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SCHOOL OF HISTORY, CLASSICS AND ARCHAEOLOGY

Spiritual Arithmetic

**Religion, social statistics and the making of an information panic
about widow-burning in India, c. 1750 – 1830**

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Submitted for the degree of Doctor of Philosophy,

2019

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Introduction

And Satan stood up against Israel, and provoked David to number Israel.
...And God was displeased with this thing; therefore he smote Israel. And David said unto God, I have sinned greatly, because I have done this thing: but now, I beseech thee, do away the iniquity of thy servant; for I have done very foolishly.

1 Chronicles 21:1-8

Was God hostile to the census? This is a question that many biblical commentators have found “bewildering”.¹ The bible gave no explanation for God’s anger or the plague he unleashed upon Israel as punishment for David’s count. It is unclear whether David’s sin was counting or following the devil’s instructions. Some conservative commentators have used these verses as the basis for a full-blown attack on scientific knowledge. In 1967 the religious broadcaster J. Vernon McGee berated Americans who trust “mathematics and not the maker. They trust computers and not Christ. They trust numbers and not the name of the Lord.”²

Certainly, the conflict between conservative religious beliefs and the social sciences has a long history. Faith is commonly cited as a key causal factor for the deficiencies of British statistical knowledge in the late eighteenth century. In her *History of the Modern Fact*, Mary Poovey suggests that at this time there was a “pervasive indifference to numerical information” which can be explained because it was “irrelevant to what many recognised as ‘truth’ or ‘value’.”³ Truths were ethical or theological and could not be measured quantitatively. The historian Gareth Stedman Jones argues that the conservative evangelical movement in Britain, hostile to the French revolution, was also antagonistic to French scientific government and the use of social mathematics to guide decision-making.⁴ Faced with the revolutionary threat from France, conservative evangelicals

¹ For a history of the commentary on this issue see chapter 3, Blaire A. French, *Chronicles through the Centuries* (Oxford: Wiley Blackwell, 2017).

² J. V. McGee, 'Thru the Bible', <<http://www.ttb.org>>, accessed May 28 2018.

³ Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: University of Chicago Press, 1998), 282.

⁴ Gareth Stedman Jones, *An End to Poverty?* (London: Profile Books, 2004), 64-87.

stressed the “peace of mind which Religion offers to all ranks indiscriminately”.⁵ Many in the British political elite seemed to be putting their faith in the Lord, not numbers.⁶

However, not all counting or social research was thought sinful by conservative British Christians. In 1802-4, as this thesis will explore, two clergymen organised a study in Bengal that was explicitly designed to produce an innovative set of social statistics. Both men were strongly evangelical. Reverend Claudius Buchanan was closely connected to the Church of England Clapham Sect evangelicals who clustered around William Wilberforce.⁷ The other, the missionary William Carey, was a Particular Baptist whose theological convictions were rooted in the evangelical Calvinism of the Bristol Baptist Academy.⁸ Both men shared the common late eighteenth-century evangelical view that the Protestant faith had been hollowed out by empty church rituals. Like others of their generation of Methodist, Baptist and Church of England evangelicals,⁹ they believed that faith was “revived” by direct experiential encounters with the gospel and the holy spirit.¹⁰ They preached conservative messages of hellfire, damnation and salvation. “The world was in darkness till Christ came”,¹¹ India was “wholly under the dominion” of the devil, and unless its people were saved, they “must go to hell”.¹² Both thought Christians had a duty to spread this message globally. They must “carry on... till all India, and the whole world, are obedient to the faith.”¹³ Yet neither man appeared to see any conflict between their conservative religious beliefs and the production of statistical information.

⁵ William Wilberforce, cited in Stedman Jones, *An End to Poverty?*, 83-4.

⁶ It has long been argued that Wilberforce and his circle were opposed to social research. See for example the chapter 'Historical Backgrounds' in Abram's classic methodological handbook: Mark Alexander Abrams, *Social Surveys and Social Action* (London: Heinemann, 1951), 23-26.

⁷ A. K. Davidson, *Evangelicals and Attitudes to India 1786-1813: Missionary Publicity and Claudius Buchanan* (Oxford: Sutton Courtenay Press, 1990); Stephen Tomkins, *The Clapham Sect: How Wilberforce's Circle Transformed Britain* (Oxford: Lion, 2010).

⁸ Brian Stanley, *The History of the Baptist Missionary Society, 1792-1992* (Edinburgh: Clark, 1992), 3.

⁹ Alec Ryrie, *Protestants: The Radicals Who Made the Modern World* (London: William Collins, 2017), 171-83; Catherine Hall, *Civilising Subjects: Metropole and Colony in the English Imagination, 1830-1867* (Oxford: Polity, 2002), 93.

¹⁰ Claudius Buchanan, *Sermons on Interesting Subjects* (Edinburgh: Ogle & Hamilton, 1812), 5-6; Eustace Carey and William Carey, *Memoir of William Carey, D.D.* (London: Jackson & Walford 1836), 59.

¹¹ Buchanan, *Sermons on Interesting Subjects*.

¹² Carey and Carey, *Memoir of William Carey*, 220-1.

¹³ Carey and Carey, *Memoir of William Carey*, 480.

The social question that interested Carey and Buchanan was the Hindu custom of widow-burning, known to Britons then as *suttee*,¹⁴ which many British officials at that time thought almost obsolete. Buchanan himself had never seen one, but unusually Carey had watched a woman burn three years previously. Returning from Calcutta, where he had been purchasing Bengali type for his printing press, on April 1st 1799 he came across a group of people gathered on a river bank preparing to cremate a body. Watching the widow lie down on the pyre with her husband's body, then be covered in cocoa leaves and butter and set alight left Carey "full of horror". The custom profoundly affected him emotionally and spiritually. Although described as a form of "perfectly voluntary" suicide by the widow and mourners, Carey felt the widow was being denied the chance of Christian salvation by this act and was effectively being murdered by her religion and her family.¹⁵

Three years after this chance encounter Buchanan and Carey began planning a survey of widow-burnings in Bengal that produced two sets of social statistics for 1803 and 1804. Why they decided to start counting has never been examined. It was no mean achievement. The counts took eighteen months to undertake, studied a relatively large area and employed a team of people, but was not financed by the East India Company. The Swiss historian Jörg Fisch has written the first global history of widow-burnings, showing that the custom was not unique to India. However he has noted that globally there is a real lack of sociological evidence, which makes it very difficult to prove how commonly it was practiced. For Fisch the counts in Bengal were vital evidence, as it was the first time anywhere in the world that widow-burning was "observed and surveyed with the help of modern bureaucratic methods."¹⁶

Carey and Buchanan's statistics were presented to the Governor-General in Bengal, but this data was not sent back to London by the Bengal administration, it was not archived by the Company in London, and therefore not included when Parliament compelled the Company to publish all its paperwork on sati in 1821. These early

¹⁴ The custom is often known as 'sati' but, although used by the Indian state, this label is controversial in some quarters as the term can be applied to any virtuous woman, so where possible I use the term 'widow-burning', which has for English readers the virtue that it makes clear what is at stake. For a fuller discussion of the issues see John Stratton Hawley, *Sati, the Blessing and the Curse: The Burning of Wives in India* (Oxford: University Press, 1994), 11-15.

¹⁵ William Carey, 'Letter to John Ryland, 1 April 1799', in George Smith, *The Life of William Carey, D. D* (London: J. Murray, 1885), 107-8.

¹⁶ J. Fisch, *Burning Women: A Global History of Widow Sacrifice from Ancient Times to the Present* (London: Seagull, 2006), 44.

statistics have subsequently sat apart from the later government figures and the only historical account of their genesis was written in 1859, as part of a history of the Baptist mission to India.¹⁷

A decade after Buchanan and Carey's counts, the East India Company started collecting its own official statistics. The first data was collected in 1815, and judicial statistics about the custom have been produced by the Indian state ever since.¹⁸ These official figures are much better known, but their production and reception has never been properly studied. The handful of historians who have examined both sets of figures have argued that the evangelical count was "completely independent of the state" and conducted "secretly."¹⁹ There are not thought to be any causal links between these two British counts. Yet both the evangelical and state counts were large-scale undertakings, occupying substantial resources, that were organised in the same city a few years apart.

This study asks why evangelicals used modern bureaucratic methods to study this obscure, rare custom and in what ways their statistical knowledge influenced how the British colonial state governed India. These two questions drive this inquiry, but behind both of them sit nagging questions about the audience for data at this time. Who were the intended audiences for the unofficial and official statistics and what was the impact of this new knowledge? How were the numbers understood within the British government, the Company and in wider public spheres, and did this reception in any tangible ways influence how the British governed or made policy?

This chapter introduces my approach to these questions. It begins with a look at information collection by European states in the nineteenth century, focussing particularly on what is known about the production of social statistics in Britain and in British colonial India. The rest of this chapter considers the audiences for numerical information, looking first at what sociologists, political theorists and historians have observed occurring when statistics are introduced to political debates and decision-making. The colonial state's widow-burning policies were intensely debated in India, Britain and by Protestants worldwide, and there is now an extensive historiography

¹⁷ John Clark Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission* (London, 1859).

¹⁸ Sardar Patel Bhavan and Sansad Marg, 'Report of the Committee on Crime Statistics', (29/06/2011 edn.; New Delhi: Ministry of Statistics & Programme Implementation, 2011). This report includes a table of crimes showing that there were zero widow-burnings in the years 2002, 2006, 2007 and 2009 in accordance with the Commission of Sati (Prevention) Act, 1987

¹⁹ Fisch, *Burning Women*, 232.

studying many aspects of these debates. Therefore, the final two sections of this chapter define the parameters of this particular study, establishing how it relates to previous studies of widow-burning and then asking what is known about the role of data in political campaigns organised by evangelicals. The chapter concludes with a brief discussion of sources and methods.

Deficient numbers? British social statistics before the 1830s

At the end of the nineteenth century Britain led the world both in the science and production of social statistics.²⁰ British scientists and mathematicians were making fundamental methodological leaps, introducing new methods for sampling large data-sets that are still in common use today. Indeed the work of Cambridge and London academics, such as Francis Galton, Karl Pearson, William Jevons and Francis Edgeworth, was so significant for the discipline that Stephen Stigler, in his history of statistical methods, call this the era of “the English breakthrough”.²¹ Alongside these intellectual developments the British state was producing vast quantities of social data. Comparing Britain with its European and North American peers, the historian Oz Frankel has noted that “the accumulation of social knowledge was an endeavor in which the British excelled...[this was] a project that was particularly British.”²² Indeed the sheer amount of information being produced by government agencies was itself becoming a problem, and in 1881 the Treasury set up a committee to review and simplify the vast quantities of statistical information supplied to Parliament from official sources.²³ In some ways the over-supply of data was a welcome problem, because only a few years earlier many British social statistics were thought to be deficient. In 1856 Lord Brougham told Parliament that he considered “our judicial

²⁰ T. M. Porter, *The Rise of Statistical Thinking : 1820-1900* (Princeton: University Press, 1986), 37.

²¹ Stephen M. Stigler, *The History of Statistics: The Measurement of Uncertainty before 1900* (Cambridge, Mass.; London: Harvard University Press, 1986), 266-362; Stephen M. Stigler, *Statistics on the Table : The History of Statistical Concepts and Methods* (Cambridge, Mass.: Harvard University Press, 1999), 13-141.

²² Oz Frankel, *States of Inquiry : Social Investigations and Print Culture in Nineteenth-Century Britain and the United States* (Baltimore, Md.: Johns Hopkins University Press, 2006), 40.

²³ Tom Crook, *Governing Systems : Modernity and the Making of Public Health in England, 1830-1910* (Oakland: University of California Press, 2016), 63.

statistics to be at the opposite point from the French, and to be the very worst which any country affecting to have such returns possesses”.²⁴

The rise of British social statistics from comparative deficiency to international prominence has been well-charted. Perhaps because social statistics are a key intellectual technology of the modern state, many historians have examined the rise of quantification in the nineteenth century, and Britain has been “especially well-served”²⁵ with historical studies. The historian Tom Crook recently identified three principal reasons why historians believe the British state became the pre-eminent producer of statistics in the late nineteenth century. First, Britain established the world’s first scientific institutions dedicated to statistics; second, in the middle of the century the British government effectively centralized its bureaucracy; and third, the British establishment was spurred into decisive action because of intense rivalry with France.²⁶ These developments all took place after 1830. In this thesis I will be arguing that British social statistics collected before this date have been somewhat overlooked. To understand why this is so first we need to look at the significance of these post 1830s developments, before looking at why British statistical knowledge before the 1830s has for so long been characterised as deficient.

The emergence of scientific institutions dedicated to the study of statistics has long been recognised as a fundamental reason why Britain nurtured so many statistical innovations in the late nineteenth century.²⁷ Many prominent statisticians have been interested in the history of their science,²⁸ and in the 1930s the *Journal of the Royal Statistical Society* commented that “No student of method” should ignore the history of the discipline.²⁹ In that spirit the society published its *Annals* in 1934, celebrating the centenary of its foundation.³⁰ The Royal Statistical Society argued that its formation, in

²⁴ ‘Judicial Statistics’, House of Lords, *Hansard Third Series*, 140: 1674-99 (3 March 1856).

²⁵ Tom Crook and Glen O’Hara, *Statistics and the Public Sphere: Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011), 2.

²⁶ Crook, *Governing Systems : Modernity and the Making of Public Health in England, 1830-1910*, 63-69.

²⁷ The best comparative study of the role played by statistical scientific institutions in different nations remains Porter, *The Rise of Statistical Thinking : 1820-1900*, 23-39.

²⁸ In the 1920s and '30s the two most prominent mathematicians working in the field both devoted substantial time to writing histories of the discipline. Karl Pearson and E. S. Pearson, *The History of Statistics in the 17th and 18th Centuries against the Changing Background of Intellectual, Scientific and Religious Thought : Lectures by Karl Pearson Given at University College, London During the Academic Sessions 1921-1933* (London: Griffin, 1978); Harald Westergaard, *Contributions to the History of Statistics* (London: King, 1932).

²⁹ ‘Harald Westergaard, 1853-1937’, *Journal of the Royal Statistical Society*, 100/1 (Jan 01 1937), 149-150

³⁰ James Bonar, *Annals of the Royal Statistical Society, 1834-1934* (London, 1934).

London on 15 March 1834, was a key turning point for the science. The new institution brought together a disparate community of mathematicians, politicians and professional social scientists, it held regular meetings and published an influential journal. The economists, scientists and politicians who gathered for the inaugural meeting at the Horticultural Hall hoped that “accurate knowledge of the actual condition... of Society” would enable the state to improve its “prospects”.³¹ They believed there could be a science of society, like there was a science of agriculture, which would lead to improvements for all. Historians have tended to agree with the Royal Statistical Society’s self-assessment, but have broadened the story, noting that within a short time, similar societies had opened in Manchester, Ulster, Bristol and Falmouth, and what became known as the British ‘statistical movement’ had begun.³²

The centralisation of Britain’s state bureaucracy in London was the second reason why Britain became a statistical powerhouse. With the establishment of the General Registrar Office (GRO) in 1837, the Public Records Office in 1838, the Design Registry in 1839, the Patent Office in 1852 and the Land Registry in 1862, over twenty-five years the British state reconfigured itself into a data collection machine. In his account of this process, the historian Edward Higgs has stressed that the initial impetus behind these bureaucratic reforms was not primarily statistical.³³ The British government placed its record keepers in Somerset House close to the Inns of Court, with the hope that the availability of well-managed, centralized records of rights and ownership, previously kept locally in county and parish records, might speed-up legal disputes. However, the new bureaucracies quickly extended their remit from a narrow legal focus on land and property, to recording the lives of the people.

These scientific and bureaucratic developments directly influenced one another. The career of William Farr, the GRO’s first statistical superintendent, indicates this well. Farr began his career as a mathematically-minded doctor, interested in epidemiology. Before his appointment as a civil servant, he was a member of the

³¹ Royal Statistical Society, *Annals of the Royal Statistical Society, 1834-1934* (London, 1934), 11.

³² The classic historical accounts of the statistical societies are: Lawrence Goldman (1983), 'The Origins of British Social Science: Political Economy, Natural Science and Statistics, 1830-1835', *The Historical Journal*, 26 (3); Victor Hiltz (1978), 'Aliis Exterendum, or, the Origins of the Statistical Society of London', *Isis*, 69 (1); Michael John Cullen, *The Statistical Movement in Early Victorian Britain: The Foundations of Empirical Social Research* (New York: Harvester Press, 1975).

³³ Edward Higgs, *The Information State in England : The Central Collection of Information on Citizens since 1500* (Basingstoke: Palgrave Macmillan, 2004), 64-98; See also: James Vernon, *Distant Strangers: How Britain Became Modern* (London: University of California Press, 2014), 53-69; Crook, *Governing Systems : Modernity and the Making of Public Health in England, 1830-1910*, 63-105.

London Statistical Society and had published essays on vital statistics. A powerful and effective bureaucrat, Farr turned the GRO's Statistical Department into England's principal producer of mortality data.³⁴ From 1837 the GRO recorded centrally English births, marriages and deaths. In that first year over a million records were collated. Under Farr's authority the statistical turn taken by the government's offices in Somerset House both reflected and then influenced the scientific agenda of the new statistical societies.

Rivalry with France was the crucial third factor. After the Revolution the French authorities had established the Bureau de Statistique with huge ambitions. Although its census of the population failed to produce usable data and the bureau was closed by Napoleon in 1811, this was only a temporary halt. From the 1820s French bureaucracies began to collect substantial quantities of data. Statistics on the health of army recruits were published from 1819, French judicial statistics were published from 1827, and the population census was reconstituted under the July Monarchy.³⁵ For much of the century, as Britain modernised its bureaucracy and established scientific institutions, its politicians and social scientists were driven by a sense that they were playing catch-up with France. This lingering sense in Westminster that Britain was the underdog made the development of a modern state bureaucracy and the publication of comprehensive datasets a matter of national prestige.

If the story of British statistics from the 1830s is about its rise to global pre-eminence, the story before that date was for many years characterised by statisticians and historians as decline and fall, after an early lead. The origin of the science is commonly traced back to fourteenth-century population counts in Florence, but the greatest early steps forward are thought to have occurred in the seventeenth century, when an English school of political arithmetic led by John Graunt, William Petty, Edmund Halley, Gregory King and Charles Davenant hugely advanced the quantitative study of society.³⁶ Christened political arithmetic by William Petty, the new science

³⁴ Crook, *Governing Systems : Modernity and the Making of Public Health in England, 1830-1910*, 69-74.

³⁵ Porter, *The Rise of Statistical Thinking : 1820-1900*, 27-30.

³⁶ In the 1920s and 1930s the discipline contemplated its origins: Pearson and Pearson, *The History of Statistics in the 17th and 18th Centuries against the Changing Background of Intellectual, Scientific and Religious Thought : Lectures by Karl Pearson Given at University College, London During the Academic Sessions 1921-1933*; Westergaard, *History of Statistics*; James Bonar, *Annals of the Royal Statistical Society, 1834-1934* (London, 1934).

borrowed mathematical techniques from commercial book-keeping, astronomy, the measurement of the earth and methods for calculating probabilities, to make calculations about the population, wealth, life expectancy and health of the nation.³⁷

These mathematical methods were influential, particularly in Germany, but the ground-breaking techniques had little immediate impact in England. This historical judgement was shared by influential thinkers at the time. In the late eighteenth century the British were thought by statistically-minded Europeans to have an antipathy to this form of knowledge. Eberhard von Zimmermann, one of several Germans who introduced the word ‘statistics’ into English,³⁸ in the introduction to the British edition of his *A Political Survey of the Present State of Europe* (1787), noted that a new science “distinguished by the new-coined name of Statistics, is become a favourite study in Germany.”³⁹ He contrasted German statistical knowledge with the “very deficient” knowledge exhibited by Britons, and hoped that his book would help young British travellers as they embarked upon grand tours

For much of the twentieth century statisticians and historians largely agreed with Zimmermann that, compared with other European states, British social statistics before the 1830s were deficient. The statistician Harald Westergaard called his chapter on the eighteenth century “the stagnation of political arithmetic.”⁴⁰ Various reasons have been given for this perceived decline. The economist Joseph Schumpeter argued that in the eighteenth century “the vast majority forgot” political arithmetic.⁴¹ This was a period of administrative torpor, the methods of political arithmetic were notoriously unreliable and the “slack period of social thought” was seen as coinciding with a slack period in

³⁷ A. Hald, *A History of Probability and Statistics and Their Applications before 1750* (New York: Wiley, 1990); A. Hald, *A History of Mathematical Statistics from 1750 to 1930* (New York ; Chichester: Wiley, 1998); Stigler, *The History of Statistics : The Measurement of Uncertainty before 1900*.

³⁸ The word first appeared in a translation of Baron Bielfeld’s *Elements of Universal Erudition* (1770), where ‘statistic’ was defined as the “the science of the political system of the different states of the world”. The first practical examples of German statistical science appeared in the late 1780s. Baron de Hertzberg’s two discourses, *On the Population of States in General* and *On the True Riches of States* (1786) featured “statistic tables” on European population density. Zimmermann’s book appeared a year later.

³⁹ Eberhard August Wilhelm Von Zimmermann, *A Political Survey of the Present State of Europe* (Dublin: White, 1788), ii.

⁴⁰ Westergaard, *History of Statistics*, 44.

⁴¹ Joseph Alois Schumpeter, *History of Economic Analysis* (Allen & Unwin, 1954), 211. Similar arguments are made by William Louis Letwin, *The Origins of Scientific Economics. English Economic Thought, 1660-1776* (London: Methuen & Co., 1963), 140. More recently, T. W. Hutchison, *Before Adam Smith : The Emergence of Political Economy. 1662-1776* (Oxford: Basil Blackwell, 1988), 54.

scientific thought.⁴² The slack period was thought to have lasted well into the nineteenth century.

There are good grounds for these well-established judgements. Compared with other European states, in the nineteenth century the British state was slow to produce social statistics and slow to develop its empirical social sciences.⁴³ Data about suicide, one of the founding topics of social statistics and sociology, make the comparative deficiencies clear. In chapter one of Emile Durkheim's famous sociological study of suicide published at the end of the nineteenth century, he produced a table showing 'suicide rates in the main European countries, in absolute figures'. The table begins in 1841 with official statistics from France, Prussia, Saxony and Denmark, but there is a long empty column for English suicide figures, which do not appear until 1857, when 1,349 suicides were recorded. Olive Anderson, the historian who has written the definitive study of the collection of English suicide statistics in the nineteenth century, noted that compared with other European countries, "English official statistics... got off to a slow start."⁴⁴

Slow to collect data, the British political classes were also slow to start using it. An initial study I undertook into the use of suicide data in parliamentary debates showed that politicians did not use quantitative data to comprehend British suicides until the middle of the nineteenth century. In Hansard's records the first suicide statistics collected in England were debated in Parliament in 1841, when MPs discussed a detailed set of figures for suicides and attempted suicides in the lakes of Regent's Park, St James' and Hyde Park.⁴⁵ MPs used this small dataset to understand a local problem, the rising numbers of suicides in central London parks. It would be over thirty years

⁴² G. N. Sir Clark, *Science and Social Welfare in the Age of Newton* (Oxford: Clarendon Press, 1937), 144-5.

⁴³ See T.M. Porter, 'Statistical and Social Facts from Quetelet to Durkheim', *Sociological Perspectives*, (1995), 15-26; Lynn McDonald, *The Early Origins of the Social Sciences* (McGill-Queen's University Press, 1993); Martin Bulmer, *Essays on the History of British Sociological Research* (Cambridge: University Press, 1985); Lawrence Goldman, 'The Origins of British 'Social Science': Political Economy, Natural Science and Statistics, 1830-1835', *The Historical Journal*, 26/3 (Sep 1 1983), 587-616. Raymond A. Kent, *A History of British Empirical Sociology* (Aldershot: Gower, 1981). R.D. Goldney, J.A. Schioldann, and K.I. Dunn, 'Suicide research before Durkheim.', *Health and History*, (Jan 1 2008). For a sociologist's perspective on this history, see Zohreh Bayatrizi, 'Counting the dead and regulating the living: early modern statistics and the formation of the sociological imagination (1662-1897)', *The British Journal of Sociology*, 60/3 (Sep 1 2009), 603-621. The most useful gathering of texts thought canonical by sociologists can be found in Anthony Giddens, *The Sociology of Suicide: a Selection of Readings* (London: Cass, 1971).

⁴⁴ Olive Anderson, *Suicide in Victorian and Edwardian England* (Oxford: Clarendon, 1987), 11.

⁴⁵ *Hansard*, 3s, 59: 685-691 (21 September 1841).

before national suicide statistics were used by MPs to get an overview of a problem; in 1878 an MP asked a question about “the number of suicides and attempts at suicide” in convict prisons in Great Britain and Ireland, and for the first time a minister was able to answer confidently with national suicide statistics gathered from prisons across the UK.⁴⁶ As the graph below demonstrates, summarising my study of Hansard, from the 1880s onwards the number of parliamentary debates featuring suicide statistics or discussing rates of suicide rose sharply, reflecting the growing importance of social data in British politics.

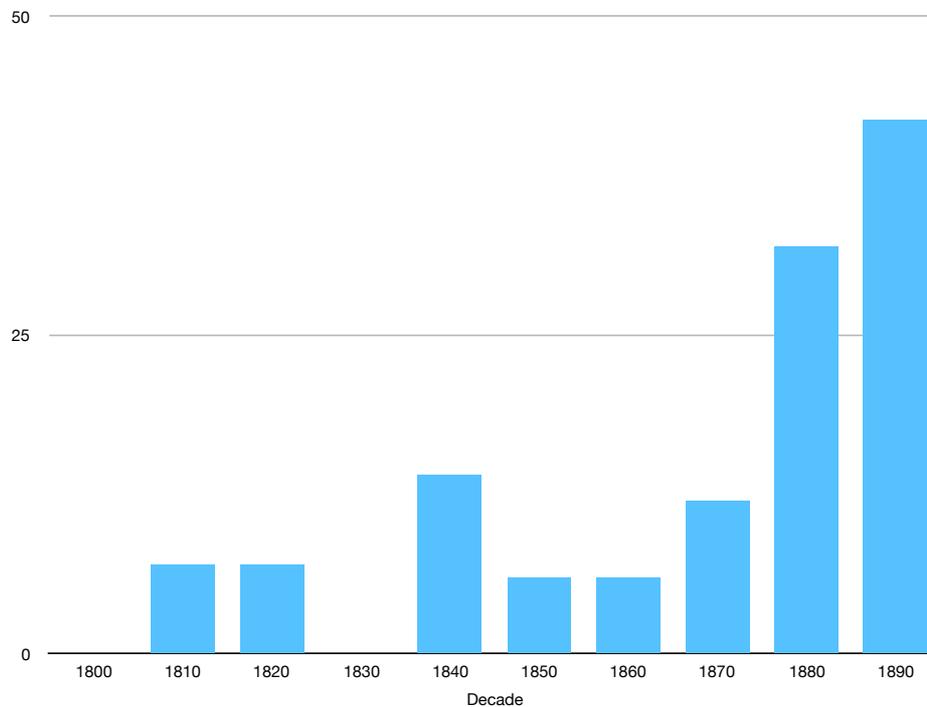


Fig. a: Graph showing the number of speakers in the House of Commons, recorded by Hansard, who used suicide statistics or discussed suicide rates, 1800-1900.

