

HOW TO DISSECT AN ELEPHANT: SURGEONS, CLERGYMEN, LOCAL INFORMANTS AND  
THE PRODUCTION OF KNOWLEDGE AT FORT ST GEORGE, 1690-1730

by

LACHLAN CHARLES FLEETWOOD

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## Abstract

Fort St George, Madras, on the Coromandel Coast of India, served as a key site for European natural philosophical knowledge production in the period 1690-1730. As a colonial port city at the centre of cosmopolitan networks of trade under the English East India Company, Fort St George can be considered a “contact zone.” In this space, interactions between European surgeons and clergymen stationed at the Fort, and local Tamil, Telugu and Malawanlu informants had particular implications for the natural philosophical, natural historical, geographic and ethnographic knowledge produced there. While questions around local informants and the hybridisation of knowledge in colonial contexts are becoming a priority in the scholarship of science and empire, the mechanisms operating in these interactions remain underexplored. This paper works to address this by reconstructing cross-cultural knowledge-making interactions between Europeans and Indians at Fort St George, highlighting the way that Europeans treated information from local informants in a dual sense, seeing it as containing potentially useful practical information embedded in flawed religious or cultural explanations. This attitude guided the way Europeans selected and recorded local knowledge, but was only ever applied imperfectly. Indeed, this paper argues that there was an ongoing tension between the ways Europeans intentionally appropriated local information, and the unintended infiltration of Indian cultural knowledge into European natural philosophical accounts. Exploring the particular dynamic of knowledge production that emerged in the contact zone at Fort St George reminds us why we must consider local contexts more closely if we are to properly understand the European natural philosophical project of cataloguing the globe and its imperial implications at the turn of the eighteenth century.

## Preface

This thesis is entirely the original, unpublished, and independent work of the author, Lachlan Charles Fleetwood.

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## Introduction: The Cosmopolitan Spaces of Fort St George

Dissecting the elephant was an arduous task. In November 1715, in a marathon twelve-hour procedure at Fort St George, Madras, French surgeon A. Suply examined the carcass of a massive specimen and mused upon its inner workings.<sup>1</sup> Conditions were unpleasant due to drizzling rain, but at least the creature had been dead for only twenty-four hours and had not yet begun to rot. Challenging though the task was, Suply did not labour alone. Throughout the dissection, he was aided by a cadre of local assistants, as he recorded:

Our governor lent me 20 Parriars, a kind of Bohemian amongst the Indians of the lowest tribe, each of them armed with a great hooked knife to help me open and separate such of the viscera as I thought fit to examine more particularly in my own house.<sup>2</sup>

Suply was, by his own admission, rather infirm; he stated at the beginning of his account that “it is not necessary to tell you the labour and pain that such a dissection must necessarily give to so weak and sickly a man.”<sup>3</sup> This infirmity necessitated his reliance on the Parriars, or Malawanlu, who became a part of the anatomical procedure.

The Malawanlus’ participation had notable implications for the way Suply recorded information about the elephant in his account of the dissection. This stemmed from the local cultural knowledge of elephants that the Malawanlu brought with them to the autopsy. In local culture, elephants were associated with the god Ganesha, and hence wisdom and learning. They also had practical and symbolic uses in terms of military deployment and the legitimation of royal power.<sup>4</sup> Based on his interactions with the

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<sup>1</sup> Madras is now known as Chennai. In the period of this study it was sometimes also known as Maderas or Madraspatam.

<sup>2</sup> A. Suply, “Anatomical Remarkes Upon an Elephant open’d att Fort St George in November 1715,” British Library, Sloane MS 3916. This manuscript contains French and English versions; all quotations herein are from the English version. All the quotations in this paper retain the seventeenth- and eighteenth-century spelling, capitalisation, punctuation, thorns and italics of the originals. The one exception is that I have replaced the archaic long ‘f’ with the modern short ‘s’ for convenience. I have usually not used “sic,” except to note errors that might otherwise mislead the reader.

<sup>3</sup> Suply, “Anatomical Remarkes Upon an Elephant open’d att Fort St George in November 1715,” 1

<sup>4</sup> For more on elephants in Indian culture, see Daniel Wylie, *Elephant* (London: Reaktion Books, 2009).

Malawanlu and other local informants, Suply recorded local cultural tropes around elephants and especially elephant behaviour, such as their high intelligence and capacity for empathy:

When an Elephant dies on Ship-Board they cannot throw him whole into the Sea, butt are forced to cut him in pieces as privately as they can, and to convey him away, for fear the other Elephants should dye from sympathy, so lively is their instinct, and so tender towards their own kind.<sup>5</sup>

Though not incorporated uncritically, local culture nevertheless sits alongside Suply's anatomical measurements in the account. Suply's inclusion reflects a dual attitude towards native knowledge, where it was seen as containing potentially useful practical information embedded within flawed cultural or religious explanations. Local information thus needed to be selected and modified to fit a European knowledge tradition based on natural philosophy, though this was only ever achieved imperfectly. This dissection therefore hints at a tension between the way that Europeans such as Suply were intentionally appropriating and modifying local information to translate it into European natural philosophical knowledge, and the way that operating in the particular spaces of Fort St George could result in the unintended infiltration of local and indigenous knowledge into European accounts.

Established in 1644, Fort St George was the first permanent English East India Company factory in India, and would remain the key English holding there until well into the eighteenth century. During the period of this study, the Fort served as not only a locus of trade and diplomacy, but also of European natural philosophical, natural historical, geographic and ethnographic knowledge production and flow.<sup>6</sup> Although nominally English during the period 1690-1730, Fort St George was a remarkably cosmopolitan space. As Danish Lutheran missionary Benjamin Schultz wrote, by the first decades of the eighteenth century, the diversity of peoples and groups residing at or transiting through Fort St George was staggering:

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<sup>5</sup> Suply, "Anatomical Remarkes Upon an Elephant open'd att Fort St George in November 1715," 22.

<sup>6</sup> Classic accounts of Fort St George include Henry Davison Love, *Vestiges of Old Madras, 1640-1800*, 4 vols., Indian Records Series (London: John Murray, 1913); F. E. Penny, *Fort St. George, Madras: A Short History of Our First Possession in India* (London: Swann Sonnenschein, 1900).

In this town [Madras] are almost all sorts of people in the world, for besides the English, there are Portugueses, French-men, Spaniards, Italians, Hollanders, Germans, Danes, Swedes, Muscovites, Grecians, Arabians, Persians, Turks, and Armenians. Moreover there are Bramanes, Marati-People, Gutzurati-Men, Chine-Men, Malayos, Jews, Syrians, Malabares, Gentous, Cannari-People, Moors and Pathaniars and very likely many more.<sup>7</sup>

The number of cultures, religions and knowledge traditions—that is, standard ways of understanding and using knowledge—that coexisted at Fort St George was considerable. The concept of cosmopolitanism is thus useful in explicating the particular cultural and intellectual spaces of Fort St George during the period of this study, but requires definition. It is most useful, after Nicholas Thomas's usage, in reiterating the agency of all of the diverse actors at the Fort. I am also using it to draw attention to the fluidity and scope of the movements of both people and ideas within this world.<sup>8</sup> Here, cosmopolitanism should not be seen to imply a state of natural harmony, but rather mutual organisation and management of difference around trade and economic interests. It is worth remembering that, in arriving on the Coromandel Coast, the English had entered a world that was not static, but one in which they were simply the latest in long stream of traders and intruders over the preceding centuries.<sup>9</sup> The English,

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<sup>7</sup> Benjamin Schultze, *The Large and Renowned Town of the English Nation in the East-Indies Upon the Coast of Coromandel, Madras or Fort St. George* (Hall in Saxony: Printed for the Orphan-House, 1750), 3. See also John Fryer, *A New Account of East-India and Persia* (London: Printed by Richard Chiswell, 1698), 27.

<sup>8</sup> Nicholas Thomas, *Islanders: The Pacific in the Age of Empire* (New Haven: Yale University Press, 2010). For why we must always be careful to make spatially sensitive studies of scientific practice see David Livingstone, *Putting Science in Its Place: Geographies of Scientific Knowledge* (Chicago: University of Chicago Press, 2003); Simon Naylor, "Introduction: Historical Geographies of Science: Places, Contexts, Cartographies," *The British Journal for the History of Science* 38, no. 1 (2005).

<sup>9</sup> For an example of this in relation to the spice trade see Sebastian R. Prange, "'Measuring by the Bushel': Reweighing the Indian Ocean Pepper Trade," *Historical Research* 84, no. 224 (2011). The term "Coromandel Coast" is used to define a region on the southeast coast of India, spanning from roughly Divi Point or Masulipatnam to the southern tip of the Indian subcontinent at Cape Comorin (now Kanyakumari). Fort St George itself was situated in the north of this region, with a Dutch settlement to the north at Pulicat, and a key French port to the south at Pondicherry. Speaking of and categorising the Coromandel Coast as a particular or cohesive region in this period is nevertheless problematic given its sheer political, religious, linguistic and cultural diversity, much as it is sometimes necessary but anachronistic to speak of an "India" at this time.

although controlling Fort St George, were very much a minority on the Coromandel Coast at this time. Indeed, by the early eighteenth century, Madras had some eighty thousand inhabitants, including those in surrounding villages, only four to five hundred of whom were Europeans.<sup>10</sup>

These cosmopolitan interests in Fort St George arose from the fact that, during the period of this study, it was a bustling trading port, as seen in Fig. 1:



*A View of Fort St George in the time of Governor Thomas Pitt 1698-1709*

Fig. 1. "A View of Fort St George in the time of Governor Thomas Pitt 1698-1709."<sup>11</sup>

In this sketch, the artist portrays Fort St George as a well-fortified and prosperous outpost, its harbour packed with ships. In doing so, he chooses to highlight the Fort's centrality to trading networks and suggest its overall economic vibrancy. However, this is an idealised depiction that portrays the Fort in an overtly European fashion, minimising the surrounding Indian settlements and the realities of its location on the Coromandel Coast. These choices of representation act to naturalise and familiarise the Fort by

<sup>10</sup> These numbers are recorded in Alexander Hamilton, *A New Account of the East Indies* (London: Printed for John Mosman, 1727), 368. The number of Englishmen was up only slightly from the 300 Fryer recorded in the late seventeenth century. Fryer, *A New Account of East-India and Persia*, 38.

<sup>11</sup> Love, *Vestiges of Old Madras, 1640-1800*, Vol 1; 2. Formerly, the Portuguese town of São Tomé, located just three miles from Fort St George, had been more significant in the area in terms of trade, but it had been largely eclipsed by the English settlement by 1690. The Fort had received a particular boost around 1689 after war in Bengal saw traders arriving en masse looking for a stable base from which to trade. In terms of trade, the Fort was well located, especially with regard to the diamond mines of Golkonda, from which some the world's largest and most famous diamonds, including the Hope and Koh-i-Noor, were sourced. Hamilton, *A New Account of the East Indies*, 360.

rendering it English rather than Indian. The idealisation in this image is also evident when considering that Fort St George was in many ways a poor location for a fort and a town. As English trader Alexander Hamilton wrote, Fort St George was:

Situated in one of the most incommodious Places I ever saw. It fronts the Sea, which continually rolls impetuously on its Shore, more here than in any other Place on the Coast of *Chormondel* ... The Soil about the City is so dry and sandy, that it bears no Corn, and what Fruits, Roots and Herbage they have, are brought to Maturity by great Pains and much Trouble.<sup>12</sup>

Hamilton focuses on the Fort's limitations, having a mediocre harbour that was unprotected from storms, and being surrounded by poor soils that hindered cultivation. It is worth keeping in mind that the English had settled on the location of Fort St George not so much because it was ideal, but that it was all that was available when they arrived on the Coromandel Coast and not already controlled by other powers.<sup>13</sup>

This study focuses on the years 1690-1730, a period in which the English were still relatively marginal players in India, but one that also anticipates the age of imperial dominance that was to come. This period is especially revealing in that it occurs prior to something of a hardening of European attitudes towards native knowledge and learning through the later eighteenth century, and particularly into the nineteenth century and the period of the British Raj. This evolution of the British presence in India is the reason why, although Fort St George remained an important site of European natural philosophical knowledge production after 1730 (for instance as a key site for observing the 1761 transit of Venus), this study concludes when it does.<sup>14</sup> That is not to say that these early information-gathering efforts did not implicitly serve a nascent imperial project. Bringing Indian plants and animals into a European tradition

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<sup>12</sup> Hamilton, *A New Account of the East Indies*, 358-9.

<sup>13</sup> Thus what was available and "local" to the English on the Coromandel Coast, both in terms of specimens and native expertise, was predicated, in part, on the more or less "accident" of geography that led to this particular location becoming the key English holding in the region and hence the centre of East India Company networks.

<sup>14</sup> For more on Fort St George's role later in the eighteenth century, see M. Sartorius to Mr Bayer, 9 Feb 1736/7, Royal Society Archives, Cl.P/8ii/62 and on the 1761 Transit of Venus see William Hirst, "An Account of an Observation of the Transit of Venus over the Sun, on the 6th of June 1761, at Madras," *Philosophical Transactions* 52 (1761); William Hirst, "Account of Several Phaenomena Observed During the Ingress of Venus into the Solar Disc," *Philosophical Transactions* 59 (1769).

asserted control over the unknown by making it known.<sup>15</sup> Indeed, even at this early time, there is an underlying sense that for Suply to possess knowledge of the elephant was to possess India.

An important consequence of situating this study on Fort St George is that it necessitates moving the focus away from the more famous European natural philosophers such as Royal Society President and British Museum founder Sir Hans Sloane. Instead, the key actors in this study are other groups of individuals whose crucial roles in and contributions to European natural philosophical knowledge production remain largely unexamined in the scholarship. One of these groups, as I define them, were European overseas collectors, often surgeons and clergymen. To understand the particular dynamic of knowledge production that emerged at Fort St George, I will focus on four Europeans whose actions exemplify the processes that occurred there: Suply, the elephant-dissecting French surgeon, as well as the English surgeons Samuel Browne and Edward Bulkley, and English clergyman George Lewis.<sup>16</sup> These individuals, though motivated by diverse interests, were all integral contributors to European knowledge production in this period. Despite this, and their vital roles in concert with locals in modifying the information they gathered, overseas collectors have tended to be overlooked in favour of the natural philosophers of Europe whom they supplied with material.

