influenced “the economy of Diseases” and “the constitutions of Mankind, the Specialities of Features, Complexion, Temper, and consequently the Manners of Mankind, which are found to vary much in Different Countries and Climates.”⁸³

While Mark Harrison argues that for eighteenth-century British physicians “this synthesis of ancient and modern wisdom became an article of faith,” he and his fellow

⁷⁷ Kupperman, “Fear of Hot Climates,” 215. The seasoning process was thought to last approximately two years, affecting colonists individually, and to varying degrees.

⁷⁸ Harrison, *Medicine in an Age*, 31 – 2.

⁷⁹ Harrison, *Medicine in an Age*, 31; Arnold, “Introduction,” 12 – 13; Sheridan, *Doctors and Slaves*, 56. According to Harrison, more than one-third of surgeons serving in the army, navy, and East India Company had also received some formal training in Edinburgh before their departure.

⁸⁰ This work was re-printed in English 1751, 1756, and again in 1851. It was also printed in French in 1742 and Latin in 1753. Angus Ross, “Sir Alexander John Arbuthnot,” Oxford Dictionary of National Biography, accessed July 25 2012, <http://www.oxforddnb.com.ezproxy.library.ubc.ca/view/article/610>.

⁸¹ Hillary was one of Boerhaave’s students, graduating from the University of Leiden in 1722.

⁸² Sargent II, *Hippocratic Heritage*, 194.

⁸³ John Arbuthnot, *An Essay Concerning the Effects of Air on Human Bodies* (London: Printed for T. Tonson, 1788), vii; 146.

medical historians focus on the majority opinion, disregarding outlying medical beliefs.⁸⁴

The colonial medical tracts they examine—including, most prominently, those of Arbuthnot, Hillary, and Lind—also centre largely on the effects of the West Indian environment on British bodies, rather than its influence on African ones. Though I do not wish to convey that the medical practitioners or tracts discussed in the following case studies had any significant sway in contemporary medical or scientific debates, I do wish to acknowledge that they presented a number of varying perspectives—not only on contemporary discussions of environmental medicine and tropical diseases, but on theories of human variation as well.

Although each man was versed in Hippocratic environmental theory via his formal European training, upon practicing in the West Indies Sloane, Atkins, Grainger, and Hunter began questioning the effects the environment had on bodily health and variation. In particular, their faith in Hippocratic theory began to wane as they came into increasing contact with African slaves—“Negros”—who suffered immensely from illness despite the fact that Hippocratic environmentalism taught that their bodies, being from a similarly tropical locale, should be well-suited for life in the West Indian climate.⁸⁵ While Sloane’s treatise contested the effects of climate on both British and African bodies, the presence of diseases such as yaws, elephantiasis, and sleepy distemper caused the remainder of these practitioners to question the influence of environment on African bodies specifically. Citing the theoretical works of Hippocrates, Bontius, and Boerhaave alongside their experiential observations, these practitioners began to stress the value of empirical evidence over academic theory. Though the reigning medical and religious orthodoxy taught that man was of one race⁸⁶ and that varieties in health and appearance were the result of environment, the clinical observations of these four medical practitioners led them to believe otherwise. Upon extensive examination and comparison of the bodies of Britons and Negros, they determined

⁸⁴ Harrison, *Medicine in an Age*, 33.

⁸⁵ While this argument is presented in the works of Kenneth F. Kiple and Philip Curtin, it does not and did not account for the relative susceptibilities of Africans.

⁸⁶ Christian theology taught that humanity was a single race with one set of parents: Adam and Eve. This theory, which became intellectual doctrine during the Renaissance, is referred to in the scholarly literature as “monogenesis.” This literature taught that Adam and Eve were white, leading early modern intellectuals to determine that darker skin colours must be the result of climatic influence. For further elucidation of this theory and its various tenets, see Colin Kidd, *The Forging of Races: Race and Scripture in the Protestant Atlantic World, 1600 – 2000* (New York: Cambridge University Press, 2006). Monogenesis will also be discussed in the later section on Atkins, whose colonial observations led him to question and eventually reject the theory altogether, positing a new one.

that there was simply far too much pathological disparity to be accounted for in environmental terms; instead, they concluded—to varying degrees—that etiological differences must, at least in part, be essential.

“Negros are much given to Venerly”: Hans Sloane’s Jamaican Medical Practice

On 19 December 1687, twenty-seven year old Hans Sloane (1660 – 1753) arrived in Jamaica after a three-month journey that began in Spithead, England. As the personal physician to its governor the Duke of Albemarle, Sloane spent fifteenth months on the island treating patients and conducting a study of its “Curiosities.”⁸⁷ Though Sloane’s interest in the curious is reflective of a larger contemporary project to order and categorize natural curiosities—a fact which is widely recognized throughout historical examinations of his work—it was also indicative of a growing proto-ethnographical trend; while he recorded accounts of Jamaica’s “Herbs and Trees, Four-Footed Beasts, Fishes, Birds, Insects, Reptiles, & c.,” as a physician versed in Hippocratic theory Sloane also had a vested interest in considering its “Inhabitants, Airs, Waters, [and] Diseases.”⁸⁸ Chronicling his natural historical, ethnographical, and medical observations in *A Voyage To the Islands Madera, Barbados, Nieves, S. Christophers and Jamaica* (1707), Sloane believed that his publication offered new information that would be crucial for the “Advancement of Natural Knowledge, and the Faculty of Physic.” While historians have discussed *Voyage*’s contributions to natural history at great length, throughout the following pages I contend that Sloane’s medical observations contributed not only to the “Faculty of Physic,” but also to contemporary discussions of human variation.⁸⁹

Through an examination of the 128 patient case histories Sloane offers in the introduction to his *Voyage*, as well as his ethnographical observations on the bodies, habits, and health of Jamaica’s British and African inhabitants, I argue that Sloane’s work represents

⁸⁷ Hans Sloane, *A Voyage to the Islands Madera, Barbados, Nieves, S. Christophers, and Jamaica, with the Natural History of the Herbs and Trees, Four-footed Beasts, Fishes, Birds, Insects, Reptiles, &c. of the last of those Islands; To which is prefix’d an Introduction, Wherein an account of the Inhabitants, Airs, Waters, Diseases, Trade, &c. of that Place, with some Relations concerning the Neighbouring Continent, and Islands of America. Illustrated with The Figures of the Things describ’d, which have not been hitherto engraved; in large Copper-plates as big as the Life, Vol. I* (London: Printed by B.M. for the Author, 1707), Preface.

⁸⁸ James Delbourgo, “Slavery in the Cabinet of Curiosities: Hans Sloane’s Atlantic World,” British Museum, accessed July 10, 2012, <http://www.britishmuseum.org/PDF/Delbourgo%20essay.pdf>, 4; Sloane, *Voyage to Jamaica*, Preface. Instances of Sloane’s “curious” nature can be seen throughout both volumes of his *Voyage*. For specific descriptions, see *Voyage* (vol. I), pp. xxi, liii, lxxxvi, lxxxix. For more information on Sloane’s curious nature, see De Beer, *Sir Hans Sloane and the British Museum* (for full citation see footnote 18); Delbourgo, “Slavery in the Cabinet of Curisities”; Kay Dian Kriz, “Curiosities, Commodities, and Transplanted Bodies in Hans Sloane’s ‘Natural History of Jamaica,’” *The William and Mary Quarterly* 57,1(January 2000): 35 – 78.

⁸⁹ Although Sloane’s work is an amalgamation of observations and case studies from the period of 1687 to 1688, for the purposes of this paper its 1707 publication places it within the realm of eighteenth-century medical discourse.

a departure from the Hippocratic theories of environmental medicine and environmental determinism. Although Sloane noted that the inhabitants of Jamaica were “for the most part *Europeans*, some *Creolians*, born and bred in the Island Barbados, the Windward Island, or Surinam, who are the Masters, and *Indians*, *Negros*, *Mulatos*, *Alcatrazes*, *Mestises*, *Quarterons*, & c. who are Slaves,” his narrative focused largely on describing the health and bodies of “Europeans” and “*Negros*,”⁹⁰ with whom he had the most professional contact.⁹¹ Noting marked disparities between the prevalence of certain diseases in each group, through a series of clinical observations Sloane gradually began to question the foundations of the Hippocratic education he had received at the universities of Paris, Montpellier, and Orange; although each group had been transplanted into a non-indigenous climate, it seemed that differences in their socio-cultural habits, rather than transplantation to the Jamaican environment, contributed to ill health. Wendy D. Churchill has argued that Sloane maintained that human physiology and disease etiology were constant regardless of climate and “race,” noting that he prescribed the same treatment for all of his patients—black and white, male and female.⁹² While it is true that Sloane treated Britons and Negros for a number of the same diseases, prescribing similar medications for each group, I maintain that his investigations into the causes of disease exhibit crude⁹³ racial undertones. Determining through a series of observations that environmental factors had seemingly no effect on the human body, Sloane gradually began to speculate that differences in the socio-cultural practices and health of his British and Negro patients must be the result of internal, bodily difference.

⁹⁰ In his narrative, Sloane identified “Negros” as “the Original Inhabitants of Africa,” referring to them often as “Negro[e]s” (with variant spellings), and simultaneously as “slaves.” Sloane, *Voyage to Jamaica*, lvi.

⁹¹ Although there may be a number of reasons behind Sloane’s decision to discuss these two groups, including his personal interests and the perceived interests of his readers, this representation is largely due to the fact that these two categories made up his client-base: Europeans because they paid for his services, and “Negros” because they were financial investments for plantations owners, who “take great care of them for that Reason, when they come to be in danger of being disabled or of Death.” From this reasoning, one can also infer that did not treat “Indians” because he was not paid to do so. He also notes on a number of occasions that “Indians” had their own brand of medicine, which they believed was more efficacious than the medicine provided by Europeans. Indeed, throughout both volumes of his work Sloane describes his own use of indigenous plants as *materia medica*. For Sloane’s descriptions of the physician characteristics and lifestyles of “Indians” on the island, see p. xlvi of Vol. I.

⁹² Churchill, “Bodily Differences?,” 427.

⁹³ By using the word crude here, I hope to articulate a sense that the racial undertones in Sloane’s work are extremely undeveloped and underexplored in comparison to nineteenth-century racial discussions.

Although it is unclear where Sloane stood on the question of bodily difference prior to his voyage, evidence from his work suggests that he carried to Jamaica an anxiety about the negative effects of “hot” climates on colonial Britons—and, thus, at least some belief that environmental factors affected the human body. This much is evident from the first passage of his *Voyage*, in which Sloane recalled:

When our intended Voyage to *Jamaica* was drawing near, I was desir'd by several who were to go on the same Voyage, to give them my Advice what Physick would be best to prevent their being Sick at Sea, and receiving injury thereby, and by the change of the several Climates we were to pass through; to which my answer was that I thought the best Counsel I could give, was, to eat and drink what was fitting, and to use Exercise, and the other six non-naturals with that moderation, that their Bodies might be kept in a healthful state, and made strong and able to endure any Disease should through unavoidable contingencies attack them.⁹⁴

Although the “unavoidable contingencies” Sloane referred to included the various illnesses contracted from a long voyage across the Atlantic, the main cause of concern for Sloane and his shipmates was not the voyage itself, but the climatic changes brought on by its tropical destination. While Sloane’s shipmates were anxious about the diseases they might encounter, Sloane’s own anxiety lay not only with contracting tropical illnesses, but also with his lack of familiarity, which he feared might lead to “kill[ing] instead of curing”; by reading the works of Richard Ligon and Thomas Trapham—which he cited throughout his tract—Sloane came to believe that “the Diseases of this place [the West Indies more broadly, and Jamaica in particular] were all different from what they are in *Europe*, and [had] to be treated in a differing Method.”⁹⁵ In addition to his background reading, upon graduating from medical school Sloane spent years under the tutelage of Thomas Sydenham, “the English Hippocrates” himself, who warned him he would be better off drowning himself in a London park than moving to the pathological climate of the West Indies.⁹⁶

While contemporary travel and medical discourse influenced Sloane’s decisions prior to departure, his writings convey that upon practicing in Jamaica his clinical observations led him to doubt the effects of the Jamaican environment on the health and bodies of his patients.

⁹⁴ Sloane, *Voyage to Jamaica*, 1. It should be noted here that the emphases presented in quotations from Sloane’s *Voyage* are from the original itself, unless otherwise stated. Sloane’s writing has a tendency to place proper names and places into italicized fonts.

⁹⁵ Sloane, *Voyage to Jamaica*, xc.

⁹⁶ Eric Saint John Brooks, *Sir Hans Sloane: The Great Collector and His Circles* (London: Batchworth Press, 1954), 78.