Before the 1840s, when suicide statistics were cited in debates, MPs were generally referring to European figures. For example, in 1817 Scrope Bernard-Morland noted that, “the lotteries occasioned, in Paris, 100 instances of suicide in the course of the year”.⁴⁷ In 1828 Sir James Mackintosh suggested that the suicide rate was “less frequent

⁴⁶ *Hansard*, 3s, 242: 1174 (5 August 1878).

⁴⁷ *Hansard*, 1s, 35: 1169-1190 (18 March 1817).. On early uses of suicide statistics in France see Anthony Giddens, *The sociology of suicide : a selection of readings* (New sociology library; London: Cass, 1971)

in England than any country in Europe” and thought that this was “capable of proof”.⁴⁸ But he could not prove it because unlike France at this time there were no national figures for suicides in England.

However, in the 1810s and 1820s there was a significant cluster of debates in Parliament featuring suicide statistics collected outside Europe. The first of these debates took place in 1813, when MPs cited data from Buchanan and Carey’s unofficial counts of the numbers of widows killing themselves on funeral pyres in Bengal in 1803-4. Eight years later, in 1821, when MPs returned to the topic of the suicide of Indian widows, they had access to tables of official figures produced by the East India Company state, which provided annual totals of widow-burnings across the whole of British India for four years from 1815-1818. Throughout the 1820s Parliament published and debated the East India Company’s statistical data about this topic.

The existence of these widow-burning statistics, collected annually by the British from a vast colonial territory and produced twenty years before the foundation of the statistical societies, raises many questions. Were the British perhaps more statistically-minded when running colonies than running domestic territories? Perhaps the emergence of political empiricism was as much a form of imperialism as the product of a new science? How were these early social statistics understood and used in British political debates? Was the decision to count this social question simply the result of scientific developments, and how should we account for religious motivations behind the first surveys of widow-burning?

A number of historians have questioned whether British statistical knowledge before the 1830s was really so deficient. We now know that the study of probability advanced rapidly in the eighteenth century,⁴⁹ and in certain areas of knowledge, such as medicine⁵⁰ and accounting,⁵¹ innovative mathematical tools were being developed. Historians have also discovered a great deal of official counting at a local level,

⁴⁸ *Hansard*, 2s, 18: 1612-1614 (21 April 1828).

⁴⁹ Lorraine Daston, *Classical Probability in the Enlightenment* (Princeton: University Press, 1996).

⁵⁰ Andrea Rusnock, *Vital Accounts : Quantifying Health and Population in Eighteenth-Century England and France* (Cambridge: Cambridge University Press, 2002).

⁵¹ B S Yamey (1949), 'Scientific Bookkeeping and the Rise of Capitalism', *The Economic History Review*, 1 (2/3).

particularly of vital statistics.⁵² Bills of mortality, the weekly counts of deaths, were first collected in London in 1592, and they continued to be produced and published throughout the seventeenth and eighteenth centuries. Bills of mortality were introduced in Glasgow in 1670, and Edinburgh in 1695. Data collection was embedded institutionally into central government with the establishment of the Board of Trade, the Inspector Generalship of Customs and the General Register of Shipping in 1696. These three bodies became prolific suppliers of numerical information in the eighteenth century. Indeed, rather than declining, the historian Julian Hoppit has shown that the use of numbers and numerical calculations in reasoning about government “was at least as common after 1700 as before and, indeed, after 1750 it became much more so.”⁵³ Hoppit concludes that long before the avalanche of statistics in the middle of the nineteenth century, the majority of government papers contained quantitative data. Alongside these national developments, the historian Edward Higgs has shown that the local state kept numerical records on social topics such as crime, civic populations and the size of military forces.⁵⁴

This study of the evangelical and East India Company’s widow-burning statistics aims to further widen our understanding of the role numbers played in British politics before the scientific developments of the 1830s, and to examine whether these colonial and missionary statistics were circulating in British and Indian public spheres or being used to inform political debates and decision-making.

Colonial knowledge

Colonial states in the modern bureaucratic age certainly produced huge quantities of statistical data, especially in India, where the British established a particularly large, and methodologically well-regarded, statistical bureaucracy. Indeed, as the anthropologist Bernard Cohn has observed, “for many British officials, India was a vast collection of

⁵² Rusnock, *Vital Accounts : Quantifying Health and Population in Eighteenth-Century England and France*; Peter Buck (1982), 'People Who Counted: Political Arithmetic in the Eighteenth Century', *Isis*, 73; Peter Buck (1977), 'Seventeenth-Century Political Arithmetic: Civil Strife and Vital Statistics', *Isis*, 68; D. V. Glass, *Numbering the People : The Eighteenth-Century Population Controversy and the Development of Census and Vital Statistics in Britain* (Farnborough: D. C. Heath, 1973).

⁵³ Julian Hoppit (1996), 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 49 (3), 519.

⁵⁴ Higgs, *The Information State in England : The Central Collection of Information on Citizens since 1500*, 28-63.

numbers.”⁵⁵ Much of Cohn’s work studies how colonial authorities used knowledge to rule. He argues that this tendency to count, which he called the ‘enumerative modality’, was one of the principal ways that colonial powers used knowledge to contain, dominate and refashion their colonies.⁵⁶ Cohn saw the collection of social statistics as a fairly straightforward continuation of well-established practical habits; the British counted the peoples they ruled in India because they had always counted goods and money.⁵⁷ However, the history is more complex than this sketch suggests.

The Company had always counted its transactions, but its financial information was notoriously unreliable, and it was not until the late eighteenth century, in the wake of the Warren Hastings scandal, that the British Parliament demanded that the East India Company adopt modern accounting practices to make it financially accountable. From 1773 it was statutorily obliged to produce half-yearly financial statements, whilst an annual ‘East India’ budget was presented to the House of Commons from 1788.⁵⁸ This was nearly seventy years before English joint stock companies were required to produce annual accounts.⁵⁹

While the East India Company led British business in the production of annual accounts, it was slow to organise a census. It is now known that counts of the population preceded the British empire,⁶⁰ and one-off city counts were produced by the British from the turn of the century, but an All-India census was not produced until 1871, seventy years after France and Britain counted their home populations.⁶¹ For most of the century population figures for India were little more than a guess. In one

⁵⁵ Bernard S. Cohn, *Colonialism and its forms of knowledge : the British in India* (Princeton, N.J.: Princeton University Press, 1996), 8

⁵⁶ This argument is also made by Arjun Appadurai, 'Number in the Colonial Imagination', in Carol A. Breckenridge and Peter Van Der Veer (eds.), *Orientalism and the postcolonial predicament : perspectives on South Asia* (Philadelphia: University of Pennsylvania Press, 1993).

⁵⁷ This claim is echoed by Mary Poovey (2004), 'The Limits of the Universal Knowledge Project: British India and the East Indiamen', *Critical Inquiry*, 31, 183-202.

⁵⁸ H. V. Bowen, *The Business of Empire: The East India Company and Imperial Britain, 1756-1833* (Cambridge: Cambridge University Press, 2006), 73.

⁵⁹ For an account of the fraud cases that led to this change in company law see James Taylor, 'Numbers, Character and Trust in Early Victorian Britain: The Independent West Middlesex Fire and Life Assurance Company Fraud', *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011).

⁶⁰ Sumit Guha (2003), 'The Politics of Identity and Enumeration in India C. 1600-1990', *Comparative Studies in Society and History*, 45 (1); Norbert Peabody (2001), 'Cents, Sense, Census: Human Inventories in Late Precolonial and Early Colonial India', *Comparative Studies in Society and History*, 43 (4).

⁶¹ Peter Gottschalk, *Religion, Science, and Empire: Classifying Hinduism and Islam in British India* (Oxford: University Press, 2012), 188-94.

parliamentary debate in 1821 two senior British politicians, William Wilberforce and George Canning, cited figures which differed by 20 million.⁶² Claims that the colony's statistical regime developed from its accounting practices would, therefore, need to explain a significant time lag.

Several specific explanations have been given for the poor state of colonial demographics before 1871. The anthropologist Arjun Appadurai argues that the delay indicates that the possession of territorial assets mattered more to colonisers than people, noting that the colonial mapping and measurement of land preceded the counting of populations.⁶³ Others argue that there was a lack of expertise. The British state in India became statistically minded several decades after the government in Whitehall, because the diffusion of knowledge and expertise from centre to periphery was slow. It took time for the Indian civil service to recruit expatriate statistical experts who could scientifically administer medicine, military intelligence and politics.⁶⁴ The India census also had a specific difficulty that caused delays; the authorities wanted to ask questions about religion but fears of social unrest led them to abandon the project several times.⁶⁵

Yet, as this dissertation highlights, the East India Company was able to produce widow-burning statistics from 1815. Because the state was slow to establish a census, its bureaucracy has been characterised as statistically backward, yet the administration produced regular annual statistics for the suicide of widows several decades before most European states were able to count suicides in their jurisdictions. In 1815 European data for suicide was only available from Sweden and a handful of German states and cities, notably Prussia and Hamburg.⁶⁶ Placed alongside similar European social statistics, the collection of annual suicide statistics for widow-burnings looks ambitious, early and highly innovative. Seemingly without statistical experts, the Company successfully collected data from across British India and produce statistics year after year, counting a religious custom few Britons had previously witnessed.

⁶² *Hansard*, 2s, 5: 1217-1222 (20 June 1821).

⁶³ Appadurai, 'Number in the Colonial Imagination'.

⁶⁴ C. A. Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, C 1780-1870* (Cambridge: Cambridge University Press, 1996), 220.

⁶⁵ Gottschalk, *Religion, Science, and Empire*, 182-224.

⁶⁶ Table 1: 'Number and Increase of Suicides in the Principal States of Europe, from 1816 to 1877' in Henry Morselli, *Suicide: An Essay on Comparative Moral Statistics* (London: Kegan Paul, 1881), 18-19.

This was a complex bureaucratic undertaking. The Company's bureaucracy was changing rapidly, as it moved from being a purely commercial operation to ruling vast territories. Administrative reforms were needed because, as the Governor-General Richard Wellesley wrote, "the civil servants of the English East India Company can no longer be considered as the agents of a commercial concern: they are in fact the ministers and officers of a powerful sovereign... Their duties are those of statesmen in every other part of the world."⁶⁷ The Company reformed its bureaucracy several decades before the expansion of Whitehall, leading some historians to argue that the modern British liberal state, utilitarian and empirically minded, was developed in the task of governing Bengal.⁶⁸

The historian H.V. Bowen has produced the most comprehensive modern study of the company's central bureaucracy, which was based in the City of London, on Leadenhall Street. Bowen portrays the organisation as lean but sophisticated, well able to cope both with new demands for financial transparency and ruling an empire. His study focuses on management structures, filing systems and letter-writing techniques, but does not examine the ways in which the Company collected numerical data. Unusually Bowen puts the office and its everyday practices at the heart of the matter, but he does not explore how information actually flowed through the organisation or whether the new administrative procedures influenced how directors, investors and government actually made decisions.⁶⁹

Those who study the Indian end of this bureaucracy characterise things a little differently. The East India Company began training its own civil servants to become statesmen in 1800. The aims were lofty, but in practice, as the historian Chandak Sengoopta has noted, the Company's colleges in India taught little more than language classes.⁷⁰ Bernard Cohn stressed the indolence of many young civil servants, observing that although Political Economy was on the curriculum, many "students were not

⁶⁷ 'Extracts from Governor General's notes with respect to the foundation of a College at Fort William' IOR/H/487 1781-1803 Educational establishments in India.

⁶⁸ Eric Stokes, *The English Utilitarians and India* (Oxford: Clarendon Press, 1959). Bart Schultz and Georgios Varouxakis, *Utilitarianism and Empire* (Lexington Books, 2005). Uday Mehta, *Liberalism and Empire: A Study in Nineteenth-Century British Liberal Thought* (Chicago, Ill. ; London: University of Chicago Press, 1999).

⁶⁹ Bowen, *The Business of Empire*, 151-81.

⁷⁰ Chandak Sengoopta, *Imprint of the Raj: How Fingerprinting Was Born in Colonial India* (London: Macmillan, 2003), 39-40.

interested in learning what was taught them”.⁷¹ These were young men, and many of them gambled, drank and got into debt. This indolence only intensified after graduation. Jon E. Wilson’s detailed study of the operation of the legal bureaucracy in Bengal has shown that whilst officials working in the central criminal courts developed a whole apparatus of orientalist knowledge to codify Indian legal traditions, magistrates at the frontline often failed to even open the books and instructions supplied from the centre, relying instead on intuition and personal judgements.⁷² In his influential essay ‘Not at Home in Empire’ Ranajit Guha described the pervasive anxieties of colonial officials, who lived in constant fear of the locals.⁷³ These anxieties produced violent emotions, and in this context it is impossible to see bureaucrats operating purely rationally.

Such irrationalities can be explained as one consequence of being dislocated to the periphery of an empire, but studying the development of the nineteenth-century state in Whitehall, the historian Patrick Joyce argues that that we also need to understand the irrationalities at the heart of the liberal state. Joyce explores how the technologies of liberalism – the postal network, imperial filing systems – remade social relations, creating new human experiences and emotional realities alongside new material operations. He argues that the business of governing is highly emotional and called for a recognition that “as well as calculations and calculability” there are “governing passions” at work in the modern state.⁷⁴ We should not assume that officials made irrational, emotional decisions at the periphery and purely rational ones at the centre.

In Britain the state became more statistical over 150 years, gradually centralizing data that was already being collected locally. In India the rise of British statistical thinking is far more clearly delineated. It is possible to date with great precision when the first set of figures on Indian widow-burnings were published. This sharp transition provides an opportunity to study the forces that led Britons to start counting and to study whether the introduction of statistics changed how people thought, made decisions and acted.

⁷¹ B. S. Cohn, 'The Recruitment and Training of British Civil Servants in India 1600-1800', *The Bernard Cohn Omnibus* (Oxford University Press, 2004), 539.

⁷² Jon E. Wilson, *The Domination of Strangers: Modern Governance in Eastern India, 1780-1835* (Basingstoke: Palgrave Macmillan, 2010).

⁷³ Ranajit Guha (1997), 'Not at Home in Empire', *Critical Inquiry*, 23 (3).

⁷⁴ Patrick Joyce, *The State of Freedom : A Social History of the British State since 1800* (Cambridge: Cambridge University Press, 2013), 12.

Making decisions

“Don’t treat people like numbers” goes the adage. The French anthropologist Catherine Weinberger-Thomas argues that counting widow-burnings profoundly changed how British officials thought, felt and acted towards the people they governed. Indian women were dehumanised and reduced to mere numbers:

“The stuff of human experience is made to vanish into a new world of statistics. Numerical analysis drains off all emotion, starting with that of unspeakable horror. Once again, entries in the logbooks of memory are placed in the service of oblivion. Satis burned alive before people’s eyes are transformed into paper satis.”⁷⁵

This claim, that statistical knowledge shuts down emotions, especially empathy, is common and almost as old as the science itself. Dickens satirised the tendency twice, in the *Mudfog Papers* and *Hard Times*.⁷⁶ In the 1920s the sociologist Max Weber argued that “calculability of results” was of paramount importance for modern bureaucracies. He theorised that bureaucrats dehumanized the people they managed as they abstracted them into algorithmic calculations. He saw catastrophic consequences for decision-making, because it became detached from emotions such as “love, hatred, and all purely personal, irrational and emotional elements which escape calculation”.⁷⁷

That numbers make decisions more rational is a deeply entrenched view. In 1698 Charles Davenant argued, in his famous essay ‘On the use of Political Arithmetic’, that computation made governments more rational, because it enabled decision-makers to consider more variables. Tax yields could be calculated more precisely and decisions about whether to fight wars could be made more safely, based on proper knowledge of the capacities of the country, its enemies and allies. 140 years later the Statistical Society of London had similar aims. Its founders declared that “accurate knowledge of

⁷⁵ Catherine Weinberger-Thomas, *Ashes of Immortality : Widow Burning in India*, trans. Mehlman, J. and D.G. White (Chicago: University of Chicago Press, 1999), 208.

⁷⁶ Charles Dickens, *Mudfog and Other Sketches* (Toronto: AUK Classics, 2012); Charles Dickens, *Hard Times* (New York: Norton, 2016).

⁷⁷ Max Weber, *From Max Weber : Essays in Sociology*, trans. Gerth, H.H. (London: Routledge, 1991), 215-16.

the actual condition... of Society” would enable the state to improve its “prospects”.⁷⁸ The economists, scientists and politicians who gathered at the Horticultural Hall on 15 March 1834 believed there could be a science of society, just as there was a science of agriculture, and that this science would lead to improvements for all.⁷⁹ Governments and corporations still stress the benefits of evidence-based decision making. The UK Statistics Authority recently titled its strategy for 2015-2020, “Better Statistics, Better Decisions”.⁸⁰ Like many in government and the media, the authority optimistically believes that good data helps civil servants and political leaders make wise evidence-based decisions, but ironically it does not feel obliged to produce empirical evidence to prove these claims.

Political theorists broadly divide into optimistic and pessimistic camps on the question of whether statistics make governments wiser and more rational. The sociologist Nikolas Rose, in his useful survey of the intellectual terrain, suggests that there is also a continental fault-line; he argues that Americans are optimists believing that numbers enabled the scientific defeat of superstition and the “replacement of old relations of status, rank and dependence by those of objectivity and truth.”⁸¹ As America became independent it became a calculating nation and “counting shaped modern life.”⁸² Strong claims are made that intellectual tools and technologies have intrinsic qualities which determine actions. Within this determinist framework there are differing views. Some sociologists and political scientists aim to challenge the determining power of these tools, reintroducing lost forms of political agency. Others hope to rescue the science of statistics from politicians and the media.⁸³ The sociologist Paul Starr has produced the most thorough framework for considering the ways in

⁷⁸ Royal Statistical Society and James Bonar, *Annals of the Royal Statistical Society, 1834-1934* (London, 1934), 11.

⁷⁹ Victor Hiltz, 'Aliis exterendum, or, the Origins of the Statistical Society of London', *Isis*, 69/1 (1978/03// 1978), 21-43

⁸⁰ 'What we do', www.statisticsauthority.gov.uk/about-the-authority/what-we-do/index.html, accessed 28/09/2015.

⁸¹ Nikolas S. Rose, *Powers of Freedom: Reframing Political Thought* (Cambridge: Cambridge University Press, 1999), 204.

⁸² I. B. Cohen, *The Triumph of Numbers: How Counting Shaped Modern Life* (New York, N.Y. ; London: W.W. Norton, 2005); Patricia Cline-Cohen, *A Calculating People : The Spread of Numeracy in Early America* (Chicago ; London: University of Chicago Press, 1982).

⁸³ Two of the strongest examples of these tendencies are: Susan Herbst, *Numbered Voices : How Opinion Polling Has Shaped American Politics* (Chicago ; London: University of Chicago Press, 1993); Joel Best, *Damned Lies and Statistics : Untangling Numbers from the Media, Politicians, and Activists* (Berkeley, CA ; London: University of California Press, 2001).

which official statistics might reshape political life.⁸⁴ He argues that through their use statistical systems commit states to certain broadly agreed long-term ends, establish norms and can act as automatic pilots, triggering pre-set decisions.

In contrast, European social theorists tend to be far more pessimistic. Nikolas Rose argues that Europeans, because of the continent's twentieth-century history, emphasise the state's use of data for surveillance, control and discipline.⁸⁵ Rose identifies Michel Foucault as the key thinker in this tradition. Foucault maintained that once governments produced reliable statistics about their people, they become concerned with the problems of managing populations rather than individuals.⁸⁶ Assembled in factories, schools, hospitals, mad-houses and concentration camps, people were numbered, measured against norms and made more productive.⁸⁷ Nineteenth-century nation states acquired terrifying new powers. States became estranged from the peoples they governed, and this new "impersonal" form of government enabled modern imperial states to expand their reach across vast territories of the globe.⁸⁸

In *Seeing Like a State* the political scientist James Scott blends American determinism with European pessimism about the state's intentions. He argues that the introduction of statistics was a crucial shift away from practical knowledge, towards a specialist, scientific knowledge. Scott suggests that statistics produced a simplified picture of society, which he called "thin simplifications". These new, radical simplifications enabled politicians and administrators to act as social engineers or designers "with improvement in mind" but such schemes to reshape society failed, because they were inherently authoritarian.⁸⁹

The anthropologist David Graeber objects that too much power is handed to knowledge in all these accounts. He argues that there is a tendency, particularly present in the work of Weber and Foucault, to over-emphasise the rationality and effectiveness

⁸⁴ Paul Starr, 'The Sociology of Official Statistics', in Alonso, W. and P. Starr (eds.), *The Politics of Numbers* (New York: Russell Sage Foundation, 1987).

⁸⁵ Rose, *Powers of Freedom*, 204.

⁸⁶ Michel Foucault, Michel Senellart, and Arnold I. Davidson, *Security, Territory, Population : Lectures at the College De France, 1977-78* (Basingstoke: Palgrave Macmillan, 2007).

⁸⁷ Rose, *Powers of Freedom*, 209-15.

⁸⁸ Vernon, *Distant Strangers: How Britain Became Modern*, 51-76.

⁸⁹ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven, Conn. ; London: Yale University Press, 1998), 92.

of bureaucracies.⁹⁰ Numbers may not simply rationalise decision-making but acquire a wide range of properties in use. Graeber stresses the importance of inefficiencies, stupidities and the brutish violence which lies behind many rational procedures.

Professional statisticians would probably agree with Graeber. Few think that their work is well understood by politicians or the public. Indeed, statistical ignorance is generally one of the first topics in textbooks on statistical methods. David Hand, Professor of Statistics at Imperial College, suggested that “all those in government should take mandatory statistics course.”⁹¹ It is general knowledge that numbers offer new opportunities for politicians to lie. This is believed to be such a common problem that it has inspired popular books⁹² and BBC radio has a weekly programme largely dedicated to correcting statistical errors in the public sphere.⁹³

There is also a well-developed body of work within psychology which demonstrates that all humans, even those trained in statistical methods, ignore, misread or misunderstand statistics when making decisions. Daniel Kahneman and Amos Tversky conducted a series of famous experiments which showed that humans are not being irrational, but prefer to use intuition, emotion, narrative and memories, rather than statistical reasoning. Their work is deeply sceptical about human ability to process statistical information.⁹⁴

However, Kahneman has subsequently posited that organisations are more likely to “avoid errors” than individual agents because they adopt more orderly procedures.⁹⁵ Whether corporate or state organisations really act more rationally than individuals is therefore a key question in this study.

Although much theorised, very few empirical studies have examined whether and how statistics change political decisions. Indeed, the use of data at the organisational and field level, in offices, meetings and debates where decisions are actually made, has

⁹⁰ David Graeber, *The Utopia of Rules : On Technology, Stupidity, and the Secret Joys of Bureaucracy* (New York: Melville House, 2015).

⁹¹ D. J. Hand, *Statistics : a very short introduction* (Oxford: Oxford University Press, 2008)

⁹² Darrell Huff, *How to Lie with Statistics* (Harmondsworth: Penguin, 1973).

⁹³ 'More or Less', <<https://www.bbc.co.uk/programmes/b006qshd>>, accessed 28/7/2018.

⁹⁴ Daniel Kahneman and Amos Tversky (1972), 'Subjective Probability: A Judgment of Representativeness', *Cognitive Psychology*, 3 (3); Amos Tversky and Daniel Kahneman (1973), 'Availability: A Heuristic for Judging Frequency and Probability', *Cognitive Psychology*, 5 (2); Daniel Kahneman and Amos Tversky (1982), 'On the Study of Statistical Intuitions', *Cognition*, 11 (2).

⁹⁵ Daniel Kahneman, *Thinking, Fast and Slow* (London: Allen Lane, 2011), 417-8.

been little examined. As a result many questions have not been answered. How easy is this kind of information to use and understand? What levels of numeracy are required? Do certain groups of people find numbers interesting or convincing and others not? Do institutions use statistics more rationally than individuals? What are the effects of being ruled by this knowledge?

Sociologists recognise that they “have generally been reluctant to investigate [quantification] as a sociological phenomenon in its own right.”⁹⁶ Paul Starr, writing in 1987, drew attention to the lack of empirical work, noting that whilst the effects of mass media and advertising on political processes have been much studied, “nothing comparable” has been done with statistics.⁹⁷

To a certain extent much has changed in the last decade. One side effect of the dominance of information technologies in twenty-first century culture has been an explosion of sociological studies of quantification, as well as the formation of new journals such as *Big Data & Society*.⁹⁸ The focus of concern has moved away from the nation state to transnational organisations,⁹⁹ non-state actors¹⁰⁰ and the effects of data collection on the individual.¹⁰¹ However, few empirical studies have examined how numbers are really used at the organizational and field level. A rare exception, *Engines of Anxiety*, Espeland and Sauder’s innovative study of university education, examines how statistical targets intensely worried the leadership of American law schools and came to dominate their decision-making.¹⁰²

Within history, as Tom Crook and Glen O’Hara note, until recently “historians of political culture have shied away from engaging with the role of statistics in public life”.¹⁰³ They relate this to the cultural turn in the 1970s and methodological moves

⁹⁶ Wendy Nelson Espeland and Mitchell L. Stevens (2008), 'A Sociology of Quantification', *European Journal of Sociology*, 49 (3), 403.