Focusing on the Coromandel Coast becomes even more critical when we consider the key roles the Malawanlu and other indigenous populations, especially Tamils and Telugu, played in the knowledge producing dynamic that emerged there. Reconstructing the intellectual, social, cultural, and gender

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<sup>15</sup> For more on this see Mary Louise Pratt, *Imperial Eyes: Studies in Travel Writing and Transculturation* (London: Routledge, 2008); Pramod K. Nayar, "Marvelous Excesses: English Travel Writing and India, 1608–1727," *Journal of British Studies* 44, no. 2 (2005): 213–38; C. A. Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780–1870*, vol. 1. (Cambridge: Cambridge University Press, 1996).

<sup>16</sup> Bulkley is also variously spelled Bulkeley, Bulkly, Buckley and Buckly. Anna Winterbottom has made an excellent preliminary enquiry into the medico-botanical networks of Browne and Bulkley, establishing what a valuable resource these correspondences are. See Anna Winterbottom, "Company Culture: Information, Scholarship, and the East India Company Settlements, 1660–1720s," (PhD Dissertation, University of London, 2011).

dynamics of the roles of “local informants,” indigenous “go-betweens” or “native assistants” in early modern knowledge production is becoming a priority in the scholarship of science and empire. It has been established that Europeans in overseas contexts could not have gathered and transmitted much of the information that they did without the help of locals, and that the knowledge they produced was thus often “jointly-produced” or “hybridised.”<sup>17</sup> However, the specific nature of these interactions and especially the mechanisms of this process of hybridisation, are less well understood, and often curiously unproblematised. My principal aim in this paper is to address this by explicating the strategies and mechanisms operating in the cross-cultural interactions between Europeans and Indians that resulted in the production of hybridised knowledge of the natural world. In doing so, I want to emphasise the ongoing tension that characterised this dynamic, between the deliberate and inadvertent ways in which European incorporated local information into the accounts they produced within the cosmopolitan spaces of Fort St George.<sup>18</sup>

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<sup>17</sup> Work done on these important questions has tended to be for the Americas, and for later time periods. See Heather Flynn Roller, “River Guides, Geographical Informants, and Colonial Field Agents in the Portuguese Amazon,” *Colonial Latin American Review* 21, no. 1 (2012); Neil Safier, *Measuring the New World: Enlightenment Science and South America* (Chicago: University of Chicago Press, 2008); Antonio Barrera-Osorio, *Experiencing Nature: The Spanish American Empire and the Early Scientific Revolution* (Austin: University of Texas Press, 2006). For recent work on local informants in Asia see Harold Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven: Yale University Press, 2007); Schaffer et al., eds., *The Brokered World: Go-Betweens and Global Intelligence, 1770-1820*; Winterbottom, “Company Culture: Information, Scholarship, and the East India Company Settlements, 1660–1720s;” Pratik Chakrabarti, “‘Neither of Meate nor Drinke, but what the Doctor alloweth’: Medicine Amidst War and Commerce in Eighteenth-Century Madras,” *Bulletin of the History of Medicine* 80, no. 1 (2006): 1-38; Richard Grove, “Indigenous Knowledge and the Significance of South-West India for Portuguese and Dutch Constructions of Tropical Nature,” *Modern Asian Studies* 30, no. 1 (1996). For later periods see Niels Brimnes, “Coming to Terms with the Native Practitioner: Indigenous Doctors in Colonial Service in South India, 1800–25,” *The Indian Economic and Social History Review* 50, no. 1 (2013): 77-109; David Arnold, *Science, Technology and Medicine in Colonial India* (Cambridge: Cambridge University Press, 2004).

<sup>18</sup> Reflecting the global ambitions of the European natural philosophical project, and the breadth of the European colonial impulse, Fort St George is not the only colonial port city in which one could explore questions around the hybridisation of knowledge. Within the Indian Ocean, other important sites to the English included Surat on the Indian west coast and Chusan in China; for the French, Pondichéry (also on the Coromandel Coast), as well as Isle de France (Mauritius) and Île Bourbon (Réunion); and for the Dutch, Batavia. For more on these places see James Delbourgo, “Listing People,” *Isis* 103, no. 4 (2012): 735-42.

### **The Importance of Local Contexts: Mechanisms of Hybridisation**

The hybridisation of natural and ethnographic knowledge produced at Fort St George was the result of both direct and indirect processes. I refer to the direct mechanisms European surgeons and clergymen employed, both consciously and unconsciously, as “appropriation.” Here I am using appropriation to describe the process by which local information was made part of a European knowledge tradition that understood the natural world through experimental natural philosophy. In practice, this usually meant selectively recording information by discarding or diminishing local cultural or religious explanations. Appropriation also included attempts to historicise the Indian landscape—that is, to project the natural world of the Coromandel Coast onto the past in a way that made Indian peoples, flora and fauna seem as if they had always been part of the Judeo-Christian world known to Europeans. Likewise, appropriating local knowledge could involve recontextualisation, whereby Europeans affected the reception of knowledge by the way they arranged it, or by what other information or specimens they placed around it. As important as these direct strategies of appropriation, however, was the indirect mechanism of absorption or, as I will refer to it, “infiltration.”<sup>19</sup> I use this term to describe the way that exposure to Indian culture resulted in local and indigenous knowledge permeating into European accounts as an unintended consequence of knowledge production at the Fort. I am aware that infiltration could be read to imply intentionality, but here I am using it in a more limited sense to highlight the accidental information transfer that was the result of producing European natural knowledge in non-European spaces. These mechanisms for the selection, modification, and hybridisation of knowledge of the natural and ethnographic world emerged from social relationships between Europeans and Indians. These relationships were always bound by the limits of social hierarchies and power relations, and could consist of

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<sup>19</sup> Marcy Norton has described a similar process of infiltration in the Americas. Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World* (Ithaca: Cornell University Press, 2009), 255.

both coerced and voluntary interactions. In practical terms, these were enacted through day-to-day conversations and interactions in situations of business and employment, as well as through deliberately sought-out intellectual exchanges.

This dynamic of knowledge production relates to the changing ways in which Europeans understood the natural world within the context of what is often referred to as the “Scientific Revolution.” The mechanisms of hybridisation that emerged at Fort St George between 1690 and 1730 evolved and diverged from the development of experimental natural philosophy, the precursor to the modern scientific method.<sup>20</sup> Emphasising experience over authority, this new way of knowing the world emerged in tandem with the rise of the scientific academies in Europe, especially the Royal Society of London (founded 1660) and the Académie des Sciences in Paris (founded 1666).<sup>21</sup> These newly-formed academies actively, if haphazardly, encouraged information-gathering outside of Europe during this period. The ambitions of these academies are evident, for example, in the efforts of James Petiver. An apothecary and Royal Society Fellow, Petiver was the principal correspondent of three of the key characters in this study, Browne, Bulkley and Lewis.<sup>22</sup> These correspondences stemmed from Petiver’s calls for the

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<sup>20</sup> To avoid confusion with science in its modern sense, in this paper I have for the most part followed the convention of preferring natural philosophy or natural history.

<sup>21</sup> For debates around the Scientific Revolution and the rise of scientific academies see A. Rupert Hall, *The Revolution in Science, 1500-1750*, 3rd ed. (London: Longman, 1983); Steven Shapin, *The Scientific Revolution* (Chicago: University of Chicago Press, 1996); Michael Hunter, *Establishing the New Science: The Experience of the Early Royal Society* (Woodbridge: Boydell Press, 1989). This impulse to catalogue the natural world outside of Europe can be seen in the earliest efforts of the Royal Society, as evident in the lists of instruction and inquiry produced under its auspices, including “Directions for Sea-Men, Bound for Far Voyages,” *Philosophical Transactions* 1, no. 1-22 (1665); Robert Boyle, “General Heads for a Natural History of a Countrey, Great or Small,” *Philosophical Transactions* 1, no. 1-22 (1665); John Woodward, *Brief Instructions for Making Observations in All Parts of the World as Also, for Collecting, Preserving, and Sending over Natural Things* (London, 1696). For recent scholarly work on these see Marjorie Swann, *Curiosities and Texts: The Culture of Collecting in Early Modern England* (Philadelphia: University of Pennsylvania Press, 2001); Daniel Carey, “Compiling Nature’s History: Travellers and Travel Narratives in the Early Royal Society,” *Annals of Science* 54, no. 3 (1997).

<sup>22</sup> For more on Petiver and his contributions to natural history, especially with regard to “collecting” overseas collectors, see Delbourgo, “Listing People.” While Petiver was undoubtedly their principal London contact, Browne and Bulkley also sent material to John Ray and Charles du Bois, and George Lewis sent manuscripts to Oxford. There was a sense that material sent back would be shared among the virtuosi anyway, “supposing all of [the Royal] Society readily communicative.” Edward Bulkley to James Petiver, 12 Feb 1702/3, British Library, Sloane MS 3321, fol. 110. Material was not sent solely to London or to English virtuosi as, to take one example, we see how

assistance of “all such *Curious Persons* who reside in different parts of the World, whose Inclination leads them to this study.”<sup>23</sup> The activities of European surgeons and clergymen at Fort St George in service of this ideal thus demonstrate the progress of the new natural philosophy. It is this intra-European trend that I refer to as a European epistemology or knowledge tradition in this paper.

Throughout this study, “knowledge” is a potentially problematic concept in that it refers at different times to knowledge as a product, knowledge production as a process, and knowledge traditions as discourses around ways of knowing the world. The European natural philosophers and collectors in this study were, as was the norm for the time, polymathic in their interests. The clearly demarcated borders between fields of knowledge that in a modern estimation would include medicine, botany, zoology, geology and meteorology did not yet exist. Significantly, as well as these proto-scientific fields, natural philosophical knowledge production also encompassed geography, ethnography, anthropology, linguistics and technology. More than simply the gathering of information or data, in this paper I am especially concerned with knowledge production as a process, and the way that information was extracted—if imperfectly—from one knowledge tradition and incorporated into another. In this paper I thus focus on the moments when the hybridisation of knowledge was occurring, and to highlight the social dimensions of these instances, I refer to them as “knowledge-making” interactions, exchanges and encounters.

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Petiver sent fifty of Browne’s seeds, shells and insects to French botanist Joseph Pitton de Tournefort in Paris. James Petiver to Samuel Browne, nd, British Library, Sloane MS 3333, fols. 181-2.

<sup>23</sup> “An Account of a Book: *Musei Petiveriani Centuria Prima*,” *Philosophical Transactions* 19(1697): 399. Petiver sent instructions on what sort of material and information he wanted, and on the best ways to preserve samples for the long sea voyages. These survive in manuscript correspondence and were also consolidated into a standard manual which he published in 1709. James Petiver, “Directions Concerning Plants [incomplete],” nd, British Library, Sloane MS 3332, fols. 1-5; James Petiver, “Brief Directions for the Easie Making, and Preserving Collections of All Natural Curiosities,” *Monthly Miscellany, or, Memoirs for the curious* 3 (1709). In this pamphlet Petiver encouraged his correspondents to disseminate copies of his instructions as widely as possible. For this and the correspondents’ efforts to do so, see James Petiver to Samuel Browne, 17 Feb 1691/2, British Library, Sloane MS 3332, fol. 13; Edward Bulkley to James Petiver, 24 Feb 1701, British Library, Sloane MS 3321, fol. 67; Edward Bulkley to James Petiver, 9 Nov 1701, British Library, Sloane MS 3321, fol. 84.

In recent years, historians of science and empire have become increasingly interested in European knowledge production outside of Europe, emphasising the importance of global networks to scientific practice.<sup>24</sup> However, there has been a tendency among scholars to take the perspective of Europe looking out to the rest of the globe, often through the classic centre-periphery model of empire. Liam Brockey has demonstrated the limitations of this approach, and instead called for port cities in particular to be considered within the conceptual framework of “nodes of empire.” These he defines as places that “were at once independent units of social organisation and points where manifold imperial activities intersected.”<sup>25</sup> He argues that we need to pay attention to the view from local colonial contexts, as well as from imperial centres, in order to properly understand the mechanisms of empire. While Brockey and others have applied this elegantly in Portuguese imperial contexts, a similar approach has not yet been completed for British port cities such as Fort St George. In light of the knowledge producing dynamic that existed at Fort St George in the period 1690-1730, and the cosmopolitan complex of networks that intersected there, this needs redressing. In this paper, I will thus treat Fort St George as a node of empire, and suggest that it should be simultaneously understood as a centre and a periphery.

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<sup>24</sup> See John Gascoigne, "The Royal Society, Natural History and the Peoples of the 'New World(s),' 1660-1800," *British Journal for the History of Science* 42, no. 155 (2009); Carey, "Compiling Nature's History: Travellers and Travel Narratives in the Early Royal Society"; Nicholas Dew, "Scientific Travel in the Atlantic World: The French Expedition to Gorée and the Antilles, 1681–1683," *The British Journal for the History of Science* 43, no. 1 (2010). The Indian Ocean is still underrepresented in the historiography of natural philosophy compared to what scholars have done for the Atlantic. For examples of Atlantic scholarship, see James Delbourgo and Nicholas Dew, eds., *Science and Empire in the Atlantic World* (New York: Routledge, 2008). For comparisons—and notable differences—between the Atlantic and Indian Ocean worlds see Philip J. Stern, "British Asia and British Atlantic: Comparisons and Connections," *The William and Mary Quarterly* 63, no. 4 (2006).