Despite the arguments of Sydenham, Trapham, and Hippocrates, who noted that diseases were particular to locality, and that hot climates were particularly volatile for British bodies, after treating hundreds of patients Sloane concluded that he “never saw a Disease in *Jamaica*, which I had not met with in *Europe*”; likewise, the ones he did encounter had the same symptoms as he had seen in Europe, followed the same course, and required the same “Remedies and Methods” of treatment as they had in London.⁹⁷ While his predecessors described the ill effects of “nitrous” tropical air on temperate bodies, Sloane concluded that the tropical Jamaican air was “very healthy and... no more Nitrous than in *England*.”⁹⁸ Indeed, despite the claims of Ligon and Trapham, throughout the course of his Jamaican stay Sloane stated that he had even come to know “Blacks one hundred and twenty years of Age,” and that “one hundred years old is very common [here] amongst Temperate Livers.”⁹⁹ After spending fifteen months becoming closely acquainted with British and Negro bodies, Sloane determined that the Jamaica environment was not in itself pathological.

By comparing his empirical observations on the health experiences of all Jamaica’s inhabitants, Sloane also came to refute another fundamental tenet of *Airs, Waters, Places*, which argued that illness was the result of humoral imbalance caused by entering a new climate. Applying this theory directly to the Jamaican environment, in his *Discourse* Trapham had noted that for their first two years on the island, newcomers would experience a series of fevers which enabled their bodies and bodily humors to slowly acclimatize to the environment. Trapham called this process “seasoning,” arguing that “seasoned” individuals would remain unaffected by the environment for the rest of their stay on the island. In response to Trapham’s theory, Sloane declared that

A great many were of the opinion that this Fever was what is call’d the Seasoning, that it is to say, that every New-comer before they acclimatize to the Climate and Constitution of the Air in Jamaica, are to have acute Disease, which is thought to be very Dangerous, and that after this is over, their Bodies are made more fit to live there, with less hazard than before.... That this Fever was not so, is manifest in that not only we New-comers were taken ill with it, but likewise many of the ancient Inhabitants of the place...[and] a great many of us who were lately arrived escap’d this and all acute diseases whatsoever.¹⁰⁰

⁹⁷ Sloane, *Voyage to Jamaica*, xc; Churchill, “Bodily Differences?,” 396.

⁹⁸ Sloane, *Voyage to Jamaica*, ix.

⁹⁹ Sloane, *Voyage to Jamaica*, ix.

¹⁰⁰ Sloane, *Voyage to Jamaica*, xcvi. Wendy D. Churchill makes the argument that Sloane’s *Voyage* was published, in part, as an outright rejection of Trapham’s 1678 *Discourse*. Churchill, “Bodily Differences?,”

Although environmental medical theory—and the work of Trapham in particular—maintained that British bodies were ill-equipped for life outside of Britain and that native bodies were built to withstand the hot and humid climate, Sloane’s clinical observations led him to conclude that this was a fallacy; not only were natives of the island contracting these fevers, many of those newly-arrived from Britain were not. Climate, therefore, had no predisposing effects upon the bodies of any of Jamaica’s inhabitants—British, Negro, or otherwise.

Likewise, although the works of Hippocrates, Sydenham, and Jacobus Bontius—whom Sloane also cited—taught that fluctuations in meteorological conditions were the main cause of fevers and illnesses, an examination of Sloane’s case histories reveals that he believed Jamaica’s weather had no effects, ill or otherwise, upon his patients’ bodies. As he observed, Jamaica’s rains were indeed “generally very violent, coming along with great Winds,” but the rains and winds themselves did not cause any of the most common ailments on the island, including “Intermittent” and “*Tertian*” fevers.¹⁰¹ While Sydenham’s *Medical Observations* dedicated hundreds of pages to describing the seasonal and local characteristics that caused these fevers, Sloane described them not as seasonal, but “Ordinary,” noting that they were “very Epidemic all over the Islands” throughout the year and that Negroes, who were from a similar climate, were equally liable to this disease.¹⁰² Sloane also attributed the other diseases that were “very common to all manner of people” on the island, which included “Fluxes and *Diarrheas*,” “Dysenteries,” “great pains in the *Abdomen*,” and the “Belly-Ach” to non-climatic phenomena such as drinking “rum-punch” and eating poor food.¹⁰³ According to his observations, it was common practice on the island “to drink a large draught of Water in the Morning...which is thought to prevent the Belly-ach,” not because it was caused by dehydration from Jamaica’s hot and humid weather, but because it

398. For literature discussing the idea of “seasoning,” see Kupperman, “Fear of Hot Climates”; Dunn, *Sugar and Slaves*; and Gary Puckrein, “Climate, Health and Black Labor in the English Americas,” *Journal of American Studies* 13,2(August 1979): 179 – 193.

¹⁰¹ Sloane, *Voyage to Jamaica*, xxvii.

¹⁰² Sloane, *Voyage to Jamaica*, cxxxiv. Sloane cites a number of case histories in which he treated “Black boy[s]” for this disease. For the detailed accounts, see pp. c and cxxxii of Sloane’s introduction.

¹⁰³ For exact instances where Sloane describes the effects of these diseases on both his British and Negro patients, see pp. cxix, cxx, cxxii, cxxvii.

allegedly “clear[ed] the Guts” of unwanted liquids or solids resulting from a long night of drinking or eating unwholesome food.¹⁰⁴

While Hippocratic environmental theory taught that human bodies and minds were heavily influenced by the environment, Sloane’s medical observations led him to refute this claim, determining that Britons and Negroes became ill not because of environmental incompatibility, but because of certain socio-cultural tendencies such as dietary habits. As Sloane observed, one of the key components leading these demographic groups to become ill were the British overindulgence in food and alcohol and the Negro tendency to eat improperly-prepared food. According to Sloane, due to their habit of eating raw meat, slaves from the Gold Coast and Guinea arrived “troubled with Worms.”¹⁰⁵ Sloane also observed that he treated slaves for worms, “Fevers,” “Convulsion-Fits,” “bloody Excrements,” and nausea as a result of their tendency to eat “corrupt Fruits, Roots, and other Meats” and an inherent lack of “the Faculties¹⁰⁶ to distinguish by their Senses what is wholesome Food.”¹⁰⁷ While Sloane’s Negro patients suffered from illness because of their dietary activities, Sloane’s case histories convey that the tendency of his British patients to overindulge in food and alcohol caused “violent fits of the Belly-ach,” as well as afflictions such as “Fevers,” gout, heart palpitations, convulsions, and “Apoplectic Distemper.”¹⁰⁸ He even treated one of his female patients, a “Mrs. L,” for cholera, which he believed resulted from “drinking too much Wine.”¹⁰⁹ Though the Hippocratic legacy conveyed in the works of Thomas Sydenham and Thomas Trapham argued that fevers resulted from climatic humoral imbalance, Sloane’s practical experience led him to rationalize the development of fevers and the different health experiences of Europeans and Negroes in terms of socio-cultural customs rather than environmental factors.

¹⁰⁴ Sloane, *Voyage to Jamaica*, xxvii. In order to treat the “Belly-ach” after it had already set in, Sloane noted that he used a number of “purgatives” to provide a similar effect. According to Sloane, these worked on the hundreds of cases of belly-ache he was exposed to, in both his British and Negro patients. Sloane, lxxi.

¹⁰⁵ Sloane, *Voyage to Jamaica*, lviii; cxxvi.

¹⁰⁶ According to Winthrop D. Jordan, the word “faculty” was used by contemporaries to indicate mental abilities which were “natural” and innate. Winthrop D. Jordan, *White Over Black: American Attitudes Toward the Negro, 1550 – 1812* (New York: W.W. Norton & Company, 1968), 189.

¹⁰⁷ Sloane, *Voyage to Jamaica*, xxv, cxv. He also argued that slave children were particularly susceptible to worms because they had a tendency to eat sugar cane raw.

¹⁰⁸ Sloane, *Voyage to Jamaica*, xciii; cviii; cxi. The case of one of these men, a “Mr. F.,” was particularly bad. A twenty-four-year-old who was “extremely corpulent and Fat, us’d to eating heartily and drinking very hard,” Mr. F. challenged another man to a fierce drinking contest, only to find himself dead in a matter of months. For a complete account of this case, see p. cxvii.

¹⁰⁹ Sloane, *Voyage to Jamaica*, cxi; cxiii.

While contemporaries believed that climate determined the behaviours of groups—as Hippocrates stated in *Airs, Waters, Places*—Sloane’s investigations into the causes of venereal disease led him to question the influence of climate on group pathologies and dispositions. Although he described a number of his afflicted British patients as “Cholerick”¹¹⁰—a symptom Hippocratic tradition taught was the result of a rise in black bile due to elevated levels of heat—he argued that their choleric disposition was not, in fact, a result of heat or sun exposure.¹¹¹ Sloane’s contemporaries believed that “Temper and Passion are influenc’d by the Air” and that “It is thought by some men, that they are bewitch’d or charm’d by the [hot and humid] Air; by others that the desire in Women by this heat is Augmented, but I believe neither.”¹¹² Instead, Sloane determined that the high incidence of venereal disease among his British patients was the result of an ingrained socio-cultural tendency to overindulge in alcohol—a practice which Sloane believed led them to become particularly libidinous.¹¹³

Demonstrating that this custom was no more prominent in Jamaica than it had been in England, Sloane noted that although his colonial British patients were “much given to Venery, and intemperance in Drinking,” his metropolitan ones, whom he described as “much given to Drinking and Venery,” suffered from similar rates of venereal disease.¹¹⁴ Indeed, heavy drinking was not only the “premier sport” of the West Indian islands, but an equally popular and prevalent pastime in England—and an equally worrisome one.¹¹⁵ Although it was an acceptable—and even encouraged—social activity in early eighteenth-century England, medical practitioners, including Sloane, warned that its excessive consumption

¹¹⁰ For these specific case histories, see pp. xc and cxlv.

¹¹¹ The works of Philip Curtin and Anthony J. Barker have demonstrated that preceding and contemporary works of both medicine and travel advocated for a view of “Negros” as particularly lewd and hypersexual—and that climate was most often held responsible. For more information, see Curtin, *Image of Africa*; Barker, *The African Link*; Mary Floyd-Wilson, *English Ethnicity and Race in Early Modern Drama* (Chapel Hill: University of North Carolina Press, 2003), pp. 46 – 47. Dierdre Coleman also notes that men were not censured for promiscuity in the West Indies because they were said to be the victims of hot temperatures. Dierdre Coleman, “Janet Schaw and the Complexions of Empire,” *Eighteenth-century Studies* 36,2(Winter 2003): 169 – 193, 177.

¹¹² Sloane, *Voyage to Jamaica*, xxxi.

¹¹³ Sloane, *Voyage to Jamaica*, xxxi.

¹¹⁴ Sloane, *Voyage to Jamaica*, xciii, cxxxiii; cxlix.. As historian Richard S. Dunn notes, for eighteenth-century Britons living in Jamaica, drinking was the “premier sport of the island,” resulting in heightened and frequent sexual contact. Dunn, *Sugar and Slaves*, 307.

¹¹⁵ Dunn, *Sugar and Slaves*, 278; 306; Paul E. Kopperman, “‘The Cheapest Pay’: Alcohol Abuse in the Eighteenth-century British Army,” *The Journal of Military History* 60,3(July 1996): 445 – 470, 459 – 60. According to Richard S. Dunn also notes that heavy drinking was made “the premier sport” in an attempt to emulate the European lifestyle these colonists had left behind.

caused the body to degenerate, creating an imbalance between the solids and fluids that led to common “evils” such as diseases of the stomach and the mind.¹¹⁶ The only difference in drinking customs Sloane attributed to environmental factors was Britons’ choice of drink: while in England beer and gin were preferred, he noted that “this strange Climate” caused them to spoil; Britons in Jamaica, therefore, turned either to Madeira wine, rum-punch,¹¹⁷ or European liquors such as brandy to quench their thirst, despite the fact that water was considered “the most wholesome Drink.”¹¹⁸ Although their choice of drink depended on their socio-economic status, Sloane’s case histories reveal that he treated British patients from all socio-economic statuses—“servants” and “Gentlem[e]n” alike—for venereal diseases, always resulting from excessive alcohol consumption.¹¹⁹ According to Sloane, venereal disease in Britons was not a result of elevated heat, nor of social standing, but of a fundamental predisposition to overindulge in alcohol.

Sloane’s conclusion that “The Passions of the Mind” were no more excited in hot climates than they were in temperate ones had similar implications for his investigations into the cause of venereal disease in Negros. By determining that human bodies and minds were not “bewitch’d or charm’d” by tropical air, Sloane refuted the contemporary neo-classical explanation that Negros were particularly lewd because of their native hot and humid African climate. Despite this refutation, Sloane’s case histories reveal that he treated a significant number of Negros for venereal diseases, noting that gonorrhoea in particular had become endemic throughout the slave population and that there were “few Plantations without several of these Diseases’d Persons.”¹²⁰ While he agreed with the travel accounts he was reading that Negros had no respect for chastity, arguing that “they are for the most part mixt with a great deal of Bawdry and Lewdness,” he refuted their claims that it was Africa’s tropical climate

¹¹⁶ Quinlan, “Colonial Bodies,” 110 – 111; Sloane, *Voyage to Jamaica*, xxviii.