⁹⁷ Starr, 'The Sociology of Official Statistics', in *The Politics of Numbers*, 52; Twenty years later similar complaints were still made: Espeland and Stevens, 'A Sociology of Quantification', *European Journal of Sociology*.

⁹⁸ Elizabeth Popp Berman and Daniel Hirschman (2018), 'The Sociology of Quantification: Where Are We Now?', *Contemporary Sociology*, 47 (3).

⁹⁹ Lorenzo Fioramonti, *How Numbers Rule the World : The Use and Abuse of Statistics in Global Politics* (New York: Zed Books, 2014); Debra Thompson, *The Schematic State : Race, Transnationalism, and the Politics of the Census* (Cambridge: Cambridge University Press, 2015).

¹⁰⁰ Michael Rodríguez-Muñiz (2017), 'Cultivating Consent: Nonstate Leaders and the Orchestration of State Legibility', *American Journal of Sociology*, 123 (2).

¹⁰¹ Deborah Lupton, *The Quantified Self : A Sociology of Self-Tracking*.

¹⁰² Wendy Nelson Espeland and Michael Sauder, *Engines of Anxiety : Academic Rankings, Reputation, and Accountability* (New York: Russell Sage Foundation, 2016).

¹⁰³ Crook and O'Hara, *Statistics and the Public Sphere*, 4.

away from quantitative history. However, as in sociology, Crook and O'Hara identify a new body of work that has begun examining the impact of statistical knowledge on the public sphere. Recent studies have shown how this scientific knowledge was culturally represented by the press and literature,¹⁰⁴ generated new forms of visual culture,¹⁰⁵ and empowered citizens to critique their governments. However, very little historical work has been undertaken on the use of statistics to make political decisions.

Debates about widow-burning

Whether widow-burning should be tolerated under British rule was a highly contentious topic, widely debated in Britain at the start of the nineteenth century. Many historians, anthropologists and cultural theorists have examined these debates, which bring together issues of race, gender, religion and empire. In the archives the statistics are unavoidable. One literary critic, Sophie Gilmartin, examining the representation of Indian widows in British political discourse, noted that the parliamentary papers about widow-burning contained “a barrage of petitions, official accounts, and statistics”.¹⁰⁶ By the 1820s numerical information dominates the sources, but the pages and pages of tabulated data have been largely taken for granted or ignored.

The East India Company statistics are still considered the only reliable information about the prevalence of the practice in India before it was banned.¹⁰⁷ Although a vital source of historical sociological information, opinions are split on what the data demonstrates. The Indian political theorist Ashis Nandy has written several times about this question. He argues that the collection of data was highly intrusive, resented by Hindus and itself responsible for a “large-scale epidemic” of burnings.¹⁰⁸ The British

¹⁰⁴ Kathrin Levitan, *A Cultural History of the British Census: Envisioning the Multitude in the Nineteenth Century* (New York: Palgrave Macmillan, 2011); Frankel, *States of Inquiry : Social Investigations and Print Culture in Nineteenth-Century Britain and the United States*.

¹⁰⁵ James Thompson, 'Printed Statistics and the Public Sphere. Numeracy, Electoral Politics and the Visual Culture of Numbers 1880-1914', *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011).

¹⁰⁶ Sophie Gilmartin (1997), 'The Sati, the Bride, and the Widow: Sacrificial Woman in the Nineteenth Century', *Victorian Literature and Culture*, 25, 141.

¹⁰⁷ See: Fisch, *Burning Women*, 232-47; Anand A. Yang (1989), 'Whose Sati?: Widow Burning in Early 19th Century India', *Journal of Women's History*, 1.

¹⁰⁸ Ashis Nandy, 'Sati as Profit Versus Sati as a Spectacle: The Public Debate on Roop Kanwar's Death', in Hawley, J.S. (ed.), *Sati, the Blessing and the Curse : The Burning of Wives in India* (New York ; Oxford: Oxford University Press, 1994); Ashis Nandy, 'Sati: A Nineteenth Century Tale of Women, Violence and

historian Christopher Bayly disagreed with this analysis. He thought the numbers revealed not an epidemic, but a disproportionate British response: “horrificing as sati was, it was more of a symbolic issue than a major social problem and it must be remembered that fewer than 1000 widows were burned each year during the 1820s according to official figures.”¹⁰⁹ Bayly looked repeatedly at the sati statistics. In 1996 he called debates about sati one of several administrative “information panics”¹¹⁰ and noted, again in 2004, that widow-burning was “rarely”¹¹¹ practised. Bayly complains that “thousands of pages of parliamentary papers were given up to 4,000 immolations while the mortality of millions from disease and starvation was only mentioned incidentally”.¹¹² Both Nandy and Bayly thought the numbers had produced significant political effects: Bayly thought they induced panic; Nandy that they encouraged more widows to burn.

Whilst the statistics themselves have not been studied, the debates in which they were deployed have been well-charted. For many years British historians concentrated on the decisions and campaigns that lead to the ban. Lord Bentinck, the Governor-General who banned the custom in 1829, was seen by some as a great social reformer; others saw the British authorities as neglectful and praised Baptist missionaries for keeping the issue on the table. Banning *sati* was seen as one of the prime examples of the “application of liberalism to India”,¹¹³ or religion holding empire to account.¹¹⁴ Indian commentators have long resisted both these British rescue narratives,¹¹⁵ but it

Protest', *Rammohun Roy and the Process of Modernization in India* (Vikas Publishing House, 1975); *Indian Express*, October 5, 1987, 1987.

¹⁰⁹ C. A. Bayly, *Indian Society and the Making of the British Empire* (Cambridge: Cambridge University Press, 1990), 122.

¹¹⁰ C. A. Bayly, *Empire and Information : Intelligence Gathering and Social Communication in India, C 1780-1870* (Cambridge: Cambridge University Press, 1996), 171.

¹¹¹ C. A. Bayly, *The Birth of the Modern World, 1780-1914 : Global Connections and Comparisons* (Malden, Mass. ; Oxford: Blackwell, 2004), 263.

¹¹² C. A. Bayly, 'From Ritual to Ceremony: Death Ritual in Hindu North India', in Whaley, J. (ed.), *Mirrors of Mortality : Studies in the Social History of Death* (London: Europe, 1981), 174.

¹¹³ Percival Spear (1938), 'Bentinck and Education', *Cambridge Historical Journal*, 6 (1); George D. Bearce (1956), 'Lord William Bentinck: The Application of Liberalism to India', *The Journal of Modern History*, 28 (3); Nancy Cassels (1965), 'Bentinck: Humanitarian and Imperialist - the Abolition of Sutte', *The Journal of British Studies*, 5 (1).

¹¹⁴ Kenneth Ingham, *Reformers in India, 1793-1833: An Account of the Work of Christian Missionaries on Behalf of Social Reform* (Cambridge University Press, 1956); Daniel Potts, *British Baptist Missionaries in India, 1793-1837: The History of Serampore and Its Missions* (Cambridge U.P., 1967).

¹¹⁵ Ananda Kentish Coomaraswamy, *Sati: A Vindication of the Hindu Woman* (London: Sociological Society, 1912); Duralabh Ram (1931), 'Account of a Sati in Gujerat in 1741', *Journal of the Anthropological Society of Bombay*, 17 (4).

was Gayatri Spivak's famous essay 'Can the Subaltern Speak? Speculations on Widow Sacrifice' that really ended the "white men... saving brown women from brown men" narratives. Spivak focussed her analysis on the operation of bureaucracy, examining the moment where widows who wanted to burn on their husbands' pyres registered this intent with British magistrates. She provided a brilliant reading of how magistrates in India could not comprehend the human experience in front of them, dramatizing this estrangement by noting that they "pathetically misspelled" the names they were required to record on a list. However, in focussing on the collection of names, Spivak had nothing to say about the women's transformation into numbers, and what this did to the operation of colonial power.¹¹⁶

Following Spivak, historians have widened their lenses considerably. Lati Mani's influential study demonstrated that debates in Bengal were as influential on British decision-making as debates in London. Hindu nationalists debated with reformers and Christian missionaries, and the colonial authorities monitored these debates closely.¹¹⁷ Clare Midgley has shown that widow-burning was one of the first political issues where British women found a collective voice. Women campaigned for a ban, petitioned and had a significant impact on political debates.¹¹⁸ Andrea Major's recent comprehensive study of European attitudes towards widow-burning emphasised that metropolitan and colonial cultures engage in a two-way dialogue. Major argues that representations of *sati* in Britain in the late eighteenth and early nineteenth centuries helped change British attitudes to suicide, religion and gender, which in turn altered how widow-burning was seen by the British in India. She concludes that in the three decades prior to abolition in 1829, there was a notable shift from centuries of ambivalence to "almost universal vilification".¹¹⁹ However, in this analysis the work of changing attitudes is performed entirely by a complex exchange of cultural representations, whilst the availability of new empirical information about the custom is not credited with any force.

¹¹⁶ Gayatri Spivak, 'Can the Subaltern Speak? Speculations on Widow Sacrifice', in Williams, P. and L. Chrisman (eds.), *Colonial Discourse and Post-Colonial Theory: A Reader* (London; New York: Harvester Wheatsheaf, 1994), 103.

¹¹⁷ Lata Mani, *Contentious Traditions: The Debate on Sati in Colonial India* (Berkeley: University of California Press, 1998).

¹¹⁸ Clare Midgley (2000), 'Female Emancipation in an Imperial Frame: English Women and the Campaign against Sati (Widow-Burning) in India, 1813–30', *Women's History Review*, 9 (1); Clare Midgley, *Feminism and Empire: Women Activists in Imperial Britain, 1790-1865* (London: Routledge, 2007).

¹¹⁹ Andrea Major, *Pious Flames: European Encounters with Sati, 1500-1830* (Oxford: Oxford University Press, 2006), 125.

Yet knowledge of the issue evolved rapidly from 1750 to 1830. Before any data was produced there was no agreement about whether widow-burnings still took place. By the 1820s Parliament was publishing vast quantities of official statistics. In this study I explore the effects of this new information, asking whether MPs, female campaigners or Hindu nationalists were aware of this data and whether it influenced how they thought about the issue or changed how they acted and made decisions.

Religious knowledge

“We seem fated in our history of statistics to mingle with the theologians, orthodox and unorthodox, Anglican and nonconformist,” remarked Karl Pearson, the eminent statistician, at the beginning of a lecture on eighteenth-century statistics.¹²⁰ For Pearson this was an amusing aside. Clergymen were known to have played a crucial role in the advancements of many sciences, but their beliefs and working lives as clerics were irrelevant, perhaps even detrimental to their scientific careers. More relevant factors were the clergyman’s class background and education, and the fact that their livings provided them with spare time and enough income to pursue scientific endeavours.

The Baptist missionaries in Bengal came from poor to middling backgrounds. None of them had attended university, they had little spare time and, in the early years, barely enough income. It often seemed to the missionaries themselves that Christianity was engaged in a battle with empire.¹²¹ Officially banned from India until 1813, the small group of Baptists who arrived twenty years earlier to join William Carey were only able to operate by basing themselves in Serampore, an area under Danish jurisdiction.

But the stories of conflict between missionaries and colonial authorities miss the deeper narrative. Miles Ogborn has shown how the Baptist missionaries’ print expertise was swiftly utilised by the British state. Some of the missionaries had a background in the printing trade and the whole mission was deeply committed to the production of tracts in local languages, which was thought crucial if Indians were to have first-hand

¹²⁰ Pearson and Pearson, *The History of Statistics in the 17th and 18th Centuries against the Changing Background of Intellectual, Scientific and Religious Thought : Lectures by Karl Pearson Given at University College, London During the Academic Sessions 1921-1933*, 348.

¹²¹ A.N. Porter, *Religion Versus Empire? : British Protestant Missionaries and Overseas Expansion, 1700-1914* (Manchester: Manchester University Press, 2004); see also Rowan Strong, *Anglicanism and the British Empire C.1700-1850* (Oxford: Oxford University Press, 2007); Brian Stanley, *The Bible and the Flag : Protestant Missions and British Imperialism in the Nineteenth and Twentieth Centuries* (Leicester: Apollon, 1990).

encounters with the Bible. Within a few years of their arrival they had established a large printing workshop and they were subcontracted by the British state to print texts in English, Bengali and Sanskrit. This regular income transformed the mission's finances and pulled the missionaries into the colonial enterprise. The Baptists' everyday working practices helped to "put the printing press at the centre of British attempts to reform India".¹²²

Counting and making estimates was an everyday practice for the missionaries, as it is for all printers and publishers who have to purchase paper and calculate print runs. But there is a big gap between that expertise and the knowledge and resources required to organise a sociological study. Carey and Buchanan were not commissioned by the East India Company to produce social statistics. Their survey was an ambitious exercise, requiring knowledge and substantial amounts of labour. How it was financed and organised is therefore a key question.

This research reached a large evangelical audience in Britain. Some members of this audience were well-educated, but many were not. Carey and Buchanan were not the only clergymen exposing their readers to large amounts of data. Reverend Thomas Malthus's *Essay on the Principle of Population* was first published in 1798 without any tables of data, but with each subsequent edition Malthus added a huge amount of statistical data. Clearly Malthus did not make this intellectual shift alone. To explain how and why he added hundreds of tables of numbers, Mary Poovey, in *A History of the Modern Fact*, says we need to ask of the late eighteenth-century "Who counted? What did people count? For what social or institutional purposes did people count?" Poovey herself had no answers and called for further research, but she feared that "the questions about counting may never be answerable" because it is "almost impossible to assemble evidence".¹²³

Malthus' work made an immediate impact amongst the literary and political classes and has left a lasting legacy. However, it produced no immediate political earthquakes, and modern studies of its reception therefore reveal little about the popular use of statistics.¹²⁴ The publication of the widow-burning statistics, in contrast, generated mass

¹²² Miles Ogborn, *Indian Ink : Script and Print in the Making of the English East India Company* (Chicago ; London: University of Chicago Press, 2007), 267.

¹²³ Mary Poovey (1993), 'Figures of Arithmetic, Figures of Speech: The Discourse of Statistics in the 1830s', *Critical Inquiry*, 19, 279-80; Poovey, *A History of the Modern Fact*.

¹²⁴ Alison Bashford and Joyce E. Chaplin, *The New Worlds of Thomas Robert Malthus : Rereading the Principle of Population* (Princeton: University Press, 2016); Robert J. Mayhew, *Malthus: The Life and*

political movements and inspired the production of pamphlets, petitions, speeches, sermons, articles, letters, tracts and advertisements. Assembling this evidence makes it possible to investigate the reception and use of data by many different sectors of British society.

Sources and methods

East India Company archives and parliamentary records provide a remarkable record of how it operated, but historians are increasingly conscious that this highly centralised, well-organised archive can itself shape and determine the narrative.¹²⁵ Methods need to be found to avoid treating the Company as a standalone organism and to reconnect it to the societies in which it operated and attempted to exert its power.

In many respects the official archives give the impression that the collection of data about widow-burning was an easy task. In 1815 senior administrators established, without any obvious difficulties or reference to any previous studies, an efficient bureaucratic machine for generating social statistics. The production of statistics appeared to be a natural, effortless function of the state. Bruno Latour terms such functioning systems ‘black boxes’. His principal method of studying science in action is to “arrive before the facts and machines are blackboxed or we follow the controversies that reopen them.”¹²⁶ Following this approach, this study is organised chronologically, beginning fifty years before the first facts were collected, and looking at the trials, failures and unofficial counts that preceded the production of official statistics. Then after production of official data began, I examine the controversies that re-opened the black box.

The evangelicals and civil servants who undertook these enormous, complex acts of data collection perceived a need for more or better information. Numbers like words contain deliberate and recoverable intentions; they become what Quentin Skinner calls

Legacies of an Untimely Prophet (London: Harvard University Press, 2014); John Avery, *Progress, Poverty and Population : Re-Reading Condorcet, Godwin and Malthus* (London: F. Cass, 1997); Donald Winch, *Malthus* (Oxford ; New York: Oxford University Press, 1987).

¹²⁵ Betty Joseph, *Reading the East India Company, 1720-1840 : Colonial Currencies of Gender* (Chicago: University Press, 2004); Ogborn, *Indian Ink : Script and Print in the Making of the English East India Company*, 22-26.

¹²⁶ Bruno Latour, *Science in Action : How to Follow Scientists and Engineers through Society* (Cambridge, Mass.: Harvard University Press, 1987), 258.

“acts of communication”.¹²⁷ Treating them as illocutionary acts requires being alert to who was being addressed, whose claims they were intended to dispute, and what their use was meant to achieve. A small group of civil servants introduced and managed the East India Company’s official statistics. Most of them were taught by Claudius Buchanan and William Carey. The personal biographies, friendships, educational attainments and religious affiliations of this small network therefore matter.

Although led by a small group this was not solitary social science fieldwork. The production and publication of statistics was a collective enterprise, requiring access to substantial resources. The numbers also changed how the East India Company and campaigning groups operated. Philosophers Christian List and Philip Pettit have shown that groups, like individuals, have agency with recoverable intentions.¹²⁸ Corporate bodies, such as political parties, governments and commercial organisations develop distinctive ways of doing things and they make collective decisions about how to act. Collecting social statistics was a new way of doing things, but internally in the Company there was surprisingly little reflection on what the data did to the work of governing India. There were no questions asked about the cost, how much time and labour it occupied, or whether this new form of knowledge was changing actions and decisions. However, the Company’s rich archives make it possible to study these changes, building on John Pickstone’s insight that “scientific change involves changes of work patterns, not just of ideas”.¹²⁹

Finding methods to study how the statistics restructured the work of the Company, I have turned to Franco Moretti’s methods of distant reading.¹³⁰ Moretti looks for patterns within literature, using databases to count, map and graph the emergence of social themes in large numbers of texts. I have added calendars to this toolset, and produced numerous graphs, timelines and maps to study work patterns, some of which are reproduced in this thesis. The aim of this approach is to examine whether the new

¹²⁷ Quentin Skinner, *Regarding Method* (Visions of politics, 1; Cambridge: Cambridge University Press, 2002), 115. Chapter 6, ‘Interpretation and the understanding of speech acts’ is the classic statement of his method, drawn from J.L.Austin, Strawson and Collingwood. See Mark Bevir, ‘Mind and Method in the History of Ideas’, *History and Theory*, 36/2 (May 01 1997), 167-189 for a useful framing of Skinner’s method within broader philosophies of mind.

¹²⁸ Christian List and Philip Pettit, *Group Agency : The Possibility, Design, and Status of Corporate Agents* (Oxford: Oxford University Press, 2011).

¹²⁹ John V. Pickstone, *Ways of Knowing : A New History of Science, Technology and Medicine* (Manchester: Manchester University Press, 2000), 18.

¹³⁰ Franco Moretti, *Graphs, Maps, Trees : Abstract Models for a Literary History* (London: Verso, 2007); Franco Moretti, *Atlas of the European Novel, 1800-1900* (London: Verso, 1998).

statistical practices in any ways determined, shaped or reorganized thoughts and actions or produced new ways of feeling. Did officials become more distant and less humane, and how should we understand the various information panics which engulfed the Company as it processed the widow-burning data? Historians who study emotion increasingly stress that there are social dimensions to feelings. Joanna Bourke in her study of fear considered powerful collective emotions, such as panics in a crowd.¹³¹ Distant reading provides a powerful method for aggregating individual feelings and asking whether collective waves of panic observed by Christopher Bayly were related to the rises and falls in the numbers of widow-burnings.

Both the unofficial and official statistics circulated widely, travelling vast distances geographically and socially. Many of the debates in which the numbers ended up have been well-charted by historians who study India and Britain. One of the key methodological challenges has been to find ways to join these histories together. Discussions about the production of transnational histories have proved useful guides for this task. The historian Isabel Hofmeyr has argued that historians should study “movements, flows, and circulation, not simply as a theme or motif but... an analytic set of methods which defines the endeavor itself.”¹³² Likewise social historians of knowledge¹³³ and the book¹³⁴ have provided many analytic tools to consider transmission and communication circuits. In this case the practical task of uncovering previously uncharted movements has also been aided enormously by the British tendency to mis-spell Indian names for which Spivak so memorably castigated officials. Mis-spelt place names, which were repeated as the figures circulated, have provided an effective way to search the digital archive, and made it possible to discover a wide range of previously unstudied British, Indian, European and North American texts making use of the statistics.

As information moves it can be put to very different uses. The same numbers that were used to set targets for the Indian police force were also used to appeal to British and North American women to raise funds for the education of Indian women. At each geographical site there were of course different, locally specific power struggles. The

¹³¹ Joanna Bourke, *Fear : A Cultural History* (London: Virago Press, 2005).

¹³² C. A. Bayly et al. (2006), 'Ahr Conversation: On Transnational History', *The American Historical Review*, 111, 1444.

¹³³ Peter Burke, *A Social History of Knowledge li: From the Encyclopaedia to Wikipedia* (Cambridge: Polity, 2012).

¹³⁴ Robert Darnton (1982), 'What Is the History of Books?', *Daedalus*, 111 (3).

analytic frameworks of intersectionality provide a useful way to move beyond localism, and consider how class, race, gender and religion interacted when looking at how very different groups used and understood this new form of information.¹³⁵

It has been argued recently that “statistics themselves are inherently disposed to transnational migration and use”, because numbers are globally understood.¹³⁶ However, assessing how this set of statistics were understood in Britain, India, Europe and North America is not straightforward. Even within a single culture there are no simple divisions between the knowledgeable and the ignorant. British public schools taught very little science and some MPs in the 1820s struggled with simple mathematical concepts.¹³⁷ At the same time it is now known that there were surprising levels of working-class numeracy before mass-education.¹³⁸ Some eighteenth-century Britons were fascinated by Indian mathematics,¹³⁹ but little now is known about the state of mathematical knowledge amongst ordinary Indians. Innumeracy in all cultures remains almost completely unstudied.¹⁴⁰ Ignorance, error and misunderstanding are rarely factored into traditional intellectual histories or histories of statistics. Improvising methods I have tried therefore to be particularly attentive to numerical mistakes, exaggerations, and misunderstandings, looking for these difficulties at all stages in the process from the initial collection and computation of rough data, to its polished appearance in print.

Errors and clear misunderstandings are relatively easy to find. It is much harder to assess how the numbers were interpreted. The publication history shows whether the data was cited in newspaper and magazine articles, books and pamphlets, and many readers responded to these news stories by writing letters, producing pamphlets and

¹³⁵ Patricia Hill Collins and Sirma Bilge, *Intersectionality* (Cambridge: Polity, 2016).

¹³⁶ Edmund Rogers, 'A Naked Strength and Beauty': Statistics in the British Tariff Debate, 1880-1914', *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011), 239.

¹³⁷ For his speculations on the public school education as a cause of this ignorance see Charles Babbage, *Reflections on the Decline of Science in England, and on Some of Its Causes* (London: B. Fellowes, 1830).

¹³⁸ Thompson, 'Printed Statistics and the Public Sphere. Numeracy, Electoral Politics and the Visual Culture of Numbers 1880-1914', in *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000*; Steven King, 'Numerical Information, Accounting Practices and the Poor Law 1790-1840', *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011). Levitan, *A Cultural History of the British Census*.

¹³⁹ John Playfair, 'Questions and Remarks on the Astronomy of the Hindus', *Asiatic Researches* (Calcutta, 1795).

¹⁴⁰ A guide to the territory can be found in John Allen Paulos, *Innumeracy* (London: Viking, 1989).

petitions which recycled the data. Following these chains of response produces a wider picture of statistical understandings, but some of the most critical responses to the data were delivered orally. When speeches were given at the House of Commons or at East India Company investor meetings, there are generally good records. It is also possible to reconstruct from preparatory letters and notes, speeches given by well-known evangelical activists. Sermons by prominent clerics were also often printed or reported. However, other categories of speech such as informal discussion, lectures and study groups, were mostly unrecorded, so many of the thoughts of ordinary people have to be implied indirectly, through actions such as signatures on petitions and donations to missionary societies.

Structure

This study begins with British disputes about the prevalence of widow-burning in the 1750s and ends in the early 1830s after the state had introduced an effective ban. At that point the numbers dropped to single digits and received far less attention both within government and in the wider public spheres. The study therefore focuses on the years before, to use Latour's concept, judicial statistics about widow-burning became an uncontroversial, closed, black box.

The first chapter asks why the prevalence of widow-burning became a question well before anyone counted the custom. It has three parts. The first section explores how Europeans constructed a sociology of widow-burning without data. The second section looks at how often British officials in India dealt with the custom and what kinds of decisions they were asked to make. Finally, the chapter examines the wider political context in Britain to see what Britons outside the East India Company knew of this distant colonial custom.

The second chapter considers what inspired evangelicals to organise a statistical count of widow-burning. It begins with an examination of the kinds of numbers circulating in political debates in the late eighteenth-century, and then focuses on William Carey, who in the 1780s was working as a shoemaker and Baptist preacher in a small village in the East Midlands. Carey was interested in statistics and produced a highly innovative numerical study of the world's population. That this was possible, and that Carey was able to use this demographic data to persuade his congregations to fund

a mission, reveals much about the popular consumption of numerical information in eighteenth-century Britain.

The middle section of the thesis looks at the first counts. In the mid 1790s influential evangelicals in London had begun to estimate the numbers of widows who burnt in India, but there was a growing demand for harder facts. The first part of chapter 3 looks at how various evangelical organisations began producing as well consuming data to push forward their agendas. The second part of the chapter examines the first unofficial surveys, which William Carey managed. These surveys, which have not previously been studied, pose many questions. Who was involved, how and why was the research conducted and how was it funded? The publication of this data in Britain and India in 1805, followed later by publication in USA, Holland and Germany, marks the moments when a wide audience encountered widow-burning statistics for the first time. Chapter 4 explores how the new figures were used, how they were understood and equally importantly misunderstood. Many social groups, well beyond the metropolitan elite, engaged with the figures and many evangelicals came to believe that tens of thousands of women were sacrificed annually in British India.

The final section examines the period from 1815 to the early 1830s when the East India Company started producing annual figures for widow-burnings. Chapter five examines the collection of official statistics, their publication and impact. Numbers of burnings now dominated discussions. The data was starkly delineating the success or failure of British policies and the publication of new data each November in London provided fresh ammunition for the many campaigners that were critical of the status quo. Powerful popular campaigns demanded reform and the leadership of the East India Company responded by making officials at all levels aware of the need to diminish the number of burnings.