<sup>25</sup> Liam Brockey, ed., *Portuguese Colonial Cities in the Early Modern World* (Farnham: Ashgate, 2008), 8. Others have also suggested that the centre-periphery model is inadequate in the case of places such as Fort St George. See Simon Schaffer et al., eds., *The Brokered World: Go-Betweens and Global Intelligence, 1770-1820* (Sagamore Beach: Science History Publications, 2009); Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Basingstoke: Palgrave Macmillan, 2007); Winterbottom, "Company Culture: Information, Scholarship, and the East India Company Settlements, 1660–1720s."

As both a colonial port city and a coastal space, it is also useful to situate Fort St George in relation to Mary Louise Pratt's concept of the "contact zone."<sup>26</sup> Pratt's model is especially valuable in foregrounding the "interactive, improvisational dimensions" of cross-cultural exchange within a colonial space, without simultaneously diminishing the often brutal realities of conquest and domination. Contact zones are, according to Pratt, best understood as spaces in which "co-presence, interaction, interlocking understandings and practices, often within radically asymmetrical relations of power" were the norm.<sup>27</sup> It is the possibilities and limitations that stem from these co-presences and interactions that mean that knowledge production at Fort St George should be understood as being practiced in a mediated space. I would also stress that even though Fort St George might be considered a contact zone, it was never just a singular or a static space, but one in which cross-cultural interactions took many different forms as local and imperial agendas evolved.

Kapil Raj has productively extended the idea of the contact zone in describing the way colonial centres could become "geographical go-betweens," which were "space[s] constituted both of constraints and possibilities."<sup>28</sup> He also notes that while economic, diplomatic and religious interactions are justifiably the normal modes of analysis for these spaces, the way these sites functioned in relation to knowledge should not be overlooked. To this I would add that it is the particular sorts of knowledge producing possibilities, and the differences in the ways these played out when compared to other contexts in which Europeans produced natural and ethnographic knowledge, that we must try to explicate. By the turn of the eighteenth century, cosmopolitan knowledge interests were increasingly being pursued in Europe itself. Similarly, Fort St George was in one sense a European space: it was controlled by Europeans, featured European institutions, and drew relevance from its centrality to European networks of

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<sup>26</sup> Pratt, *Imperial Eyes: Studies in Travel Writing and Transculturation*, 1-12.

<sup>27</sup> *Ibid.*, 8.

<sup>28</sup> Kapil Raj, "The Historical Anatomy of a Contact Zone: Calcutta in the Eighteenth Century," *Indian Economic Social History Review* 48, no. 1 (2011): 72; 78.

economic exchange and trade. However, colonial port cities such as Fort St George also presented opportunities and limitations for natural philosophical knowledge production that were notably different from those available to natural philosophers based in London and Paris. The presences of Tamils, Telugu and Malawanlu meant that Fort St George, as a contact zone, was simultaneously a European and non-European space, with distinct consequences for the natural philosophical and natural historical information gathered there.

This paper is divided into two parts, which mirror the tension between the intentional and unintentional ways that Europeans at Fort St George incorporated local and indigenous knowledge into their natural philosophical and ethnographic accounts. The first section considers the roles, and the economic, intellectual and social motivations of European surgeons and clergymen involved in the production of knowledge at Fort St George. The second section works towards reconstructing the ways in which cross-cultural interactions with Tamils, Telugu and Malawanlu affected European knowledge production on the Coromandel Coast. Together, they demonstrate the opposing mechanisms of appropriation and infiltration by which Indian culture and knowledge became embedded in European accounts produced at Fort St George.

### **Suply, Browne, Bulkley and Lewis: European Surgeons and Clergymen in the Contact Zone**

Historians of science have increasingly demonstrated the importance of seamen and travellers to European natural philosophical knowledge production in the late seventeenth and early eighteenth centuries. Steven Shapin and Daniel Carey have examined European natural philosophers' ongoing concerns around the reliability and credibility of travel knowledge, and their efforts have been invaluable in extending our understanding of attempts to apply natural philosophy to the globe.<sup>29</sup> However, in these

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<sup>29</sup> Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: University of Chicago Press, 1994); Carey, "Compiling Nature's History: Travellers and Travel Narratives in the Early Royal

studies there is less sensitivity than seems warranted to the differences between European travellers, and Europeans living *in situ* in overseas contexts, especially in cosmopolitan port cities such as Fort St George. Suply, Browne, Bulkley, and Lewis, by living permanently or semi-permanently at the Fort, engaged in a recognisably different dynamic of knowledge production to itinerant travellers. There was no guarantee when they accepted their commissions that these men would see Europe again, and indeed neither Browne nor Bulkley ever did. Long-term residency within the contact zone of Fort St George meant that these individuals had the added incentive to engage with local culture and knowledge traditions. They also had the time to develop ongoing relationships with Indian informants, which became pivotal to the way knowledge was produced at the Fort.

Established European networks of trade and missionary activity, in which Fort St George already played a central role in the later seventeenth century, were crucial to the natural philosophical efforts of Suply, Browne, Bulkley and Lewis. Recent scholarship, especially by Steven Harris and Anna Winterbottom, has established the fundamental importance of pre-existing networks, particularly those run by the English East India Company and the Jesuits, in enabling European efforts towards natural philosophical and ethnographic knowledge production on a global scale in this period.<sup>30</sup> These networks were constituted of ships that carried bodies, objects and correspondence between sites in and beyond the Indian Ocean, as well as back and forth to Europe. Fort St George thus became a key site of knowledge production because Europeans there could adopt and adapt already functioning networks of economic exchange and missionary activity. Just as significantly, Browne, Bulkley and Lewis (and likely Suply) were all stationed at Fort St George and thereby in a position to pursue natural philosophy on the East India

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Society." These questions around the reliability of travel knowledge would not really be resolved until the scientific expedition became the preferred method of interaction with the globe later in the eighteenth century.

<sup>30</sup> Anna Winterbottom, "Producing and Using the Historical Relation of Ceylon: Robert Knox, the East India Company and the Royal Society," *British Journal for the History of Science* 42, no. 155 (2009); Steven J. Harris, "Long-Distance Corporations, Big Sciences, and the Geography of Knowledge," *Configurations* 6, no. 2 (1998); Steven J. Harris, "Jesuit Scientific Activity in the Overseas Missions, 1540-1773," *Isis* 96, no. 1 (2005).

Company's payroll. This was, of course, not unusual in a period when the English presence in India was still almost exclusively overseen by the Company. For its part, the East India Company appears to have mostly accepted or even encouraged information-gathering efforts. That said, the piggybacking of natural philosophical enterprises onto these networks was not determined on an institutional basis at this time, but rather by personal relationships. These networks were not without their limitations, being slow and exposed to failure through hazards such as weather and piracy.<sup>31</sup> Nevertheless, they provided the conduits without which information and material could not have circulated into and out of the spaces of Fort St George.

Suply, Browne, Bulkley, and Lewis were in many ways dissimilar, especially in their professional interests. This reflects the differing goals of surgeons and of clergymen, as well as their national identities as French or English. Nevertheless, the similarity of their activities in service of natural history, their equivalent functions within networks of natural historical exchange, and their maintenance of correspondences with other natural philosophers, make it appropriate to consider them together. This grouping also stems from the way Suply, Browne, Bulkley and Lewis all evidently chose to be part of the European natural philosophical project, rather than being forced to participate as a result of any particular patriotic or institutional requirements. This is borne out by the counter-example of Englishman John Foquett, who wrote to James Petiver in 1700 to explain that he would not be providing natural historical specimens in the same way as his compatriots at Fort St George. As he wrote, "I heartily wish it lay in my

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<sup>31</sup> See James Petiver, "An Account of Part of a Collection of Curious Plants and Drugs, Lately Given to the Royal Society by the East India Company," *Philosophical Transactions* 22 (1700): 580-1; Journal Book of the Royal Society, 26 Oct 1698 and 2 Nov 1698, Royal Society Archives, JBO/10. The hazards these networks faced meant that travel and the sending of letters, accounts, and specimens, both within the region and to other parts of globe was not without notable risk. See Edward Bulkley to James Petiver, 14 Oct 1700, British Library, Sloane MS 3321, fol. 56. These risks caused Bulkley to insist on a policy of sending duplicates of correspondence, in order to make sure that at least one copy got through, and chastising Petiver for not always doing the same. He also indicated hesitation to commit to sending large collections of specimens together, being "not willing to venture all in one ship." Edward Bulkley to James Petiver, 9 Oct 1702, British Library, Sloane MS 3321, fol. 103; Edward Bulkley to James Petiver, 24 Jan 1705/6, British Library, Sloane MS 4064, fols. 54-7.

power to serve you in those things you wrote to Mr Brown ... but my employ is another way.”<sup>32</sup> It is not clear from the letter whether this reluctance was because of potential cost, lack of time or simply lack of interest. It does nevertheless show that participating in the natural philosophical projects of the European academies was a choice that Suply, Browne, Bulkley and Lewis each made and that, while not unique, their activities were by no means typical of European surgeons and clergymen stationed in colonial port cities.

So who then were these surgeons and clergymen? For Monsieur Suply, we have very little by way of biographical details, and even his first name is elusive.<sup>33</sup> His manuscript account includes both French and English versions, and Suply himself was French. That a Frenchman should be the one to perform this important dissection at an English Fort is intriguing, but perhaps not especially unusual given the cosmopolitanism of the Fort in the early eighteenth century. Suply’s account reveals that he had experience with and an enthusiasm for anatomical knowledge and dissection that seems to go beyond what he might have been required to undertake during his training as a surgeon. As he remarked, “the following experiment is often what I have made upon a Frog with pleasure.”<sup>34</sup> Beyond scant personal anecdotes such as this, we get a further sense of Suply’s personality through his rigour and meticulousness in recording the process of dissection and preserving samples as he went.<sup>35</sup> He later conducted tests on these samples—for example, filling a length of intestine with water in order to test its porosity—and included the results of these experiments in his account.<sup>36</sup> Suply also seems to have been more than happy to critique previous accounts of elephant anatomy. As he wrote, “Dr Dureen author of the

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<sup>32</sup> Foquett had married Samuel Browne’s widow, which explains his connection to Petiver. Despite declining to become one of Petiver collectors, he did forward a few letters and collections of plants that Browne had been working on when he died. John Foquett to James Petiver, 24 Feb 1700, British Library, Sloane MS 4063, fol. 7.

<sup>33</sup> In what follows, I sometimes treat Suply separately, not so much because his activities seem to have been qualitatively different from the others, but because he was not a regular correspondent of James Petiver and is hence less well represented in the archives than Browne, Bulkley and Lewis.

<sup>34</sup> Suply, “Anatomical Remarques Upon an Elephant open’d att Fort St George in November 1715,” 15.

<sup>35</sup> *Ibid.*, 4.

<sup>36</sup> Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 95.

natural chymistry is mistaken in affirming that the elephant has four ventricles like other ruminating animals.”<sup>37</sup> Suply offered reasons for the elephant’s distinct heart structure, and was thus contributing not just descriptive and observational data, but also speculatively to the project of the new natural philosophy.

Archival contingencies mean that we know considerably more about the three English collectors, Samuel Browne, Edward Bulkley and George Lewis than about Suply. Samuel Browne became the East India Company’s chief surgeon at Fort St George in 1688 and served in this capacity until 1692, though he remained at the Fort as an agent of the company until 1697.<sup>38</sup> He never returned to England, and died at the Fort in late 1698.<sup>39</sup> Other than his natural philosophical efforts, he has a historical legacy surrounding a trial for the accidental poisoning of a patient in 1692, in which Edward Bulkley was asked to perform an autopsy and give a second opinion. Browne was ultimately acquitted by Grand Jury in 1693, but his reputation no doubt suffered.<sup>40</sup> After 1692, Bulkley replaced Browne as chief surgeon to the East India Company at the Fort. Born in 1651, Bulkley seems to have previously been to India in 1682, before taking up residence permanently at Fort St George in 1692. He held the position of chief surgeon until 1709, when he took a position on the Fort council.<sup>41</sup> He died on August 8, 1714 and was buried at the St Mary’s church cemetery at the Fort, with his memorial surviving in transcription at the British Library.<sup>42</sup> A sermon delivered on his death was later published in London, in 1715, in which his

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<sup>37</sup> Suply, “Anatomical Remarques Upon an Elephant open’d att Fort St George in November 1715,” 8.

<sup>38</sup> Browne was also sometimes referred to as Samuel Brown or Sam Brown. Ray Desmond, *Dictionary of British and Irish Botanists and Horticulturists* (London: Taylor & Francis, 1977), 98.

<sup>39</sup> *Ibid.* records “d. Madras, India 22 Sept. 1698,” while his cemetery record suggests he died 21 December 1698. Penny, *Fort St. George, Madras: A Short History of Our First Possession in India*, 190-1.

<sup>40</sup> This was notable for probably being the first “medico-legal” autopsy performed in India. The poisoning resulted from the accidental grinding of medicinal pearl in a mortar that had previously been used for powdering arsenic. It is unclear whether Browne or his servant was directly responsible for this error (both were committed to trial). See K. Mathiharan, “State Control of Medical Malpractice,” *Law & Medicine (National Law School of India University, Bangalore)* 4 (1998): 88-92.

<sup>41</sup> Desmond, *Dictionary of British and Irish Botanists and Horticulturists*, 103; *Fort St George, Diary and Consultation Book of 1710*, Records of Fort St George (Madras: Government Press, 1929).