¹¹⁷ According to Dunn, nearly every planter kept a bowl of rum-punch on the table to accommodate both friends and visitors. Dunn, *Sugar and Slaves*, 276. Sloane described rum-punch as a mixture of “Rum, Water, Lime-juice, Sugar, and a little Nutmeg scrap’d on top of it.” He also noted that servants and other “people of the poorer sort” were often “very easily fuddled with it” because it was so cheap. For a fuller account of Sloane’s description, see *Voyage to Jamaica*, xxix.

¹¹⁸ Sloane, *Voyage to Jamaica*, xxvii; xxviii.

¹¹⁹ For several examples of this, see Sloane, *Voyage to Jamaica*, xxix; cxvii.

¹²⁰ Sloane, *Voyage to Jamaica*, cliii; cxvi. The word “endemic” here is carefully chosen to illustrate the fact that Sloane believed gonorrhoea—one particular venereal disease—was confined on a large scale to Jamaica’s Negro population. Although the word “endemic” is most often used to refer to a disease that is confined to a certain locality, I would argue that Sloane believed it was, indeed, confined to a large extent in a certain locality—the Negro body.

that contributed to this heightened sexuality.¹²¹ Instead, Sloane turned again to socio-cultural explanations to account for the high incidence of venereal diseases amongst his Negro patients. Noting that Negroes were temperate and that they did not drink “Wine or vinous Liquors,” Sloane determined that this endemic was not a result of alcohol abuse.¹²² He described his Negro patients as naturally “much given to Venery,” arguing instead that they had an innate inclination toward hypersexual behaviour that resulted from inherently—not environmentally—elevated levels of black bile.¹²³ According to Sloane’s case histories, this overly-passionate behaviour led them to become troubled not only with gonorrhoea, but also pubic lice and other more general strands of venereal disease not observed in any of his British patients.

Although Sloane’s etiological investigations into the more general strands of venereal disease suggested an inherent mental disparity between Britons and Negroes, his discussion of a new form of venereal disease—“Yaws”—asserted that Negroes differed not only socio-culturally and mentally, but bodily as well. According to Sloane, yaws was a form of venereal disease so severe that it enveloped the entire body of those it infected, taking on its own course and subsequent diagnosis. Although his colleagues believed that it was “propagated by ordinary Conversation,” Sloane’s clinical observations led him to believe that yaws was “most communicated to one another by Copulation.”¹²⁴ He also argued that it was particularly affluent throughout Jamaica’s Negro population—not only because of their socio-cultural tendency toward lustful behaviour, but also because of a bodily predisposition. Though Sloane acknowledged that yaws was not confined to his Negro patients, he observed that it could be “communicated from one to another, from Blacks to Whites,” stressing that it

¹²¹ Sloane, *Voyage to Jamaica*, lvi. Sloane particularly admired and cited the works of Richard Hakluyt, who was one of the most prominent English travel writers of the early seventeenth century. Throughout his *Voyages*, Hakluyt determined that Negroes were always naked and that this nakedness—a result of their “wild” African origins—resulted in heightened levels of sexual behaviour. James Walvin, *Black and White: The Negro and English Society, 1555 – 1945* (London: The Penguin Press, 1973), 26.

¹²² Sloane, *Voyage to Jamaica*, xxvii.

¹²³ Sloane, *Voyage to Jamaica*, xxvii.

¹²⁴ Sloane, *Voyage to Jamaica*, cxxvii. Yaws is not, in fact, a sexually-transmitted disease. It is a disease of the skin, bone, and joint that is transmitted through contact and is closely related to the same bacteria which causes syphilis: *Treponema pallidum*. According to the National Institutes of Health, it is a tropical disease affecting inhabitants of the Caribbean, Latin America, India, Southeast Asia, and Western Africa. For more information, see David C. Dugdale, M.D., “Yaws,” U.S. National Library of Medicine, accessed June 19 2012, <http://www.nlm.nih.gov/medlineplus/ency/article/001341.htm>.

originated somewhere in the Negro body.¹²⁵ Indeed, while he recognized that Britons could contract yaws, his case studies do not reveal that any of his British patients were afflicted with or treated for this specific disease; they do, however, suggest that it was widespread throughout Jamaica's Negro population.

Although Sloane's case histories only discuss the presence of yaws in two of his Negro patients, they suggest not only that this disease originated somewhere in the Negro body, but that Negroes were particularly susceptible to it, suffering commonly and severely from its unpleasant symptoms. Sloane first described its effects on "One *Prince*, a lusty *Negro*," whose symptoms were so severe that he was sent to the surgeon's "Hot House" in order to be treated.¹²⁶ Though he was "flux'd" for the disease, according to Sloane the severity of his symptoms eventually caused him to go "mad," break out, and run away "in a very great Breeze of Wind."¹²⁷ Sloane's second case history described the effects of yaws in another "*Negro* lusty Fellow," who "had not been long from *Guinea*, and was all broke out into hard whitish swellings, some greater, some lesser" that developed into large ulcers spreading from his penis and scrotum to his elbows.¹²⁸ Although this second case described the symptoms of yaws in a singular Negro patient, Sloane's description of the disease itself suggests that he believed it was a common Negro affliction. Throughout this case history, Sloane described yaws in terms of how it "usually" proceeded, asserting that the tumours it created were "usually white at the top, from some of the *Cuticula* and Humours," and that at "other times the Ulcers are much larger," causing his Negro patients to "complain sometimes of great pains in the Bones."¹²⁹ While Sloane's description of its symptoms suggested its prevalence amongst Negroes, so, too, did his commentary on its treatment: according to Sloane, "It is commonly thought that this Distemper is curable [in Negroes] without fluxing by Purgers, but I could never find it so."¹³⁰ Stating that "Purgers, &c." cured European forms of venereal disease such as "the Pox," Sloane determined that yaws was not only constitutional to Negroes, but that it was a common affliction among them—one that took on an entirely new (and more severe) set of symptoms requiring more elaborate treatment.

¹²⁵ Sloane, *Voyage to Jamaica*, cxxvi.

¹²⁶ Sloane, *Voyage to Jamaica*, ciii.

¹²⁷ Sloane, *Voyage to Jamaica*, ciii.

¹²⁸ Sloane, *Voyage to Jamaica*, cxxvi.

¹²⁹ Sloane, *Voyage to Jamaica*, cxxvi.

¹³⁰ Sloane, *Voyage to Jamaica*, cxxvii.

While Sloane's clinical observations on yaws led him to determine that there was something etiologically peculiar about the Negro constitution, his treatment of "A Negro Woman, belonging to *Mr. Forwood*," convinced him that the Negro body was in some respects inherently pathological. According to Sloane, this woman was brought to him with ulcers covering her fingers, toes, and joints that had been treated unsuccessfully by a number of other physicians. Though he had been "assur'd by those who have lost several *Negros* of this disease...[that it] was peculiar to Blacks," Sloane decided to run clinical tests on this patient to extrapolate from them his own conclusions about the nature of this disease.¹³¹ Despite conducting the same treatments as he would on all "Cutaneous [skin] Diseases of this Nature," including bleeding, salivation, vomiting, and providing dosages of mercury, her ulcers and blisters reappeared after numerous courses of treatment. As a result of the continual failure of these treatments, Sloane determined that "this [disease] was proper to Blacks, and so might come from some peculiar indisposition of their black Skin."¹³² Although Sloane's contemporaries—most notably Johann Friedrich Blumenbach and Georges-Louis Leclerc, le Comte de Buffon—regarded skin colour as fluid, resulting from under or overexposure to the sun's rays, Sloane's observations led him to refute this claim.¹³³ Citing a number of instances where he had seen anomalous Negroes born with white skin or "spotted with White Spots," Sloane determined that sun exposure was not the cause of black skin.¹³⁴ This disease, then, was not induced by the humid Jamaican or African environment, but instead resided somewhere in the constitutionally-determined and supposedly malignant black skin of the Negro.

Though it remains unclear what Sloane's views on racial difference were before leaving Jamaica, what is clear from an investigation of his case histories and etiological investigations is that he gradually began to consider and concede the possibility that hot and humid environments had little effect on the minds and bodies of his patients—and,

¹³¹ Sloane, *Voyage to Jamaica*, cvi. Based on the few symptoms Sloane names for this disease, one might infer that he is describing leprosy.

¹³² Sloane, *Voyage to Jamaica*, cvi.

¹³³ Buffon considered skin colour to be not only malleable, but also reversible. In one particular account, Buffon noted that "The Dutch carried off a Hottentot girl a few days after her birth, brought her up among themselves, and she soon became as white as any European." Georges Louis Leclerc, Comte de Buffon, *Natural history, general and particular, by the Count de Buffon, translated into English. Illustrated with above 260 copper-plates, and Occasional Notes and Observations by the Translator*, Vol. 3 (Edinburgh: Printed for William Creech, 1780-85), 158.

¹³⁴ Sloane, *Voyage to Jamaica*, liii.

consequently, on human variation. Having no practical experience treating the bodies of transplanted individuals, Sloane had to determine for himself what caused the diseases of British and Negro bodies residing in the non-indigenous climate of Jamaica. While an examination of the introduction to his *Voyage* reveals that he initially held an ardent belief that travel to different climates resulted in illness, it also reveals that his fifteen months of clinical colonial observations led him to question his Hippocratic education, which postulated that medical, racial, and cultural differences were caused by climate.¹³⁵ Determining that there was too much disparity in the prevalence and causes of diseases amongst his British and Negro patients, Sloane began to consider case-by-case that mental, physical, and medical disparities might result not from environmental factors, but constitutional ones. His discovery of two diseases that seemed to affect Negroes peculiarly—yaws and the unnamed skin disease afflicting Mr. Forwood's female slave—compelled him to conclude that the bodies of Negroes might be different in a number of essential, medical ways.

¹³⁵ Glacken, *Traces on the Rhodian Shore*, 8.

“Distempers Peculiar to Negros”: John Atkins and Polygenetic Theory

Setting sail to the coast of Guinea on 16 March 1719, British naval surgeon John Atkins (1685 – 1757) had almost twenty years of experience treating the head injuries, gunshot wounds, and broken bones of British naval officers. Though his expedition on the HMS *Weymouth* was meant as a short voyage to save slave ships from pirates, Atkins ended up spending twelve months in Guinea, traveling from there on a three-year tour of Britain’s West Indian islands. While two decades of naval service prepared him for the illnesses and diseases befalling men on the sea, his colonial expeditions led him to an entirely new set of climates, a new realm of tropical medical care, and, most significantly, a new set of patients. Fascinated by his journeys and medical discoveries, upon his return to England in 1723 Atkins retired from naval service, dedicating the next thirteen years to writing accounts of them. The first, *The Navy Surgeon* (1734), outlined his medical experiences with British naval men, colonists, and African slaves; the second, *Voyage to Guinea, Brasil, and the West Indies* (1735) provided detailed accounts of his voyage and the various “curiosities” he came into contact with. Each of these accounts—particularly *The Navy Surgeon*—was tremendously popular, running to several editions.¹³⁶ While the particularities of Atkins’ voyage itself are fascinating, it is his medical observations throughout these two works that form the basis of this case study.

Although *The Navy Surgeon* was written primarily as a synopsis of Atkins’ medical experiences in Britain’s slave colonies, one of Atkins’ main goals with its publication was to assert the importance of empirical observation over ancient philosophy and theory. Discussing the works of Aristotle, Hippocrates, and Boerhaave, Atkins determined that it was specific observations from experience, rather than speculations from theory and mathematical calculations, that were of “Real Service” to the field of medicine.¹³⁷ Citing passages from Hippocrates, Atkins argued that the tenets of ancient medicine were flawed and that “To talk in general on the Nature of Fluids and Solids... and [their] Way of acting in human Bodies, is not a Tenth Part so Instructive...as seeing, feeling, and being acquainted

¹³⁶ Throughout this section, I will be discussing the 1742 edition of his *Navy Surgeon* because it contains the most detailed and numerous descriptions of the Africans he came into contact with and treated.

¹³⁷ John Atkins, *The Navy Surgeon; Or, Practical System of Surgery. With a Dissertation on Cold and Hot Mineral Springs; and Physical Observations on the Coast of Guiney* (London: Printed for J. Hodges, 1742), Preface.

with Practice.”¹³⁸ Determining that his colonial observations were far more accurate than the medical theory he had read prior to his journey, in *The Navy Surgeon*’s preface Atkins went on to state that

It is exceedingly difficult from this if not impossible, to attain any competent Knowledge in Physick [sic] without Practice, and more so in Surgery. The Bulk of what is good, and to be depended on in either, is what arises from Experiments, Careful Observations on the Consequences of Hurts, and the good or ill Effects, Management, and Medicine has at different Times, in different Constitutions.¹³⁹

Here, Atkins lauded the benefits of “Careful Observations,” arguing that the works of Hippocrates were too hypothetical to be studied as seminal texts—particularly in their discussions of non-Greek constitutions. By criticizing the methods of Hippocrates, he simultaneously lauded his own work for its detailed description and comparison of the “different Constitutions” and medical experiences of his British and “Negro[e]” patients.