Chapter six, which concludes this study, compares post-statistical political decisions with those made before numbers, and draws some general conclusions about the impact of statistical information on political debates and government. The final part of this chapter explores how officials on the ground responded to the strong pressures to reduce the number of widow-burnings, with some magistrates taking actions to diminish the number of widow-burnings in their districts, at almost any human cost. The full force of the state was being applied to produce numbers it could live with.

1

Before Numbers

Knowing, quantifying & counting Indian widow-burnings before statistics,
c. 1750 - 1797

William Alexander thought that the worst place in the world to be a widow in the late eighteenth century was India. He had reached this conclusion while writing his *History of Women*, an ambitious work of social history which aimed to give “some account of almost every interesting particular concerning that sex... among all nations”.¹⁴¹ One of the first works of gender history,¹⁴² the *History of Women* was organised thematically around topics such as women’s education, employment and amusements, women’s dress and ornamentation, courtship and celibacy. There was a chapter on widowhood, which like other aspects of gender Alexander saw as having universal traits as well as historic and geographic contingencies. In all cultures, Alexander observed, widows were disadvantaged because they were older, less attractive and economically weak, but in “rude and barbarous” countries the disadvantages were “still more numerous and more grievous.”¹⁴³ He thought India was the most barbarous place of all, because women there burnt to death on the funeral pyres of their husbands.

Like most eighteenth-century Britons, William Alexander had not been to India, but this did not prevent him from writing a history of widow-burning “from the earliest antiquity to present times”.¹⁴⁴ There were plenty of sources of information. Widow-burning had been known to Europeans since antiquity, and it was well-established that “this cruel and inhuman custom” was at least “several thousand years” old.¹⁴⁵ The

¹⁴¹ Frontispiece William Alexander, *The History of Women, from the Earliest Antiquity to the Present Time, Giving Some Account of Almost Every Interesting Particular Concerning That Sex among All Nations*, 2 vols. (London: C.Dilly, 1796).

¹⁴² Others include: Antoine Leonard Thomas and William Russell, *Essay on the Character, Manners and Genius of Women in Different Ages* (London, 1773); the opening chapter of John Millar, *The Origin of the Distinction of Ranks* (London, 1779); John Adams, *Woman; Sketches of the History, Genius, Disposition, Accomplishments, Employments, Customs, and Importance of the Fair Sex in All Parts of the World; Interspersed with Many Anecdotes* (London, 1790).

¹⁴³ Alexander, *History of Women*, 436.

¹⁴⁴ Alexander, *History of Women*, frontispiece.

¹⁴⁵ Alexander, *History of Women*, 454.

ancient history was clear. “Since time immemorial”, Alexander declared, women in India had been “burning on the funeral piles of their deceased husbands”.¹⁴⁶ However, its contemporary status was another matter. “Some historians”, he warned, “have lately asserted, that the custom of burning no longer exists in India.” However, he confidently re-assured his readers, this “is a mistake”.¹⁴⁷

When Alexander was writing in the 1770s, there had been no systematic attempt by any Indian authority, local or colonial, to examine the prevalence of widow-burning as a contemporary custom.¹⁴⁸ The Mughal empire had interrogated widows who wanted to burn, but they kept no formal records of burnings. The first set of social statistics about the custom was published in Britain in 1805.¹⁴⁹ William Alexander’s assertion that other historians were mistaken when they claimed that the custom was obsolete therefore raises many questions. How was widow-burning known and how could its prevalence be disputed before there were numbers?

The prevalence of widow-burning in India before the nineteenth-century counts remains a historical question today. Christopher Bayly, one of the most prominent historians of colonial India, argued throughout his career that it was “rarely” practiced.¹⁵⁰ But Bayly was an outlier on this issue. Jörg Fisch is more typical when he suggests that widow-burning must have been fairly common, because between 1500 and 1800 “during their stay in India an astonishingly large number of Europeans saw one or even several widow-burnings”.¹⁵¹ Clare Midgely, examining the paucity of female accounts before the 1790s, has similarly referred to there being “many accounts” by male witnesses in the eighteenth century¹⁵² and Andrea Major has called widow-burning, “a well-known and well-authenticated custom in eighteenth-century travel literature”.¹⁵³ However, William Alexander’s aside suggests that British knowledge of the custom was less secure and more contested than many historians now imagine.

This chapter looks at eighteenth-century controversies about the prevalence of widow-burning and asks how such a question could be debated before any statistical

¹⁴⁶ Alexander, *History of Women*, xx.

¹⁴⁷ Alexander, *History of Women*, 494.

¹⁴⁸ Fisch, *Burning Women*, 232..

¹⁴⁹ See chapter 3.

¹⁵⁰ Bayly, *The Birth of the Modern World, 1780-1914 : Global Connections and Comparisons*, 263.

¹⁵¹ Fisch, *Burning Women*, 231.

¹⁵² Midgley, 'Female Emancipation in an Imperial Frame: English Women and the Campaign against Sati (Widow-Burning) in India, 1813–30', *Women's History Review*, 67.

¹⁵³ Major, *Pious Flames*, 71.

data was collected. I am particularly attentive to any statements or disputes about numbers, trends or the prevalence of widow-burning. Many of these claims were tentative, ill-informed or contradictory, and because this was recognised at the time, they provoked challenges and debate. Understanding that before statistics were collected there was a controversy about the prevalence of the custom helps to explain what led the British to count widow-burnings in India decades before the British state was able to produce many other social statistics.

The chapter begins with an examination of British knowledge of widow-burning before the East India Company governed Bengal. The second section examines historians' disputes about the prevalence of the custom after the Company acquired political control, the third asks how often East India Company officials dealt with widow-burnings and the kinds of decisions they were asked to make. The final section explores what Britons outside the Company knew about this distant and much disputed custom in the new colony.

Eyewitness accounts before 1760

The primary source of European knowledge about widow-burning in the eighteenth century was the first-hand eyewitness account. As historians such as Midgely and Major have identified, accounts of widow-burning were relatively widespread in eighteenth century histories, travel writings, operas, poems and plays, but European descriptions of the custom referenced a surprisingly small number of first-hand accounts. For example before the East India Company acquired political power in India, very few Britons reported that they had witnessed a widow-burning. In this respect John Henry Grose was typical. Born in London, the son of a Swiss jeweller, Grose worked as a writer for the East India Company for a short period from 1749 to 1754. He was employed to keep business records, but he also recorded his thoughts and observations about the country, which he turned into a popular travel book on his return to England.¹⁵⁴ In this he included an account of widow-burning, which he thought a “barbarous custom”, though,

¹⁵⁴ John H. Farrant, 'Grose, John Henry (1732-1774)', *Oxford Dictionary of National Biography* (Oxford, 2004).

like the vast majority of Britons in India, Grose “never was myself an eye-witness to it.”¹⁵⁵

There were many ways that Britons could know about widow-burning without personally seeing one. Grose spent a great deal of his working time in India travelling around the coast, talking with his colleagues, translators, guides and local leaders. Although he did not cite any specific conversations as a source, it is likely that the casual exchange of information played an important role in helping him reach the judgement that widow-burning “still continues”. For more specific information about how the custom was practised, Grose turned to the “many authors” he had read.¹⁵⁶ Like the majority of Britons at this time, Grose could not read any Indian languages. Britons who wanted to know more about India relied heavily on previous knowledge acquired by Europeans. Many of the most highly regarded books had been written by French, Portuguese and Italian travellers. Grose spoke multiple European languages, and later worked as a language teacher in France, but little knowledge of European languages was required for Britons to access much of this travel literature. From the seventeenth century onwards there had been a concerted effort by publishers to translate key European works about India into English to meet the demand of Britons interested in overseas voyages and trade.¹⁵⁷

The custom of widow-burning was mentioned frequently enough in European books about India for Claude-Marie Guyon, the eminent French historian, to complain in 1744 when writing about India and imperial expansion, that “there are none of the almost infinite number of travellers who have gone through that country, who do not mention the abominable custom”.¹⁵⁸ Guyon exaggerated, the number of traveller accounts was relatively small, and many of the most well-known were, by the mid eighteenth century, centuries old.¹⁵⁹

¹⁵⁵ John Henry Grose, *A Voyage to the East-Indies, with Observations* (London: Hooper & Morley, 1757), 144.

¹⁵⁶ Grose, *A Voyage to the East-Indies, with Observations*, 143.

¹⁵⁷ The classic account of this literature remains: Donald F. Lach, *India in the Eyes of Europe: The Sixteenth Century* (Chicago: University of Chicago Press, 1968).

¹⁵⁸ Claude Marie Guyon, *A New History of the East-Indies, Ancient and Modern. [Partly Translated from the French of C. M. G.]* (London, 1757).

¹⁵⁹ The most comprehensive guides to European accounts of sati can be found in: Major, *Pious Flames*, 16-121; Fisch, *Burning Women*, 211-457; See also: Binita Mehta, *Widows, Pariahs, and Bayaderes : India as Spectacle* (Lewisburg, PA: Bucknell University Press, 2002).

As well as mentioning widow-burning, many European travellers to India also speculated about whether the custom was still widespread. Their views on this sociological question differed. Marco Polo, writing in 1299, argued that “The ladies who do this are highly praised by all. And I assure you that there are many who do as I have told you.”¹⁶⁰ In contrast Nicolo de’ Conti, who at the end of the fifteenth century was one of the first Europeans to travel widely inland,¹⁶¹ thought it specific only to certain geographic regions. He argued that the practice was far more common in central India where “living wives, for the most part, are consumed in the same funeral pyre with their husband”.¹⁶² In the sixteenth century the Portuguese explorer Tomé Pires thought it was habitual throughout India,¹⁶³ and Duarte Barbosa, who worked in India administering a Portuguese factory, agreed, speculating that “all perform this in general”.¹⁶⁴ But there was no consensus. Ludovico Di Varthema, an Italian travelling in India at the same time Pires and Barbosa were writing, claimed the custom was rare and that “only the most noble of the land do it”. He argued that women “all in general do not do it”.¹⁶⁵ A century later in 1627 Francisco Pelsaert, a Dutch commercial agent, claimed that two or three burnings took place each week in Agra, the capital city of the Mughal empire,¹⁶⁶ but several other writers claimed the practice had largely been eradicated from Mughal ruled territories.¹⁶⁷

European travellers could not agree whether the custom was rare or commonplace. Their ways of producing social knowledge – reading European sources, travelling around the country and speaking with individual Indians about the custom – were unable to produce consistent answers. However their comments about prevalence

¹⁶⁰ Marco Polo, *The Travels of Marco Polo* (Harmondsworth: Penguin, 1965), 264-5.

¹⁶¹ Lach, *India in the Eyes of Europe*, 59-63.

¹⁶² R. H. Major, *India in the Fifteenth Century: Being a Collection of Narratives of Voyages to India in the Century Preceding the Portuguese Discovery of the Cape of Good Hope from Latin, Persian, Russian and Italian Sources* (London: Hakluyt Society, 1857), 25.

¹⁶³ Tomé Pires, *The Suma Oriental of Tomé Pires. An Account of the East, from the Red Sea to Japan, Written in Malacca and India in 1512-1515* (London, 1944), 63, 198.

¹⁶⁴ Duarte Barbosa, *A Description of the Coasts of East Africa and Malabar in the Beginning of the Sixteenth Century*, trans. Stanley, H.E.J. (London, 1866), 93.

¹⁶⁵ Ludovico Di Varthema, *The Travels of Ludovico Di Varthema in Egypt, Syria, Arabia Deserta and Arabia Felix, in Persia, India, and Ethiopia, A.D. 1503 to 1508*, trans. Jones, J.W. (London: Hakluyt Society, 1863), 207-08.

¹⁶⁶ Francisco Pelsaert, *Jahangir's India. The Remonstrantie of Francisco Pelsaert*, trans. Moreland, W.H. (Cambridge: W. Heffer & Sons, 1925), 328-9.

¹⁶⁷ Fisch, *Burning Women*, 350-52.

indicate that they were thinking about widow-burning as a quantifiable social phenomenon, centuries before the production of social statistics.

François Bernier, a French doctor and travel writer, was the first European to make an extended study of the custom. Briefly the personal physician to Mughal prince Dara Shikoh, Bernier's *Travels in the Mughal Empire* was published in Paris in 1670, and in London a year later. Bernier encountered the custom at least six times while he was in India. He attended the funeral of an Indian colleague whose wife planned to burn herself and credited himself with dissuading her. He came across another funeral where he watched a widow and five of her female slaves die in a pyre. He witnessed a second widow-burning in the company of several Englishmen and Dutchmen and a fellow Frenchman. He saw two funerals where women were compelled to burn, and one where the widow was aged about twelve. The custom upset him enormously. He was "present at so many of these shocking exhibitions that I could not persuade myself to attend any more, nor is it without a feeling of horror that I revert to the subject."¹⁶⁸

Bernier had personally witnessed more widow-burnings than any previous European, but he recognised that his own testimony was not enough. How knowledge was made had become a key question in the natural sciences at the end of the seventeenth century when Bernier was writing. Scientific facts were established by experiments, and it was crucial that these experiments were witnessed by more than one person. As in a court of law, a truth established by the evidence of a single witness was deemed unreliable. For this reason, Robert Boyle's famous experiments with the air pump took place in the Royal Society's public rooms, where collective witnessing could take place. As Boyle wrote, multiple witnesses produced "a concurrence of such probabilities... [and] may well amount to moral certainty".¹⁶⁹ Bernier's accounts of widow-burnings indicate that he thought similar procedures were required to produce certainty for social facts.

¹⁶⁸ François Bernier, *Travels in the Mogul Empire A.D. 1656-1668*, trans. Constable, A. (Oxford: University Press, 1916), 306-15.

¹⁶⁹ Boyle, 'Some Considerations about the Reconcilableness of Reason and Religion' (1675) cited in: Steven Shapin, *Never Pure : Historical Studies of Science as If It Was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority* (Baltimore, Md.: Johns Hopkins University Press, 2010), 94-5.

Bernier used eyewitness knowledge to make a claim about the custom's prevalence. He was aware that widow-burning must seem incredible to many of his readers; he thought "it must be seen to be believed".¹⁷⁰ He emphasised that he had witnessed one burning with other European witnesses; their presence added to its certainty. The practice had also been "confirmed by so many travellers" that European scepticism about whether it still existed should cease. However, Bernier also recognised that many European accounts "exaggerated" the problem and that "the number of victims is less now than formerly".¹⁷¹

Bernier was quantifying Hindu culture, well before there were any actual numbers. He hypothesised that there was a downward trend in the number of widow-burnings, which he attributed to the actions of the Mughal colonial government. Acutely aware that they were a religious minority, the Mughals had not sought to ban the custom although they strongly disapproved of it.¹⁷² Instead they made widows seek permission from the local governor, who would only grant it after he had tried to persuade them not to burn. The effectiveness of this policy, Bernier judged, could be demonstrated by the higher prevalence of the custom in the territories that the Mughals did not control. There "the number of self-immolations is still very considerable."¹⁷³ Neither the Mughals or states outside their empire kept any systematic records, so Bernier's assessments about the comparative numbers of burnings were highly speculative.

Swiftly translated, Bernier's account of the custom was highly influential, especially in late eighteenth-century Britain.¹⁷⁴ His insider's account of Mughal governance provided the new empire with insights about the ways its predecessor had managed and shaped Indian society. Bernier's analysis suggested that with the right governance widow-burning could be eradicated.

Few seventeenth-century British observers made comments about the social aspects of the custom. William Hawkins speculated that the practice had become less common in Mughal territories,¹⁷⁵ and Nicholas Withington reported that he thought the custom

¹⁷⁰ Bernier, *Travels in the Mogul Empire*, 309

¹⁷¹ Bernier, *Travels in the Mogul Empire*, 306-7.

¹⁷² For an overview of Islamic attitudes and Mughal policies see Fisch, *Burning Women*, 347-52.

¹⁷³ Bernier, *Travels in the Mogul Empire*, 307.

¹⁷⁴ Mehta, *Widows, Pariahs, and Bayaderes : India as Spectacle*, 69-70.

¹⁷⁵ William Foster, *Early Travels in India, 1583-1619* (Oxford University Press, 1921), 119.

had become a general habit: “nowe they have gotte such a custome of yt that they doe yt moste willingly.”¹⁷⁶ Well into the eighteenth-century, Britons turned to European writers to understand Indian customs. For example, in 1630 Henry Lord wrote that he had witnessed a number of Indian funerals, but no immolations. His knowledge of widow sacrifices came from European travel writing.¹⁷⁷

Before the 1740s written British eyewitness accounts of widow-burning were exceptionally rare. At the start of the seventeenth century, Edward Terry, an East India Company chaplain, witnessed a funeral which he thought a “hellish sacrifice”,¹⁷⁸ and Thomas Bowrey recorded seeing burnings on his travels around Bengal between 1669 and 1679.¹⁷⁹ A few Britons also reported a number of close encounters with the practice. In 1626 William Methold reported that an English commercial agent had attempted to rescue a widow.¹⁸⁰ In 1663 Job Charnock, founder of Calcutta, reputedly rescued his wife-to-be from a funeral pyre, but this might well be a myth as it was not documented until 1727.¹⁸¹ John Fryer in 1681 reported that he saw the charred remains of corpses burning, but he did not witness the act itself.¹⁸² Some Britons found the custom exceptionally difficult to contemplate. Johan Sigmund Wuffbain recorded that one Briton living in Agra was so mentally disturbed by witnessing a burning “that his mind became affected and he was unable to overcome this for the rest of his life.”¹⁸³

The first extended British eyewitness account of a widow-burning was produced by John Zephaniah Holwell. He watched a widow-burning in 1742, in Cossimbazaar at a site close to an East India Company factory.¹⁸⁴ Holwell was employed by the Company

¹⁷⁶ Foster, *Early Travels in India, 1583-1619*, 121.

¹⁷⁷ John Pinkerton, *A General Collection of the Best and Most Interesting Voyages and Travels in All Parts of the World: Many of Which Are Now First Translated into English: Digested on a New Plan* (London: Cadell and Davies, 1811), 546.

¹⁷⁸ Foster, *Early Travels in India, 1583-1619*, 323.

¹⁷⁹ Thomas Bowrey, *A Geographical Account of Countries Round the Bay of Bengal, 1669 to 1679* (Cambridge: Hakluyt Society, 1905), 204.

¹⁸⁰ Major, *Pious Flames*, 57.

¹⁸¹ Alexander Hamilton, *A New Account of the East Indies, Being The ... Remarks of Capt. A. H. Who Spent His Time There From ... 1688 to 1723* (Edinburgh: J. Mosman, 1727), 8.

¹⁸² John M. D. Fryer, *A New Account of East-India and Persia, in Eight Letters: Being Nine Years Travels Begun 1672, and Finished 1681* (London: Chiswell, 1698), 101.

¹⁸³ Fisch, *Burning Women*, 355.

¹⁸⁴ The account is dated ambiguously as 1742-3. All Indian names are given as used in the sources. John Zephaniah Holwell, *Interesting Historical Events, Relative to the Provinces of Bengal, and the Empire of Indostan* (London: Becket, 1767).

as a surgeon, based in Fort William.¹⁸⁵ He was interested in Indian social customs and, like John Grose, had read Bernier and other European writers. Holwell travelled extensively around the Bengal, and in 1742 by chance, while he was a visitor at the Company's Cossimbuzaar factory, heard that a widow-burning was planned. He wrote a private account of what followed which described how he, along with the factory manager and his wife, Sir Francis and Lady Anne Russell,¹⁸⁶ came to witness the death of a widow. This account was not written for or archived by the Company. One of a handful of Britons in the pre-colonial era to have written an account of witnessing widow-burning, Holwell was exceptional, and he provides valuable insights into why and how the British in India encountered the custom before the East India Company became a colonial authority.

The man who had died, Rhaam Chund, was a prominent and wealthy man, who had many commercial dealings with the East India Company factory. The Russells knew him well enough that when his widow, who is not named in the account, announced that she wished to kill herself on her husband's funeral pyre, they were moved and felt they should try to prevent the funeral occurring. As a factory manager, Sir Francis Russell had no legal authority over the funeral arrangements. Permission to burn was granted by Hosseyn Khan, the Mughal who ruled this territory. Persuasion was therefore the only option, and Anne Russell took the lead. Rhaam Chund's widow was only seventeen or eighteen years old, with young children. The two women spoke at length before the funeral took place. Anne Russell tried to persuade the widow not to die. They discussed the future for her three young children, the eldest not yet four, and the pain of burning to death. The widow thanked Russell for her interest but told her that "she had now nothing to live for" and asked her to protect the children.¹⁸⁷ Anne Russell was almost certainly the first British woman to attempt to stop a widow-burning.

The intervention had failed and Holwell gave a detailed narrative account of the funeral that followed. Measurements of various kinds played a significant role in structuring his observations. Throughout the funeral he used a pocket watch to keep

¹⁸⁵ D.L. Prior, 'Holwell, John Zephaniah (1711–1798)', in Goldman, L. (ed.), *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004).

¹⁸⁶ Chund's widow and Russell's wife were both unnamed by Holwell. Chund's widow remains unidentified, but British records of aristocratic marriages show that Francis Russell and Anne Gee married in 1725. E. Kimber and R. Johnson, *The Baronetage of England to Which Is Added an Account of Such Nova Scotia Baronets as Are of English Families; and a Dictionary of Heraldry* (London: G. Woodfall), 141.

¹⁸⁷ Holwell, *Interesting Historical Events*, 93.

track of time. Rhaam Chund's body was taken to the waterside early in the morning. It was the start of a long day. The young widow appeared at about ten o'clock. Permission to burn was granted by Khan's emissary at one o'clock. The widow then retired for half an hour with her female relations, including her mother.

As well as timings Holwell carefully counted the rituals. The number three seemed particularly significant. Having divested herself of her jewellery, the young widow was led three times round the pyre by the Brahmins, before being given three burning cotton wicks. She climbed up to her husband's body and for about a minute made a profound reverence at his feet before using the three wicks to set fire to the pyre. Numerological superstitions were still commonplace in European culture and the number three was connected with death, because Christ rose from the dead on the third day. Numbers also played a significant role in structuring many Christian rituals. For example, the rules for the conduct of Anglican church services were carefully enumerated in the Book of Common prayer. "The 119th Psalm is divided into twenty-two portions, and is over-long to be read at one time; It is so ordered, that at one time shall not be read above four or five of the said portions" is a typically complex instruction. Perhaps seeing numerical consistencies in the funeral helped Holwell to understand widow-burning as a religious rite. Certainly numbering was part of watching and interpreting the custom, long before the number of burnings were counted.

At the moment of death itself the report is silent, as if Holwell became lost for words, though he stressed that the pyre was highly combustible and that Chund's widow appeared to die quickly.

When it was published in 1767, Holwell's eyewitness account was recognised as "very curious and important" by contemporary British reviewers,¹⁸⁸ and it was translated into German and French. The death of Chund's widow was cited by Voltaire and featured in numerous European accounts of India. William Alexander used it as his principal evidence that the custom was still practiced, devoting four pages of his *History of Women* to a retelling of this eyewitness encounter.¹⁸⁹

¹⁸⁸ P. J. Marshall, *The British Discovery of Hinduism in the Eighteenth Century* (Ann Arbor, MI: University Microfilms International, 1992), 7.

¹⁸⁹ Alexander, *History of Women*, 459-62.

Two more Britons wrote eyewitness accounts in the 1750s, both of which were published in Britain. In December 1751 an anonymous Briton, presumably male, witnessed a funeral at Collicutta, Bengal, which he recorded in a letter. Like Holwell the writer timed the burning and made other numerical observations. He estimated the widow's age, about 15 or 16, and counted the number of times she walked round the pyre. He did not engage the widow in conversation; he stood apart and projected his feelings onto her. He emphasised the widow's melancholy state of mind, the restraints that were used to pin her to the body of her husband, and the forceful interventions of her family. He became convinced that they were coercing her onto the pyre. This anonymous account was reproduced in *The Gentleman's Magazine* in July 1752 and simultaneously in *The Scots Magazine* and *The London Magazine*.¹⁹⁰ Both the *Scots* and *London Magazines* felt it needed an editorial introduction, placing the "barbarous" custom into a broader social context. The editors appeared familiar with Bernier's account and were aware of Mughal attempts to restrict the practice, but they noted that the Mughals had "not been able to suppress it entirely."¹⁹¹ This eyewitness account demonstrated that widow-burnings were still occurring in some parts of India.

A second eyewitness account, written by Captain Cope, was published in Britain a few years later in 1754. He had come across widow-burning on the west coast of India. Like his British and Indian contemporaries, he made careful mental measurements, but Cope focussed more on the mechanics than the rituals. He estimated the size of the pit and recorded the procedures for lighting the fire before the widow climbed onto the pyre. Like Bernier eighty years earlier, Captain Cope witnessed a number of burnings, and these experiences led him to make a wider sociological claim. He thought the practice widespread, believing that "now the Custom so far prevails" that if any woman did not do it she was "shaved and degraded".¹⁹² Cope believed that there were cultural sanctions for women who did not participate. A bluff sea captain, who when abroad kept a lookout for "pretty nimble female dancers" and priests "all naked, except a Bit of Cloth to hide their Privities",¹⁹³ Cope does not appear to have been considered a reliable

¹⁹⁰ 'Historical Chronicle, July 1752', *The Gentleman's Magazine*, vol. 22, (1752), 335. 'History', *The Scots Magazine*, (July, 1752), 363-4.

¹⁹¹ 'The Monthly Chronologer', *The London Magazine*, vol. 21, (July, 1752), 333. *The Scots Magazine*, (July, 1752), 363.

¹⁹² Captain Cope, *A New History of the East Indies. With Brief Observations on the Religion, Customs, Manners and Trade of the Inhabitants* (London: Cooper; Reeve; Sympson, 1754), 299.

¹⁹³ Cope, *A New History of the East Indies*, 296-98.

witness by his peers. His eyewitness account and his claims about the custom's prevalence were not cited by other writers and his account quickly disappeared into obscurity.

There was no standard British emotional response to the custom. Britons were detached, appalled, mentally disturbed and empathetic. Sir Francis and Lady Anne Russell knew the family and Anne Russell in particular tried to be sympathetic and sensitive. Grose thought it barbarous as did the anonymous witness who watched appalled from a distance, while Captain Cope seemed devoid of any feelings for the widow. He was fascinated by the mechanics, especially the workings of a rope contraption which held up a five-hundred-pound log that would drop onto the widow and pin her to her husband.¹⁹⁴ British emotional responses were highly individual and not straightforwardly humane. If as some claim the arrival of statistics changed how Britons felt, it first needs to be recognised that they were not coming from a common starting point.