<sup>42</sup> Edward Bulkley, “Inscription on his Monument,” British Library, Sloane MS 1968, fol. 195. Browne was also buried in this cemetery.

efforts in natural history were alluded to: “Tho’ his inclination led him to retirement and Study; he show’d himself no less fit for action and business, when he was called to it.”<sup>43</sup> The third of these men, George Lewis, was born ca. 1666, completed his education at Oxford before being appointed to the church at Fort St George in 1692 and become principal chaplain there in 1696. Unlike Browne and Bulkley, he would eventually return to England in 1714, where he died sometime after 1719.<sup>44</sup> If perhaps less prolific, Lewis’s activities often paralleled the collecting efforts of Browne and Bulkley, and he was held in similar esteem by Petiver, their mutual correspondent in London. Lewis’s interests also sometimes diverged from the surgeons however, reflecting his position as chaplain. This is especially evident in his focus on local languages and translation. Where their service and lives overlapped, the interaction between Browne, Bulkley and Lewis seems to have been frequent and extensive, so much so that Petiver explicitly suggested sharing between them. As he wrote to Bulkley, “a printed letter I herewith send you, wch you may show to Dr Lewis, Mr Brown &c. it being all I had left, otherwise you should have each had one.”<sup>45</sup>

The principal sources for the activities of Suply, Browne, Bulkley and Lewis during their time at Fort St George are a series of correspondences that have been preserved as part of the Sloane Manuscripts at the British Library, and in the Royal Society Archives. Published and unpublished accounts and lists as well as objects complement these correspondences. Indeed, the surgeons and clergymen handled a vast array of objects including plants, seeds, shells, minerals, insects, animals, manuscripts and

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<sup>43</sup> William Stevenson, *A Sermon Preach’d on the Death of Mr. Edward Bulkley, in the Church of St Mary, in Fort St. George, Sunday August 15* (London: Printed by J. Roberts, 1715).

<sup>44</sup> Frank Perry, *Chaplains in the Jurisdiction of the Presidency of Fort St George from 1647 to 1805* (Madras, 1904).

<sup>45</sup> James Petiver to Edward Bulkley, 1 Jan 1698, British Library, Sloane MS 3333, fols. 98-9. For other examples of sharing see James Petiver to Edward Bulkley, nd, British Library, Sloane MS 3333, fols. 100-102; James Petiver to George Lewis, 30 Oct 1698, British Library, Sloane MS 3333, fols. 182-183.

tools. A number of the objects these men and their Indian assistants collected survive; notably an extensive collection of plant specimens in the Sloane Herbarium of the British Natural History Museum.<sup>46</sup> Fig. 2. shows some of the material gathered at Fort St George:

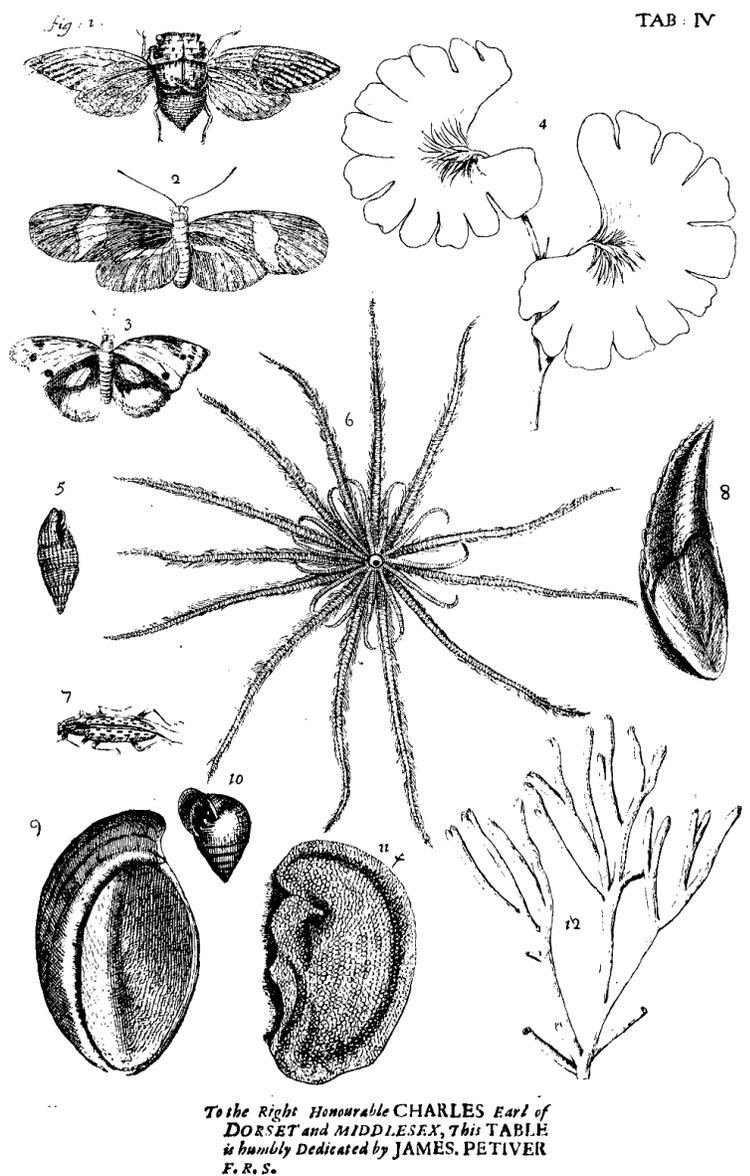


Fig. 2. A plate from James Petiver's *Gazophylacii Naturæ & Artis* (1702-6).<sup>47</sup>

<sup>46</sup> J. E. Dandy, *The Sloane Herbarium: An Annotated List of the Horti Sicci Composing It, with Biographical Accounts of the Principal Contributors* (London: Trustees of the British Museum, 1958); John Woodward, *An Attempt Towards a Natural History of the Fossils of England*, 2 vols. (London, 1729).

<sup>47</sup> James Petiver, *Gazophylacii Naturæ & Artis: Decas Prima* (London, 1702), Tab. IV.

In this image, items 3, 4 and 6 originated from or passed through Fort St George:

3. *Papilio MADRASPATANUS* ... *This singular Butterfly* Mr. Edw. Bulkley sent me from Fort St. George; 4. *Adiantum Philippense* ... *Taken from a Design the Reverend Father George Joseph Camel sent Mr. Ray and me, from the Philippine Isles* [via Fort St George and Browne]; 6. *Stella CHINENSIS* ... *Mr. Samuel Brown procured me this odd Animal from China*.<sup>48</sup>

Other material sources include Lewis's and Bulkley's shells at the British Natural History Museum, an elephant fibula that Suply sent to the Royal Society, and Chinese tools at the British Museum.<sup>49</sup> Lewis also produced a collection of Brahmin manuscripts, and an account of the currencies, measures and weights in use on the Coromandel Coast.<sup>50</sup> It is impossible to quantify exactly how much material these surgeons and clergymen gathered and processed at the Fort between 1690 and 1730, as not all of it has survived. However, the numbers noted in publications such as Petiver's *Gazophylacium*, in the correspondence—for example, "I have now sent you 20 volumes of Plants most of ym wh flower & fruit, gathered & preserved wth great care"—and the quantity of specimens surviving today with Fort St George as their provenance suggest a vast scope.<sup>51</sup>

This volume of material is especially notable given that Suply, Browne, Bulkley and Lewis, as surgeons and clergymen, were all employed professionals, and were hence limited in the time they could devote to natural history. As Browne explained to Petiver:

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<sup>48</sup> Petiver, *Gazophylacii Naturæ & Artis: Decas Prima*, 7-8.

<sup>49</sup> Hans Sloane, "An Account of a China Cabinet, Filled with Several Instruments, Fruits, Etc. Used in China: Sent to the Royal Society by Mr. Buckley, Chief Surgeon at Fort St. George," *Philosophical Transactions* 20, no. 236-247 (1698); Hans Sloane, "A Further Account of the Contents of the China Cabinet Mentioned Last Transaction," *Philosophical Transactions* 20, no. 236-247 (1698); Hans Sloane, "A Further Account of the China Cabinet," *Philosophical Transactions* 21, no. 248-259 (1699); Hans Sloane, "A Further Account of What Was Contain'd in the Chinese Cabinet," *Philosophical Transactions* 21, no. 248-259 (1699). On this cabinet, see James Delbourgo, "'Exceeding the Age in Every Thing': Placing Sloane's Objects," *Spontaneous Generations* 3, no. 1 (2010). For other specimens see "Account of Fossils," nd, British Library, Sloane MS 3329, fol. 148; William Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant* (London, 1722), 93; Guy Wilkins, "A Catalogue and Historical Account of the Sloane Shell Collection," *Bulletin of the British Museum (Natural History)* 1, no. 1 (1953): 37.

<sup>50</sup> George Lewis, "Account of Various Foreign Currencies and Weights," nd, Royal Society Archives, RBO/9/51.

<sup>51</sup> Edward Bulkley to James Petiver, 10 Feb 1704, British Library, Sloane MS 3321, fol. 133; Edward Bulkley, "Descriptions of East Indian Birds," nd, British Library, Sloane MS 4020, fol. 192; Petiver, *Gazophylacii Naturæ & Artis: Decas Prima*; James Petiver, *Musei Petiveriani* (London: S. Smith & B. Walford, 1703).

Pray pardon ye deficiency of these Collections wch proceeds as much from my want of time as of ability for such a work not willingnesse to serve you. But Necessity obliges me to provide for my family wch as times are now is as much as one of our profession can do.<sup>52</sup>

Before the age of dedicated scientific voyages, and away from the world of the predominately upper-class metropolitan natural philosophers, these surgeons and clergymen had to balance conflicting demands on their time and finances. Nevertheless, whatever the constraints of their duties to the East India Company, Suply, Browne, Bulkley and Lewis were committed observers of nature with more than passing interests in the project of assembling a global natural history. Collectively and individually, they dedicated substantial portions of their lives to what was, at the time, a peculiarly European project of cataloguing the globe.

Indeed, though living on the Coromandel Coast, it is clear that these surgeons and clergymen were aware that they were intellectually and materially contributing to a European project, and one that had an audience beyond their local sphere. After Suply and his assistants completed the dissection of the elephant, he produced an account of the event titled “Anatomical Remarkes Upon an Elephant open’d att Fort St George in November 1715.”<sup>53</sup> This twenty-two page account was ostensibly written as a letter, and addressed to the “Chief Chirurgion at Fort St David,” a small English trading post some one-hundred and sixty kilometres south on the Coromandel Coast. However, it is clear that Suply intended the account for a wider audience of European natural philosophers and natural historians. This implicit

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<sup>52</sup> James Petiver to Samuel Browne, 2 Jan 1699, British Library, Sloane MS 3333, fols. 243-244. See also Samuel Browne to James Petiver, 1696, British Library, Sloane MS 3333, fols. 201-7; Samuel Browne to James Petiver, 30 Sept 1698, British Library, Sloane MS 4062, fols. 288-291b.

<sup>53</sup> Suply, “Anatomical Remarkes Upon an Elephant open’d att Fort St George in November 1715.” Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 90, records the date as October rather than November.

audience is evident from the fact that Suply wrote to English virtuoso Hans Sloane to advertise his efforts.<sup>54</sup> Suply also sent Sloane his full dissection account in manuscript form, and preparations of the elephant's tissues.<sup>55</sup> Through their correspondences with Sloane and Petiver, Suply, Browne, Bulkley and Lewis were thus intellectually linked to wider currents around the advancement of European natural philosophy. This metropolitan audience is also important to recognise if we are to understand the European surgeons' and clergymen's conscious and unconscious selection and modification of native information.

The potential for a broader readership is also evident in Suply's decision to produce the account of the elephant. The term "charismatic megafauna" is sometimes used to explain the perennial appeal of elephants, and the way they have attracted more attention than less dramatic creatures.<sup>56</sup> Such enthusiasm for the most grandiose of the land animals is reflected in Suply's exclamation, "What colour! And what vast intestines, bigger than the body of a man."<sup>57</sup> Elephants were not new to European imaginations thanks to classical accounts, especially those describing Alexander the Great's use of war elephants. Nevertheless, with their massive bulk and peculiar trunks, elephants continued to be a source of fascination at the turn of the eighteenth century, while anatomical knowledge of them remained limited.<sup>58</sup> Suply was undoubtedly aware of this, and being stationed on the Coromandel Coast meant that he was in a unique position to help address this knowledge gap, and exploit any recognition that might

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<sup>54</sup> A. Suply to Hans Sloane, 8 Jan 1719/20, British Library, Sloane MS 4045, fol. 282. This letter is the only piece of correspondence between the two men surviving in the Sloane Manuscripts, but is clearly part of an ongoing exchange.

<sup>55</sup> Suply, "Anatomical Remarques Upon an Elephant open'd att Fort St George in November 1715," 1.

<sup>56</sup> For a discussion of the wide-ranging appeal of elephants see Daniel Wylie, *Elephant*, 153. Other notable accounts of animals from the Coromandel Coast include Louis Le Comte's account of a chameleon and Claude Perrault's anatomical description of a great sea tortoise. Claude Perrault, *Memoir's for a Natural History of Animals*, trans. Alexander Pitfield (London, 1688); Louis le Comte, *Nouveau Mémoire Sur L'état Présent De La Chine* (Paris, 1696).

<sup>57</sup> Suply, "Anatomical Remarques Upon an Elephant open'd att Fort St George in November 1715," 4.

<sup>58</sup> Naturalists in this period often referred back to classical, especially Greek, descriptions of elephants. An examples of this can be seen in Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 91-2.

follow. Even if it meant spending twelve hours in the rain, dissecting an elephant was an opportunity not to be missed.

Suply's actions hint at the economic, intellectual and social motivations of these individuals for dedicating significant portions of their lives to natural philosophical knowledge production, and these are worth exploring more fully. How might these motivations have affected the ways they processed the information they gathered on the Coromandel Coast? How might these motivations have shaped their interactions with Indian informants at the Fort? The potential for economic gain, real or perceived, cannot be discounted in the actions of Suply, Bulkley, Browne, and Lewis in deciding to become involved in natural history at Fort St George, but nor can it have been the only factor. Much has been made of economic botany in the scholarship of recent decades, with a key successful example being cinchona (the source of anti-malarial quinine).<sup>59</sup> Bulkley touches on this search for commodities that could potentially bring material returns in his description of the "gum or glewe of ye Punsu Coy or fruit of the Panitsjakamar," about which he notes, "I should be glad if from what you receive, you may make some profitable discovery, wch may someway compensatē ye charge & trouble I am yearly at."<sup>60</sup> This statement is especially notable in hinting at what were ultimately financial losses that the surgeons and clergymen incurred. Indeed, nothing substantial seemed to come of these commodity-hunting efforts, as Bulkley mused:

I wonder yt out of the large acquirements from these parts, you have not so far reduced any thing into use ... & render it a mercantile commodity & consequently give some addition to ye booke of rates & cause a newe title in ye Druggists Shop, but of such a matter I hear not anything.<sup>61</sup>

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<sup>59</sup> Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World* (Cambridge, MA: Harvard University Press, 2004); Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age*.