While the preface of Atkins’ work aimed to refute Hippocrates’ methodology, the main text of his *Navy Surgeon* and *Voyage* criticized the theories Hippocrates set out in *Airs, Waters, Places*, determining that the airs and waters of Guinea and the West Indies had little ill effect upon the bodies of British naval officers. According to Atkins, Guinea and the West Indies lay “so near the Equator, [that they] must of course be very hot.” Upon examining them, however, he noted that the climates of these “excessive hot Countries” were “less troublesome or hurtful” than the works of his ancient and contemporary colleagues maintained.¹⁴⁰ Though he admitted that “The Shores [of Guinea and the West Indies] become in general more pernicious to the Healths of Europeans, than the Sea,” he determined that this was not because of any change in climate, but because “the Seamen do greedily purchase anything to eat or drink...without regard to the Wholesomeness.”¹⁴¹ Indeed, while many of his British patients became ill as a result of a poorly managed diet, Atkins argued that the airs of Guinea and the West Indies were in fact healthier and more “Wholesome” than that on their ships, where close quarters and uncleanness “load[ed] the Air with corrupt Particles,” causing the spread of disease.¹⁴² Atkins even went on to chastise a number of “superstitious” naval officers who, trusting in environmental medical theory, refused the

¹³⁸ Atkins, *Navy Surgeon*, Preface.

¹³⁹ Atkins, *Navy Surgeon*, Preface.

¹⁴⁰ Atkins, *Navy Surgeon*, 352.

¹⁴¹ Atkins, *Navy Surgeon*, 353.

¹⁴² Atkins, *Navy Surgeon*, 354.

“fresh Air” of the shore because they “feared a Communication with it of the utmost Danger.”¹⁴³ Though these men eagerly attempted to avoid catching cold, Atkins determined—in direct opposition to Hippocratic teachings—that it was the air on the ship rather than the “excessive Heat” that caused their illnesses; they did not become sick because of their travel from a temperate climate to a tropical one, but instead because they refused to enter the tropics.

Expanding his criticism of environmental theory, Atkins also asserted that the Guinean and West Indian environments had little determining effect upon the bodies of his Negro patients—an assertion which greatly impacted his views on human variation. According to prevailing eighteenth-century European theological and scientific theories—which historian Colin Kidd argues were fundamentally intertwined—all humans “must necessarily have sprung from the same stock of family”: Adam and Eve.¹⁴⁴ Determining that Adam and Eve were European (i.e. white) in appearance, contemporaries argued that heat and sun exposure explained variations in skin hue; as Buffon affirmed in his *Natural History*, the skin of Negros was “indeed darker, because they live in a more southern climate.”¹⁴⁵ As Atkins began maintaining near-daily contact with “Negros,” whom he referred to interchangeably as “*Guineans*” and “slaves,” he found himself in a position from which he could closely monitor and assess their “black Colour, and woolly Tegument.”¹⁴⁶ Though he determined that the sun’s rays could account for darkening of skin to a degree, his empirical observations gradually led him to question “how so entire and opposite a Change of white and black [could develop] between us and the *Guineans*.”¹⁴⁷ Presenting five theses that denied the role of environmental influence on Negro physiology, Atkins concluded that Europeans and Negroes could not change colour “without mixing in Generation,” asserting that “tho’ it be a little Heterodox, I am persuaded the black and white Race have, *ab origine*,

¹⁴³ Atkins, *Navy Surgeon*, 354.

¹⁴⁴ Buffon, *Natural History*, 1780, vol 3, 409; Kidd, *Forging of Races*, 30, 69, 156; Jordan, *White over Black*, 12.

¹⁴⁵ Buffon, *Natural History*, 75.

¹⁴⁶ John Atkins, *A Voyage To Guinea, Brasil, and the West Indies; In His Majesty’s Ships, the Swallow and the Weymouth. Describing the several Islands and Settlements, viz. Madeira, the Canaries, Cape de Verd, Sierraleon, Sesthos, Cape Appolonia, Cabo Corso, and others on the Guinea Coast; Barbadoes, Jamaica, &c. in the West-Indies. The Colour, Language, Diet, Languages, Habits, Manners, Customs, and Religions of the Respective Natives, and Inhabitants. With Remarks on the Gold, Ivory, and Slave-Trade; and on the Winds, Tides, and Currents of several Coasts* (London: Printed for Cesar Ward and Richard Chandler, 1735), 39.

¹⁴⁷ Atkins, *Navy Surgeon*, 367 – 8.

sprung from different-coloured first Parents.”¹⁴⁸ Influenced by his empirically-oriented clinical observations, Atkins denied the accepted religious and scientific orthodoxy, asserting instead the polygenetic view that humans originated not from one race, but from many—each with a fundamentally different set of mental and physical characteristics.¹⁴⁹

Here, I do not intend to make the claim that Atkins’ writings or his polygenetic theory held any significant intellectual sway on eighteenth-century Britons; I do, however, assert that this polygenetic thesis had profound implications for his medical diagnoses. The first was that his medical work, like that of Sloane’s, departed from Hippocratic environmentalism by refusing to acknowledge the impact of environment upon his British and Negro patients’ health. According to Atkins, the ailments which most afflicted his British patients on the coast of Guinea were “phrenzies, Convulsions, and colliquative [rapid] Sweats,” all arising not from the tropical air of Guinea and the West Indies, but from a combination of poor hygiene and a diet consisting largely of overabundant alcohol and wild vegetables that were “highly noxious and unwholesome.”¹⁵⁰ Indeed, overindulgence in alcohol became such a widespread problem throughout the British military that a number of campaigns were organized in an effort to warn troops of the dangers of excessive alcohol consumption.¹⁵¹ While Britons got sick because of their poor food choices, Atkins observed that Negroes avoided many of these “acute or chronic Distempers” because they had a “happy

¹⁴⁸ Atkins, *Voyage to Guinea*, 39. These five theses are as follows: 1) The sun did not have the same effects on animals; 2) No European was changed in colour any great deal by staying in Africa, “nor, in Generation beget Blacks”; 3) The palms of Negroes’ hands were whiter than the rest of their bodies; 4) People in the same latitude elsewhere in the world, exposed to similar amounts of sun, were not as dark; and 5) He noted that he had seen people with white skin in “Negro Land” which are “in every other respect else a Negroe.” Atkins, *Navy Surgeon*, 368.

¹⁴⁹ Martin Summers argues that the central tenet of polygenism was to assert that a fundamental physical and mental difference existed between themselves Europeans and Negroes. According to historical scholarship, the shift from monogenetic views to polygenetic ones did not occur until the mid-nineteenth century—primarily because until that time, scientists were still operating under an “empire of theology.” Atkins’ works, therefore, represent a departure from this line of thinking nearly one hundred years earlier than previous historical scholarship allows. For a more detailed explanation on the origins of polygenetic claims and their impact in nineteenth-century theological and scientific thinking, see Martin Summers, “‘Suitable Care for the African When Afflicted with Insanity’: Race, Madness, and Social Order in Comparative Perspective,” *Bulletin of the History of Medicine* 84(2010): 58 – 91, p. 67; Kidd, *The Forging of Races*; and Gould, *The Mismeasure of Man*.

¹⁵⁰ Atkins, *Navy Surgeon*, 356 - 58.

¹⁵¹ According to Kopperman, because of the excessive heat in Africa and the West Indies, British soldiers and navy men were each given rum to stave off thirst. A fairly substantial alcohol ration was also provided for each troop: he could either get one pint of wine per day, half a pint of brandy or rum, or one gallon of beer. Because the ration was so high, and access to liquors such as rum so abundant, it was common for troops to overindulge in alcohol. The level of alcohol consumption got so out of hand that military campaigns were issued in the eighteenth century to warn troops of the dangers of excessive drinking. Kopperman, “‘The Cheapest Pay,’” 459, 466.

Ignorance in the Means of Intemperance.”¹⁵² According to Atkins, this ignorance, which was an inherited characteristic, saved his Negro patients from the discomforts of fevers, sweats, and nausea; unfortunately, however, it also led Negroes to become more susceptible to diseases resulting from laziness and idleness.¹⁵³ By asserting that these psychological characteristics were inherent, Atkins’ work denied the role of environmental influence on human psychology and health, representing another early departure from Hippocratic environmental theory.

While Atkins’ polygenetic theory asserted the impact of heredity on the mind and psychological health of Negroes, it led Atkins to an even more profound conclusion: that their bodies, too, were fundamentally different. Though he treated Britons and Negroes for fractures, dislocations, burns, wounds, and “mortifications” such as gangrene—each resulting from their naval and plantation work—he observed that his Negro patients suffered from a number of diseases that seemed to be “more properly their own.”¹⁵⁴ Because these four diseases—*Croakra*, *Yaws*, *Chicoes*, and “the Sleepy Distemper”—seemed to affect slaves exclusively, Atkins labeled them “distempers peculiar to Negroes,” arguing that they were inherent in the bodily constitution of the Negro race.¹⁵⁵ The first, *Croakra* “(so called by the Negroes),” arose from a peculiar disposition of the Negro skin. According to Atkins, although it was a “Cutaneous distemper, somewhat like, but not so inveterate as our own itch,” *Croakra* differed in terms of its symptoms and severity, causing not only rashes, but also blisters and sores.¹⁵⁶ Like *Croakra*, *Yaws*, “a general name for the Venereal Distemper among Negroes,” differed from the venereal diseases of Europeans in terms of its course and severity. Unlike the more common venereal diseases amongst Atkins’ European patients, yaws left “ghastly Spectacles” upon the bodies of its Negro victims.¹⁵⁷ Although it ranked in

¹⁵² Atkins, *Navy Surgeon*, 1 - 2.

¹⁵³ Describing their laziness, Atkins noted that Negroes would always come to white colonists for food before attempting to look for it on their own. He also wrote that they were so indolent when being shipped away as slaves they were dispassionate toward their wives, children, and friends. Atkins, *Navy Surgeon*, 68; 366.

¹⁵⁴ Atkins, *Navy Surgeon*, 39, 150 – 55, 365.

¹⁵⁵ Atkins, *Navy Surgeon*, 364; Saakwa-Mante, “Western Medicine and Racial Constitutions,” 31. According to Winthrop D. Jordan, it was not an uncommon occurrence for an eighteenth-century medical tract to insist that a particular disease was common amongst Europeans and Negroes. Jordan argues, however, that environmental factors were generally used to explain the commonness of disease amongst these populations—particularly slaves. Jordan, *White over Black*, 260.

¹⁵⁶ Atkins, *Navy Surgeon*, 367.

¹⁵⁷ Atkins, *Navy Surgeon*, 370. The most “ghastly” of these consisted of eruptions, blotches, and ulcers on the face and head.

“Similitude...with our Pox¹⁵⁸ and Clap,” Atkins also noted another unique aspect of *Yaws*: its cure. While Atkins observed that mercury was an unsuccessful form of treatment in most of his European patients suffering from similar, albeit less mild, venereal symptoms, in Negro *Yaws* sufferers, mercury “seemed more easily to take effect.” An examination into Atkins’ observations on *Croakra* and *Yaws* suggests that he believed there was something constitutionally unique about the body of Negroes that caused them to suffer more severely, and to respond to mercury more efficaciously.

While Atkins’ descriptions of *Croakra* and *Yaws* hinted at a separate Negro constitution, his description of the etiology of *Chicoes* suggested a much more explicit form of bodily difference. *Chicoes*, the African word for worms, was a disease common among the Negroes of Guinea and the West Indies. According to his medical observations, worms were particularly prevalent in the Negro population because of Negroes’ inherent unintelligence; “For want of Custom or Instinct,” he wrote, “they cannot distinguish proper Food, nor know when to leave off.”¹⁵⁹ Although Atkins attributed Negro ignorance as a major cause of this disease, he also refuted contemporary claims that worms were contracted from drinking unwholesome waters spoiled by heat, arguing instead that evidence suggested “The Generation of all internal Worms...must be *ex novo* [from the beginning].”¹⁶⁰ It can be determined from this statement that Atkins believed worms were aboriginal to the Negro, whose “particular Disposition,” combined with eating improper food, caused them to grow and become parasitic. Further investigation into Atkins’ clinical observations demonstrates that Atkins concluded that a “Deficiency of Bile” aggravated this disease.¹⁶¹ While the Hippocratic environmental legacy taught that humoral imbalance was a cause of environmental factors, Atkins inferred that this imbalance, and consequently the Negro susceptibility to *Chicoes*, was largely hereditary.

¹⁵⁸ “The Pox” was not, in fact, a reference to smallpox; instead, it was the seventeenth and eighteenth-century British medical term for syphilis. For a detailed account of contemporary discussions of the Pox, see Wear, *Knowledge and Practice*, 15.

¹⁵⁹ Atkins, *Navy Surgeon*, 366.

¹⁶⁰ Atkins, *Navy Surgeon*, 371. As Atkins noted, he disagreed with the theories that “most Travellers advance who have visited warm Climates, and mention of these Worms.” These theories noted that worms “bred from the Seed or Eggs of such Insects swallowed in drinking unwholesome stagnant Waters.” Believing the waters and airs of Guinea and the West Indies particularly wholesome, Atkins refuted this claim. He also argued that the temperature of the stomach was too hot to breed worms from eggs to the sizes he had seen and heard of in a number of patients—one of whom had an intestinal worm a foot and a half long.