The numbers of travel books that mentioned widow-burning seemed almost infinite, but only a handful contained original evidence. The custom had been witnessed by a small number of European travellers, and many of the best-known reports were centuries old. Britons interested in understanding India were familiar with these accounts, though not with contemporary Indian accounts.¹⁹⁵ There were competing European claims about the prevalence of the practice. Some described it as rarely performed, others suggested that it was duty for all widows. The most comprehensive social account was produced by François Bernier, who argued that it was declining in Mughal areas but widespread elsewhere. But Bernier, like other writers, was aware that he faced general scepticism about whether the custom still took place.

Governing knowledge

In 1753 Robert Orme, a young and ambitious East India Company employee, wrote a short essay on the 'General Idea of the Government and People of Indostan'. Orme hoped to establish himself as an authority on India believing that understanding its

¹⁹⁴ Cope, *A New History of the East Indies*, 299.

¹⁹⁵ Two contemporary Indian accounts are now known to historians. Julia Leslie, *The Perfect Wife : The Orthodox Hindu Woman According to the Stridharmapaddhati of Tryambakayajvan* (Oxford: Oxford University Press, 1989), 291-304; Ram 'Account of a Sati in Gujerat in 1741', *Journal of the Anthropological Society of Bombay*.

culture and customs would be “of no mean importance to the commerce of the Indies”.¹⁹⁶ General ideas of how India was governed and how its society operated, which had been useful when building trading relations, became vital as the East India Company mutated into a colonial power. The East India Company acquired new governing responsibilities after the Battle of Plassey in 1757 and governance became a practical question.

One result, as P. J. Marshall has observed, was that from the 1760s “books on India began to multiply”.¹⁹⁷ The principal writers on India in this period, Robert Orme, Luke Scrafton, Alexander Dow and John Zephaniah Holwell, were all former Company employees who had recently returned from Bengal. Their books were researched and written in London, explicitly drawing on published sources, while making use of their own first-hand experiences. British knowledge of India was being made in Britain, as well as India. All four wrote histories. Understanding the past was seen as the key to understanding how to govern the newly acquired territories. In their dedications, the authors directly connected historical knowledge with British power. Robert Orme in 1763 and Alexander Dow in 1768 dedicated books to George III. Dow wrote “The History of India is laid, with great humility, at the foot of the throne.”¹⁹⁸ John Holwell hoped his history was “persuasive to the court and directors of the East India Company.”¹⁹⁹ The authors targeted the powerful, but the authorities in turn also recognised their need for history. In 1769 the East India Company appointed Robert Orme the first official historiographer of the Company, on a salary of £400 a year. The market also supported the production of knowledge about India. These new histories of India were relatively popular works, simultaneously published in multiple editions by booksellers.

Official patronage and public demand for new histories of India was a recognition that the introduction of British rule was a profound political and social change. Luke

¹⁹⁶ Robert Orme, *Historical Fragments of the Mogul Empire, of the Morattoes, and of the English Concerns in Indostan* (London: Wingrave, 1805), 393.

¹⁹⁷ P. J. Marshall, *The British Discovery of Hinduism in the Eighteenth Century* (London: Cambridge U.P., 1970), 2. This remains the classic account of the explosion of eighteenth-century material on India. For the early modern-period see Lach, *India in the Eyes of Europe*.

¹⁹⁸ Muḥammad Qāsim Firishtah and Alexander Dow, *The History of Hindostan* (London: Debrett; Blacks & Parry, 1803), v.

¹⁹⁹ Holwell, *Interesting Historical Events*, frontispiece.

Scrafton described the recent political and military events in Bengal as “revolutions”.²⁰⁰ Certainly a fundamental change had occurred and to know how to proceed Scrafton argued that Britons needed to know about the “Religion, Customs, Policy, and Government of the native Indians, and the conquerors the Mahometans”.²⁰¹ How to understand and govern India pre-occupied both the East India Company and parts of the public sphere.

This need to understand how Indian society operated aligned with a general intellectual concern. In the eighteenth century there was broad interest in everyday lives, manners and customs. Not confined to one kind of knowledge, it was seen as much in the rise of the novel as the emergence of social history. The cultural historian Mark Phillips argues that this interest in how other people lived was part of the mid to late eighteenth-century’s “reconceptualization of social knowledge”, which increasingly saw political action as shaped by economic factors, ideas and social customs.²⁰² The global expansion of British power brought a particular urgency to the task of reconceptualising eighteenth-century social knowledge.²⁰³ To govern unfamiliar cultures, they needed to be made familiar.

Widow-burning was not a pressing governmental issue for the British at this time as they established colonial rule. There were no recorded discussions about the custom within the East India Company before 1787. Yet, for reasons this section will explore, British historians in the early years of Company rule were all agreed that it was culturally and historically significant, even as they split sharply on the sociological question of whether the practice still occurred.

Establishing the borders of the new British-governed state, Robert Orme, in his *History of the Military Transactions of the British Nation in Indostan* (1763), thought geographical features such as rivers, oceans and mountains particularly important, but he also placed great emphasis on the unities of religious and social customs. For this

²⁰⁰ A judgement about what occurred at Plassey that still echoes today. See for example Sushil Chaudhury, *The Prelude to Empire : Plassey Revolution of 1757* (New Delhi: Manohar, 2000).

²⁰¹ Luke Scrafton, *Reflections on the Government of Indostan, with a Short Sketch of the History of Bengal* (London, 1763), 3.

²⁰² Mark Phillips, *Society and Sentiment: Genres of Historical Writing in Britain, 1740-1820* (Princeton, N.J.: Princeton University Press, 2000), 171-89.

²⁰³ Ronald L. Meek, *Social Science and the Ignoble Savage* (Cambridge: Cambridge University Press, 1976).

reason, widow-burning appeared on page three of his military history as a key characteristic of the people, “they encourage wives to burn themselves with their deceased husbands”.²⁰⁴ As much as the Ganges or the Himalayas, Orme thought this distinctive Hindu funeral practice could be used to define the boundaries of a new nation state.

Luke Scrafton also thought it was a “remarkable” custom and gave an extended account of the practice in the opening pages of his *Reflections on the government of Indostan* (1761). Similarly, in 1768 Alexander Dow thought widow-burning essential to examine in his short ‘dissertation concerning the Customs, Manners, Language, Religion and Philosophy of the Hindoos’, which introduced his translation of Firishtah’s *The History of Hindostan*. Likewise, twenty-five years after he witnessed the widow-burning in Cossimbazaar, John Zephaniah Holwell returned to the topic at length in *Interesting historical events, relative to the provinces of Bengal, and the empire of Indostan* (1767). All four writers tackled widow-burning as they sought to define what constituted India.

While the historians agreed that widow-burning was culturally significant, they split sharply on the sociological question of whether it still occurred. Robert Orme, in a number of works written between 1753 and 1782, argued that the practice was still prevalent. John Holwell agreed; widow-burning was a contemporary practice, that “subsists among them at this day”.²⁰⁵ Alexander Dow and Luke Scrafton argued the opposite. Scrafton in 1761 claimed that “the practice is far from common, and only complied with by those of illustrious families”,²⁰⁶ while Dow claimed that, “The extraordinary custom of the women burning themselves with their deceased husbands, has, for the most part, fallen into desuetude in India: nor was it ever reckoned a religious duty, as has been very erroneously supposed in the West.”²⁰⁷

What were the reasons for this split? Principally it was a result of their personal experiences. Each historian had administrative experience in India. Speaking about their methods, all four made it clear that they used this personal knowledge to support their claims about the present. Robert Orme made “observations” during “a residence of

²⁰⁴ Robert Orme, *A History of the Military Transactions of the British Nation in Indostan* (London: Nourse, 1763), 3.

²⁰⁵ Holwell, *Interesting Historical Events*, 87.

²⁰⁶ Scrafton, *Reflections on the Government of Indostan*, 11.

²⁰⁷ Firishtah and Dow, *The History of Hindostan*, xxxi.

several years in India”.²⁰⁸ Luke Scrafton relied on “memory” as well as the “papers I have by me”,²⁰⁹ and Alexander Dow emphasised his conversations with Brahmins.²¹⁰ John Zephaniah Holwell was the only writer of this generation to have personally witnessed widow-burnings. . Like Bernier and Captain Cope, he had “been present at many of these sacrifices”²¹¹ and therefore he made the strongest case that the practice was still widespread.

The historians’ attitudes to Indian culture strongly coloured how they saw widow-burning. However this had surprisingly little influence on their thoughts about its prevalence. Robert Orme thought the pervasiveness of the custom was evidence that Indian society was still essentially barbaric: “It is not probable that any great changes can have been introduced amongst a people, who have preserved a custom which so strongly revolts the first feelings of humanity.”²¹² Similarly, Luke Scrafton thought the culture resisted change and that religion was to blame for this. “They admit no converts, nor are themselves ever converted, whatever the Roman missionaries may pretend.”²¹³ However, whilst Scrafton thought Hinduism was responsible for the lack of progressive changes within Indian society, unlike Orme, Scrafton argued that widow-burning was rarely practised.

In contrast Alexander Dow argued that Hinduism was self-correcting and capable of internal reform. He hoped that modernising leaders would teach the broader population that widow-burning had never been “a religious duty”. He thought the custom was already rare and stressed that long-term the trends were downward.²¹⁴ Holwell produced one of the most sympathetic British accounts of widow-burning. He was aware that widow-burnings seemed cruel, but Britons needed to understand the internal logic of the religion. He explained that Hindus were educated from birth that life is a punishment, death a release and this, he claimed, gave women “motives, for cheerfully [sic] embracing death”.²¹⁵ Holwell became notorious as an apologist for Hinduism, and he would be condemned by many evangelicals for this. However

²⁰⁸ Orme, *Historical Fragments of the Mogul Empire*, 393.

²⁰⁹ Scrafton, *Reflections on the Government of Indostan*, 3.

²¹⁰ Firishtah and Dow, *The History of Hindostan*, xx.

²¹¹ Holwell, *Interesting Historical Events*, 90.

²¹² Orme, *Historical Fragments of the Mogul Empire*, 393.

²¹³ Scrafton, *Reflections on the Government of Indostan*, 7.

²¹⁴ Firishtah and Dow, *The History of Hindostan*, xxxi.

²¹⁵ Holwell, *Interesting Historical Events*, 97.

ironically he also became the primary source of evidence that the practice was widespread.

There was general agreement amongst the historians that widow-burning was a significant, culturally defining custom, but the four most prominent British writers on Indian society were sharply divided about whether it was still practiced. Two, Robert Orme and John Holwell, thought widow-burning was prevalent, and two, Luke Scarfton and Alexander Dow, thought it was not. Unlike later commentators their views about its prevalence were not strongly connected to their stance on Hinduism.

However whilst the custom's prevalence was disputed by historians in Britain, in India widow-burnings were disappearing from British view. By the 1770s Howell's eyewitness account was over 25 years old and it stood alone. Between 1754 and 1777 no other British eye-witness account of a widow-burning was published in Britain.

In 1782 Orme returned to the topic of widow-burning in his history of the Mughal empire. His position had not shifted in twenty years, he still thought the practice was repugnant and widespread, but now he produced a new kind of evidence to support his claims. Orme cited evidence produced by Jesuit missionaries, which, although 180 years old, had recently been translated into English.²¹⁶ In 1602 Jesuits had witnessed a huge royal funeral where "three hundred and seventy-five women burnt with the Naigue of Tanjore".²¹⁷ There had been several European accounts of mass widow-burnings in the princely states, but the Jesuits were the first to attach a number to these mass-suicides and to believe that the numbers of deaths mattered. Citing this figure, Robert Orme became one of the earliest British writers to use a precise number to quantify the horrors of widow-burning.

However, the use he made of the figure was curious. The data, although 160 years old, supported his case that widow-burnings were prevalent, but Orme was not convinced by Roman Catholic numbers, "which we suppose to be the honest but enthusiastic credulity of the missionaries lamenting the infernal state of the heathens they wished to convert".²¹⁸ The numbers looked too big, and Orme concluded that missionaries were not reliable sources of information. Orme thought Jesuit knowledge

²¹⁶ John Lockman, *Travels of the Jesuits, into Various Parts of the World*, 2 vols. (London: T. Piety, 1762).

²¹⁷ Orme, *Historical Fragments of the Mogul Empire*, 261.

²¹⁸ Orme, *Historical Fragments of the Mogul Empire*, 261.

was too obviously tainted. Similar criticisms would soon be made of the first British social statistics on widow-burning, which were also collected by missionaries.

Official decisions

After acquiring political control, the East India Company gradually took on more civic responsibilities. From 1772 the Company took on direct responsibility for the administration of civil justice in the parts of India it governed. Widow-burning was not illegal, but it was starting to come to the attention of the British colonial authorities.

There are excellent records of British dealings with the custom. In the 1820s all the East India Company's internal correspondence on widow-burning was published by Parliament. These parliamentary papers, supplemented by the original handwritten records in the India Office archive, collate what was thought worth recording about widow-burning by Company officials at all levels in British India and London. The papers straddle the introduction of statistical data and provide a remarkable record of how the colonial state acted before and after widow-burning was counted.

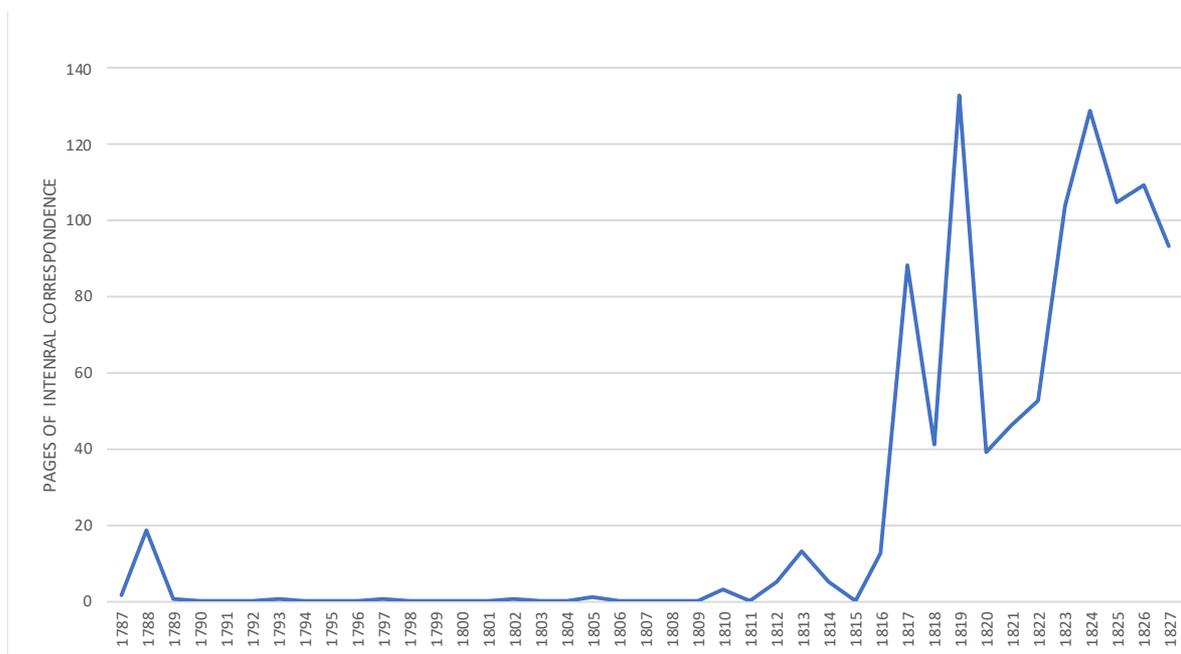


Fig. 1a: A graph showing the quantity of internal East India Company correspondence about widow-burning, 1787-1827, measured by printed pages in the parliamentary papers.

The first records of Company discussions about widow-burning appear in 1787. The papers demonstrate clearly that there was a huge increase in paperwork within the Company after official statistics were introduced in 1815, and a smaller but noticeable increase after the first unofficial data was published in 1805. This chapter examines British decision-making before that date, when very little discussion was recorded. When and how often did the Company consider the issue of widow-burning before there were numbers of any kind? What brought it to their attention and what kinds of decisions did they make? Were doubts in Europe about the prevalence of the custom shared by senior British officials on the ground?

The Company dealt with very few cases of widow-burning before 1805. The British directly ruled three areas of India, and each was managed as a distinct administrative region, known as a presidency. No cases were recorded by officials of the Bombay Presidency until 1817. In the Presidency of Fort St George, a British military officer prevented a widow-burning in 1772 and two deaths were officially recorded in 1802 when the wives of a prominent Indian monarch killed themselves at his funeral. In the Bengal Presidency there were three cases where the British prevented women from burning and only three deaths recorded officially from 1757-1805. In fifty years of British rule only five widow-burnings were recorded across the three presidencies. The practical experience of government would have indicated to most administrators that widow-burning was neither prevalent nor an issue that required much attention.

Company records of eyewitness accounts were even more rare. In this period only one Briton was recorded in the internal correspondence as personally witnessing a widow-burning. This account was written by a Mr Cruso on 24 July, 1786. Like other observers he recorded attentively what he saw. Cruso paid careful attention to the mechanics of the act, but this was not a disinterested account. He was strongly drawn to the nineteen-year-old widow. He thought “her form elegant, and her features interesting and expressive: her eyes in particular, large, bold and commanding”. Cruso noted that “happily” the “welcome din of the trumpets” masked the widow’s cries as the pyre was lit.

Cruso’s account was passed up the bureaucratic chain by Sir Charles Ware Malet, Resident of Poona, who added a comment that he found Cruso’s account “faithful and

interesting”.²¹⁹ When it arrived in London it was stored in the Company’s archives in Leadenhall Street, where it remained, unknown to a wider public sphere until it was published by Parliament in 1821. What the senior male bureaucrats in London made of the trumpets masking the death cries of a beautiful young widow is unknown, because widow-burning was not on the agenda. From 1757-1797 there are no records of any discussion of the topic by the Court of Directors, or by stockholders or the Board of Control. No-one in London wrote to India with any official guidance or made any requests for further information about widow-burning.

Widow-burning occupied very little Company time. Many years the topic was not mentioned at all and its appearance in correspondence was sporadic and unpredictable. When it did come to the attention of officials, threats to social order were the main reason. The British were discovering that burnings and suicides more generally could be both a devotional act and a political weapon. In 1772 a large crowd of Hindu men, estimated to be 700 strong, threatened to kill themselves because a British captain had led a widow away from her husband’s pyre by the hand. The revolt fizzled out, but British military officials in Fort St George were warned strongly by a number of Indian leaders that the British captain’s conduct had been “imprudent” and “arbitrary”. The British were reminded strongly that they should not interfere in a religious practice.²²⁰ A perceived threat to colonial authority was also why in 1788 Jonathan Duncan, the revenue collector and senior British official in Benares in Bengal, conducted an investigation into the death of a woman on a funeral pyre. The widow had believed that her husband was beaten dead by an abusive tax collector, and the British feared that her death was part of a political protest against paying taxes. However, the widow’s self-sacrifice was not the focus of Duncan’s investigation, which aimed to exonerate the tax collector. Wanting to avoid a breakdown of order and “a general anarchy”²²¹ he was concerned that Indians understood their obligations to pay tax. Jonathan Duncan wrote notoriously long-winded reports,²²² and his lengthy investigation of the case, very little of which actually dealt with widow-burning, was solely responsible for the spike in the paperwork in 1788.

²¹⁹PP 18 (749), at 3.

²²⁰ PP 18 (749), at 268.

²²¹ PP 18 (749), at 8.

²²² Pamela Nightingale, 'Duncan, Jonathan (Bap. 1756, D. 1811), Administrator in India ', *Oxford Dictionary of National Biography* (Oxford, 2004).

Whilst the practice itself was of no particular concern in this case, Jonathan Duncan did on another occasion record his thoughts about the prevalence of the custom and its wider social significance. He worried that it was widely prevalent in his region; people in the hilly part of the province seemed “addicted to suicide” and both old women and cows were burned on pyres. Duncan found the “dispositions” of many of the inhabitants “unaccountable” and thought widow-burning was evidence of widespread Indian irrationality.²²³

Senior officials saw that widow-burning had the potential to be a focus of political dissent, but it was not a significant issue for the executive in India. In general, they rarely thought about the custom, and many years the topic generated no paperwork at all at this level.

However, the Company’s records do not fully describe what was occurring in the empire. There is evidence outside East India Company archives that some junior British officials witnessed and made decisions about widow-burnings that they did not report to their seniors. In the 1770s and 80s at least four Company managers, merchants and soldiers wrote letters to families and friends in Britain describing what they had seen and how they acted. Absent from the East India Company’s official records, these detailed accounts reveal much about how lower-level Britons dealt with and thought about widow-burning in the years before they were called upon to regulate the practice and collect statistics.

At the end of August 1776 Joseph Wilson, a 27-year-old single plantation manager,²²⁴ was asked to give permission for the funeral of Orram Gose, a man he knew well through business. The family wanted the funeral to take place in the village bazaar which belonged to the plantation that Wilson managed. However, this was not a simple practical arrangement. Gose’s widow, Jananca wished to die on her husband’s funeral pyre and her family asked Joseph Wilson to permit it.

This was an unusual decision for an East India Company employee to be asked to make. Prior to British rule Hindu widows in Bengal had been required to seek permission from Mughal rulers if they wished to burn. But in 1776 there were no British

²²³ PP 18 (749), at 8.

²²⁴ Joseph Hunter, *Hallamshire : The History and Topography of the Parish of Sheffield in the County of York* (London: Lackington, 1819), 279.

regulations or policies about widow-burning, so approval was not officially required. However, in this case, because Joseph Wilson managed the chosen venue, his permission was sought. Wilson felt able to sanction the funeral without referring the matter to any higher British authority. He spoke directly with Jananca Gose who told him that “she was much obliged to me for giving her liberty to burn in that place” and that she “desired I would not offer to oppose it”.²²⁵ Wilson added one proviso, that no force should be used to make her die against her will.

Wilson decided to ensure that Jananca Gose’s death was freely chosen by attending the funeral himself a few days later on 2 September 1776. This was the first time that a Company employee watched a funeral to confirm that it was conducted in accordance with his instructions. Beside the pyre he spoke again with the widow to confirm that she still wanted to burn. He scrutinised the funeral carefully to make sure that there was no coercion. He noted that she mounted the pile without help and thought that she was not drugged. When the pyre was lit, and death came, Wilson thought it came quickly. He kept watching to make sure that his instructions were followed. Right up until her death he believed that Jananca Gose was acting freely, concluding that “it was an intirely [sic] voluntary act.”²²⁶

Joseph Wilson did not explain whether he had any prior knowledge of the custom, but his lack of surprise when he first heard about the request suggests it was not completely unknown to him. Wilson made no attempt to extrapolate from what he saw; he made no general claims about whether widow-burning was a common social custom in India. It was the decision-making that prompted him to write a letter to his father in Yorkshire. Jananca Gose’s death was personally significant for Joseph Wilson because, as he explained to his father, he found it troubling that he was responsible for approving a suicide.

A letter similar to Wilson’s was written three years later by Joseph Cator in 1779. Like Wilson, Joseph Cator had established a friendly business relationship with the man who died, a well-respected merchant called Gocul Chundes Gosaul. Aged 50, Joseph Cator was over twenty years older than Joseph Wilson. He had visited Gosaul as he lay dying by the river, and in his report of this visit the personal warmth between the two men is self-evident. Making lots of physical contact, Cator held Gosaul’s hand and took

²²⁵ 'Letter from Joseph Wilson to John Wilson', *The Gentleman's Magazine*, vol. 47, (December, 1777), 590-1.

²²⁶ *The Gentleman's Magazine*, vol. 47, (December, 1777), 590-1.

his temperature. Subsequently he attended the funeral and like Wilson witnessed the death of a widow he knew personally. His account emphasised the bravery and agency of Gosaul's wife. He believed she did it "deliberately, with astonishing fortitude and resolution". He emphasised that it was a quick death, and that the smoke must have suffocated her swiftly.²²⁷

Cator and Wilson's descriptions of the death of friends' wives mark the high-point for a certain form of friendly tolerance. Sir William and Lady Ann Russell, Joseph Wilson and Joseph Cator had listened to the thoughts and feelings of women they knew by name and then watched them burn. These were unusual accounts; other British eyewitnesses, like Captain Cope and Mr Cruso did not engage with Indian widows in this way. This was the last period when some Britons in India thought that widows' opinions were at the heart of the matter. Subsequent investigations into the custom completely excluded such friendly discussions. Many more eyewitness accounts followed from the end of the 1790s onwards as the practice came under increased British surveillance, but the tolerant spirit of some eighteenth-century Britons who saw widow-burning as a cultural custom to be respected and understood on its own terms almost entirely vanished.

Perhaps aware of the historians' debates in London, some Britons in India were starting to make judgements about the wider prevalence of the custom. Abraham Caldecott, a merchant, witnessed a burning in Bengal in 1783. In a letter to Miss Pettet of Dartford in Kent, Caldecott wrote that he could scarcely countenance what he thought he had seen if he had not made further enquiries and heard reports of other cases. "I certainly would have been apt to doubt the veracity of it, but the fact is so well established and so many instances of the like nature have occurred since writing my letter as leaves no doubt of the generality of the practice all over Bengal."²²⁸ However, others took the opposite view. Eliza Fay, the first British woman to record her thoughts about the practice, wrote at length from Calcutta to her sister in England about it in September 1781.²²⁹ Fay wrote that "the fact is indubitable, but I have never had an opportunity of witnessing the various incidental ceremonies, nor have I ever seen any

²²⁷ Joseph Cator, 'A Particular Account Relative to an Hindoo Woman's Burning Herself Alive with Her Deceased Husband: Taken from an Authentic Letter, Dated Calcutta, 25th July, 1779', *The Annual Register* (London: J. Dodsley, 1783), 170.

²²⁸ Major, *Pious Flames*, 75.

²²⁹ Andrea Major, *Sati : A Historical Anthology* (Oxford: Oxford University Press, 2007), 53.