<sup>60</sup> Edward Bulkley to James Petiver, 10 Feb 1704, British Library, Sloane MS 3321, fol. 133.

<sup>61</sup> Edward Bulkley to James Petiver, 28 Oct 1712, British Library, Sloane MS 4065, fols. 71, 94.

Thus while the prospect of discoveries with economic potential was likely a factor in the efforts of the Europeans at Fort St George, there is little evidence that this was an especially tangible prospect. Certainly, it never seems to have come close to compensating for the costs of gathering material and shipping it around the world.<sup>62</sup>

Given that it ultimately cost Suply, Browne, Bulkley and Lewis to participate in natural philosophical projects, the social benefits of their devotion of time and resources must have been significant. Indeed, the potential for recognition, respect and even fame should not be underestimated as motivators. Petiver promised that his correspondents' work would be shown at meetings of "our Royall society, to those worthy members with assurances at ye same time."<sup>63</sup> He also promised recognition in print, and followed through with this, including by publishing eight books of Browne's plants (albeit posthumously) in the *Philosophical Transactions* between 1701 and 1703.<sup>64</sup> These books were introduced and described as follows:

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<sup>62</sup> Edward Bulkley to James Petiver, 9 Nov 1701, British Library, Sloane MS 3321, fol. 84.

<sup>63</sup> James Petiver to Samuel Browne, 10 Jan 1698, British Library, Sloane MS 3333, fol. 107. This was sent after Browne's death, but is nevertheless representative of Petiver's promises. For instances of Petiver showing Browne's work at the Royal Society see Journal Book of the Royal Society, 21 Oct 1696 and 23 Nov 1698, Royal Society Archives, JBO/10. For more on Petiver's exploitation of social credits see Delbourgo, "Listing People."; K. A. James, "'Humbly Dedicated': Petiver and the Audience for Natural History in Early Eighteenth-Century Britain," *Archives of Natural History* 31, no. 2 (2004).

<sup>64</sup> James Petiver, "An Account of Mr Sam Brown, His Third Book of East India Plants, with Their Names, Vertues, Description, &c," *Philosophical Transactions* 22, no. 260-276 (1700); James Petiver, "A Description of Some Shells Found on the Molucca Islands; Also an Account of Mr Sam Brown, His Fourth Book of East India Plants, with Their Names, Vertues," *Philosophical Transactions* 22, no. 260-276 (1700); James Petiver, "An Account of Mr Sam. Brown His Fifth Book of East India Plants, with Their Names, Vertues, Description, &c," *Philosophical Transactions* 22, no. 260-276 (1700); James Petiver, "An Account of Mr Sam Brown His Second Book of East India Plants, with Their Names, Vertues, Description, &c," *Philosophical Transactions* 22, no. 267 (1700); James Petiver, "An Account of Part of a Collection of Curious Plants and Drugs, Lately Given to the Royal Society by the East India Company."; James Petiver, "Mr Sam Brown His Seventh Book of East India Plants, with an Account of Their Names, Vertues, Description, Etc," *Philosophical Transactions* 23(1702); James Petiver, "An Account of Mr Sam. Brown His Sixth Book of East India Plants, with Their Names, Vertues, Description, Etc." *Philosophical Transactions* 23(1702); James Petiver, "The Eighth Book of East India Plants, Sent from Fort St George," *Philosophical Transactions* 23(1702). The eighth book may not have been Browne's, although it continued the form of the previous seven.

[They] shall contain the whole and entire *Observations* of Mr *Brown*[e], without any abridgement. His *Observations* shall have his name subscribed to them, to distinguish them from the *Remarks*, designed to be added by Mr *Petiver*, which will give his *Thoughts* and *Discoveries* concerning these plants.<sup>65</sup>

Browne's words, unaltered and clearly acknowledged, thus made their way into the *Philosophical Transactions*, the most significant English-language natural philosophical journal of the period.<sup>66</sup> Similar possibilities were almost certainly also on Suply's mind when he sent his elephant account and specimens to Hans Sloane, arguably the most prominent natural historian of the era. From Bulkley's correspondence we know that the surgeons and clergymen were both aware and proud that their work was being presented at the academies in this way.<sup>67</sup> As well as intellectual curiosity, they were thus motivated at least in part by social recognition, and this undoubtedly affected the ways they prepared their accounts and specimens and interacted with their Indian informants.

Much as they became integral parts of the larger correspondence and exchange networks of natural philosophers such as Sloane and Petiver, Europeans at Fort St George also established their own personal regional networks.<sup>68</sup> These networks come into sharp relief when taking a Fort St George-centric perspective, and further highlight the way Fort St George operated as a node of empire in the period 1690-1730. These networks allowed the surgeons and clergymen to extend their reach beyond the immediately local in terms of material to contribute to the natural history project. The Englishmen maintained contacts on the Coromandel Coast and in the Bay of Bengal, but these networks also stretched

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<sup>65</sup> James Petiver, "An Account of Part of a Collection of Curious Plants and Drugs, Lately Given to the Royal Society by the East India Company," 579.

<sup>66</sup> It was arguably the most significant scientific journal of the time in any language, rivalled only by the Académie des Sciences' *Journal des Sçavans*.

<sup>67</sup> We know that Bulkley was familiar with the way Browne's work had been publicly showcased, and that he had copies of Browne's books of plants to hand, which he used as a template for recording observations. As Bulkley wrote in 1700: "I send you with the virtues & manner of using yt you have done by Mr Browne's collection printed among the Transactions." Edward Bulkley to James Petiver, 23 Feb 1700, British Library, Sloane MS 3321, fols. 28-9. Here Bulkley was referring to James Petiver, "An Account of Some Indian Plants, Etc. With Their Names, Descriptions and Vertues," *Philosophical Transactions* 20, no. 236-247 (1698).

<sup>68</sup> For more on these networks see Delbourgo, "Listing People;" Winterbottom, "Company Culture: Information, Scholarship, and the East India Company Settlements, 1660-1720s."

much wider, spanning the East Indies, and extending as far as Persia and Arabia. It is possible to trace natural philosophy related connections from Fort St George to parts of Arabia, Borneo, Ceylon, China, Indonesia, Japan, Madagascar, Malaysia, Iran, the Philippines and Vietnam, and more specifically to Acheen, Batavia, the Cape of Good Hope, Chusan, Gombroon, Malacca, Maldiva, Manila, Mocoa, Muscat, Pegu, and Tonqueen.<sup>69</sup> The Europeans at Fort St George actively solicited information through correspondences these networks enabled. Typical of this wider networking is Bulkley's remark in 1699 that: "I have wrote to China about ye Tartarian Lamb [a fern] but cannot expect answer till ye next year."<sup>70</sup> Browne's and Bulkley's roles as intermediaries often involved the repackaging of physical specimens, such as those Czech Jesuit Georg Joseph Kamel in Manila or Scottish physician James Cuninghame in Chusan sent. An example of this is Bulkley's famous "china cabinet," the details of which Sloane published in the *Philosophical Transactions* in four parts.<sup>71</sup> This collection, which Bulkley sent to the Royal Society, featured an eclectic mix of items including brass tweezers, bone probes, Chinese pencils, ear picks, bezoars, seeds, insects, and a sea horse tooth. Bulkley accumulated and arranged this diverse collection at Fort St George, in the process recontextualising the individual items by constituting them as an ostensibly coherent collection.

Use of these regional networks for natural philosophy was not limited to exchanges with Europeans, nor only to the transfer of correspondence and objects. The surgeons and clergymen at Fort St

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<sup>69</sup> Samuel Browne to James Petiver, 30 Sept 1698, British Library, Sloane MS 4062, fols. 288-291b; Edward Bulkley to James Petiver, 24 Feb 1701, British Library, Sloane MS 3321, fol. 67. Petiver encouraged this: "I should be glad to see wt returns are made yu from Persia, Arabia, China, Sumatra Pegu, Malacca, Java." James Petiver to Samuel Browne, nd, British Library, Sloane MS 3333, fols. 220-2. He was even hoping (perhaps optimistically) that Browne and Bulkley's reach could extend to South America, though there is not any indication that this occurred: "If possible procure some collections from ye Portuguese and Spanish Collonyes as Brasil, Mexico, Peru, &c." James Petiver to Samuel Browne, nd, British Library, Sloane MS 3332, fol. 9.

<sup>70</sup> Edward Bulkley to James Petiver, 12 Oct 1699, British Library, Sloane MS 3321, fol. 18.

<sup>71</sup> Some of the objects from this cabinet can still be seen in the British Museum. See Delbourgo, "'Exceeding the Age in Every Thing': Placing Sloane's Objects." Bulkley brokered another collection of items from Mocoa in 1706. The box they arrived at Fort St George in was broken, so Bulkley repacked it. While doing so, he added some local shells, starfish, and eggs, confusing the proper contexts. Edward Bulkley to James Petiver, 23 Feb 1705/6, British Library, Sloane MS 3321, fol. 191.

George also hired collectors and sent them into the field to hunt for plants and other specimens.

Browne and Bulkley were especially notable in this regard, and the two English surgeons also shared collectors, with parts of Browne's network taken on by Bulkley after the former's death in 1698.<sup>72</sup> Bulkley outlined his use of collectors to Petiver, writing that:

I shall dispatch two men to ye northward viz. from Melchlepotam, Vizayopotam & thence to Bengall & at these places & in their way to collect what they observe newe & not already sent you, they will be nine months before they can return.<sup>73</sup>

The surgeons placed an emphasis on new specimens, for at this stage Browne and Bulkley had likely gathered a significant proportion of the material that was immediately local to Fort St George. There remained an issue of cost in maintaining these networks of collectors. As Bulkley noted of a collector, "yt person yt was to perform yt dying in Pegu [Burma], which is a great disappointment. I was at great charge in maintaining ye 2 men abroad & their familys."<sup>74</sup> What is especially interesting about these collectors is that they were usually local Tamils or Telugu rather than Europeans. This brought cross-cultural interactions and the potential for hybridisation to the fore of the knowledge-making process. European surgeons and clergymen played essential roles in natural philosophical knowledge production at Fort St George in the period 1690-1730, but—as in Suply's dissection of the elephant—they often did not labour alone.

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<sup>72</sup> Edward Bulkley to James Petiver, 2 Feb 1713, British Library, Sloane MS 4065, fol. 94.

<sup>73</sup> Edward Bulkley to James Petiver, 24 Feb 1701, British Library, Sloane MS 3321, fol. 67. Bulkley sent an update three years later, noting delays: "[I have] given you ye reason why I send you little this year, my servants being gone to other parts viz. Acheen on Sumatra & Pegu [now Bago, Myanmar] & doe not expect them this year, they went to Bengall but not dareing to enter ye woods for fear of ye Tygers found scarce anything worth gathering." Edward Bulkley to James Petiver, 1 Mar 1704/5, British Library, Sloane MS 3321, fol. 171. Browne also maintained extensive networks. See, Petiver, *Musei Petiveriani*, 43.

<sup>74</sup> Edward Bulkley to James Petiver, 9 Oct 1706, British Library, Sloane MS 3321, fol. 205. He also discusses collectors in Edward Bulkley to James Petiver, 12 Feb 1706/7, British Library, Sloane MS 3321, fol. 213. Though it appears Browne's and Bulkley's collectors were paid servants, we do know that Petiver was not opposed to the use of slave labour in knowledge production in other contexts. See James Petiver to Mr Colebatch, 6 Jan 1695/6, British Library, Sloane MS 3332, fol. 174. For more on slavery and knowledge production, albeit in the Atlantic, see Mark Govier, "The Royal Society, Slavery and the Island of Jamaica: 1660-1700," *Notes and Records of the Royal Society of London* 53, no. 2 (1999): 203-17.

### Tamils, Telugu and Malawanlu: The Anatomy of Cross-cultural Knowledge-making Interactions

Interactions between Europeans and Tamils, Telugu and Malawanlu at Fort St George in the period 1690-1730 were central to the knowledge-making dynamic that emerged there, and are indicative of the ways that information was selected, negotiated and moulded in contact zones. In this section, I consider the importance of cross-cultural interactions for understanding the ways that local knowledge could be appropriated into and infiltrate European accounts within the spaces of Fort St George. Within this dynamic, European attitudes toward their local informants were complex. The surgeons and clergymen saw Indians as valuable sources of information, while simultaneously seeing local knowledge traditions as inferior to an epistemology based on the new natural philosophy. As a result, Europeans on the Coromandel Coast often treated local knowledge as useful but problematic. William Stevenson, a Protestant missionary and chaplain of the East India Company, provides a typical example of this assessment of native knowledge. Undoubtedly biased by his missionary goals, he wrote of the locals that “their skill and capacity in all manual Arts ... seem to excel the common Artificers in *Europe*; and sometimes outdo the most ingenious” but goes on to denigrate “the grossness of their superstition, and their absurd belief.”<sup>75</sup> This attitude, translated into the practice of knowledge production, saw Suply, Browne, Bulkley and Lewis selectively record indigenous and local information in order to fit it into a European natural philosophical tradition, but this was often only achieved imperfectly, leading to the production of hybridised knowledge.