¹⁶¹ Atkins, *The Navy Surgeon*, 372.

Although the descriptions of these three previous diseases suggest that Atkins attributed racial qualities to the Negro mind and body, his description of “Sleepy Distemper” affirms his belief in the mental and physiological uniqueness of Negroes. According to Atkins, Sleepy Distemper, a disease “common among the Negroes,” was characterized by slow breathing, excessive salivation, extreme slothfulness, and insensitivity toward pain—the principal cause of which Atkins determined to be the “natural Weakness of the African Brain.”¹⁶² Although he admitted that Europeans could also suffer from a weak brain, he noted that this weakness resulted in no way from a constitutional deficiency, but from “Enormities in the Non-Naturals, Surfeiting and Drunkenness...[which] do gradually, as Age and Custom advance, weaken the Tone of the Brain.”¹⁶³ While art and science could help strengthen one’s “intellectual Faculties,” Atkins noted that Negroes—who were “hereditarily ignorant, destitute of all Art and Science, or any mechanical Knowledge”—did not have the ability to stave off this weakness.¹⁶⁴ Though Atkins acknowledged that this ignorance was heightened to some extent by “the Heats of the Sun,” he concluded that it was so ingrained in the Negro constitution that it could never be fully reversed—even if a Negro’s progeny were brought up in a more temperate country such as England.

In looking for the “Procatartick” (initial or predisposing) causes of Sleepy Distemper, through a series of clinical observations Atkins determined that this disease was evidence not only of a separate Negro mental constitution, but of a native and unique physical constitution as well.¹⁶⁵ This much is evident in his etiological examination of Sleepy Distemper, which determined that the disease was caused by an excess of phlegm in the Negro brain,

¹⁶² Atkins, *The Navy Surgeon*, 366. In his study of Atkins’ *Navy Surgeon*, Norris Saakwa-Mante argues that the weakness of the brain was “clearly intended as a racial characteristic.” Saakwa-Mante, 44. Although Atkins incorrectly attributed its etiology to a natural weakness, “Sleepy distemper” is, indeed, an Africa disease. Referred to as “African Sleeping Sickness” in modern medical literature, it is a disease still common in Africa which is spread through consuming the excrement of the African tsetse fly. Dunn, *Sugar and Slaves*, 305.

¹⁶³ Atkins, *Navy Surgeon*, 365. Atkins listed these six non-naturals as “Air, Meat and Drink, Motion and Rest, Watching and Sleeping; the Passions and Excretions and Retentions.” According to his tract, moderating these was the best way to preserve and/or restore health. Atkins, *Navy Surgeon*, 1 – 2.

¹⁶⁴ Atkins, *Navy Surgeon*, 366. Atkins’ views on this are in keeping with contemporary images of Africans, which distinguish a mental margin between Europeans and Negroes. According to Winthrop Jordan, they were believed by colonists and travelers to have little mental capacity and to be ignorant, unteachable, barbarous, stubborn, and deficient in understanding. Jordan, *White over Black*, 97; 187.

¹⁶⁵ Saakwa-Mante, “Western Medicine and Racial Constitutions,” 35; Atkins, *Navy Surgeon*, 365.

obstructing the functioning of the body's nerves.¹⁶⁶ After determining excessive phlegm to be the cause, Atkins observed that

more of Phlegm and recrementitious Humor is bred [in childhood], than at Manhood; because the Fibres, and consequently the Faculties resulting from their [Negroes'] Constitution, have not attained their due Spring and Perfection; and it is only supposing the *Africans* continue longer Children than the *Europeans*.¹⁶⁷

According to Atkins, the separate origin of his African patients dulled the fibres of their brains, causing them to remain in a state of constitutional immaturity much longer than the more-advanced, fully-developed bodies of his European patients. Although an overabundance of phlegm was attributed by environmentalists to a humoral imbalance caused by bodily transplantation, Atkins concluded that Negroes had come from a different set of parents whose brains were naturally phlegmatic, contributing to “*their* [racial] *Immaturity*.”

An examination of the medical assertions Atkins made in his *Voyage and Navy Surgeon* reveals that he not only criticized Hippocratic environmental theory, but replaced it with theories of constitutional difference based on his own empirical observations. Upon closely observing and comparing the health of naval men and slaves in Britain's African and West Indian colonies, Atkins determined that environment had little effect upon human health, bodies, and, consequently, human variation. In an attempt to make sense of his colonial medical experiences, he contrarily argued that such a wide mental and physical divide could only be explained in terms of their origination from a separate set of parents with different mental and physical constitutions. While he treated Britons and Negroes for a number of the same ailments, he determined that the most evident disparities between the bodies and health of his British and Negro patients—their skin colour and the diseases “peculiar to Negroes”—were not the result of environmental influence, but of essential characteristics. Through his clinical, colonial observations, Atkins laid explicit empirical claim to the notion that the Negro body was a uniquely diseased and therefore fundamentally separate entity: one that was inherently indolent, immature, and pathological.¹⁶⁸

¹⁶⁶ Atkins, *Navy Surgeon*, 365.

¹⁶⁷ Atkins, *Navy Surgeon*, 365.

¹⁶⁸ By using the word “pathological” here, I do not mean to suggest a negative connotation. I simply wish to use it as a neutral term to express Atkins' view of the Negro body as inherently diseased.

“The diseases of Blacks”: James Grainger’s Medical Manual

In an effort to increase medical awareness about the proper “Management, & c. of Negroes,” in 1764 British physician and slave owner James Grainger published *An Essay on the more common West-India Diseases*.¹⁶⁹ The result of four years of medical observations made on the island of St. Kitts, Grainger’s *Essay* was the first medical tract dedicated entirely to discussing the health of slaves in the British West Indies—an “important branch of medical history” to which “too little attention has hitherto been paid.”¹⁷⁰ Written primarily as a manual for slave owners to diagnose and cure diseases commonly afflicting “Negroes,” Grainger’s *Essay* made a number of significant assertions about health and disease in the British West Indies. Firstly, it claimed to contain information about diseases and their cures, recorded from Grainger’s personal experience, which could “save many valuable [slave] lives.”¹⁷¹ Secondly, it claimed to offer information to medical practitioners and slave owners that would enable them to treat their slaves “in a more scientific manner” than had previously been practiced.¹⁷² Even more significantly, it identified a number of diseases “as more peculiarly affect the Negroes.” Although Grainger attributed most of these to climatic conditions or workplace hazards, he determined that a number of distempers—which he labeled the “Diseases of Negroes”—could only be accounted for by the presence of internal, inherent qualities residing exclusively in the Negro body.¹⁷³

As a recent graduate of Edinburgh University, Grainger was heavily influenced by the environmental medical theory advanced in the recent works of Hermann Boerhaave and William Hillary—a fact which is evident in his discussion of a number of diseases commonly

¹⁶⁹ Grainger, *An Essay*, i. In a later edition of this work, Wright added an introduction noting that many physicians had profited from its specificity, “both in knowledge of the diseases of the Negroes, and of the indigenous readers; in which respects it is, in my opinion, an excellent model for a more scientific and general treatise on tropical diseases, especially among the Blacks.” Sheridan, “Mortality and Medical Treatment,” 295.

¹⁷⁰ Grainger, *An Essay*, iii. Sheridan, *Doctors and Slaves*, 28. According to Sheridan, the only other manuals devoted entirely to the medical treatment and diseases of Negroes were Dr. Collins’ *Practical Rules for the Management and Medical Treatment of Negro Slaves in the Sugar Colonies* (1803), a 1790 tract by Robert Thomas, Thomas Dancer’s 1809 tract, and John Williamson’s 1817 tract. For more information on these particular tracts and on nineteenth-century discussions of “Negro” medical treatment, see Sheridan, “Mortality and Medicine,” 71.

¹⁷¹ Written during the period in which the process of amelioration reached its peak, Grainger’s tract suggested that providing slaves with proper medical treatment would be far more profitable than continuously buying new ones. As Grainger himself expressed, “One Negroe, saved in this manner, more than pays the additional expenses which owners of slaves by this means [losing slaves to disease] incur.” Grainger, *An Essay*, 62.

¹⁷² Grainger, *An Essay*, i.

¹⁷³ Grainger, *An Essay*, iii.

afflicting St. Kitts' British and Negro populations.¹⁷⁴ According to Grainger, all of the island's inhabitants suffered from ailments such as sore throats, fevers, and coughs, each resulting from a mixture of seasonal and climatic factors. As he noted, coughs were common "from the latter end of October to the latter end of February," while inflammatory fevers—which were common in England—were rare in the West Indies because of "the warmth and moisture of the climate"; instead, Grainger observed that the humid West Indian climate bred fevers that were "putrid, malignant, or nervous."¹⁷⁵ The only way for such illnesses to be avoided, according to Grainger, was for Britons and Negroes to undergo a twelve-month seasoning period.¹⁷⁶ Because they were from a tropical region, Grainger also asserted that "New Negroes should never be sent to mountain plantations, for there they are very liable to catch cold, or fall into fluxes" from transportation to more temperate regions.¹⁷⁷ Indeed, because of their tropical origins, throughout the first section of his Essay—"Of the choice of Negroes"—Grainger advised slave owners to choose their slaves carefully, arguing that the "constitution of their native climates" caused them to be "very different in their manners and passions" and to suffer from a variety of disorders.¹⁷⁸ According to Grainger, women from hot and humid "Ibbo country"¹⁷⁹ wore minimal clothing—a custom which exposed them to the elements, leading to an "incurable obstructions of the menses" that caused "barrenness and many disorders."¹⁸⁰ He likewise observed that Negroes from the Congo should be avoided because they were particularly prone to "dropsical indispositions."¹⁸¹ Through a series of colonial clinical observations, Grainger perpetuated the Hippocratic education he received in Scotland by determining that climatic changes and conditions greatly affected human bodies—especially those of Negro slaves.

¹⁷⁴ William Hillary's *Observations on the Changes of the Air...in the island of Barbados* (1759), which was the most recently published popular account of environmental medical theory, is cited throughout Grainger's work.

¹⁷⁵ Grainger, *An Essay*, 19, 23.

¹⁷⁶ Grainger, *An Essay*, I, 11. According to Grainger, "No one has purposefully [previously] written on the method of Seasoning new Negroes"—an observation he made with a "matter of Astonishment." Although this description of seasoning is clearly referencing acclimatization to the environment, later in his work Grainger also described seasoning as a process by which Negroes must be "must be familiarized to labour by gentle degrees."

¹⁷⁷ Grainger, *An Essay*, 13.

¹⁷⁸ Grainger, *An Essay*, 7.

¹⁷⁹ This refers to modern-day Nigeria, where the Ibbo tribe (also spelled Ibo, Ibo(e) and Igbo) still reside.

¹⁸⁰ Grainger, *An Essay*, 8.

¹⁸¹ Grainger, *An Essay*, 7.

Although Grainger believed that climate was a principal determinant of health and illness in the West Indies, an examination of his *Essay* reveals that he believed external factors such as diet, exercise, and working conditions had similar effects upon British and Negro bodies. According to his detailed observations, diarrheas, dysenteries, constipation, “the Dropsy,” and “Dry Belly Ach” were also common ailments amongst Britons and Negros, caused by external factors such as “errors in the art of food and exercise” and “improper food and drink.” While they emanated in Britons from too much relaxation, overindulgence in alcohol, and a diet that was high in acidity, Grainger asserted that slaves were particularly susceptible to these illnesses because they were forced to overexert themselves and eat a diet consisting of “crude raw vegetables.”¹⁸² As infants, Negros were also more susceptible than white children to tetanus and lock jaw, often dying within ten to twelve days after their birth because they were “not being kept sufficiently warm” during the night—a result of poor slave housing.¹⁸³ Their field work, as well as a lack of proper shelter and clothing, also led them to contract “Chigoes”¹⁸⁴ and ulcers on their ankles because they worked long hours in bare feet; as Grainger noted, “As the White inhabitants generally wear shoes and stockings, they are less subject to these sores than the Negroes.”¹⁸⁵ While ruptures and burns were common among St. Kitts’ white inhabitants, Grainger also noted that the circumstances of slavery, including over-exercise and strain, led Negros to suffer more often and more violently from injuries; Grainger asserted that “boilers” in particular, who spent the day melting sugar down into rum, “are very apt to get scalded.”¹⁸⁶ Though climatic factors and transplantation caused Britons and Negros to become ill, Grainger observed that circumstances of slavery contributed greatly to the mortality and morbidity rates of Negros in the West Indies.

Though the aforementioned illnesses resulted from external, mutable factors, Grainger’s description of the cause and course of other diseases common to both populations suggested the possibility of more deep-seated, internal etiological differences. According to Grainger, contemporary medical texts taught that heart-burn arose “from too free use of

¹⁸² Grainger, *An Essay*, 31 - 2.

¹⁸³ Grainger, *An Essay*, 17.

¹⁸⁴ A particular breed of flea.

¹⁸⁵ Grainger, *An Essay*, 18, 67. According to Grainger, Chigoes and ankle sores were such a common problem that all Negros “should have their feet and hands examined regularly once a week; for want of this precaution, Negroes often may lose joints of their toes, & c. and so become less useful on a plantation.”