European who had been present at them.”²³⁰ In 1785 ‘An account of a woman burning herself’ was published in the Calcutta press. An anonymous British officer had by chance come across a funeral on his way to dinner. The officer stopped to watch, immediately aware that this was a chance to witness something unusual: “I had read many accounts of this strange and barbarous ceremony, but had never seen it performed, I was resolved upon the present occasion to be an eyewitness.”²³¹ British residents in India, like historians in London, could not agree whether the practice was common or rare.

Joseph Wilson had felt able to give permission for a funeral and issue instructions without seeking advice from more senior Company officials. A decade later, placed in a similar situation, M H Brookes sought guidance about how to respond. In January 1789 Brookes wrote to the Governor-General of Bengal because he had been asked to approve a widow-burning in Shahabad. More judgemental than Wilson, he made it clear that he thought it “a horrid ceremony”. He wrote that his “human nature shudders” at the practice and he felt therefore that he could not permit it within his jurisdiction “without particular instructions” from the government.²³² Brookes was the first of numerous officials to complain in writing that the British were sanctioning an intolerable practice that they could be preventing. The administration in Calcutta in the 1780s had no specific forum for making policy about religious practices and Brookes’ request for guidance was considered rather incongruously by the committee that dealt with Revenue Consultations. The committee made a group response. It approved his refusal to permit a burning but made it clear that such interventions could not be sanctioned by the Company, which had a long-standing policy of non-interference in religious affairs.²³³ Brookes was told that he could only act privately to dissuade widows and should not use his official powers to prevent the practice.

Although the Revenue Consultations committee had no data, it made a rough reckoning of the likely effects of intervention to support its policy position. The

²³⁰ Eliza Fay, *Original Letters from India; Containing a Narrative of a Journey through Egypt, and the Author's Imprisonment at Calicut by Hyder Ally. To Which Is Added an Abstract of Three Subsequent Voyages to India*. (Calcutta, 1817), 292.

²³¹ Walter Scott Seton-Karr and Hugh David Sandeman, *Selections from Calcutta Gazettes of the Years 1784 -1823, Showing the Political & Social Condition of the English in India* (Calcutta: Cutter, 1864), 90.

²³² PP 18 (749), at 22.

²³³ Major, *Pious Flames*, 98-108.

committee, which normally counted money, applied similar quantitative thinking as it calculated the social consequences of a political act. It argued that “public prohibition... would in all probability tend rather to increase than diminish their [Hindu] veneration for it; and, consequently, prove the means of rendering it more prevalent than it is at present.” An outright ban would make it an anti-colonial cause and increase the numbers of burnings. The committee favoured a gradualist, Indian-led change, rather than a British ban. “It is hoped the natives themselves will, in the course of time, discern the fallacy of the principles which have given rise to this practice, and that it will of itself gradually fall into disuse.”²³⁴ Like Bernier a century earlier, who hypothetically compared the numbers of burnings in Muslim and Hindu ruled areas of India, in some official circles, British thoughts about how to proceed politically were becoming quantitative. Estimating the future numbers of burnings was starting to play a small role in shaping government actions.

Prior to the introduction of statistics, official discussions within the Company about widow-burning were rare, sporadic and driven by the demands of individual events. There were significantly different perspectives on the question of prevalence. Some people thought the custom was widespread, whilst others, most notably the Revenue Committee in Calcutta, the most senior group of officials to determine a policy position prior to the production of statistics, thought widow-burning was fading away under the influence of a civilising British rule. However, these internal discussions about policy had negligible impact on ordinary lives. At this point the vast majority of Indians and Britons would have had no awareness that British officials were even thinking about the custom.

Debates in the British public sphere

Whether Indian widows still burnt on their husbands’ funeral pyres might have remained an obscure question, debated only by historians and some East India Company officials, if the prevalence of widow-burning had not become a minor controversy in Britain in the late 1770s. Before then mentions of the custom in British newspapers and magazines were sparse. There was very little new evidence, and as a result widow-burning was not newsworthy. However, in 1777 John Wilson received a letter from his

²³⁴ PP 18 (749).

younger son, Joseph, the plantation manager who had permitted and watched Jananca Gose's death on a pyre. Wilson, of Broomhead Hall near Sheffield,²³⁵ was a prolific collector, antiquarian and keen reader of popular histories.²³⁶ He read *The Gentleman's Magazine* and entertained himself by occasionally submitting letters on historical and social questions, such as the origin of tarring and feathering.²³⁷ Wilson realised that his son's letter provided him with a chance to challenge the claim, currently circulating in some histories of India, that Indian widows no longer burnt on their husbands' pyres.

The historian that John Wilson decided to challenge was the popular Scottish author, William Guthrie, who was best known at this time for his global histories such as *General History of the World, from the Creation to the Present Time* (1764–7) and *Geographical, Historical, and Commercial Grammar* (1770).²³⁸ In the *Geographical Grammar*, an ambitious overview of the world's knowledge and of its inhabitants, Guthrie gave a short account of Hindus and Hinduism. He described Hindus as alien – he thought them “entirely passive” and “free of all those passions, particularly that of love, and sensations that render the rest of mankind either happy or miserable”. Although disgusted by their belief systems, like other historians at this time Guthrie could disconnect his views about Hinduism from his ideas about the prevalence of its customs. He thought that “the practice of women burning themselves, upon the death of their husbands, is now said to be disused all over Indostan”.²³⁹ On the question of prevalence, Guthrie had sided with Dow and Scrafton, the historians who thought widow-burning was all but extinct.

Like the vast majority of Britons, William Guthrie had not been to India. His knowledge was second-hand, which made his claims about widow-burning vulnerable to a challenge from a first-hand account. John Wilson, spotting the opportunity for some intellectual glory, sent his son's letter to the editor of *The Gentleman's Magazine*,

²³⁵ The Wilsons of Broomhead Hall were a prominent Sheffield family whose genealogy and employment histories can be found in Hunter, *Hallamshire : The History and Topography of the Parish of Sheffield in the County of York*, 279.

²³⁶ John Wilson's biography is in Hunter, *Hallamshire : The History and Topography of the Parish of Sheffield in the County of York*, 275–7.

²³⁷ John Wilson, 'Letter', *The Gentleman's Magazine*, vol. 45, (1775), 565.

²³⁸ Better known for his geographies, Guthrie was also a prolific writer of histories. R Mayhew (1999), 'William Guthrie's Geographical Grammar, the Scottish Enlightenment and the Politics of British Geography', *The Scottish Geographical Magazine*, 115 (1); L Okie (1989), 'William Guthrie, Enlightenment Historian', *The Historian*, 51 (2).

²³⁹ William Guthrie, *A New Geographical, Historical, and Commercial Grammar and Present State of the Several Kingdoms of the World* (London: J. Knox, 1774), 539.

adding his own introduction. “It be asserted by Mr. Guthrie... and some other authors, that the custom of the Gentoo women burning themselves with their husbands was disused in India”. John Wilson believed that Joseph’s letter proved that this was wrong. Introducing it he concluded with quiet satisfaction, that “it appears that the custom is yet kept up and practised.”²⁴⁰

Wilson’s attack on Guthrie was reprinted in newspapers such as the *General Evening Post* and the *St. James's Chronicle*²⁴¹ and was collected in the 1777 edition of the *Annual Register*.²⁴² Readers might well have enjoyed seeing a historian’s facts being corrected by an unpublished amateur, but they were also being made aware, if they did not already know it, that the prevalence of widow-burning in Bengal was an interesting question. From this point onwards, eyewitness accounts were given fuller coverage in magazines. Joseph Cator’s very similar account was published in the British press in 1779, and a small flurry of coverage led a British newspaper to comment that “all the world knows that in many parts of the East Indies they uphold the barbarous custom of the women burning themselves at the funeral of their husbands”.²⁴³

Compared with the explosion of magazine and newspaper coverage in later decades, it was an exaggeration to claim in the 1770s that the whole world knew about widow-burning, but some worlds certainly did. In Britain, France and Germany descriptions of Indian social customs and religious practices began to appear in encyclopaedias, philosophical writing, geographies and general historical writing, and widow-burning was featured in plays, operas, poems and novels.²⁴⁴ Many of these works were also swiftly translated.

Widow-burning was becoming well-known in European intellectual circles. Voltaire read John Holwell’s account and became convinced that the custom was common enough that “there is scarcely a governor of Madras or Pondicherry who has not seen some Indian woman voluntarily perish in the flames.”²⁴⁵ Voltaire was one of

²⁴⁰ *The Gentleman's Magazine*, vol. 47, (December, 1777), 590.

²⁴¹ *General Evening Post* (London, England), January 6, 1778 - January 8, 1778, Issue 6870. *St. James's Chronicle or the British Evening Post* (London, England), January 3, 1778 - January 6, 1778, Issue 2623.

²⁴² Robert Dodsley, *The Annual Register, or a View of the History, Politicks and Literature of the Year 1777* (London, 1783), 45-47.

²⁴³ *The London Chronicle*, September 9, 1777.

²⁴⁴ Dorothy M. Figueira, 'Die Flambierte Frau: Sati in European Culture', in Hawley, J.S. (ed.), *Sati, the Blessing and the Curse: The Burning of Wives in India* (Oxford: University Press, 1994); Mehta, *Widows, Pariahs, and Bayaderes : India as Spectacle*; Major, *Pious Flames*; Major, *Sati : A Historical Anthology*.

²⁴⁵ Voltaire, *A Philosophical Dictionary*, trans. Gorton, J.D., 6 vols. (London: Hunt, 1824), 57. vol. 2

the first Europeans to attempt to estimate the total number of widow-burnings, suggesting that the custom was a much smaller problem than the inquisition: “A few hundreds of Indian women at most have furnished this horrid spectacle; but our inquisitions...have put to death in the flames more than a hundred thousand of our brethren.”²⁴⁶ Johann Herder in his *Outlines of a Philosophy of the History of Man*, published in Leipzig in 1784 and in translation in London in 1800, argued that the custom was a significant indicator of the state of Indian civilisation. Herder said that “the burning of wives on the funeral piles of their husbands may be reckoned among the barbarous consequences” of Hindu doctrine of the Transmigration of souls, which Herder believed produced a “want of sympathy”.²⁴⁷ In contrast Goethe’s 1797 poem ‘Der Gott und die Bajadere (Indische Legende)’ echoed the more sympathetic accounts of Holwell, Cator and Wilson, presenting the widow’s death on a pyre as an example of selfless, heroic love.

Goethe was inspired to treat the subject of widow-burning by reading a German translation of the work of French explorer and naturalist, Pierre Sonnerat.²⁴⁸ Sonnerat directly challenged the validity of historical knowledge as a method of social enquiry. “Religion, manners, actual customs”,²⁴⁹ he argued, gave a better picture than history, which merely collects anecdotes from the archive. In India, he argued, archival records were insufficient, and this lack of evidence was leading history to make too many conjectures. Rejecting the narrow perspective offered by single eyewitness accounts, he introduced a number of novel procedures to collect his contemporary information about widow-burning. He travelled extensively and collected accounts rather than trying to witness a funeral himself. He also examined material practices, such as the construction of trophies and cenotaphs at the site of funeral pyres, which few other contemporary observers had noted. These objects acted as signposts to human activity, enabling him to know about funerals that had not been witnessed by Europeans. The aim was to build a multifaceted picture of Indian society.

²⁴⁶ Voltaire, *A Philosophical Dictionary*, 58.

²⁴⁷ Johann Gottfried Herder, *Outlines of a Philosophy of the History of Man*, trans. Churchill, T.O. (London, 1800), 309.

²⁴⁸ Figueira, 'Die Flambierte Frau: Sati in European Culture', in *Sati, the Blessing and the Curse: The Burning of Wives in India*, 59.

²⁴⁹ Pierre Sonnerat, *A Voyage to the East Indies and China between the Years 1774 and 1781*, trans. Magnus, F. (Calcutta: Stuart & Cooper), vii.

Whilst many writers emphasised the static nature of Indian society, Sonnerat saw a society in flux and he thought widow-burning was a good indicator of these changes. It was an “inhuman” custom²⁵⁰ and its continuance demonstrated that India had lost its ancient status as a world-leading culture; it had “fallen into ignorance and contempt”.²⁵¹ However, Sonnerat was optimistic. An advocate of empire, Sonnerat agreed with Bernier that the civilising process had begun with the Mughal conquests and that widow-burning was a key indicator. “Formerly the women burned themselves with the bodies of their husbands. This barbarous custom is now entirely abolished in the Mahomedan districts: and among the Hindoos is only in use with the cast of Bramins and the cast of the military.”²⁵² Widow-burning, like other forms of suicide, was a marginal practice, but it could be used similarly to assess the state of a society. Other French writers shared Sonnerat’s view that the custom was gradually dying out. The French missionary John Dubois argued that while it “is by no means so general and frequent as it was in former times... in the northern parts of India... it is by no means uncommon”.²⁵³ Louis Grandpre argued more simply in 1801 that “it might be in decline”.²⁵⁴ This was a distinct strain in French thought, connecting a decline in widow-burning with the civilising effects of colonialism.

Enlightenment ideas of social progress were being attached to the custom. Louis-Sebastien Mercier’s science fiction fantasy, *Memoirs of the year two thousand five hundred*, published in Paris in 1770 and London in 1772,²⁵⁵ included a passage where Mercier imagined a future state of Malabar in which a widow could burn her husband’s body and then happily remarry.²⁵⁶ Contemplating the eradication of widow-burning was part of a radical re-orientation of knowledge taking place in late eighteenth-century Europe where the past and present could be studied to imagine a better future.²⁵⁷

²⁵⁰ Sonnerat, *A Voyage to the East Indies and China*, 117.

²⁵¹ Sonnerat, *A Voyage to the East Indies and China*, vi.

²⁵² Sonnerat, *A Voyage to the East Indies and China*, 112.

²⁵³ J. A. Dubois, *Description of the Character, Manners, and Customs of the People of India; and Their Institutions, Religious and Civil* (Madras: Higginbotham, 1862), 172.

²⁵⁴ Louis De Grandpre, *A Voyage in the Indian Ocean and to Bengal Undertaken in the Year 1790* (London: G. and J. Robinson, 1803), 185.

²⁵⁵ Robert Darnton, *The Forbidden Best-Sellers of Pre-Revolutionary France* (London: HarperCollins, 1996), 118-20.

²⁵⁶ Louis-Sebastien Mercier, *Memoirs of the Year Two Thousand Five Hundred*, trans. Hooper, W. (Dublin: W. Wilson, 1772), 175.

²⁵⁷ Reinhart Koselleck, *Futures Past : On the Semantics of Historical Time* (New York: Columbia University Press, 2004).

In Britain the prevalence of widow-burning was increasingly a topic of debate. William Alexander had consciously taken one side in the *History of Women*, agreeing with John Wilson that contemporary eyewitness accounts proved that the practice was not dying out. Writers from a wide variety of backgrounds, addressing very different audiences, took many positions on this question.

Some Britons, like the French, argued that imperial rule was ending the practice. In *Sketches chiefly relating to the History, Religion, Learning, and Manners, of the Hindoos* (1792) Quintin Craufurd, a former East India Company writer and friend of the French Royal family,²⁵⁸ accepted that the “shocking” and “barbarous” custom “still exists” in territories ruled by Hindus, but Craufurd believed that as in areas under Mughal control, “in the territories belonging to the English, it has every where been opposed, and rarely happens there, unless it be done secretly”.²⁵⁹

Many more writers thought that the custom was still common in certain regions and sectors of Indian society. John Payne was a hack writer of popular titles.²⁶⁰ In his *Universal geography formed into a new and entire system* (1794), Payne argued that “the practice is not now so general as it has formerly been, yet it is frequently practised among the wives of men of high rank and condition”.²⁶¹ The linguist and translator John Lettice, a fellow of Sidney Sussex College, Cambridge,²⁶² thought widow-burning was a widespread problem. Annotating a reference to the practice in Isaac Hawkins Browne’s Latin poem ‘De animi immortalitate’, in 1795, he cited Joseph Wilson’s letter.²⁶³ Lettice thought Wilson’s letter “very remarkable”. He was well aware of the controversy that surrounded the letter. He noted that William Guthrie and other writers had suggested that “this custom has long ceased in India”, but Lettice argued that this view was an “error” because “authentic proofs” had been published recently. He contended that Wilson’s evidence was supported by other contemporary travel writers

²⁵⁸ Quintin Craufurd, *Sketches Chiefly Relating to the History, Religion, Learning, and Manners, of the Hindoos. With a Concise Account of the Present State of the Native Powers of Hindostan.*, 2 vols. (London: T. Cadell, 1792).

²⁵⁹ Craufurd, *History, Religion, Learning, and Manners of the Hindoos*, 15.

²⁶⁰ O.M. Brack, 'John Payne (Fl. 1762–1800)', *Oxford Dictionary of National Biography* (Oxford, 2004).

²⁶¹ John Payne, *Universal Geography Formed into a New and Entire System: Describing Asia, Africa, Europe, and America* (Dublin: Jackson, 1794), 282.

²⁶² W.A. Shaw and W. Gibson, 'Lettice, John (1737–1832)', *Oxford Dictionary of National Biography* (Oxford, 2004).

²⁶³ Isaac Hawkins Browne, *The Immortality of the Soul*, trans. Lettice, J. (London: Rivington, 1795), 219.

and “confirmed by the testimony of numerous respectable Writers both ancient and modern”. Lettice was in no doubt that this long history of first-hand accounts proved that widow-burning was a significant and continuing custom.²⁶⁴ Thomas Campbell’s poem ‘The pleasures of hope’ (1795) also included a brief mention of widow-burning to which he added a more expansive footnote where he explained that he thought that widow-burning was an indication of social progress. “From the consolations of individual misery, a transition is made to prospects of political improvement in the future state of society. The wide field that is yet open for the progress of humanizing arts among uncivilized nations.”²⁶⁵

These were male academic disputes, fought through closely argued footnotes and citations, but by the early 1790s there is evidence that the debate about widow-burning was beginning to reach a wider audience and to interest women. Marianne Starke’s drama *The Widow of Malabar* was one of the first attempts to bring the topic to a broad female audience. The play opened in January 1791, and was produced by Anne Wignell, a leading actress who funded the play and took the title role. The first production at the Theatre Royal Covent Garden made exciting use of elaborate pyrotechnics including indoor fireworks. The spectacle was widely reviewed and the newspapers reported that it attracted a large female audience, including many society women,²⁶⁶ as well as influential progressive thinkers such as William Godwin.²⁶⁷ The play was a success; from receipts of £338 Wignell made £233 profit,²⁶⁸ and the script was quickly published and reprinted, in London, Dublin and North America.²⁶⁹

Burning pyres were a novel attraction on the West End stage, but Starke asked her audience to consider whether they were commonplace in India and if so what the British should do about the custom. A prologue, written by W T Fitzgerald and spoken by one of the actors, explained that “the custom reigns... in climes remote, where Ganges rolls

²⁶⁴ Browne, *The Immortality of the Soul*, 219.

²⁶⁵ Thomas Campbell, *The Pleasures of Hope: With Other Poems* (Edinburgh: Mundell & son, 1800), 40.

²⁶⁶ Daniel O’ Quinn, ‘Torrents, Names and the Education of Desire. Battling Hindu Superstition on the London Stage’, in Franklin, M.J. (ed.), *Romantic Representations of British India* (London: Routledge, 2006).

²⁶⁷ William Godwin, ‘12 January 1791’, in Myers, V., D. O’shaughnessy, and M. Philp (eds.), *The Diary of William Godwin* (Oxford: Oxford Digital Library, 2010).

²⁶⁸ Philip H. Highfill, Jr., Kalman A. Burnim, and Edward A. Langhans, *A Biographical Dictionary of Actors, Actresses, Musicians, Dancers, Managers & Other Stage Personnel in London, 1660-1800* (Carbondale: Southern Illinois University Press, 1991), 70.Vol 16

²⁶⁹ Amal Chatterjee, *Representations of India, 1740-1840 : The Creation of India in the Colonial Imagination* (Basingstoke: Macmillan, 1998).

his waves.”²⁷⁰ This view was echoed within the drama itself. The central character, Indamora declared “I, alas, too frequently have seen, the op’ning flower of life consum’d in flames”²⁷¹ The frequency of widow-burning was a central aspect of its moral difficulty. Starke’s principal characters argued passionately that ending it was a British responsibility, reminding audiences that “Christians conquer to save and humanise Mankind.”²⁷² Starke, who was strongly evangelical, was attempting to redefine the Imperial mission of the East India Company. She used the horror of widow-burning as a starting point to imagine a future India where Hinduism had been destroyed.

However, rather than taking a single view the play dramatized the controversy about prevalence and British responsibility. The play ended with an unusual epilogue, written by the author’s father Richard Starke, a former governor of Fort St George in Madras. Worried what audiences would think of his daughter’s “new-fangled play” and its evangelical agenda, Richard Starke’s epilogue, delivered each night by one of the cast, Mrs Mattocks, was designed to reassure them that the East India Company’s presence was itself socially progressive. These were already “favour’d times, Mercy prevails, even o’er even o’er distant Climes, And makes the human Race her fondest care, Whether their hue be tawny, black or fair.”²⁷³ The audience was left to ponder whether they believed the evangelical playwright or her less interventionist father.

Growing popular interest in widow-burning was not only an English phenomenon. Antoine Le Mierre’s drama, *La Veuve du Malabar*, premiered in Paris in 1770 and played in repertory well into the 1790s.²⁷⁴ It inspired several parodies and operas, the most famous by Baron Gebler. A German tragic drama based on *La Veuve*, titled *Lanassa*, was performed in Berlin in 1782.²⁷⁵ In the USA productions of David Humphreys’ adaptation, *The Widow of Malabar*, were staged in New York and

²⁷⁰ Mariana Starke, *The Widow of Malabar, a Tragedy in Three Acts* (London, 1791), 15.

²⁷¹ Starke, *The Widow of Malabar*, 15.

²⁷² Starke, *The Widow of Malabar*, 45.

²⁷³ Starke, *The Widow of Malabar*, 14.

²⁷⁴ Marie A Dakessian (1999), 'Envisioning the Indian Sati: Mariana Starke's 'the Widow of Malabar' and Antoine Le Mierre's 'La Veuve Du Malabar'', *Comparative Literature Studies*, 36 (2); Henry Carrington Lancaster, *French Tragedy in the Time of Louis Xv and Voltaire 1715-1774* (Baltimore: Johns Hopkins Press, 1950), 433-66.

²⁷⁵ Figueira, 'Die Flambierte Frau: Sati in European Culture', in *Sati, the Blessing and the Curse: The Burning of Wives in India*, 70.

Philadelphia in 1791, where it was “the most popular American-authored drama produced in that city” to date.²⁷⁶

In the late 1780s another new visual representation of the custom reached Europe. For the first time those who had not been to India could look at drawings, etchings and paintings of social practices made by professional artists on the spot. These works fed a growing demand in Europe for images of the new colony. The painter William Hodges toured India for four years producing images of landscapes and social customs. Returning to Europe in 1786 he published *Select views in India, drawn on the spot, in the years 1780, 1781, 1782, and 1783, and executed in aqua tinta*, which was issued simultaneously in London and Paris. He included in this series an etching of a widow about to burn on her husband’s pyre.



Fig. 1b: ‘Procession of a Hindoo woman to the funeral pile of her husband’.
Engraving from a painting by William Hodges, published in London 1793.

Hodges produced highly theatrical images, but he emphasised that they were based on direct personal experience. Hodges did not draw during the funeral itself, but he emphasised his ability to observe and the accuracy of his visual memory. He also made

²⁷⁶ J H Richards (2008), ‘Sati in Philadelphia: The Widow(S) of Malabar’, *American Literature*, 80 (4).

a sketch to record what he had seen. “The minutest circumstance attending it could not be erased from my memory; and when the melancholy which had overwhelmed me was somewhat abated, I made a drawing of the subject, and from a picture since painted the annexed plate was engraved.”²⁷⁷ Widow-burning could now be seen on the stage in London, Paris, Berlin and New York, and looked at in print.

Demand for these pictures was strong, and in 1793 Hodges republished his etchings in *Travels in India* alongside a prose account of his journey. He included a chapter on the ‘ceremony of Widows devoting themselves on the funeral pyre’ which was written to authenticate his engraving ‘Procession of a Hindoo Woman to the Funeral Pile of her husband’. Hodges admitted that this was a scene he had been excited to witness as an artist.²⁷⁸ Britons travelling to India like Hodges increasingly viewed customs like widow-burning through the lens of knowledge acquired in Great Britain. Hodges had read some of the published eyewitness accounts of widow-burning, and was particularly impressed by John Holwell’s claim that he had witnessed many of these sacrifices. For Hodges the steady accumulation of European eyewitness accounts proved that widow-burning was “a general custom”. He was convinced, before he even arrived in India, that that the practice was “well-known and well-authenticated”.²⁷⁹

The market for visual representations of India was competitive. By the early 1790s the Flemish painter Baltazard Solvyns²⁸⁰ and the uncle and nephew team, Thomas and William Daniells,²⁸¹ were also producing images. Solvyns produced four memorable drawings of widow-burnings, which were collected in *A Collection of Two Hundred and Fifty Coloured Etchings: Descriptive of the Manners, Customs and Dresses of the Hindoos* and published in Calcutta, London and Paris in various editions from 1796.

²⁷⁷ William Hodges, *Travels in India, During the Years 1780, 1781, 1782 & 1783* (London, 1793), 83.

²⁷⁸ Hodges, *Travels in India*, 84.

²⁷⁹ Hodges, *Travels in India*, 84.

²⁸⁰ Robert L. Hardgrave Jr (1998), 'The Representation of Sati: Four Eighteenth-Century Etchings by Baltazard Solvyns', *Bengal Past and Present*, 117, 57-80.

²⁸¹ Gottschalk, *Religion, Science, and Empire*, 142-52.