The Indians who operated as local informants and native assistants at Fort St George included a diverse mix of Tamils, Telugu and Malawanlu. Knowledge-making interactions involved individuals across different social classes, and included indigenous medics and collectors, as well as local elites such as Brahmin priests. There was also no singular local knowledge tradition or culture but several, meaning

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<sup>75</sup> William Stevenson, *A Letter from Fort St. George in the East-Indies: Concerning the Protestant Mission in Those Parts* (London: Printed by J. Downing, 1721), 7-15.

that the local informants were in many ways dissimilar from each other. As Heather Flynn Roller has noted, the lumping together of local informants into undifferentiated, homogenous groups is problematic.<sup>76</sup> However, like the European surgeons and clergymen, what brings them together in this paper is their involvement in particular processes of knowledge production. As the individuals involved in these cross-cultural interactions were numerous and varied, in this section I will not emphasise just one way that knowledge could be hybridised, but rather demonstrate the multiplicity of ways that Indians could and did modify the knowledge they produced together with Europeans in this time period.

European interactions with Tamils, Telugu and Malawanlu at Fort St George were not necessarily a new or unique phenomenon related to emerging European natural philosophical ambitions. Instead, these kinds of relationships had a dynamic history, and were likely adapted from the sorts of interactions that had sprung up around trading on the Coromandel Coast in earlier decades. Locals often made the first approaches when actively interacting with Europeans. This could be as merchants looking to trade, or to offer their services as intermediaries, interpreters, interlocutors, brokers and fixers.<sup>77</sup> Seventeenth-century travellers recorded that it was standard practice for locals to row out to meet arriving ships. English ship's captain, travel writer and pirate William Dampier described these practices while at Fort St George in 1689:

These Peuns are some of the *Gentous*, or *Rashbouts*, who in all places along the Coast, especially in Sea-port Towns, make it their business to hire themselves to wait upon strangers, be they Merchants, Seamen, or what they will. To qualify them for such attendance, they learn the *European Languages*, *English*, *Dutch*, *French*, *Portuguese*, &c.<sup>78</sup>

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<sup>76</sup> Roller, "River Guides, Geographical Informants, and Colonial Field Agents in the Portuguese Amazon," 101-2.

<sup>77</sup> William Dampier, *A New Voyage Round the World* (London: Printed for James Knapton, 1697), 507-8. John Fryer also noted these practices while at Fort St George. Fryer, *A New Account of East-India and Persia*, 26. For more on Dampier see Adrian Mitchell and Geraldine Barnes, "Measuring the Marvelous: Science and the Exotic in William Dampier," *Eighteenth-Century Life* 26, no. 3 (2003); William Hasty, "Piracy and the Production of Knowledge in the Travels of William Dampier, c.1679-1688," *Journal of Historical Geography* 37 (2011): 508.

<sup>78</sup> Dampier, *A New Voyage Round the World*, 507-8.

The dynamic Dampier describes here is perhaps not so different from what one encounters outside tourist attractions in India today. The locals took the initiative in learning the necessary European languages, and not necessarily the other way around. By extension, these assistants must have expected to benefit from these exchanges, whether financially or socially. These were thus relationships of shared agency, and these exchanges were never solely dictated and controlled by Europeans, whatever the nuances of economic or power relations. Overall, it is likely that in these exchanges Indians often viewed natural historical information as simply another commodity, one that foreigners wanted and might be willing to pay for. This story is thus part of a longer tradition of cross-cultural interaction, and meant that the Tamils, Telugu and Malawanlu may not necessarily have seen a break between the activities of traders at Fort St George and the information-gathering enterprises of European surgeons and clergymen.

Suply, Browne, Bulkley and Lewis all evidently relied on and frequently consulted with local informants. Of a typical exchange, Bulkley wrote: "I have lately contacted a friend ship with ... ye Gentue [Telugu] Dr who has promised me to be very communicative & give me a large account so I know plants of these parts."<sup>79</sup> These interactions mostly took the form of face-to-face conversations, and the relationships usually seem to have been ongoing rather than occasional. That these surgeons and clergymen relied on their informants is evident in the way Bulkley spoke of the death of an assistant, "my old malabar [Tamil] yt collected for me & Mr Brown for several years. I am endeavouring to find out another fit person ... I much lament to the loss of that excellent man."<sup>80</sup> There is not really a sense in the correspondences of attempting to disguise the presence or even necessarily diminish the importance of Indians in these information-gathering efforts, even if it does not seem to have been considered necessary to name them.<sup>81</sup> For his part, Petiver was certainly aware of these relationships, and encouraged his correspondents to seek them out. As he wrote to Bulkley about a collection of plant samples, "if you please

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<sup>79</sup> Edward Bulkley to James Petiver, 24 Feb 1701, British Library, Sloane MS 3321, fol. 67.

<sup>80</sup> Edward Bulkley to James Petiver, 2 Feb 1713, British Library, Sloane MS 4065, fol. 94.

<sup>81</sup> Edward Bulkley to James Petiver, 23 Feb 1700, British Library, Sloane MS 3321, fols. 28-9.

to look ym over with any Bramin or Country Doctor & if he knows ye names or vertues of any of ym.”<sup>82</sup>

This instruction suggests that Petiver had a reasonable regard for the information that local informants could provide, at least on practical questions.

The difficulty in trying to understand the nuances of these relationships is that the Tamils, Telugu and Malawanlu are never named. The archival silences around these individuals are exacerbated by the fact that they did not leave their own written records of their interactions with the European surgeons and clergymen. Adding to this is the way that in their accounts, Suply, Browne, Bulkley and Lewis tended to homogenise their Tamil, Telugu and Malawanlu informants. As Lewis wrote about a type of coconut, “the Kernall ground up with Bezoar and Rhinoceros horn & taken inward is Esteemed & used by ye natives as a great antidote against poisons.”<sup>83</sup> Indeed, the Europeans often recorded the local informants under the faceless moniker of “the natives,” even as they cultivated ongoing relationships with individual Indians. As a result, resurrecting the individual personalities of the Indian actors in this study is difficult or impossible. Similarly, some questions, such as the roles of women and the effects of gender in these interactions, cannot be satisfactorily answered. That these informants were both male and female is apparent, especially in regard to the forms of herbal medical knowledge that female healers might have had, though gender is rarely explicitly acknowledged.<sup>84</sup> I can thus say that relationships with both men and women could be valued, but what precise effects this may have had on the knowledge produced is much harder to determine.

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<sup>82</sup> James Petiver to Edward Bulkley, 1 Jan 1698, British Library, Sloane MS 3333, fols. 98-9. He made similar requests in James Petiver, “Directions Concerning Plants [incomplete],” nd, British Library, Sloane MS 3332, fols. 1-5.

<sup>83</sup> George Lewis to James Petiver, 12 Feb 1704/5, British Library, Sloane MS 4064, fol. 54. This trope is evident throughout Browne’s eight books of plants published in the *Philosophical Transactions*.

<sup>84</sup> For an example in which gender is explicitly noted, see Browne’s note on the *Naiureevee Malabar* that “the Indian Old Women esteem it there as a sacred Herb, and hold it very good for such as are Bewitcht, or under an Evil tongue.” Petiver, “An Account of Part of a Collection of Curious Plants and Drugs, Lately Given to the Royal Society by the East India Company,” 315.

Information about the informants' professions or place in social hierarchies is more frequent—whether identifiable as elites in the case of Brahmin priests, or non-elites in the case of the elephant-dissecting Malawanlu—and these can be revealing about the mechanisms through which hybrid knowledge was produced in settings of employment, teaching or intellectual exchange. They can also be used to infer what sorts of knowledge different groups of informants might have had access to. In this regard, a particularly noteworthy group of informants were the Brahmin priests who, as well as being holy men, were the intellectuals and knowledge keepers in local culture.<sup>85</sup> Brahmins held a monopoly on certain types of learning, as French Jesuit Father de la Lane suggests:

They are the Preservers of Sciences, and none but they are allow'd to study and apply themselves to Learning. There being no Printing among them, all their Books are Manuscript, in very curious Characters on Palm Tree Leaves. They make use of an Iron Stile, or Bodkin, to write with, and manage it with wonderful Dexterity."<sup>86</sup>

This is backhanded praise, in that the Jesuit sees the Brahmins' skills as impressive, but only in making up for their technological inferiority in lacking the ability to print. This attitude undoubtedly reflects the Jesuit conflict with the Brahmins "who are so much respected by the *Indians*, and such Enemies to the Preachers of the Gospel."<sup>87</sup> In an account of Brahmin learning published in the *Philosophical Transactions* in 1701, Englishman John Marshal contended that Brahmin knowledge was narrow, and that most of their learning was limited to the religious sphere.<sup>88</sup> Marshal also reflects the assumption of the superiority of European knowledge traditions in assertions about the Brahmins' limited understanding of global geography:

They [the Brahmins] are ignorant of all parts of the World but their own; they wonder much at us, that will take so much care and pains, and run thro so many dangers both by Sea and Land,

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<sup>85</sup> Fryer, *A New Account of East-India and Persia*, 27. Here I use the word Brahmin to refer to individuals who performed particular religious roles, though the term can have other meanings in different contexts (especially with regard to caste).

<sup>86</sup> *The Travels of Several Learned Missioners of the Society of Jesus, into Divers Parts* (London: Printed for R. Gosling, 1714), 123.

<sup>87</sup> *Ibid.*, 119.

<sup>88</sup> John Marshal, "A Letter from the East Indies, of Mr John Marshal to Dr Coga, Giving an Account of the Religion, Rites, Notions, Customs, Manners of the Heathen Priests Commonly Called Bramines," *Philosophical Transactions* 22 (1700): 737.

only, as they say, to uphold and nourish Pride and Luxury. For, say they, every Country in the whole world is sufficiently endow'd by Nature with everything that is necessary for the life of Man, and that therefore it is madness to seek for, or desire, that which is needless and unnecessary.<sup>89</sup>

While it is very possible that Marshal was misunderstanding or misrepresenting the Brahmins, this is nevertheless revealing. Marshal's anecdote suggests that the Brahmins likely saw the very kernel of the European natural philosophical project of cataloguing the globe as pointless or even absurd. This perspective reminds us that understandings of these knowledge-making enterprises (and of what knowledge was, and what it was for) differed greatly among the various actors and agencies involved in the process. Natural philosophical knowledge might have often been produced by both Europeans and Indians, but in this time period, it was for a European audience and sensibility rather than a local one.

The potential for misinterpretation and the difficulty of examining English and French interactions with the Brahmins from solely European sources is significant. It is sometimes hard to distinguish between what the European surgeons and clergyman understood, knew they did not understand and, perhaps most problematically, what they merely thought they understood.<sup>90</sup> This problem of interpretation means that the mechanisms by which Brahmin knowledge was gathered could include unintended infiltration as well as deliberate appropriation. However, if the European surgeons and clergyman had the potential to misinterpret the Brahmins, this could result from deliberate actions on the part of the Brahmins as well as accident. The surgeons and clergymen do seem to have been aware that their Brahmin informants could have their own agendas in these knowledge-making interactions. As Browne noted with regard to the Curututee *Malab*:

This I gathered on a Mountain 20 mile[s] from Madrass call'd Tercucceanum, on which is a *Pagoda*, the *Bramins* of which have taught 2 strange White Birds to come every day at noon to eat ... By this Artifice they get much Money, making the superstitious believe their *Fables*, &c.<sup>91</sup>

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<sup>89</sup> Marshal, "A Letter from the East Indies, of Mr John Marshal to Dr Coga, Giving an Account of the Religion, Rites, Notions, Customs, Manners of the Heathen Priests Commonly Called Bramines," 737.

<sup>90</sup> Here I have in mind Robert Darnton, *The Great Cat Massacre and Other Episodes in French Cultural History* (New York: Basic Books, 1984).

<sup>91</sup> Petiver, "A Description of Some Shells Found on the Molucca Islands; Also an Account of Mr Sam Brown, His Fourth Book of East India Plants, with Their Names, Vertues," 944.

Browne is acknowledging that the Brahmins could be political operators, capable of deliberate deception in the explanations they offered. Anecdotes such as this further suggest that the Fort St George surgeons would have been selective in what they believed from their sources, and hence how they appropriated and selected information as they produced and recorded it.

Some of the natural philosophical interests of Europeans did overlap with Brahmin concerns, even if the locals' explanations could not necessarily be reconciled with an epistemology based on experimental natural philosophy. As Father de la Lane noted:

I do not perceive that they [the Brahmins] have any Knowledge of the Mathematicks, excepting Arithmetick ... As to Astronomy, there is a probability that it has been in use among our *Indians*. The *Brachmans* have the Tables of the ancient Astronomers, for calculating of Eclipses, and know how to make use of them ... [though] they are altogether ignorant of the Theory.<sup>92</sup>

The Jesuit ascribes the Brahmins practical knowledge but not epistemological credit, as they do not have the “theory” or explanations for the efficacy of their astronomical tables. This passage also reflects a common trope in which ancient India was reputed to have had a wealth of learning, but that these abilities in the sciences had been lost or diminished.<sup>93</sup> In the more practical and highly sought after realm of medical knowledge, the author thought:

The *Brachmans* have also Books of Physick, but they are not of so much use as they might be, because they have scarce any Knowledge of Anatomy. All their Skill consists in some Secrets and use of certain Simples, which they apply with Success.<sup>94</sup>

While the European author is dismissive of Brahmin anatomical knowledge, he does acknowledge that information about local “simples” (remedies or medicines) could have practical value. Overall, while these are not entirely accurate characterisations of the state of Brahmin mathematical, astronomical and medical knowledge, they are nevertheless indicative of the European attitudes that informed their interactions with locals and local knowledge traditions.

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<sup>92</sup> *The Travels of Several Learned Missioners of the Society of Jesus, into Divers Parts*, 116-7.

<sup>93</sup> *Ibid.*, 123.