¹⁸⁶ Grainger, *An Essay*, 65.

vegetables, a weak stomach, and inert bile”—symptoms common in his British patients, whose tendency to overindulge in certain foods and alcohol caused their bile to become stagnant.¹⁸⁷ The observations he made on plantations, however, led him to determine that “The Negroes are not as subject to this disorder as the White people, and yet they live more upon vegetables.”¹⁸⁸ Though he acknowledged that this finding was significant, he made no explicit assertions about the mechanisms causing these disparities, determining only that they must be internal and constitutional to each group. Grainger reached similar conclusions in his description of “Fluor Albus”—a gynecological condition that he also observed “the Blacks are less subject to...than the White inhabitants, among whom I have known infants, not three years old, and women of sixty, wasting away from it.”¹⁸⁹ Although he speculated that this might be because Negro women were “less chaste,” I would argue that the latter half of Grainger’s statement suggests that he believed there was either something peculiar about Negro women’s biology, which saved them from this disease, or the gynecology of British women, which caused them to be highly susceptible to Fluor Albus at any age.¹⁹⁰ While Grainger did not determine the precise cause of disparities between each group’s susceptibility to either illness, his descriptions of their etiology suggested that he believed a number of internal, medical differences existed between his British and Negro patients.

Though these observations identified a gendered divide, Grainger’s depictions of two diseases afflicting many Britons and Negroes on the island—“the Itch” and “Worms”—demonstrate his conviction that internal characteristics caused certain diseases to manifest differently in British and Negro bodies. In his discussion of the Itch, for instance, Grainger noted that while both groups were susceptible to this irritation, there was a particular “species of the Itch which Negroes from Guinea oft bring with them to the West-Indies.” According to Grainger, this species, which Negroes called “the Crakras,” was a particularly harsh form of the disease that caused not only minor irritation—the main symptom of the British Itch—but also “inveterate ulcers” upon the bodies of its victims. While he noted that this species of the Itch was chronic in Negroes, he observed that none of his British patients suffered from the Crakras. In fact, by describing its symptoms as “inveterate,” Grainger suggested that the

¹⁸⁷ Grainger, *An Essay*, 47.

¹⁸⁸ Grainger, *An Essay*, 47.

¹⁸⁹ Grainger, *An Essay*, 44.

¹⁹⁰ Grainger, *An Essay*, 14; 44.

Crakras resulted not from life in the tropical African environment, but from an internal disposition in Negroes “of every age and sex.”¹⁹¹ His description of “Worms,” too, suggests that he believed there were ingrained differences between British and Negro bodies.

According to Grainger, although most of the worms he treated in the West Indies were “the same as those which are common in Europe,” the Negroes of St. Kitts suffered from a species of worms different both in kind and severity. This breed—“Ascarides”—was smaller than any Grainger had ever seen in Europe and did not afflict any of his European patients.¹⁹²

While Grainger’s contemporaries noted that Negroes contracted worms through poor eating and drinking habits, Grainger determined that they resided not in corrupt or putrid food and water, but in the stomachs of their Negro victims—a fact that accounted not only for their absence in Britons, but their prevalence in Negroes; according to Grainger, worms accounted for the deaths of “more people in the West-Indies than all other diseases.” By determining that these unique species were the result of ingrained attributes, Grainger asserted that Negroes suffered from a number of bodily peculiarities that justified the production of his manual.

While Grainger determined that most diseases were not confined to the Negro population, in the third section of his work, “An Essay on the Management and Diseases of Negroes,” he identified a number of distempers that his clinical observations led him to determine were exclusive—and consequently unique—to the Negro constitution.¹⁹³ The first of these so-called “Negro” diseases was leprosy, which Grainger observed “breaks out without any visible cause” and was, as previous medical literature maintained, a disease of African origin.¹⁹⁴ Indeed, his various experiences with the disease led him to doubt “whether it be infectious”—a proclamation that suggests he believed it was caused by an internal, ingrained indisposition in the Negro body. Similar etiological considerations were advanced by Grainger in his discussion of the Guinea Worm and Elephantiasis. According to Grainger,

¹⁹¹ Grainger, *An Essay*, 19.

¹⁹² Grainger, *An Essay*, 21.

¹⁹³ Grainger, *An Essay*, vi. It is these descriptions that Winthrop D. Jordan argues were the most constituent association of difference and disease within any eighteenth-century medical work. Jordan, *White over Black*, 260.

¹⁹⁴ Grainger, *An Essay*, 54. Historians note that leprosy was a disease with a number of different names and connotations throughout the eighteenth century. According to Kenneth F. Kiple, it was also referred to as “coco-bay,” “cacabay,” and “the Joint Evil.” Interestingly, Grainger seemed to distinguish between leprosy and “the Joint-Evil,” noting that they were different—albeit similar—complaints. Kiple, *The Caribbean Slave*, 136.

although worms existed in Britain, the Guinea Worm was a distinct and peculiarly enigmatic endemic that was a native “of Negroe-land,” residing in the “cellular membrane” of Negroes.¹⁹⁵ Grainger also determined that Elephantiasis—an “enormous swelling of the lower extremities”—was native to “Negroe-land.” Though this was common throughout the Negro population, his observations led him to conclude that it was not caused by climatic factors and was “in no ways infectious”; instead, he argued, it originated somewhere in the peculiar constitution of his Negro patients.¹⁹⁶ By asserting that these widespread diseases could not be contracted, and by labeling them as peculiarly “Negro,” Grainger concluded that there were a number of pathological characteristics essential to the Negro constitution.

While the aforementioned descriptions hinted at medical peculiarities, the proceeding descriptions of two “diseases of blacks” unequivocally demonstrate that Grainger believed the Negro body was characterized by a number of etiologically-distinct features. The first of these diseases was “the Joint-Evil,”¹⁹⁷ a particularly volatile topical disease that attacked the fingers, toes, and joints of its many Negro victims, causing them to fall off. What was perhaps most volatile about this disease, according to Grainger’s clinical observations, were not its symptoms, but the fact that unlike the cutaneous diseases afflicting his British patients, it was seemingly incurable. Although Grainger acknowledged that he had little professional contact with the Joint-Evil, he argued that “as far as I know, it is confined to the Blacks.”¹⁹⁸ Though he could not determine where in the Negro body the disease was produced, the fact that he described it as a “frequent” complaint “confined” to Negroes suggests that he believed it was deep-seated in their constitution. Like the Joint-Evil, *Yaws* was similarly identified by Grainger as a particularly volatile, exclusively Negro disease. Devoting five pages to the description of its treatment, Grainger asserted that *Yaws* was the most prevalent

¹⁹⁵ Grainger, *An Essay*, 62.

¹⁹⁶ Grainger, *An Essay*, 54.

¹⁹⁷ Grainger, *An Essay*, 55. Although Grainger is not the first medical practitioner to discuss the Joint-Evil in his writings, he is the first to suggest it is a disease constitutional to the Negro. Richard Towne’s 1726 *A treatise of the diseases...of Barbados* discussed “*The Joint-Evil*” and Elephantiasis in great detail, claiming that it was the first medical treatise to identify and describe both. Although it may have indeed included the first description of these two afflictions, Towne’s *Treatise* failed to elaborate on their causation, simply noting their effects and failed attempts at treatment. Richard Towne, *A Treatise of the Diseases Most frequent in the West-Indies, And herein more particularly of those which occur in Barbaradoes* (London: Printed for John Clarke, 1726), 192.

¹⁹⁸ Grainger, *An Essay*, 55. Grainger’s description of this disease—its symptoms, course, severity, resistance to treatment, and confinement to “the Blacks”—match that of the unnamed disease Sloane identified as particular to the black skin nearly sixty years earlier.

disease amongst Negroes; it was so pervasive, in fact, that he argued “Every plantation should have a proper hut for the reception of yawey patients.”¹⁹⁹ While *Yaws* was the most universal “Negro” disease, it was also the most difficult to cure. Extending his argument for the bodily peculiarity of Negroes, Grainger asserted that the disease could be cured only by using a particular form of mercury which was “seven times sublimed”—a gaseous, much more powerful form than he would ever consider using on British patients suffering from similar diseases.²⁰⁰ By determining that these diseases were different not only in origin, but in course, severity, and treatment, Grainger further perpetuated the view that the bodies of Negroes were fundamentally and medically distinct.

Although he was educated in Edinburgh under the Hippocratic tradition, during his time in the West Indies James Grainger identified a number of diseases “as more peculiarly affect the Negroes” that were not the result of climatic and work conditions, but what he deemed to be a number of internal, essential bodily characteristics. Dedicating his entire manual to discussing the “diseases of Blacks,” Grainger aimed to provide an accurate and detailed portrait of their symptoms and treatment in order that their effects might be minimized. While he recognized that a number of the disorders devastating St. Kitts’ slave population resulted from seasonal changes and bodily transplantation, he determined that these factors caused only a small number of afflictions; likewise, the circumstances of slavery, including poor diet, housing, and clothing, accounted for only a percentage of etiological disparities between Britons and Negroes. Though Grainger was a firm believer in environmental medical theory, he identified a number of “Negro” diseases that he determined were far too exclusive, prevalent, and deep-seated to be accounted for through environmental medical theory; instead, he asserted his own etiological theories, determining that distempers such as Crakras, leprosy, Elephantiasis, and *Yaws* were so distinctive that they must result from a set of fundamental, fixed characteristics within the bodies of Negroes.

¹⁹⁹ Grainger, *An Essay*, 71.

²⁰⁰ Grainger, *An Essay*, 58.

On the “Diseases of Negroes”: John Hunter’s Jamaican Observations

In 1777, twenty-three year old British medical practitioner John Hunter (1754 – 1809) was appointed Physician to the Army—a prestigious position which enabled him to assess his Edinburgh education by observing health and disease in varying climates. During his appointment, Hunter spent two years in Jamaica as superintendent of its military hospitals, where he attempted to reduce the “dreadful mortality, that has always accompanied military operations in the West Indies, in consequence of sickness and disease.”²⁰¹ Upon his return to England in 1783, Hunter began publishing medical accounts of his West Indian experiences. In 1787, he wrote a paper for the Royal College of Physician’s *Medical Transactions* detailing his views on the “Dry-belly-ach” of the tropics.²⁰² One year later, he published a fuller account of “the diseases of warm climates” in his *Observations on the Diseases of the Army in Jamaica* (1788). Throughout this seminal work, Hunter asserted the importance of experience over theory, acknowledging that it was more useful to publish accounts that provided first-hand observations than ones that simply “collect[ed] the opinions of others.”²⁰³ His published observations on “the Health of Europeans in that Climate” led him to become one of the most widely read medical practitioners of the late eighteenth and early nineteenth centuries. Although his work was lauded for its detailed descriptions of the “Diseases to which soldiers are subject” and their cures, Hunter also presented “Remarks on some of the Diseases of *Negroes*”: three distempers whose presence led him to call into question the medical education he had received ten years prior.²⁰⁴

²⁰¹ Hunter, *Observations*, vii.

²⁰² Charles Creighton and Lise Wilkinson, “John Hunter (1745 – 1837),” Oxford Dictionary of National Biography, accessed 25 May 2012, <http://www.oxforddnb.com.ezproxy.library.ubc.ca/view/article/14223>. Unlike his predecessors, Hunter determined that the “Dry Belly-Ach,” though a tropical disease, was the result of a mixture between environmental and socio-cultural factors. Hunter determined that it resulted from British soldiers’ overindulgence in rum, which was distilled in improper vessels made of lead, resulting in high levels of “lead taken into the body.” He also determined that high quantities of rum and “an intemperate use of spirituous liquors” could result in grave disease such as “*Mania*.” Although these initially appear to be strictly socio-cultural, Hunter determined that soldiers working in the West Indies drank high volumes of rum for two reasons: firstly, because it was readily available; secondly, because the heat of the tropics caused them to be perpetually dehydrated, turning to rum as an alternative to less readily-available clean water. Hunter, *Observations*, 265; 301.

²⁰³ Hunter, *Observations*, viii.

²⁰⁴ Hunter, *Observations*, 285; 305. Hunter attended the University of Edinburgh from 1770 to 1775. According to Charles Creighton and Lise Wilkinson, the thesis that he produced at the University of Edinburgh was lauded by contemporaries and published, in English, as an appendix to Blumenbach’s *De generis humani varietate native*. Creighton and Wilkinson, “John Hunter (1745 – 1837).”