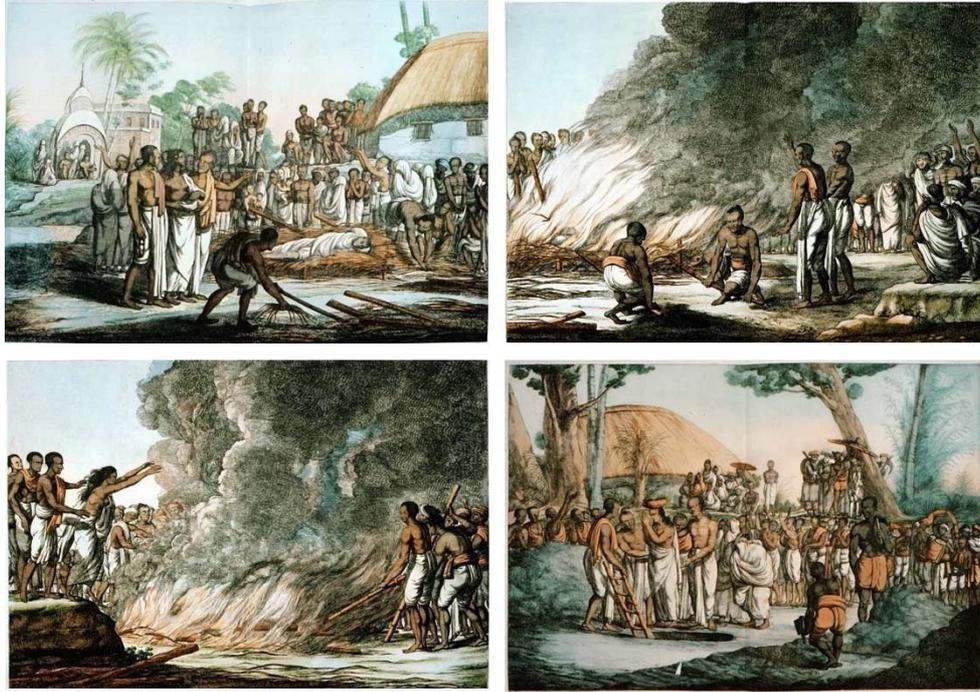


Fig. 1c: Four tinted engravings of widow-burnings based on drawings by Baltazard Solvyns, published in Calcutta, Paris and London in various editions from 1796.

Like Hodges, Solvyns wrote an account of how his works were produced. As producers of pictures made in India, both artists affirmed the value of the eyewitness view. Solvyns argued that India could not be understood in the library. “Instead of trusting to the words of others, or remaining satisfied with the knowledge contained in preceding authors, I have spared neither time, nor pains, nor expense, to see and examine with my own eyes, and to delineate every object with the most minute accuracy...” Solvyns could not resist comparing his own images with the more mannered work of William Hodges: “Mr. Hodges has represented it in an engraving, but not very correctly.” He emphasised that unlike Hodges his drawings were made “upon the spot.” Solvyns made four images of widow-burning because he believed that it was of “sufficient importance to require several plates in order to represent it with all its circumstances and most minute details”. Making aesthetic choices, Solvyns claimed he “purposely avoided all sort of ornament or embellishment; they are merely representations of the objects such as they appeared to my view.”²⁸²

Both artists emphasised that widow-burning would be properly understood by minute attention to the details. Some earlier observers had also talked with widows and

²⁸² Solvyns' catalogue comments from the 1796, 1799 Calcutta editions and 1808-1812 Paris editions have been translated and collated: Hardgrave Jr, 'The Representation of Sati: Four Eighteenth-Century Etchings by Baltazard Solvyns', *Bengal Past and Present*.

bystanders, and most Europeans tended to look away at the moment of death. The painters in contrast did not talk to the widows and watched the deaths attentively. They were amongst the first to emphasise this new way to watch Indian widow-burnings. In their prose they recorded horrifyingly detailed observations of severed limbs and charred bodies. Unlike Goya, their Spanish contemporary, the artists who worked in Bengal chose or were unable to fully record visually the horrors they witnessed, and the resulting images fail to convey the intense feelings that the painters more easily expressed in prose.

Overcome by melancholy and disgust, it was clear that Hodges and Solvyns shared similar feelings about widow-burning. They were making their images two decades after the high-point of relativist encounters represented by Holwell, Cator and Wilson. They were horrified and in no doubt that the women were victims of Hinduism. As we shall see in later chapters, the artists' responses were quite typical of a growing "hostility to Hinduism" which began to emerge in the 1790s.²⁸³

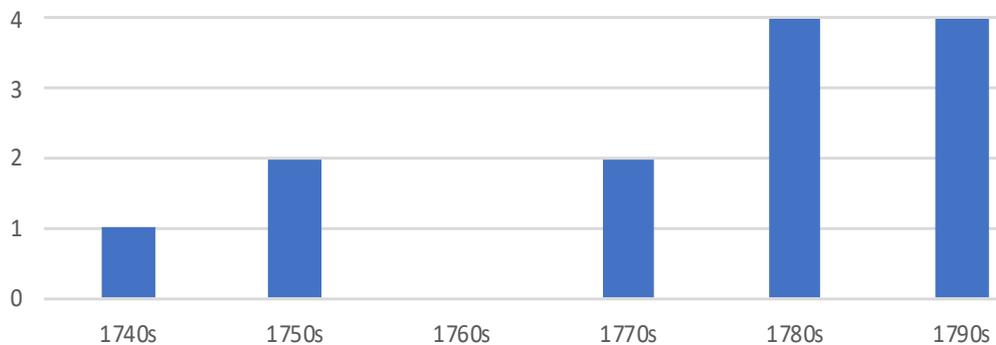


Fig. 1d: Graph showing the numbers of European eyewitness accounts of widow-burnings per decade – 1740-1800.

European eyewitness accounts of widow-burning were rare in the eighteenth century but becoming slightly more common in the latter decades. There were several reasons for this gradual increase. The territories ruled by the East India Company were expanding rapidly and more Britons were visiting and working in India, so there were

²⁸³ Marshall, *The British Discovery of Hinduism*, 43.

more chances to witness the custom. Europeans who recorded these encounters in this period included French and British travellers and sailors, East India Company merchants, soldiers and administrators. This new eyewitness evidence supplemented a well-established corpus of European knowledge stretching back to antiquity. These ancient and modern sources provided the basis for eighteenth-century speculations about the prevalence of the custom.

Chance encounters remained the principal way Britons knew about widow-burning until they started counting the practice. The tea planter Thomas Twining wrote extended notes, unpublished at the time, of one such encounter in 1793. He was fully aware of the scarcity of eyewitness accounts. “Though feeling a great repugnance for painful sights, I determined to avail myself of an opportunity which so seldom offers itself to a native of Europe of *seeing* one the most remarkable customs of the East.”²⁸⁴ In 1795 another extended eyewitness account, by the Scottish traveller Donald Campbell, was published in Britain. Invited to attend a widow-burning Campbell was disgusted, finding the “spectacle was most melancholy, and naturally struck me with horror”. Immensely popular, Campbell’s *Adventures* quickly went through a number of editions. Knowledge of the practice was starting to reach a wider audience, but like other Europeans who wrote about witnessing widow-burning, Duncan recognised that many of his readers doubted whether widow-burning still actually occurred. Indeed, Campbell himself had been sceptical, commenting that “I had only gone there to assure myself of the truth of such sacrifices being made”.²⁸⁵

Conclusion

Before the British started surveying and counting burnings, widow-burning was not as is commonly claimed by historians now, a “well-authenticated” practice.²⁸⁶ That the custom was deeply rooted and had an ancient history was widely accepted but its continued existence needed to be repeatedly proved. It was the present prevalence not its ancient roots that was contested. The reason for these doubts was a lack of clear

²⁸⁴ Thomas Twining, *Travels in India a Hundred Years Ago; with a Visit to the United States* (London: Osgood, 1893), 464.

²⁸⁵ Donald Campbell, *A Narrative of the Extraordinary Adventures of D. Campbell, Esq. Of Barbreck: Comprising the Occurrences of Four Years and Five Days in an Overland Journey to India* (London: Vernor & Hood, 1797), 257.

²⁸⁶ Major, *Pious Flames*, 71.

evidence. Between 1742 and 1795 fewer than fifteen Europeans had claimed to have seen widow-burnings, and most of these accounts were obscure, unpublished and unknown to most readers. A tiny handful of accounts circulated widely and were pored over. With such little evidence it is not surprising that Europeans could not agree whether widow-burning was a 'general custom', that was 'practised, 'kept up', 'encouraged', 'frequently practised' and 'still exists', or 'far from common,' 'fallen into desuetude', 'never a religious duty', 'disused', 'not now so general', 'almost abolished', perhaps even 'entirely abolished'.

From the seventeenth century onwards, some people were able to think about the overall numbers of widow-burnings, discuss whether they thought that the trends were up or down and propose causal factors to support their views. Thinking quantitatively about widow-burning preceded the production of social statistics. In France claims about the prevalence of widow-burning were becoming strongly linked to claims about the civilising effects of colonialism, but in Britain and elsewhere before the nineteenth-century claims about the extent of the custom indicated little about a writers' view of imperialism or their religious stance towards Hinduism. Cultural relativists could argue that the practice was prevalent, horrified Jesuit missionaries thought it almost non-existent.

For much of the century discussions about Indian social customs principally interested a small group of historians and India specialists. Until the late 1770s widow-burning was not thought newsworthy in Britain, it was not discussed by the London leadership of the East India Company until 1797 and the issue rarely bothered Company officials in India. By the end of the century there was more popular and intellectual discussion about widow-burning, and what it revealed about the state of Indian society, but this interest should not be over-stated. There were long periods of time when the issue simply wasn't discussed inside or outside the Company. There was no sense yet of a wide political or religious debate in Britain or India, there were few newspaper articles and no campaigns or petitions. All this would change with the arrival of Protestant missionaries in India, looking for information that might undermine East India Company claims that it could civilise India without the introduction of Christianity.

2

Conjectural Numbers

The decision to count widow-burning in 1802 did not come out of thin air. William Carey, one of the organisers of the first survey, had long been interested in data. Fifteen years earlier, when working as a poor shoemaker in Leicestershire, he had compiled ‘a survey of the present state of the World’. Made up of 23 pages of tabular data about the geographical size, population and religions of every country in the world, this was a highly innovative study. By producing these figures Carey became one of the first Britons to estimate the size the population of the world and to calculate the relative size of the world’s religions. His research was the central evidence in *An Enquiry into the Obligations of Christians to use Means for the Conversion of the Heathens*, the pamphlet that transformed Carey from cobbler into a celebrated missionary.

This life story has become a Baptist myth,²⁸⁷ in which the production of the ‘Survey of the World’ usually features as a kind of miracle. George Smith, one of Carey’s more reliable biographers, marvelled that he was under thirty and lived in an obscure village, yet he “surveys the whole world, continent by continent, island by island, race by race, faith by faith, kingdom by kingdom, tabulating his results with an accuracy, and following them through with a logical power of generalisation which extort the admiration of the learned even of the present day”.²⁸⁸

The survey was certainly a remarkable achievement, but it was no miracle and Carey is misrepresented if he is seen as an exceptional man acting alone. He collected his data on the world’s population between 1788-1792, without leaving a small village in the Midlands. What Carey gathered and how his data was then used, as this chapter shows, reveals much about the kinds of numerical information that was available to people in eighteenth-century Britain.

²⁸⁷ The mythic status accorded to Carey’s life is well indicated by the status granted to his relics. See for example William Carey University’s response when given a brick from Carey’s cottage *The Profile*, Summer, 1983.

²⁸⁸ Smith, *The Life of William Carey, D. D.*, 32-33; There have been no modern studies of Carey’s life or work. Historians have focussed more broadly on the mission. Potts, *British Baptist Missionaries in India*; Stanley, *The History of the Baptist Missionary Society*.

Many parts of the world were still barely known to Europeans at this time, and few countries were producing reliable demographic statistics, so much of the population data that Carey accessed was highly conjectural. Such conjectures were not peculiar to population data. There was little official counting by the state, and businesses were not required to produce annual accounts. Without reliable figures people resorted to other kinds of numerical information to make decisions. The historian Julian Hoppit has noted that many of “the numbers employed were unreliable if not downright lies”.²⁸⁹ There has been very little historical work on these kinds of conjectural estimates and guesses, on how they were produced, deployed or challenged in real policy debates. Hoppit, like other historians of information, assumes that decision-making requires reliable ‘scientific’ data. He argues that because of the reliability issues, eighteenth-century numbers were “an important language of rhetoric” deployed by many, but “for rather fewer, a vital help to decision making”.²⁹⁰ In this chapter I will be challenging this claim, exploring how Britons from a wide range of backgrounds used conjectural numbers of various kinds to make decisions.

Until recently little was known about the poor’s access to or uses of numerical information. The classic Weberian view saw statistics as a new form of expert knowledge and a key component of remote state bureaucracy that took power away from ordinary people.²⁹¹ This view contains an implicit argument that ordinary people were innumerate and averse to using numbers. Some recent historical work has begun to challenge this assessment. Analysis of popular newspapers, magazines and advertising has shown that by the late nineteenth century workers encountered many kinds of numerical information in both their private and working lives.²⁹² A cultural history of the census has shown that by the mid-nineteenth century trade unionists and political radicals were making extensive use of census data to make new political arguments.²⁹³ In the early nineteenth century statistics about poverty were being used by some of the

²⁸⁹ Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 531.

²⁹⁰ Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 535.

²⁹¹ This position was restated eloquently by Scott, *Seeing Like a State : How Certain Schemes to Improve the Human Condition Have Failed*.

²⁹² Thompson, 'Printed Statistics and the Public Sphere. Numeracy, Electoral Politics and the Visual Culture of Numbers 1880-1914', in *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000*.

²⁹³ Levitan, *A Cultural History of the British Census*.

poor as a new way to argue their case for relief.²⁹⁴ This recent work has gone some way to alter how historians understand the impact of nineteenth-century government statistics on ordinary lives. However little work has been done on everyday numerical culture before the avalanche of statistics, and little is known about how people of low income, of both sexes, used numbers to manage or understand their worlds.

Carey's global population statistics are to modern eyes a curious mix of hard facts, reasonable estimates and wild suppositions. However, as this chapter explores, the use of highly conjectural information was not unusual at the time or peculiar to evangelicals or the poor. To demonstrate this the chapter begins by looking first at the use of different kinds of numerical data in contemporary British political debates. The rest of the chapter examines how William Carey was able to calculate the population of the world in the 1780s, a time when there were few hard facts. That he could do this raises many questions, not least about his numeracy and access to knowledge. Carey left no record of his sources of information, but as the middle section explores, a number of European writers were producing estimates of international populations. Strong numerical correlations indicate which of these were Carey's sources. Comparing his work with his sources clarifies William Carey's particular contribution to demographic knowledge.

The final section looks at how Baptists used this innovative data to fund-raise for a new missionary society and make evangelical decisions about where to send missionaries. Over the next two chapters I will be showing that there was a direct causal link between William Carey's production of a 'survey of the present state of the World' in a small village outside Kettering in the 1780s and the production of widow-burning statistics in Calcutta in 1803. To understand why evangelicals started to count widow-burnings we need to understand what else they counted at this time and for what social, political or institutional purposes. The Baptist Missionary Society's use of numerical data to understand the world challenges the narrative, still quite standard amongst historians, that scientific developments gradually dragged reluctant, religious Britons away from their statistical indifference.

²⁹⁴ King, 'Numerical Information, Accounting Practices and the Poor Law 1790-1840', in *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000*.

Available numbers

Only a sample of government papers from the late eighteenth century now survive, but in these numerical data is not an incidental feature. Indeed, the available written records of government are teeming with numbers, so much so that the historian Julian Hoppit has concluded, after a brief survey of the terrain, that most government papers “would have been quantitative reports”.²⁹⁵ However, compared with the nineteenth century relatively few statistics were collected by the state, and many of the numbers used in political debates were as conjectural as William Carey’s population estimates. This section examines the various kinds of numerical information that were available, looking at how hard facts, rough estimates and conjectures were combined to make political decisions.

Britons in the late eighteenth century were uncertain of many facts about their country, including, most notoriously, about the size of its population. In 1779 Dr Richard Price estimated that the population was 5 million. A few years later Sir Frederick Morton Eden, in *An Estimate of the Number of Inhabitants in Great Britain and Ireland* (London 1800), calculated a figure of 9 million. Britons were used to thinking about their country’s population as a rough estimate. However, some European states had already begun collecting more reliable demographic data. The Scandinavians were first. Iceland introduced a census in 1703, Sweden began counting its population in the 1740s, Norway and Denmark in 1769. Austria produced its first demographic data in 1754, and the French government began counting its population in 1772, over thirty years before the British. Like Britain, Central, Southern and Eastern Europe also lagged well behind the French and Scandinavians. There were city and regional counts, for example, in Germany and Italy but throughout the eighteenth century, population counts of the larger territories were “lacking or largely defective”.²⁹⁶

British MPs resisted counts of mainland Britain, but they happily ordered counts of British colonies. Colonised peoples were seen as prime economic assets, to be taxed and controlled like livestock. The Irish population was counted in a census in 1659, and many US colonies were counted repeatedly, as were the West Indies where slaves were carefully distinguished from settlers. There were five counts of the Jamaican population

²⁹⁵ Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 522.

²⁹⁶ Glass, *Numbering the People: The Eighteenth-Century Population Controversy and the Development of Census and Vital Statistics in Britain*, 13.

in the seventeenth century,²⁹⁷ Connecticut was counted in 1756 and Massachusetts in 1764. However such counts were sporadic and not all colonies were counted. There were for example no population counts of Canada (the territory that is now Quebec),²⁹⁸ or the new East India Company state in India. Where reliable data was not available, Britons estimated, and these estimates could vary wildly. Patrick Colquhoun in 1814 complained that “Some take the East India Company Settlements to contain 50,000,000 Inhabitants, others 60, and some as high as 70,000,000.”²⁹⁹ Colquhoun himself thought the true figure was nearer 40 million.

Although slow to collect population data, the British government, like most other central governments across Europe in the seventeenth and eighteenth centuries, collected other kinds of numerical information, mainly about tax and warfare.³⁰⁰ Developing policies to expand British trade, in 1674 the government began to quantify the balance of trade between Britain and France.³⁰¹ At the start of the eighteenth century to further facilitate trade and the collection of revenue, the government established the Board of Trade, the Inspector Generalship of Customs and the General Register of Shipping. The Board of Trade was primarily an information gathering organisation, providing MPs with detailed statistics about trade. Customs and Excise was also a prolific supplier of economic information. When in the 1730s the government sought information about the quantity and quality of harvests, Customs and Excise could supply data about the import and export of corn, and the price of corn in counties across the country.³⁰²

The Navy was the most statistically minded branch of the state. It was a vast employer, and in the eighteenth century managed its affairs with a huge system of pay books and ships musters. Precise numerical data about the Navy’s activities and financial requirements was part of eighteenth-century political discourse. In 1763, for

²⁹⁷ Charlotte Sussman (2003), 'The Colonial Afterlife of Political Arithmetic: Swift, Demography, and Mobile Populations', *Cultural Critique*, 56 (1), 101. Sussman argues that colonial ideology underpinned seventeenth and eighteenth-century political arithmetic. A similar connection is made between nineteenth century trade statistics and colonial imperatives in Tim Rowse and Tiffany Shellam (2013), 'The Colonial Emergence of a Statistical Imaginary', *Comparative Studies in Society and History*, 55 (04).

²⁹⁸ Westergaard, *History of Statistics*, 86.

²⁹⁹ Patrick Colquhoun, *A Treatise on the Wealth, Power, and Resources, of the British Empire in Every Quarter of the World Including the East Indies: Illustrated by Copious Statistical Tables* (London: Joseph Mawman, 1814), Appendix 51.

³⁰⁰ Higgs, *The Information State in England: The Central Collection of Information on Citizens since 1500*.

³⁰¹ Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 517.

³⁰² Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 523-4.

example, the House of Commons received a statement from the Navy that it had recruited 184,893 men during the Seven Years War.³⁰³

Whilst the data collected by government was restricted to a small number of topics, these official figures were starting to influence wider political debates. Some official data sets were well-established, so long-term trends could be analysed and discussed. In 1759 James Postlethwayt produced a *History of the Public Revenue* with data tabulated from 1688 to 1752.³⁰⁴ In 1776 Charles Whitworth MP analysed the trade figures from 1696 to the present.³⁰⁵ In 1782 the political writer, George Chalmers used official trade figures along with population estimates to calculate that wealth per capita had increased substantially over the century.³⁰⁶ The growing costs of wars sparked fears of national bankruptcy, prompting statistical analysis of trade and government finances by Sir John Sinclair in 1785³⁰⁷ and by William Playfair, who from 1786 produced a series of highly innovative charts based on government data, which analysed trends in British overseas trade and the fluctuations of the national debt.³⁰⁸

³⁰³ Higgs, *The Information State in England : The Central Collection of Information on Citizens since 1500*, 50.

³⁰⁴ James Postlethwayt, *The History of the Public Revenue, from the Revolution in 1688 to Christmas 1753 ; with an Appendix Completing the Same to Christmas 1758. Containing a Minute and Comprehensive View of All Our Public Transactions Relative to Money and Trade, within the Said Period* (London: Knapton, 1759).

³⁰⁵ Charles Sir Whitworth, *State of the Trade of Great Britain in Its Imports and Exports Progressively from the Year 1697 ... With a Preface and Introduction Setting Forth the Articles Whereof Each Trade Consists* (London, 1776).

³⁰⁶ George Chalmers, *An Estimate of the Comparative Strength of Britain During the Present and Four Preceding Reigns; and of the Losses of Her Trade from Every War since the Revolution... To Which Is Added an Essay on Population by the Lord Chief Justice Hale* (London: Dilly & Bowen, 1782).

³⁰⁷ John Sinclair, *The History of the Public Revenue of the British Empire* (Dublin: printed by P. Byrne, 1785).

³⁰⁸ William Playfair, *The Commercial and Political Atlas; Representing by Means of Stained Copperplate Charts, the Exports, Imports, and General Trade of England, with Observations* (London: Stockdale, 1786).

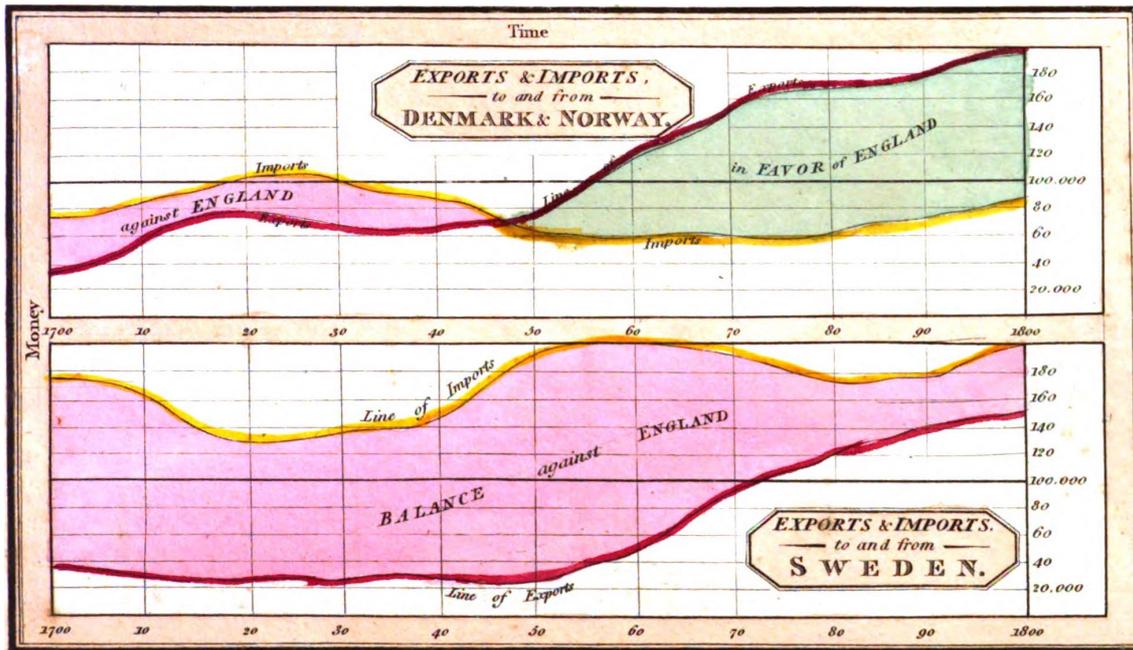


Fig. 2a: 'Exports & Imports to and from Denmark & Norway, and Sweden'
A graph from William Playfair's *Commercial and Political Atlas*, 1786

One set of official social statistics was repeatedly analysed throughout this period. The London Bills of Mortality had been established in the sixteenth century by the Corporation of London to warn the Corporation of the arrival of plague.³⁰⁹ The two principal Scottish cities, Glasgow and Edinburgh, introduced their own Bills of Mortality in 1670 and 1695 respectively. By the latter part of eighteenth century commentators were increasingly taking the long view. Thomas Birch in 1759 published *A Collection of the Yearly Bills of Mortality, from 1657 to 1758 Inclusive*, which enabled readers to reflect on a century of data. In 1750 a doctor, Thomas Short published *New Observations on the Bills of Mortality* which used trends in mortality to examine the effect of air on health. The same year Corbyn Morris used the data extensively in his *Observations on the Past Growth and Present State of the City of London*, as in 1775 did Walter Harrison in *A New and Universal History, Description and Survey of the Cities of London and Westminster, the Borough of Southwark and Their Adjacent Part*.³¹⁰ Every month the *Gentleman's Magazine* published the latest

³⁰⁹ Stedman Jones, *An End to Poverty?*, 30.

³¹⁰ Walter Harrison, *A New and Universal History, Description and Survey of the Cities of London and Westminster, the Borough of Southwark and Their Adjacent Parts, Including Not Only the Parishes within*

mortality statistics, alongside other data such as the price of corn and weather predictions. There was clearly an appetite amongst general readers for up-to-date numerical information.

However, many core functions of government were conducted without reliable data. Naval, trade and mortality statistics were exceptional. Most other state activities were not counted at all, or not counted centrally, regularly or systematically. For example, since medieval times the English had kept extensive tax records and these were occasionally used to produce counts of population and income.³¹¹ But tax payments were handled at a local level, and central government made decisions about rates of taxation without reliable data about receipts. This would not change until after the introduction of income tax in 1799.³¹² In the rest of this section I will explore how MPs made use of conjectural numbers alongside hard facts.

Numbers of various kinds were cited by speakers in parliamentary debates about trade and taxation. Taking 1784 as a sample year, MPs discussed the problem of smuggling using data about quantities of goods smuggled,³¹³ financial calculations about fairness were central to debates about the tax on candles³¹⁴ and Post Office charges.³¹⁵ MPs were presented with a table summarising the annual costs of government,³¹⁶ whilst a proposal to restore inheritance rights to Scottish Highlanders included estimated figures for rents, investments and income of the estates.³¹⁷ MPs used national, local and foreign numbers, sourced from government agencies, local authorities, published accounts and private individuals. In these debates rough estimates and conjectures mingled with carefully gathered official data.