<sup>94</sup> *Ibid.*

Knowledge-making exchanges between Indians and Europeans at Fort St George often revolved around useful “virtues” or properties, most commonly medical. Indeed, the correspondence shows there was a strong inclination towards indigenous medical knowledge.<sup>95</sup> Browne and Bulkley were, after all, surgeons which meant that they likely privileged certain types of knowledge and assessed information in medically-oriented ways. However, these preoccupations did not exclude interest in other sorts of practical uses such as dyes or oils, as apparent in Bulkley’s description of one of his samples: “*Cauhq Roy*, is calcined before used, and then given for the Hiccough. The Fakiers dye or stain their Clothes with it, to appear different from others. ‘Tis a Nodule, ochrerus, and holding Iron.”<sup>96</sup> The way Bulkley attributes a reason for the Fakiers’ actions is notable, and in this example the dye’s practical use is hybridised and given particular connotations by the inclusion of its meaning in local culture.

Information obtained from Indian informants may not have been entirely “local” at all, but could have already been modified before the surgeons and clergymen obtained it. Indeed, these were not necessarily simple encounters between two clearly demarcated spheres of knowledge or knowledge traditions, with Indians on one side and Europeans on the other. This can be seen in Browne’s revealing speculations on “Indian Ebony”:

I can’t as yet learn that the *Natives* use this in *Physick*, except here and there one, who use it as an ingredient in their *Cuddanee* (which is Decoctions for the *Pox*) which possibly they may have done in imitation of the *Portuguese*, who do the same.<sup>97</sup>

Previous encounters between Indians and other visitors to the Coromandel Coast could mean that in some cases the information that Browne was getting from local informants already contained a hybrid

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<sup>95</sup> For numerous examples of this see Petiver, “An Account of Part of a Collection of Curious Plants and Drugs, Lately Given to the Royal Society by the East India Company.”

<sup>96</sup> Woodward, *An Attempt Towards a Natural History of the Fossils of England*, vol. 2, 46.

<sup>97</sup> Petiver, “An Account of Mr Sam. Brown His Sixth Book of East India Plants, with Their Names, Vertues, Description, Etc.,” 1059.

of European and Indian knowledge. Feedback loops such as this would also have extended to the informants' repeated interactions with Browne, Bulkley, and Lewis, as the informants undoubtedly adapted their offerings based on what they perceived the surgeons and clergymen to want or expect.

While it is clear that the Europeans relied on local informants, they nevertheless maintained an ongoing vein of critical scepticism around the information these informants provided. As Browne wrote of a local plant, this "tree is to me new & tho ye natives assert yt [it has] no fruits yet am not willing to believe them. For it seems very incongruous for ye minutest plants to seed so noe less it does for trees."<sup>98</sup> The incorporation of local assertions was thus neither uncritical nor entirely credulous. Indeed, the attitude to informants' assertions was sometimes completely dismissive.<sup>99</sup> These kinds of judgments, though at times based on intuition, were often the result of trial and experimentation, in keeping with the principles of a European epistemology based on the new natural philosophy. As Browne recorded with regard to Shevanar calunga *Malab*, "this cures, they say, all sort of venomous bites and *Vonda guddee*: but against that of the *Cobree de Capello* 'twill do no good, as I have tried."<sup>100</sup> Like Suply with the elephant intestines, Browne made practical experiments, and included the results of these with the specimens that he sent to Europe. Repeating tests such as this one, on a snake indigenous to the Indian subcontinent, would have been impossible in Europe at the time, meaning that any contextual alterations embedded into his account would be inseparable once it left the Coromandel Coast.

The way that Europeans at Fort St George appropriated information from local informants often reflects the way they saw native knowledge as useful in a practical sense, but coupled with superstitious explanations for efficacy which needed to be addressed. As Browne wrote, also in conjunction with the

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<sup>98</sup> James Petiver to Samuel Browne, nd, British Library, Sloane MS 3333, fols. 174-6.

<sup>99</sup> Petiver, "An Account of Mr Sam. Brown His Fifth Book of East India Plants, with Their Names, Vertues, Description, &c," 1021-2.

<sup>100</sup> Petiver, "An Account of Mr Sam. Brown His Sixth Book of East India Plants, with Their Names, Vertues, Description, Etc. To These Are Added Some Animals, Etc.," 1061.

Shevanar calunga *Malab*, “the *Natives* ascribe very great *Sympathetical, Magical* and other *Metaphysical Operations*, to that part of this *Root* which grows towards the *North*.”<sup>101</sup> In this example, Browne offers the local explanations unadorned, with the expectation that the reader would implicitly reject them. At other times the surgeons and clergymen more explicitly ridiculed such claims. Browne described the Chaddai lakaree *Malab* as follows:

It’s of no use in *Physick*, but these People say that if the *Juice* of it be rubb’d on the Hands of any person and he stroaks the Breasts of a Woman, ‘twill cause her to love him; they are full of these ridiculous stories.<sup>102</sup>

This kind of dismissal is indicative of the general attitude among the Europeans toward supposedly fanciful or superstitious explanations, though this did not stop Browne, Bulkley and Lewis from recording them. Nor did it stop natural philosophers in London from eventually printing these cultural anecdotes in the *Philosophical Transactions*. The presence of cultural meanings alongside botanical information served to recontextualise the knowledge, such that a reader could associate a specimen with particular cultural practices that might in turn influence their opinion of its worth. Although ridiculed by the surgeons and clergymen, the informants’ explanations could thus infiltrate European accounts with their potentially problematic cultural associations only imperfectly erased.

As well as locally sourced information on potential virtues, Browne, Bulkley and Lewis frequently sought out and included names of specimens in the multiple local languages present at Fort St George. As Bulkley wrote to Petiver in February 1700, “I have now sent you a large collection wth their Malabar [Tamil] names, the next opportunity you will have ye Gentue [Telugu] alias Gentile names.”<sup>103</sup> Taking account of multiple local languages was important for accurate cataloguing, as other collectors may have

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<sup>101</sup> Petiver, “An Account of Mr Sam. Brown His Sixth Book of East India Plants, with Their Names, Vertues, Description, Etc. To These Are Added Some Animals, Etc.,” 1061.

<sup>102</sup> *Ibid.*, 1060.

<sup>103</sup> Edward Bulkley to James Petiver, 23 Feb 1700, British Library, Sloane MS 3321, fols. 28-9. These efforts took place prior to the consolidation of classification with Linnaean taxonomy.

already recorded specimens under different names. This made necessary local informants whose linguistic knowledge could provide indigenous names for specimens. Petiver suggested in a letter that Browne track down a man who “hath some knowledge of the Indian tongue, whose consultation (if yu do not already know him) may be of some use to you as concerning ye Indian names & vertues.”<sup>104</sup> Statements such as this, and the use of European languages for trading at the Fort, suggest that interactions with informants took place primarily in English and French, or through translators, rather than in local languages. Nevertheless, the Europeans also engaged in linguistic observations around the meanings of certain words, indicating they had at least partial knowledge of Tamil and Telugu. As Lewis noted, “the smooth, flat nutt (of wch I had sent you some before) was called Gairas but that is a name give them by the Portuguese, but by the Indians they are called Garakay; Kay or Kaya signifying a nutt or fruit.”<sup>105</sup> Languages and translation were thus key mediators of the direct and indirect transfer of Indian knowledge. Accurate cataloguing served to appropriate and historicise the Indian landscape by situating it within a world intelligible through European natural philosophy, and therefore render it less threatening. However, the infiltration of the semiotic characteristics of indigenous languages could undermine this, as local meanings were absorbed into European accounts, making them hybrid repositories of natural historical and cultural knowledge.

Interest in local languages was linked to the way that European interests at Fort St George at times became consciously ethnographic, an impulse to which linguistics and translation were also central. This translation process was intrinsically linked with missionary activity, and clergymen carried out most of the linguistic work at Fort St George in the period of this study. It is perhaps not surprising then

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<sup>104</sup> James Petiver to Samuel Browne, nd, British Library, Sloane MS 3332, fol. 9. In this paper I use “linguistic” in the general sense of the term—as broadly pertaining to languages and translation—rather than in the modern disciplinary sense.

<sup>105</sup> George Lewis to James Petiver, 5 Feb 1705/6, British Library, Sloane MS 4064, fol. 99.

that the most active of the Englishmen in this regard was George Lewis. As a reverend, Lewis was involved in this linguistic process probably more with conversion than academic knowledge production as his aim.<sup>106</sup> Lewis especially sought out Brahmin manuscripts and sent a substantial collection of these to Dr Arthur Chartlett and Dr Edward Bernard at the University of Oxford, his alma mater, in 1697.<sup>107</sup> Lewis listed the contents of this collection in an accompanying letter, of which a small snippet of the longer list reads:

A. The *Ramianum* or History of *Ram*, in the Sanscreeet Language and ye Grandum Character, i.e. the Character us'd by the Malabar Bramines.  
 A.2. The *Ramainum* in the modern Gentio or Tulinga Language.  
 ...  
 F. A Gentio book writ at the Request of an English Chief in those parts Containing 1. The Tulinga Alphabet, and their way of compounding it and making Syllables. 2. An erroneous & imperfect Account of the Coast of *Coromandell*, and of the Kings of *Golconda*. 3. Some of their ancient Stories of Fables; all in a fair Character.<sup>108</sup>

Lewis's collection was extensive, varied, and notably included translations in both the Tamil and Telugu languages. This collection represents what Lewis managed to acquire from his local contacts, almost certainly Brahmins themselves.

Though more closely linked to missionary activity than natural philosophical knowledge production, these manuscripts were subsequently shared with the Royal Society, who published Lewis's letter in the *Philosophical Transactions*.<sup>109</sup> In this, Lewis commented on the state of the process of translation occurring at Fort St George:

*Mr. Elihu Yale*, late Governor of this Place, got a learned Bramine to translate out of the *Sanscreeet* into the *Tulinga* Language some of their Sacred Books. But the Bramine in some measure abus'd him. However, he translated the whole Body of the *Gentio* Laws into the *Tulinga*; as likewise their

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<sup>106</sup> See Bartholomaeus Ziegenbalg and Johann Ernst Gründler, *A Letter to the Reverend Mr. Geo. Lewis, Chaplain to the Honourable, the East India Company at Fort St. George* (London: J. Downing, 1715).

<sup>107</sup> This letter survives in both a manuscript copy and a printed version. George Lewis to Arthur Charlett and Edward Bernard, 6 Sept 1697, Royal Society Archives, EL/L6/4; George Lewis, "Part of a Letter from the Reverend Mr. George Lewis, at Fort St. George ... Concerning Some Indian Manuscripts, Lately Sent to the University of Oxford," *Philosophical Transactions* 20, no. 236-247 (1698): 421-4. Lewis did not send this collection unsolicited, but was responding to an earlier request.

<sup>108</sup> *Ibid.*, 422-3.

<sup>109</sup> *Ibid.*, 423-4.

Account of the Creation of the World, taken out of the *Shastrum* or *Porane*, I am not certain which.<sup>110</sup>

Lewis indicates something of a lack of trust in the local translators, with the assertion that the Brahmin “in some measure abus’d him.” This may explain why Lewis included an alphabet and pronunciation guide for Tulinga in the collection of manuscripts, which would allow the Oxford scholars to go about mastering the language in order to make their own translations, and thereby circumvent the interference of the Brahmins. There was also a material component to this gathering of manuscripts and linguistic knowledge, in that one of the books Lewis sent was made of leaves of the Palma Malabarica, which Petiver identified by comparing it to other specimens sent to him from India.<sup>111</sup> In this manuscript, Indian religious and cultural knowledge was entangled with European natural historical information. The processes of hybridisation that this natural historical, linguistic and ethnographic knowledge went through in the contact zone of Fort St George thus left it—in this case, quite literally—multi-layered.

Returning to Suply with his scalpel—or rather his native assistants’ “hooked knives”—poised over the elephant, we can get a further sense of the way that the cosmopolitanism and diverse knowledge traditions at Fort St George could affect the way that surgeons and clergymen produced natural philosophical knowledge there. It is noteworthy that Suply identifies his assistants as Parriars. Contemporary Europeans often used the generic term “Parriars” to refer to groups of Indian peoples outside the caste system—those also sometimes known as untouchables. In the context of Fort St George, however, these Parriars were part of a group of the Punchum Bundum peoples, identifiable by the Telugu name Malawanlu (which I have preferred over Parriar in this paper for its specificity). The Malawanlu as a group appear to have been formed from indigenous southern hill tribes who had been subsumed into the social hierarchy at the lowest rung. The explanation for their lowly status was that their

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<sup>110</sup> Lewis, “Part of a Letter from the Reverend Mr. George Lewis, at Fort St. George ... Concerning Some Indian Manuscripts, Lately Sent to the University of Oxford,” 422.

<sup>111</sup> *Ibid.*, 423-4.

ancestors had, at some point in the mythical past, succumbed to the temptation to eat the sacred flesh of a cow. For this travesty they were unable to access religion directly from the Brahmins and had to employ their own Velluan priests.<sup>112</sup> This was also used as a justification for the way that the Malawanlu were often treated as little more than slaves, and it was the source of their reputation as eaters of carrion. These perceived faults meant it was a social necessity for higher castes to shun the Malawanlu and avoid physical contact. However, they were nevertheless considered competent labours, and especially skilled in wicker work.<sup>113</sup> This complex series of local social and political machinations is the reason that it was Malawanlu, and not a different group of workers, that the governor of Fort St George offered to supply to assist in the bloody work of cutting apart the elephant.

These Malawanlu played an important part in performing the dissection of the elephant, and hence in the production of natural philosophical knowledge that would eventually end up in the hands of Europe's top savants. What evidence we have for the Malawanlus' actions on the day of the dissection is limited, in that it comes solely from Suply's descriptions. Though Suply acknowledges the presence of the Malawanlu at the beginning of his account, they often disappear from the narrative, fading from the scene until it appears that Suply was working alone, the protagonist of the various autopsy actions: "In cutting it cross [the Kidney] I Observ'd a visible cavity, fill'd with a brown and viscous liquor."<sup>114</sup> It was very likely an Indian who did the actual cutting, though Suply's omission here is explicable in the way he is fashioning his own role in the dissection. Suply was undoubtedly attempting to present himself in the best light, and his representation of the Malawanlu is thus both consciously and unconsciously biased. Nevertheless, when the Malawanlu are explicitly acknowledged, these snippets are intriguing, and at times arresting:

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<sup>112</sup> Francis Buchanan Hamilton, *A Journey from Madras through the Countries of Mysore, Canara and Malabar* (London, 1807), 19-30.