As Hunter increasingly observed that British bodies were negatively affected by transplantation to and life in the tropical Jamaican environment, his colonial experiences quickly began to ratify his belief in the tenets of environmental medical theory. While he acknowledged that he treated soldiers throughout England for “Fevers and fluxes,” he noted that they were particularly fatal in Jamaica, where they “rage[d] with peculiar violence.”²⁰⁵ According to Hunter, summer was a particularly deadly month for Britons, “who just arrive from cool and healthy climates,” only to be immediately immersed in temperatures as high as fifty-eight degrees at noon.²⁰⁶ The most fatal seasonal illnesses were “*Remittent Fevers*,” which Hunter determined were caused by a rise in yellow bile resulting from a combination of “heat, moisture, and decayed vegetables or animal matter”—all of which, he noted, were common circumstances of tropical environments.²⁰⁷ Though these fevers were the same in kind as those in England, Hunter argued that they took on a different course in Jamaica, where they were “greatly more violent in their attack, quicker in their progress, and more fatal in their termination, than what are seen in Europe.” His etiological investigations also determined that a number of afflictions were caused by Jamaican mosquitoes, whose “bites produce violent itching, inflammation, and sometimes fevers” amongst British soldiers.²⁰⁸ Underestimating the extensive contribution mosquitoes made to British fatalities, Hunter determined that their existence—and the fevers they produced—were the by-product of Jamaica’s humid climate.²⁰⁹ Although Jamaica’s heat was considered particularly debilitating, so, too, were its nightly chills. According to Hunter, “walking or running

²⁰⁵ Hunter, *Observations*, 14.

²⁰⁶ Hunter, *Observations*, 3; 23.

²⁰⁷ Hunter, *Observations*, 15; 158. Hunter also warned his readers that they should avoid living in “neighbourhood[s] of marshes,” noting that fevers also proceeded from “noxious exhalation from wet, low, and marshy grounds.” The theory that sickness arose from decaying vegetable and animal matter is a subset of environmental medical theory, often referred to as “miasmatic” theory. For a more detailed explanation of this theory, and descriptions of its perpetuators, see Glacken, *Traces on the Rhodian Shore*, 234 – 248, and Sargent II, *Hippocratic Heritage*, 194. Although these fevers were, indeed, a circumstance of living in swampy areas, they resulted not from miasma, but from bites received by *Anopheles* mosquitoes—the primary carriers of malaria—who lived and bred in swampy, marshy areas. A number of these mosquitoes also carried yellow fever, which caused the deaths of many Britons living in the West Indies during the period of slavery and the nineteenth century. For more information on the course of malarial infection, see Dunn, *Sugar and Slaves*, 303.

²⁰⁸ Hunter, *Observations*, 288.

²⁰⁹ As Philip Curtin and Kenneth F. Kiple note, physicians and scientists did not begin to fully understand the concept of “disease environments” until the late nineteenth century. Though late eighteenth-century and nineteenth-century medical practitioners identified and discussed “yellow fever,” they did not attribute its onset to bites from disease-carrying mosquitoes: they simply acknowledged that it was a circumstance of living in a tropical environment, which resulted from an excess in yellow bile caused by heat and humidity. Curtin, *Image of Africa*; Kiple and King, *Another Dimension*; Kiple, *The Caribbean Slave*.

violently in the sun, lying down in the open air during the heat of the day or damps of the night, and going to sleep in those situations” were particularly troublesome activities, causing fevers “both more violent, and more frequent” than any he had seen in England.²¹⁰ An initial examination of Hunter’s etiological investigations reveals an affirmation of the works of Hippocrates and Thomas Trapham, as well as the “genius of Boerhaave,” who determined that tropical environments were not benign; in conversation with these works, Hunter even asserted that “Upon being sent to a cooler and more healthy climate, many of them [the afflicted soldiers] recovered”—a statement which implies that he believed the island was anything but healthy for British bodies.²¹¹

While his clinical observations outlined the role of Jamaica’s environment in the diseases devastating British military personnel, Hunter’s identification and descriptions of several diseases “in great measure confined to the negroes” did not align with environmental medical theory.²¹² Creating an etiological divide between Europeans and “Negroes,” Hunter dedicated an entire chapter to the existence of “Diseases of Negroes”—a subject which, he admitted, remained “hitherto much in the dark.”²¹³ By investigating these diseases, he suggested that he might not only enhance knowledge of contemporary pathology, but would teach his colleagues and readers “many new and interesting facts in the animal economy.” This statement suggests that Hunter believed the medical experiences of Negroes varied so considerably that the study of their bodies could uncover an entirely new set of physiological knowledge. The “new” knowledge Hunter’s *Observations* imparted on readers consisted of the descriptions of three diseases: *Yaws*, *Cacabay*, and “Dirt Eating.” Hunter’s description of *Yaws* echoed those of his predecessors, noting that *Yaws* appeared to be African in origin. Though Hunter argued that this African disease was not confined to Negroes, he remarked that it “prevail[ed] among negroes” so generally and so violently that he and his colleagues

²¹⁰ Hunter, *Observations*, 22. Hunter also noted the presence of a “large fly that produces a dreadful disease, by depositing its ova in the mouth or nose” of British and Negro victims “while sleeping in open air.” For further information on this disease, see Hunter, 290.

²¹¹ Hunter, *Observations*, 149, 328. He asserted that Negroes, in contrast, did not suffer from fevers to the same extent that British soldiers did. This immunity was perceived not only by Hunter, but a number of other colonial and military medical practitioners. As a result of their published findings, it became policy at the end of the eighteenth century and early nineteenth century for the British army to employ large quantities of black troops in their armies and navy. Kenneth F. Kiple and Kriemhild Conee Ornelas, “Race, War, and Tropical Medicine in the Eighteenth-century Caribbean,” in *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500 – 1900*, ed. David Arnold (Atlanta: Editions Rodopi B.V., 1996), pp. 65 - 79, 71.

²¹² Hunter, *Observations*, 24; 305.

²¹³ Hunter, *Observations*, 305.

proposed the development of a *yaws* inoculation—a practice which “appears to be well deserving of a trial” due to its high incidence rates.²¹⁴ Like *Yaws*, Hunter described the second “Negro” disease as aboriginally African. “A disease not known among Europeans or their descendants,” *Cacabay* generated white spots and ulcers near the end of infected Negroes’ extremities, causing them to fall off after months or years of infection.²¹⁵ Although Hunter’s observations provided no explicit examination into the cause of this disease, his acknowledgement of its absence amongst European patients, as well as the lack of any environmental explanations, suggests that he believed it resided somewhere in the Negro body itself, which presented signs of etiological distinction.

While *Yaws* and *Cacabay* were hailed as exterior, bodily markers of this etiological divide, the final “Negro” disease described by Hunter—“Dirt Eating”²¹⁶—suggested that he believed there were also inner, mental markers of difference. As its name suggests, Dirt Eating was an affliction that caused Negroes to fill their stomachs with dirt and, in its absence, plaster, dust, or white clay.²¹⁷ According to Hunter, although a number of medical practitioners labeled it a disease of the stomach, Dirt Eating was in origin “more a mental than a corporeal affliction” which manifested itself so strongly in the minds of afflicted Negroes that they could “seldom or never be corrected of this unnatural practice.”²¹⁸ Although many of Hunter’s contemporaries regarded this disease a result of the “unhealthy climate” of the West Indies, Hunter determined, instead, that it was psychologically ingrained, afflicting Negroes of all ages; in fact, the disease was so allegedly instilled in Negroes that Hunter asserted “they are not deterred from it by stripes, promises, or threats; nor have stomachic medicines, magnesia, and absorbents, or a good full diet ever done much good.”²¹⁹ While he did not consider Dirt Eating a “bodily” affliction *per se*, its manifestation

²¹⁴ Hunter, *Observations*, 308.

²¹⁵ Hunter, *Observations*, 309. In the most severe cases, Hunter noted that this disease may end in fatality. By examining Hunter’s entire description, one can glean that he was likely referring to the same unnamed disease that Sloane described as peculiar to the Negro’s skin seventy-one years earlier.

²¹⁶ In contemporary literature, “Dirt Eating” was also referred to as “pico” and “*mal d’estomac*.” In modern literature, it is discussed as geophagy and is determined to be the result of malnutrition—not a psychological disorder. For more information, see Sheridan, *Doctors and Slaves*, pp 217 - 220; Kiple and King, *Another Dimension*, 74 – 77.

²¹⁷ Hunter, *Observations*, 310.

²¹⁸ Hunter, *Observations*, 310 – 314. As Hunter acknowledged, this disease inevitably ended in death.

²¹⁹ For additional contemporary descriptions of Dirt Eating, see Dr. Thomson, *A Treatise on the Diseases of Negroes* (1820), Dr. Dancer, *A Study of the Diseases of Jamaica* (1784), and Dr. Williamson, *Medical and Historical Observations* (1817).

certainly had a profoundly pathological impact on the bodies of suffering Negroes, becoming “much more frequent and destructive” a complaint than both *Yaws* and *Cacabay* put together.²²⁰ Its bodily destructiveness was measured first-hand by Hunter himself, who performed autopsies on its Negro victims. According to Hunter, its bodily consequences included enlargement of the colon, swelling of the “mesenteric glands,” thinning of the blood, and the development of “large *polypi*” (tumours) in the ventricles of the heart.²²¹ By acknowledging that Dirt Eating was confined to Negroes and that it was so deep-seated that it was essentially irreversible, Hunter suggested that this disease did not, in fact, fall under the tenets of environmental medical theory; instead, its description, alongside those of *Yaws* and *Cacabay*, suggests that he believed Negroes were a category of humans that were physiologically and psychologically distinct.²²² Though their bodies, like those of British soldiers, had recently undergone transplantation, they suffered not from exposure to the new Jamaican climate, but from essentially—that is, racially—determined medical characteristics.

²²⁰ Hunter argues that on many estates, “half the number of deaths, on a moderate computation, are owing to this cause [distemper].” Hunter, *Observations*, 313.

²²¹ Hunter, *Observations*, 312.

²²² The psychological uniqueness and pathology of “the Negro” was a theme that developed even more concretely in the British colonial medical literature of the nineteenth and early twentieth centuries. See Michael Worboys, “Germs, Malaria, and the Invention of Mansonian Tropical Medicine: From ‘Diseases of Tropic’ to ‘Tropical Diseases,’” in *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500 – 1900*, ed. David Arnold (Atlanta: Editions Rodopi B.V., 1996), pp. 181 – 207; Harriet Deacon, “Racial Categories and Psychiatry in Africa: The Asylum on Robben Island in the Nineteenth Century,” in *Race, Science and Medicine, 1700 – 1960*, ed. Waltraud Ernst and Bernard Harris (London: Routledge, 1999), pp. 101 - 122; Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (Oxford: Polity Press, 1991). For similar discussions regarding Indians in British India, see Waltraud Ernst, “Colonial Policies, Racial Politics, and the Development of Psychiatric Institutions in Early Nineteenth-century British India,” in *Race, Science and Medicine, 1700 – 1960*, ed. Waltraud Ernst and Bernard Harris (London: Routledge, 1999), pp. 80 - 100.

Conclusion: Difference, Disease, and Racial Demarcation

Although the colonial preoccupations of each author vary, their basic motives remain largely the same: to explain the medical phenomena they experienced in the West Indian islands for metropolitan and colonial readers. Most evident in these writings is a preoccupation with providing explanations for how and why disease occurred, in order that future colonists could live healthfully, successfully, and profitably in the British West Indies. A slightly less conspicuous—albeit equally significant—motivation in each of these writings is an attempt made by each medical writer to satisfy his own personal, professional, and intellectual curiosity. While Hans Sloane's curiosity lay first and foremost with discovering and collecting new specimens of flora and fauna, for John Atkins, James Grainger, and John Hunter, the satisfying of curiosities was a more medico-professional endeavor; through their colonial travels, they hoped to test and expand their own medical knowledge by examining health and disease in what was, in essence and in name, a "New World." This new world included new geographic features and an entirely new climatic make-up that consisted of heavy rainfall, hurricanes, and some of the highest temperatures and most humid air Britons had ever encountered. What it also provided was an unparalleled opportunity for medical practitioners to evaluate their Hippocratic educations by experiencing the progression of health and disease in an entirely new climate.

As recent medico-historical works have observed, travel to the West Indies led the majority of eighteenth-century medical practitioners to affirm their belief in the environmental medical theory of Hippocrates. What they fail to consider, however, is that the presence of a new category of patients—"Negros"—led to a separate trajectory of medico-historical thought that called Hippocratic notions of environmental medicine and ethnology into question. This subset of medical literature, which identified and described a number of diseases that seemed to affect Negroes peculiarly, led practitioners to determine that Hippocratic etiology and notions of human variation could not adequately account for the observed health/disease disparities between British and Negro patients. Privileging clinical observation over medical theory, these medical men developed varying theories, each accounting for etiological and bodily difference between Britons and Negroes on a fundamental level. While Hippocrates, Sydenham, and Boerhaave viewed human difference as malleable and fluid, in their published works Sloane, Atkins, Grainger, and Hunter

asserted that a number of observed physical and mental differences were fixed, arguing that the African body itself was inherently pathological.

While these practitioners and their various colonial medical writings discuss the physiology and psychology of Negroes in largely fluid ways, the views they espouse are all equally valuable and independent contributions to contemporary intellectual literature. Though their categorizations and descriptions of “Negro” diseases vary, what is significant about their etiological categories is not how they are classified, but what they represent: an attempt to understand and make sense of the relationship between two sets of humans living together in new geographic settings. More specifically, they represent a contemporary process of rationalization through which colonial physicians tried to create meaningful and logical explanations for the profoundly different medical experiences they observed. While reigning metropolitan ideas were still largely of a religious nature, promoting the homogeneity of man,²²³ the clinical observations of these colonial British medical practitioners forced them to question and overlook reigning religious and intellectual theories in the face of practical, empirical evidence. Though these works may not have held any influence in contemporary intellectual debates over human variation, their interpretations represent an equally significant and equally intelligent contemporary viewpoint: that the different medical experiences of Britons and Negroes in the West Indies could only be explained by a theory or theories that stressed the fundamental heterogeneity of “man.”²²⁴

Though the preceding case studies are organized chronologically, I do not intend to assert that this was an inevitable process; in fact, I hope to demonstrate via the paper’s chronological ordering that this process was a gradual one that was anything but linear, developing along a number of possible intellectual tracts. With this organizational structure I also hope to convey that despite the works of intellectual historians, who argue that ideas of “racial” difference were not advanced until the 1780s, ruminations on racial distinction began to emerge as early as 1707 within the medical writings of Hans Sloane. These contemplations progressed to varying degrees of articulation and success alongside the growth of the slave population throughout the eighteenth-century West Indies. Though racial categorizations affirm the presence of inner, fundamental differences between perceived

²²³ See footnote 86 regarding the contemporary theory of monogenesis, which argued that Adam and Eve were the parents of all humans and, thus, that humans must have spawned from the same set of (white) parents.

²²⁴ Kidd, *Forging of Races*, 69.

groupings of humans, eighteenth-century medico-racial assertions did not embody value judgements or, consequently, any attempt to justify slavery by determining that “Negros” were naturally pathological.²²⁵ Instead, the categorizations and explanations developed by colonial British medical practitioners represent a conscientious effort to understand—not appraise—the vast etiological differences that manifested between Britons and Negros inhabiting the same temporal and geographical location.

Although most historians of race trace the concept’s modern origins to the works of eighteenth-century scientists such as Carl Linnaeus and Johann Friedrich Blumenbach, etiological discussions offer a similarly privileged viewpoint from which one can examine contemporary notions of human variation—and the origins of racialized²²⁶ thinking. While historical works assert the importance of scientific discussions in the development of racialized thought, they limit their scope of “scientific” to the natural sciences, overlooking the contributions of published medical works to eighteenth discussions on human variation. Though the natural sciences played a significant role in the conceptualizing of “race,” their discussions were preceded by early eighteenth-century medical and etiological considerations of bodily difference. As print culture continued to burgeon throughout the century, popular West Indian medical works reached wider audiences in Britain, North America, and Central Europe, encouraging a number of early nineteenth-century medical practitioners, particularly those working with slaves, to think and practice in increasingly racialized—and racist—terms.²²⁷

The influence of colonial British etiological investigations is particularly evident in the writings of nineteenth-century North American physicians, who continued to perpetuate the concept of “Negro” diseases set out by British writers.²²⁸ As they became increasingly

²²⁵As James Delbourgo discusses in his article “Curiosity in the Cabinet of Curiosities,” during the early eighteenth century there was not yet a need to justify the slave trade, as there were few, if any, protestations against it. The abolitionist movement did not develop until the third quarter of the eighteenth century. Until then, few individuals publically conveyed any belief that it was politically, economically, or morally inexcusable. Delbourgo, “Curiosity in the Cabinet of Curiosities.” For full bibliographic information, see footnote 88.

²²⁶ Once again, I must reiterate that there is a distinction between the words “racial” and “racist.” While nineteenth-century works are discussed more in terms of their racist qualities, which seek to appraise and order the differences between different groups, I argue that eighteenth-century medical works were simply asserting a fundamental difference—not any sort of judgment about or on the value and/or political meaning of these differences.

²²⁷ Harrison, *Medicine in an Age*, 24.

²²⁸ Kiple and King, *Another Dimension*, 77.

convinced that Negroes were etiologically unique, North American practitioners asserted that there was a need for specialists who were trained to treat their anatomically and physiologically distinct bodies.²²⁹ Old South medical practitioners in particular discussed the facial features, hair, posture, and skin colour of Negroes, often determining that physiological differences caused medical disparities that were alleged proof of black inferiority—and a need for Southern-trained doctors to treat otherwise helpless slaves.²³⁰ As American physician John S. Wilson of Columbia, Georgia affirmed, “the peculiarities in the diseases of the negroes are so distinctive that they can be safely and successfully treated...only by Southern physic.”²³¹ In *Practical Rules for the Management and Medical Treatment of Negro Slaves in the Sugar Colonies* (1811), Dr. Collins, too, concluded that Negroes required special medical treatment and attention—not only because they suffered from specific diseases, but because “the most nauseous drugs seldom ruffle the stomachs of negroes, resisting most drastic purges without suffering much inconvenience.”²³² While this statement initially appears to be a declaration of Negro bodily superiority, Collins asserted that the black brain was so primitive that Negroes could endure high degrees of pain without harm; because their minds and bodies were so desensitized, he declared that specialized, Southern (i.e. racialized) medical knowledge was needed in order to properly treat the peculiar bodies of slaves.

By the 1830s, it became commonplace for American physicians to promote the idea that racial predispositions in body and mind caused various physical and mental illnesses amongst America’s Negro population.²³³ While John Atkins had determined in 1734 that the Negro brain was naturally weak, nineteenth-century physicians measured the Negro body and brain to determine the precise causes of its supposed etiological and mental deficiencies. In 1839, Dr. Samuel George Morton published his *Crania Americana*, which provided skull measurements of twenty-four families of humans, subdivided into five races, including one “Negro” race. Out of these skulls, he determined that those of Negroes were the smallest, noting that their inconsiderable skull size—and consequently their brain size—was scientific

²²⁹ Kiple and King, *Another Dimension*, 162; Martin Kaufman, “Medicine and Slavery: An Essay Review,” *The Georgia Historical Quarterly* 63,3(Fall 1979): 380 – 390, 381.

²³⁰ Todd L. Savitt, “Black Health or the Plantation: Owners, the Enslaved, and Physicians,” *OAH Magazine of History* 19,5(September 2005): 14 – 16, 15 - 16.

²³¹ Stamp, *The Peculiar Institution*, 309.

²³² Haller, “The Negro and the Southern Physician,” 246.

²³³ Kiple and King, *Another Dimension*, 178.

proof that they were racially predisposed toward mental and physiological diseases.²³⁴ Advancing a similar theory, Southern physician Samuel A. Cartwright affirmed that the brain size of Negroes was one-ninth that of whites, determining that whites and blacks must not only be of a different race, but of an entirely distinct species.²³⁵ Through a series of articles published in the 1840s and 1850s, Cartwright argued that Negroes had a distinct etiology and peculiar reactions to medical treatments, stating that medical schools had a duty to give specific study to “Negro diseases.”²³⁶ As he asserted in his “Report on the Disease and Physical Peculiarities of the Negro Race” (1851), “according to unalterable physiological laws, negroes as a general rule...can only have their intellectual faculties awakened [and their diseases cured]...when under the compulsory authority of the white man.”²³⁷ In addition to the diseases that Britons had declared peculiarly Negro, Cartwright identified two new conditions to which blacks alone were prey: *Draptomania* (running away from service) and *Dysaesthesia Aethiopsis* (“hebetude of the mind”)—two diseases of the mind whose presence corroborated Cartwright’s belief that Negroes were inherently psychopathological.²³⁸ Similar attempts to highlight Negro psychopathology were made throughout later nineteenth-century American medical literature, as Southern physicians concluded at an exponentially definitive rate that many diseases afflicting Negroes—most conspicuously mental illnesses—were fundamental, racial traits.

Scholars of nineteenth-century American medicine contend that the categorizations and descriptions of “Negro” diseases enabled physicians to contribute significantly to contemporary intellectual and pro-slavery discussions endorsing the inferiority of Negroes.²³⁹

²³⁴ Kiple and King, *Another Dimension*, 177. Morton was part of the “American School of Ethnology,” which is often cited as a central contributor to the beginning of racism in the modern world. This group consisted of a number of famous members, including Josiah C. Nott and George Gliddon, who dedicated their careers to proving the innateness of racial inequality.

²³⁵ Haller, “The Negro and the Southern Physician,” 246 – 48.

²³⁶ Todd L. Savitt, *Medicine and Slavery: The Diseases and Health Care of Blacks in Antebellum Virginia* (Chicago: University of Illinois Press, 1978), 10; Stamp, *The Peculiar Institution*, 309. Cartwright is considered by many medical historians to be the most famous perpetrator of “Negro” diseases and racialized medical treatment amongst contemporary Southern physicians.

²³⁷ Sander L. Gilman, *Difference and Pathology: Stereotypes of Sexuality, Race, and Madness* (Ithaca: Cornell University Press, 1985), 138. This excerpt is extracted from a commissioned report addressed at the annual meeting of the Medical Association of Louisiana on 12 March 1851.

²³⁸ Gilman, *Difference and Pathology*, 138.

²³⁹ Haller, “The Negro and the Southern Physician,” 239; Gilman, *Difference and Pathology*, 140. It was during this time, too, that the Negro “race” began to take on a connotation of criminality, as physicians began to conclude that fundamental psychological defects predisposed Negroes toward criminal behaviour. For more information on the discussion of Negro criminality in nineteenth-century America see Gwenda Morgan and

While historians have acknowledged the role of nineteenth-century American etiological investigations in the modern conceptualization of “race,” my thesis expands upon previous scholarly literature by attesting that West Indian medical literature advanced notions of bodily difference nearly a century earlier than historical scholarship currently allows. As scholars of eighteenth-century British medical literature contend, “climate and humoral theory provided the most important rubric for thinking about human difference in the eighteenth century.”²⁴⁰ While environmental theory was unarguably the most prominent way of conceptualizing difference, I argue that it was by no means the most historically important; the divergent, crudely racial etiological theories advanced by physicians such as Hans Sloane, John Atkins, James Grainger, and John Hunter created an early foundation for the scientific racism and racialized medicine that would develop in the two proceeding centuries.²⁴¹

Although eighteenth-century British discussions of “Negro” diseases provide significant historical insight into the development of racialized thinking, this study only scratches the surface of the potential contributions of colonial etiology to the development of “race.”²⁴² Because its temporal and geographical scope are limited to the eighteenth-century British West Indies, etiological investigations made in other colonial contexts—British and otherwise—remain largely unexamined. By solely discussing British medical perceptions of Negroes, it also treads closely to furthering the common scholastic fallacy that race is a concept exclusive to peoples of European and African origins.²⁴³ In order to bridge this gap,

Peter Rushton, “Visible Bodies: Power, Subordination, and Identity in the Eighteenth-century Atlantic World,” *Journal of Social History* 39,1(Autumn 2005): 39 – 64.

²⁴⁰ Wheeler, *The Complexion of Race*, 22.

²⁴¹ Although scientific racism is most often associated with the nineteenth century, it continued into the early twentieth century—most evidently in colonial Africa and during the Nazi regime. During these two regimes, scientific racism most often took on the form of racialized—and racist—medical treatment and/or medical experimentation. For specific case studies on scientific racism and its effects in colonial Africa, see Worboys, “Germs, Malaria, and the Invention of Mansonian Tropical Medicine”; Deacon, “Racial Categories and Psychiatry in Colonial Africa”; and Vaughan, *Curing their Ills*. For those discussing medical racism under the Nazi regime, see Skinner, “Racialized Futures”; Gilman, *Difference and Pathology*; Susan Bachrach and Dieter Kuntz, *Deadly Medicine: Creating the Master Race* (Chapel Hill: University of North Carolina Press, 2004); and Paul Weindling, *Health, Race and German Politics Between National Unification and Nazism, 1870 – 1945* (New York: Cambridge University Press, 1993).

²⁴² Here, again, I am referring to race in its most modern (particularly nineteenth-century) connotation: as a concept that distinguishes between peoples of different skin colours and backgrounds based on supposed essential, inherited mental and physiological traits.

²⁴³ Discussion of the commonality of and problems associated with this fallacy can be seen in the various works of Mark Harrison, as well as David Skinner’s “Racialized Futures,” Sander L. Gilman’s *Difference and Pathology* and Ivan Hannaford’s *The Idea of Race in the West*. Although these authors acknowledge that race is

further investigation is needed into contemporary British and European conceptions of Creole, Indian, and Amerindian bodies (and vice versa), as well as their supposed disease susceptibilities and immunities in native and transplanted, colonial and non-colonial locales. Supplementary exploration into eighteenth-century conceptions of Negro immunities is also essential in order to develop a fuller portrait of how colonial British medicine contributed to modern racialized—and racist—thought. In his 1968 investigation into the epidemiology of the slave trade, Philip Curtin astutely proclaimed that “the role of disease in history has not yet been fully explored.”²⁴⁴ Forty-four years later, Curtin’s statement continues to reign true as historians only begin to recognize the role of disease in the histories of race and colonialism and its immense value as a critical historical lens.

not an idea restricted to acknowledging a divide between whites and blacks, they discuss race from a predominantly Western perspective.

²⁴⁴ Philip D. Curtin, “Epidemiology and the Slave Trade,” *Political Science Quarterly* 83,2(June 1968): 190 – 216, 216.

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