<sup>113</sup> P. E. Connor, "Extract from the General Memoir of the Survey of Travancore," *Madras Journal of Literature and Science* 1 (1834): 6.

<sup>114</sup> Suply, "Anatomical Remarks Upon an Elephant open'd att Fort St George in November 1715," 5.

My Indians found a great heat issuing from the entrails and viscera. It was somewhat singular and diverting to see these savage anatomists go in and out of the Belly of this terrestrial whale, like Jonas, to wash themselves from the blood and filth in a little river that ran by our slaughter-house before they refreshed themselves when they came almost suffocated out of their Trojan Horse looking like so many Infernal Furies laden with their prey, or if you will as we sometimes see the Painters represent the [?] in Purgatory.<sup>115</sup>

Even in the typically paternalistic depiction of “my Indians,” Suply’s reliance on his assistants is evident. This picture is steeped in classical and Christian references, and Suply’s indulgences are almost over the top as he squeezes in allusions to Jonah and the Whale, the Horse of Troy and Purgatory. These references are also instances of self-fashioning, as Suply demonstrates his education in the classics and literary sophistication to a well-educated European reader. Suply is thus depicting the scene in a manner that he hopes would impress a European audience. However, these tropes also inadvertently serve to sanction the scene, bringing it into the purview of a world that Europeans knew and understood. Though likely not Suply’s conscious intention, by placing the Malawanlu alongside Jonah and the Trojan Horse, he was effectively historicising these “savage anatomists” into a larger Judaeo-Christian picture of the world. These similes, semiotic associations and familiar imagery ultimately serve to make the Indian presences in the account more palatable to a European audience. By bringing the Indian landscape into a Judeo-Christian worldview and making India both knowable and known, this process thus contributed, in the longer term, to European imperial efforts on the subcontinent.

The Malawanlu would not, of course, have seen the Christian and classical allegories Suply layered over his description of the carcass of the elephant, nor would these references have been meaningful to them. Their own understandings of elephants must have given a different cant to their day’s work, even if this perspective can only be speculated about. Elephants had key roles in local culture that stretched across the boundaries of the different linguistic groups and castes at the Fort. The elephant-attributed Ganesha was one of the most popular deities in the Hindu pantheon, as seen in Fig. 3:

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<sup>115</sup> Suply, “Anatomical Remarkes Upon an Elephant open’d att Fort St George in November 1715,” 10-11.



Fig. 3. *Ganesha*, ca. 1730, Bashohli painting, National Museum, New Dehli.<sup>116</sup>

In this painting, the god's elephant aspect is on full display, and he is depicted holding a divine lotus flower. Ganesha, who was given an elephant's head after having his original head removed by Shiva, was worshipped as a "remover of obstacles," revered for his intellect and wisdom, and was thought to oversee letters, learning, and the arts and sciences. Indians thus associated elephants both literally and metaphorically with knowledge and wisdom, and held them as sacred. Indian rulers drew on these connections to link elephants with royalty and often housed them in palaces and temples. Alongside this sacredness, Indians also saw elephants as useful; namely, having roles as war machines, in executions, and as palanquin bearers in processions. In these settings, live elephants were thus both practical and

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<sup>116</sup> For more on this painting see Paul Martin-Dubost, *Ganesha: The Enchanter of the Three Worlds* (Mumbai: Franco-Indian Research, 1997), 73. For more on cultural appropriations of elephants, see Wylie, *Elephant*, 62-113.

symbolic expressions of power and military force. These symbolic, religious and cultural associations suggest a particular poignancy to the scene of the dissection. As well as the necessity of having Malawanlu perform the actual operations on the elephant's sacred flesh, this was undoubtedly a scene fraught with culturally charged meanings that Suply may not have completely comprehended.

These cultural tropes nevertheless affected the way that Suply deliberately appropriated local knowledge of the elephant, as well as the way that local culture infiltrated and was unconsciously absorbed into his account. Suply concluded his dissection manuscript by offering several pages on local legends about the behaviour and personalities of elephants. Whether these stories were offered to Suply by his "savage anatomists," or by other Indians is unknown. Here Robert Darnton's ideas around cultural permeation are useful, specifically that meanings are inevitably drawn from surrounding culture.<sup>117</sup> In the context of natural philosophy at Fort St George, the surgeons and clergymen absorbed symbolic meanings from the cultures of those around them, if imperfectly. The French surgeon's sober and measured work of dissection, experiment and anatomical drawing is thus rounded out by more fantastical tales that draw on local cultural tropes around elephants. For his part, Suply seems to be aware of this apparent break in the narrative and shift in tone. As he tells the reader, "I shall conclude with some observations with relation to the sentiments and instincts of this animal, and some particulars which perhaps have not come to your knowledge: Take them as I had them."<sup>118</sup> Suply is indicating that he is repeating what he has heard, but leaving the judgement to the reader.

In the account, Suply suggests that Indians saw elephants as personable creatures, with high intelligence, excellent memory and vast wisdom:

For you know that the oriental Indians seriously believe that Elephants understand and love flattery &c. for which reason they invent and compliment them with most magnificent titles to cajole and render them tractable and gentle.<sup>119</sup>

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<sup>117</sup> Darnton, *The Great Cat Massacre and Other Episodes in French Cultural History*, 99.

<sup>118</sup> Suply, "Anatomical Remarks Upon an Elephant open'd att Fort St George in November 1715," 18.

<sup>119</sup> *Ibid.*, 22.

These tales depict friendships and understandings between humans and elephants that blur the line of the supposed gap between human and non-human animals.<sup>120</sup> Indeed, in these depictions Indians were seen to anthropomorphise elephants, attributing to them a number of human traits, especially stubbornness and playfulness. While Suply warns of the potential for the fantastical in these tales, he nevertheless incorporated local knowledge into his account. These stories and cultural tropes, placed alongside the anatomical details of the elephant, act to recontextualise the information in Suply's account. This sort of layering was key to the way that natural philosophical knowledge from the Coromandel Coast could be modified and hybridised as it was produced in the contact zone at Fort St George.

### **Conclusions: The Imperfect Silencing of the “Savage Anatomists”**

The dissection of another elephant by Royal Society fellow William Stukeley in 1720 was a less arduous task than Suply's had been. This was because Stukeley's specimen was considerably smaller. Like Suply, Stukeley performed his autopsy in the open air, but instead of on an Indian riverbank, this later dissection took place in the central London garden of Hans Sloane.<sup>121</sup> What the neighbours thought of this turn of events is unknown, though given Sloane's enthusiasm for all things natural historical, it was perhaps not an especially unusual occurrence. It may seem ironic, in an account advocating shifting the focus to nodes of empire, to end the story at the heart of a metropolitan imperial centre, half a world away from the place this natural historical knowledge was originally produced. However, the way natural philosophers received and used information, such as Suply's elephant account, after it had left

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<sup>120</sup> Questions around non-human selves are beyond the scope of this paper, but would potentially offer interesting perspectives. For scholarship in this vein, see Eduardo Kohn, *How Forests Think: Toward an Anthropology Beyond the Human* (Berkeley: University of California Press, 2013).

<sup>121</sup> The London elephant was sent from the East India Company factory at Bencoolen (now Bengkulu City) in Sumatra. The creature had been exhibited in London as a curiosity until it died, in Stukeley's estimation, from inadequate knowledge on the part of its keeper relating to the creature's food and housing, and the propensity of spectators to give it ale. Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 91. For more on Stukeley, see David Boyd Haycock, *William Stukeley: Science, Religion and Archaeology in Eighteenth-Century England* (Woodbridge: The Boydell Press, 2002).

the contact zone, is instructive. It shows us which elements of the story are lost in the process of dissemination, and hence what can only be understood by engaging with the particular local spaces of colonial port cities such as Fort St George. During dissemination, the processes of appropriation and infiltration in which interactions between Europeans and Indians affected knowledge production are often rendered invisible, even in instances where the results remain visible. The particular ways that knowledge was made and modified in nodes of empire mean that if we begin the story of European knowledge production at the turn of the eighteenth century with the arrival of specimens and accounts in Europe itself, we have already missed half of the story.

Like Suply, Stukeley wrote an account of his elephant dissection, and published it in January 1722 as “An Essay Towards the Anatomy of the Elephant, from one Dissected at Fort St George Oct 1715 and another at London Oct 1720.”<sup>122</sup> In this account, Stukeley drew heavily on Suply’s description of the dissection of the elephant at Fort St George, interweaving the French surgeon’s observations with his own. Stukeley chose to provide the reader with measurements from the much more impressive Fort St George specimen rather than from his own more modest subject.<sup>123</sup> He also used the preparations that Suply had sent from the Coromandel Coast to inform his detailed anatomical drawings, such as the one seen in Fig. 4:

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<sup>122</sup> Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 89-93. Stukeley presented details of the dissection at a meeting of the Royal Society meeting on October 10, 1720.

<sup>123</sup> *Ibid.*, 90.

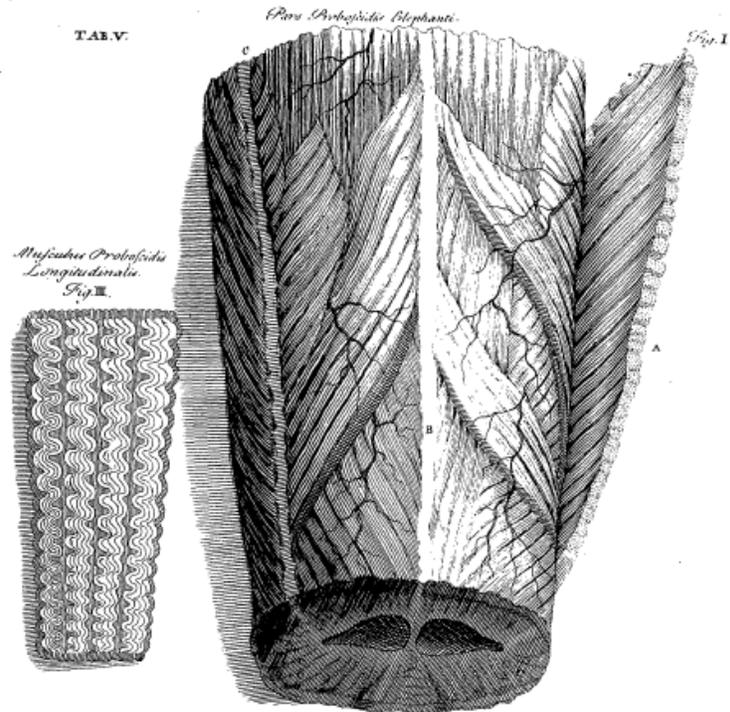


Fig. 4. Anatomical drawing of an elephant's trunk. From William Stukeley's "An Essay Towards the Anatomy of the Elephant, from one Dissected at Fort St George Oct 1715 and another at London Oct 1720" (1722).<sup>124</sup>

For this drawing, Stukeley added the following caption: "A piece of this *omentum* is delineated Tab. IV. Fig. I. as well as graving can imitate ... from the original pieces, prepar'd by *monsieur Suply*, and stretched upon paper, which are beautiful beyond imagination."<sup>125</sup> This bears out Suply's belief that the account he was producing had a wider audience, even if one that was, in practice, fairly narrowly constituted of European natural philosophers. It also demonstrates that his hope for intellectual and social recognition was not an idle dream, and that the networks of exchange and information flow were functional. In Stukeley's account, Suply the surgeon thus becomes a heroic proponent of the new natural philosophy.

But what of the Malawanlu? What traces of their presences and their interactions with Suply remain? What traces of the hybridisation of the knowledge of the elephant remain once it has left the

<sup>124</sup> Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 90.

<sup>125</sup> *Ibid.*, 94.

Coromandel Coast and crossed the ocean to London? Stukeley does note once in his text that Suply had the help of local assistants, but they are no longer identifiable as Malawanlu.<sup>126</sup> In his account, Stukeley repackaged information about the elephant for a metropolitan audience who likely knew little of the cultural and geographical spaces of the Coromandel Coast, and almost certainly had no firsthand experience of them. By this stage in the dissemination process, the imprints of the “savage anatomists” are even fainter. The process that Suply began by projecting Jonah and the Whale and the Trojan Horse over the scene of the autopsy is taken a step further. The Malawanlu have been appropriated into a picture of the world that Europeans could understand and would increasingly seek to control. However, like Suply, Stukeley provides descriptions of elephant behaviour that reflect hybridisations of European and Indian knowledge.<sup>127</sup> Local knowledge and culture thus remain embedded in the account, even where the processes that put it there have been rendered invisible. The Malawanlu may have become silences in the text, but the effects of their roles in modifying knowledge of the elephant remain. Michel-Rolph Trouillot reminds us there are many ways these sorts of “silences” can be constituted, and hence many ways that they might be recovered.<sup>128</sup> Although we may never be able to extract the personalities of the individual Tamil, Telugu and Malawanlu informants from the silences of the archive, we can establish their presences in the narrative, the particular processes of knowledge production they were involved in, and the implications of this for the natural historical knowledge they helped produce. Even if the project of resurrecting local actors remains incomplete, these “savage anatomists” remind us that to properly understand European knowledge production in this period, we need to leave the drawing rooms of London and Paris behind, and look to the cosmopolitan spaces of nodes of empire such as Fort St George.

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<sup>126</sup> Stukeley, *Of the Spleen. To Which Is Added Some Anatomical Observations in the Dissection of an Elephant*, 99.

<sup>127</sup> *Ibid.*, 92.

<sup>128</sup> Michel-Rolph Trouillot, *Silencing the Past: Power and the Production of History* (Boston: Beacon Press, 1995).

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