How did MPs make sense of the different kinds of figures they were using? A closer examination of one debate will help us to understand how numbers were being

the Bills of Mortality, but the Towns, Villages, Seats and Country, to the Extent of Twenty Miles Round (London, 1775).

³¹¹ The poll tax of 1377, for instance, recorded 23,314 taxpayers in London. Higgs, *The Information State in England: The Central Collection of Information on Citizens since 1500*.

³¹² Hoppit, 'Political Arithmetic in Eighteenth-Century England', *The Economic History Review*, 532.

³¹³ *The Parliamentary Register: Or, History of the Proceedings and Debates of the House of Commons During the First Session of the Sixteenth Parliament* (London: Debrett, 1784), 378.

³¹⁴ *The Parliamentary Register, Sixteenth Parliament First Session*, 27.

³¹⁵ *The Parliamentary Register, Sixteenth Parliament First Session*, 347.

³¹⁶ *The Parliamentary Register, Sixteenth Parliament First Session*, 406.

³¹⁷ *The Parliamentary Register, Sixteenth Parliament First Session*, 320.

used. After the American War of Independence, the British government imposed restrictions on trade. These sanctions were meant to harm Americans but were also damaging British colonies in the West Indies. West Indian planters wanted the embargo lifted, so in 1784 a committee of MPs reviewed the situation. Their deliberations were intensely statistical, but there was little official data. How they negotiated this difficulty illustrates how data of various kinds could be used in political decision-making.

MPs were used to getting numerical overviews of British trade, and the committee wanted a similar overview of trade in the colony, but there was no West Indian Board of Trade, so they turned to other sources of information. The quantity of imports was easily reckoned because the harbour authorities collected official data. MPs were provided with a table of official shipping data listing the quantities of American goods that had been imported through Kingston, Jamaica from December 1783 to March 1784.

Arrival at Kingston.	Vessels.	Barrels of flour.	Staves and heading.	Feet o boards, scantling, &c.	Shingles.	Packed or shaken hhds.	From
1783.							
Dec. 12.	Schooner Hope, Smart	—	—	21,250	36,300	—	East. Florida
	Brigantine Mars	—	—	34,465	204,600	—	Philadelphia
	Brigantine Recovery, Grimes	260	25,000	—	30,000	—	Virginia
	Ship Queen of England, Campbell	209	98,000	20,000	44,000	—	Philadelphia
	Schooner Sally	250	1,500	—	—	—	New York
14.	Sloop Patty, Killy	—	—	—	—	—	Tortola
15.	Sloop Betsey, Wainwright	—	—	—	—	—	Philadelphia
16.	Brigantine Polly and Harriot	—	3,608	15,000	70,000	—	Georgia
	Schooner Rose, Brunton	—	—	4,000	—	—	New York.
	Schooner Betsey, Lear	456	2,000	—	30,000	—	Philadelphia
18.	Ship Robina, Maniel	1,280	4,800	—	—	—	Ditto
22.	Sloop Industry, Darrat	—	2,000	1,000	—	—	New York
23.	Ship Maria, Jones	1,139	6,500	—	—	—	Philadelphia
	Ship Cormorant, Hutchinon	—	70,000	—	—	—	Virginia
	Ship Yorick, Anderfon	—	—	60,000	—	—	Quebec
29.	Brigantine Lord Howe, Maclean	—	2,000	30,000	18,000	100	Panobscot

Fig. 2b: Table of shipping data showing the quantity of American commodities carried by British-built vessels to Jamaica (12 December 1783- 17 March 1784).
The parliamentary Register, vol. XVI, (London, 1784), 202

Barrels were counted precisely, but the round numbers for other commodities suggest that the authorities did not require customs officials or ships to make precise counts or measurement. Approximations and round numbers were good enough. By keeping a watchful eye, making enquiries and requiring ships to make reports, harbour authorities

could produce official figures that were sufficiently reliable to quantify the goods that passed through their port.

Reliable data about prices was much more difficult to gather. Prices fluctuated wildly and there was no agreed system for calculating the market averages. West Indian planters provided MPs with data from different sources and discussed the validity of each at some length. Figures provided by the *Kingston Royal Gazette* showed the rise in prices week-to-week as the boycott came into force. However, the paper only printed the highest price that had been paid, which over-emphasised fluctuations. The West Indian planters themselves preferred figures based on “prices taken from real sales”.³¹⁸ However, this data did not exist, so MPs generated it themselves. The committee asked two merchants to give accounts of the current commodity prices which were then tabulated to provide comparative data.

FIRST ACCOUNT.				MEDIUM.				SECOND ACCOUNT.				MEDIUM.					
		£.	s.	£.	s.	£.	s.	d.			£.	s.	£.	s.	£.	s.	d.
Superfine flour per barrel, of 196lb. - - -	1	5	to	2	5	1	15	0	Superfine flour per barrel	2	9	to	2	19	2	14	0
White-oak staves per 1000	10	0	to	12	0	11	0	0	White-oak staves, Philadel.	10	0	to	14	0	12	0	0
Red-oak staves per ditto -	8	0	to	10	0	9	0	0	Red-oak staves - - -	8	0	to	12	0	10	0	0
Common boards per 1000 feet - - -	5	0	to	10	0	7	10	0	Common boards - - -	7	0	to	10	0	8	10	0
Cyprefs and yellow-pine per ditto - - -	6	0	to	12	0	9	0	0	Cyprefs and yellow-pine boards - - -	8	0	to	11	0	8	10	0
Pitch-pine scantling per ditto - - -	8	0	to	12	0	10	0	0	Pitch-pine, scantling and boards - - -	9	0	to	12	0	10	10	0
Shingles, Boston - - -	2	5							Shingles, Boston - - -	0	15	to	1	6	1	0	0
Ditto cedar - - -	2	15	to	2	10	3	2	6	Ditto, cedar and cyprefs -	3	0	to	3	10	3	5	0
Wood hoops per 1000	10								Wood hoops from Ame- rica - - -	5	0	to	8	0	6	10	0
									Ditto, from Great Britain	10	0	to	15	0	12	10	0

Fig. 2c: Comparative tables showing two sets of commodity prices in Jamaica on 20 March 1784. *The parliamentary Register*, vol. XVI, (London, 1784), 182

Establishing the prices being paid in the present was only part of the task. The committee wanted to understand the effects of the embargo, so needed to know the prices before the War of Independence. Again, merchants in Jamaica were asked to conjecture about the average price of various commodities over the previous ten years.

³¹⁸ *The Parliamentary Register*, Sixteenth Parliament First Session, 183.

Their conjectures produced a range of prices, which the committee used to estimate average commodity prices before the embargo. They produced a table showing their calculations.

		Medium.
Superfine flour per Barrel, supposed to be 200lb.	from £. 2 9 to £. 2 19	£. 2 14
White-oak staves from Philadelphia per 1000	from £. 10 — to £. 14 0	12 —
Red-oak staves, per 1000	from £. 8. — to £. 12 —	10 —
Common boards 1000 feet —	from £. 7 — to £. 10 —	8 10
Cypres and yellow pine boards	from £. 8 — to £. 11 —	9 10
Pitch, pine, scantling and boards	from £. 9 — to £. 12 —	10 10
Boston shingles per 1000 feet —	from £. — 15s. to £. 1 5	1 —
Cedar and cypres shingles per 1000 feet —	from £. 3 — to £. 3 10	3 5
Wood hoops, from America, per 1000 — —	from £. 5 — to £. 8 —	6 10
Ditto from Great Britain — —	from £. 10 — to £. 15 —	12 19

Fig. 2d: A table summarizing conjectures about 'Medium' prices of goods in Jamaica in the ten years before the boycott. *The parliamentary Register*, vol. XVI, (London, 1784), 179

None of the figures tabulated by the committee could be characterised as downright lies, but none would now qualify as a reliable statistic. The committee used these estimates to determine whether the policy of embargo was pushing up prices and depressing trade.

Looking to maintain the embargo, the committee looked to Canada, which it considered a potential alternative source of lumber and other raw materials if the labour could be found to extract it. However, information about the European population in Canada was scarce. There was an existing French population, but what was known about it was not encouraging: “the number of inhabitants may amount to 100000, mostly Catholics and not possessing any spirit of industry.” However, in Nova Scotia the British population was believed to be growing rapidly: “the number of new settlers there amount to near 30,000, are industrious and extremely anxious to cultivate the land allotted to them.”³¹⁹ No sources were provided for these figures, but they were not challenged. MPs understood that for both Nova Scotia and French Canada there was

³¹⁹ *The Parliamentary Register*, Sixteenth Parliament First Session, 186.

little information available. They were well-aware that for much of the world the population could only be roughly reckoned.

Parliament was using the best available information to make decisions. The ability to quantify the effects of a policy such as a trade embargo was a vital political calculation that could not wait for reliable data. MPs made the best sense they could, creating and using estimates, producing tables of figures, calculating averages and weighing up the consequences of their decisions, with data that they recognised had different levels of reliability.

Access to numbers

MPs were not the only Britons looking to understand the population of the world to help them determine how they should act. A small group of Baptists in the East Midlands was planning a worldwide mission to convert the world's pagans, and in 1786 a young Baptist minister, William Carey, decided that he needed to research what was known about the world's populations to find out how many pagans there were, and where they were most concentrated. This was an ambitious undertaking. Carey had never left the East Midlands, he was born into a poor family, trained as a shoemaker and was relatively uneducated, yet he felt able to set about calculating the world's population and the relative size of its religions.

Carey was not the only clergyman at this time collecting data about the world's population. Fifteen years later when Thomas Malthus began preparing the second edition of his *Essay* on population, he also wanted to collect data on the world's populations. The first edition of the *Essay* had cited no statistics and referenced only eleven books; the second edition referenced 125 books and included huge quantities of data about international populations. To give his argument an empirical grounding Malthus made use of all the advantages available to him as a Cambridge educated, younger son of an affluent gentleman. Although employed as a Church of England clergyman, he was still free to travel widely around Europe; he could afford to buy and read a large number of books and had the knowledge, contacts and resources to gather together the government statistics that were being published by European states.³²⁰

³²⁰ Mayhew, *Malthus: The Life and Legacies of an Untimely Prophet*, 105-16.

In stark contrast, nothing about William Carey's access to knowledge can be taken for granted. Before examining his sources and methods, it needs to be explained in the first place how Carey could access books and comprehend data. As the first Baptist missionary to India Carey became a central figure in the history of the Baptist church and much is known about his background, education and the circumstances that enabled him to write and publish the *Enquiry*. When this biographical information is synthesised with recent historical work about ordinary people's access to knowledge in the eighteenth century it becomes possible to comprehend how and why a provincial shoemaker was calculating the population of the world.

Carey was born on 17 August 1761. His father was a weaver and schoolmaster, running a small free school in Northamptonshire. Neither trade was profitable. Carey described his parents as poor and thought his education limited, later telling an associate that he had been an idle student, only reaching a level "esteemed good in country villages".³²¹ Even with such a basic education Carey would have encountered a great deal of tabulated data. The historian Natasha Glaisyer has shown that mathematical tables were common in schools from the sixteenth century onwards. Numeration tables sat alongside the abacus and counters as the standard method to teach arithmetic. Tabulation as a way to process numbers was taught in all the common mathematical handbooks such as Robert Recorde's *The Gounde of Arts*, first published in 1543, and John Copeland's *Arithmetik Made Easie* (1714). But tables were not exclusively the preserve of arithmetic lessons. Students were taught to produce their own tables in handwriting lessons, learning for instance how to create tabulated receipts. Tables also featured prominently in spelling books. Although commonplace, they were not thought straightforward to understand. In educational manuals tables were labelled with guidance notes about how to read them; it was thought that students needed to be taught to look from left to right, as well as up and down.³²²

Carey left school at fourteen and became an apprentice shoemaker, before setting up on his own. Certainly, as a sole trader Carey would have kept accounts of some form. This would have required him to tabulate numbers much as he had learnt at school. In the *Complete English Tradesman*, written fifty years before Carey established his trade as a cobbler, Daniel Defoe wrote a manual for small businesses. In the chapter

³²¹ Carey and Carey, *Memoir of William Carey*, 7-8.

³²² Unpublished paper: Natasha Glaisyer, 'Printing, Reading, Writing and Speaking Numbers: Early Modern Numeration Tables', *Working It Out* (Birkbeck, 2013).

on book-keeping Defoe equated keeping good accounts with godliness. Defoe stipulated that “the tradesman should keep his books always in order; his day books duly posted, his cash duly balanced, and every one’s accounts always fit for a view”.³²³ It is likely that Defoe had very simple tabulation in mind. Pacioli’s *Summa* which introduced double entry bookkeeping was translated in the sixteenth century, but it has been well-established by historians of accountancy that “the rate of adoption... was extremely slow”.³²⁴ Indeed, it did not become a standard business practice until the end of the nineteenth century.³²⁵ However, what is now called ‘single-entry bookkeeping’ was very common. Businesses of all sizes as well as private individuals kept basic tables recording amounts that they were due to be paid and what they themselves owed.³²⁶ Tabulated data of this kind would have played an everyday role in Carey’s life as sole proprietor. Unfortunately, neither the craft of shoemaking or running a small business came easily. “Trade became dull” in his first cobbling business and William Carey was forced to sell off all his stock at a great loss.³²⁷

Whilst shoemaking was not a great success for him, it was through the influence of a fellow cobbler that Carey, who had been brought up within the established church, became a dissenter. Whilst a young teenage apprentice he joined the Baptist church, and quickly established himself. Carey began preaching at eighteen and six years later he moved to Moulton, a small Northamptonshire village, where he became the minister of a Baptist chapel, paid £16 per annum. Married with young children, Carey had been regularly bailed out financially by his brother before he moved to Moulton. Part of the attraction of the move was the prospect of becoming proprietor of a small village school like his father. However, he was unable to keep discipline in the classroom, numbers started to fall, and consequently so did his teaching income, which fell to about 7s 6d per week or £19 10s per annum. With two incomes Carey was now earning well above

³²³ Daniel Defoe, *The Complete English Tradesman* (Oxford, 1841), 310.

³²⁴ J. R. Edwards, *A History of Financial Accounting* (London: Routledge, 1989), 56.

³²⁵ Richard K Fleischman and Lee D Parker (1990), 'Managing Accounting Early in the British Industrial Evolution: The Carron Company, a Case Study', *Accounting and Business Research*, 20 (79); The first writer to argue that claims for double-entry were exaggerated was Yamey, 'Scientific Bookkeeping and the Rise of Capitalism', *The Economic History Review*.

³²⁶ C.J. Napier, 'Accounting Historiography', in Edwards, J.R. and S.P. Walker (eds.), *The Routledge Companion to Accounting History* (London: Routledge, 2009); Christopher J Napier (2006), 'Accounts of Change: 30 Years of Historical Accounting Research', *Accounting, Organizations and Society*, 31 (4-5); Natasha Glaisyer, *The Culture of Commerce in England, 1660-1720* (Woodbridge: Boydell, 2006).

³²⁷ Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission*, 6.

the average income,³²⁸ but the family remained poor. Visitors noticed that the Careys ate no meat and bought no new clothes.³²⁹ One biographer described the situation as “simply starvation”.³³⁰ Carey took up shoemaking again to supplement his income, this time doing piece-work making shoes in the schoolroom at night.

The most likely cause of these financial difficulties was that Carey had begun spending much of his income on books. Carey’s sister noted that her brother had been interested in science, history and travel since his youth.³³¹ These interests intensified after Carey met Andrew Fuller. Seven years older than Carey, Fuller had become an influential preacher in the East Midlands and exerted an even greater influence on his young friend. Fuller’s sermons challenged the Midlands narrow inward-looking Calvinism and promoted a new spirit of evangelism. In one sermon, preached in 1784, he noted that “Christianity has not yet made its way, even in name, over one fifth part of the world”. Fuller thought conversion could be a swift process; “thousands are converted by a single sermon, and Satan falls before the gospel of Christ like lightning from heaven.”³³² Carey was deeply impressed by this argument and in Moulton began a research project to find where in the world were the largest populations of heathens.

Particularly good records exist of the ordinary reading of East Midlands provincial men such as William Carey. John Clay was a bookseller and librarian with branches in Daventry, Rugby, Lutterworth and Warwick. Clay’s detailed records of sales and borrowings from 1744 to 1807 have been analysed by the historian Jan Fergus. Her work has overturned many preconceptions about provincial readers in eighteenth-century England. Fergus shows that less than 10% of adult customers read novels. The introduction of specialist titles broadened the readership of magazines to “farmers, apprentices, artisans, and other working men, such as turnpike keepers and even labourers, not to mention women.”³³³ The subscription model of small regular payments attracted a new class of buyer. Tradesmen went from 10% of subscribers in 1740s to

³²⁸ Carey’s income converts to a 2017 income of £35,120. Value calculated using a labour to earnings ratio which calculates the income relative to the income of an average worker in 1788, and then converts that to an equivalent income in 2017. <https://www.measuringworth.com/calculators/ukcompare/>

³²⁹ Carey and Carey, *Memoir of William Carey*, 30.

³³⁰ Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission*.

³³¹ Carey and Carey, *Memoir of William Carey*, 24.

³³² J. W. Morris, *Memoirs of the Life and Writings of the Rev Andrew Fuller* (London: Morris, 1816).

³³³ Jan S. Fergus, *Provincial Readers in Eighteenth-Century England* (Oxford: Oxford University Press, 2006), 217.

30% in the 1770s. School teachers, especially dissenters such as Carey, subscribed disproportionately. Serialized books, which were designed to be bound when the series was complete, were the most popular non-fiction titles. Of these, bibles published in instalments were the most popular provincial titles, but titles promising new forms of knowledge also sold well. Chambers' *Cyclopaedia*, which was reissued in 1778 in weekly instalments costing 6d,³³⁴ had fourteen subscribers at Clays. Charles Middleton's *New And Complete System of Geography*, which began publication in 1777 had fifteen subscribers.

Carey, with an annual income over £35 per annum and keeping his family on a meagre diet, could afford to purchase books and subscribe to the reference works he needed to complete his research into the population of the world. It should be noted that unlike Malthus who researched without suffering any material hardship, a price was paid by all the Careys for this project. All his biographers noted that Carey was unhappily married. Baptists put this down to the couple's "immense disparity in intellect and attainments",³³⁵ but it is possible that the unhappiness stemmed in part from the single-minded way that Carey prioritised his own interests above all else.

Numbering the world's population

When the discipline of statistics reflects on its history, it has largely focussed on the development of techniques for producing better, more reliable knowledge. Much is known therefore about the small group of scientists, mathematicians and demographers who in the seventeenth and eighteenth centuries used probability and sampling techniques to turn reliable official mortality data into demographic data.³³⁶ These scientific methods, known as political arithmetic, could be used to calculate the population of England, but were completely irrelevant to discussions about the population of India, China or French Canada, because Europeans had no reliable data about births, marriages or deaths in these territories that could be the basis of

³³⁴ Abraham Rees, *Proposals for Publishing in Weekly Numbers, Mr. Chambers's Cyclopædia; or Universal Dictionary of Arts and Sciences: With the Supplement and Modern Improvements Incorporated in One Alphabet* (London: W. Strahan).

³³⁵ Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission*, 6.

³³⁶ The most comprehensive is 'Estimates and Enumerations of Population' in Westergaard, *History of Statistics*, 79-91.

arithmetical calculations. However, as we have seen, decisions cannot always wait for reliable methods. Those who wanted to know about the population of the wider world relied on different kinds of calculations. Just as maritime explorers planned and made voyages when maps of the world's coastlines contained blank sections, so MPs and missionary societies made plans and decisions about how to act with the data that was available. This section explores the sources of information available to William Carey when he began compiling his tables of data about the world's population.

The main source of factual information about the world in the eighteenth century was in works of geography. Until recently historians of geography focussed on the discipline's establishment as a school and university subject in late nineteenth century Europe, but recently historians have begun to explore the understanding of geography before it became a discipline.³³⁷ Travel writing, commercial correspondence and map-making provided Europeans with a multitude of sources of information about the wider world.³³⁸ From the seventeenth century onwards a number of influential German and British writers attempted to summarise this information, producing reference books which described the world as it was known. This genre, usually described as 'special geographies' by British and American intellectual historians,³³⁹ is known as 'armchair' geography in Germany, a term which aptly describes their production by the "scholar in the study (Stubengelehrter)".³⁴⁰ 'Scholars' were typically men who had read rather than travelled widely. Their skill was in being able to compile and reduce a wide range of highly disparate sources into condensed, systematic accounts.

³³⁷ The best overview of this shift in the historiography can be found in Robert J Mayhew (1998), 'The Character of English Geography C. 1660-1800: A Textual Approach'.

³³⁸ Miles Ogborn (2004), 'Geographia's Pen: Writing, Geography and the Arts of Commerce, 1660–1760', *Journal of Historical Geography*, 30 (2); Charles W J Withers (2004), 'Writing in Geography's History: Caledonia, Networks of Correspondence and Geographical Knowledge in the Late Enlightenment', *Scottish Geographical Journal*, 120 (1-2); C C Kolb and M Brückner (2008), 'The Geographic Revolution in Early America: Maps, Literacy, and National Identity'.

³³⁹ The first comprehensive bibliography of the genre was produced by O. F. G. Sitwell, *Four Centuries of Special Geography: An Annotated Guide to Books That Purport to Describe All the Countries in the World Published in English before 1888, with a Critical Introduction* (Vancouver: UBC Press, 1993); Special geography's wider significance is explored by Charles W J Withers and Robert J Mayhew (2011), 'Geography: Space, Place and Intellectual History in the Eighteenth Century', *Journal for Eighteenth-Century Studies*, 34 (4); Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley; Los Angeles: University of California Press, 1967).remains useful for contentualising western thought about geography.

³⁴⁰ D W Bond (2016), 'Enlightenment Geography in the Study: A.F. Büsching, J.D. Michaelis and the Place of Geographical Knowledge in the Royal Danish Expedition to Arabia, 1761–1767', *Journal of Historical Geography*, 51, 65.

By the eighteenth century the basic procedures for producing geographic knowledge were well-established. The world was divided into continents and then into states. Each state was then described as uniformly as possible. Bernard Varen in *Geographia generalis* (1650) produced a list of topics that should be included for each state. These topics fell into three categories: terrestrial – study of the land’s features and boundaries; celestial – factors caused by the earth’s movement such as climate, seasons and motion of the stars; and third human particulars – such as the customs, histories and characteristics of the inhabitants, including religious practices.

By the late eighteenth century, the literary style of geographical grammars had changed; the entries acquired numerous subheadings and became “even less like a piece of continuous prose”.³⁴¹ Entries on each country conformed to ever more rigid templates, as geographers tried to describe the world uniformly. Whilst these literary developments are well-understood, in this section I will be showing how changes in prose went hand-in-hand with the introduction of increasing quantities of numerical data both within the listings and in tabulated overviews. Alongside globes and maps of the world, eighteenth-century geographers were increasingly trying to describe the world with tables of data.

The first British attempt to provide a global overview of the world’s population was produced by Thomas Templeman in 1729. *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms, And Islands in the World With Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated* consisted of very little prose, being mainly composed of tabulated information. A short introduction was followed by plates of tabulated data about different parts of the world.

³⁴¹ Robert J Mayhew (2007), 'Materialist Hermeneutics, Textuality and the History of Geography: Print Spaces in British Geography, C. 1500–1900', *Journal of Historical Geography*, 33 (3), 478.

<i>Dominions of Spain</i>									
<i>Spain</i>	<i>sq. Miles</i>	<i>Sum Total</i>	<i>Length</i>	<i>Breadth</i>	<i>MADRID</i>	<i>dis fr. London</i>	<i>dis fr. Madrid</i>	<i>Long^W</i>	<i>Lat</i>
	148,218	150,243	610	470					
<i>Castile New</i>	27,840		220	180	<i>MADRID</i>	690		4,14	40,25
<i>Andalusia</i>	16,500		273	135	<i>Seville</i>	890	205	0	37,20
<i>Castile Old</i>	14,400		193	140	<i>Burgos</i>	580	115	4, 8	42,21
<i>Aragon</i>	13,818		190	105	<i>Saragosa</i>	590	00	1, 7	41,30
<i>Extremadura</i>	12,600		180	123	<i>Badajoz</i>	840	180	7, 25	38,43
<i>Gallicia</i>	12,000		165	120	<i>Compostella</i>	635	270	0, 11	43, 1
<i>Leon</i>	11,200		167	96	<i>Lion</i>	580	103	0, 8	42,44
<i>Catalonia</i>	9,000		172	110	<i>*Barcelona</i>	622	200	2, 1	41,25
<i>Granada</i>	8,100		200	45	<i>Granada</i>	850	180	3, 43	37, 21
<i>Valencia</i>	6,800		180	75	<i>Valencia</i>	712	180	3, 0	39,28
<i>Biscay & Guisaco</i>	4,760		140	55	<i>*Bilboa</i>	237	184	3, 0	43,20
<i>Asturia</i>	4,600		124	55	<i>Oviedo</i>	562	208	0, 34	43,24
<i>Murcia</i>	3,600		87	65	<i>Murcia</i>	810	165	1, 7	38, 7
<i>Navarr</i>	3,000	148,218	92	45	<i>Pampelona</i>	525	195	1, 38	42,58
<i>Majorca I</i>	14,00		58	40	<i>*Majorca</i>	618	315	2, 22	39,33
<i>Yvica I</i>	02,5	2025	37	25	<i>*Yvica</i>	588	265	5, 9	38,50
<i>Minorca I</i>	520		41	20	<i>*Citadella</i>	634	360	3, 30	39,59

<i>Dominions of Portugal</i>									
<i>Portugal</i>			<i>324</i>	<i>133</i>	<i>*LISBON</i>	<i>354</i>	<i>dis fr. London</i>	<i>W</i>	<i>Lat</i>
	278,51								
<i>Extremadura</i>	6,700		147	133	<i>*LISBON</i>	354	805	9, 42	38, 50
<i>Alentejo</i>	6,645		110	92	<i>Evora</i>	860	60	8, 23	38, 32
<i>Beira</i>	5,940		117	108	<i>Coimbra</i>	775	97	8, 57	40, 16
<i>Terras Montes</i>	3,850		113	77	<i>Mimuda</i>	657	217	0, 40	41, 33
<i>Entre Minho & Douro</i>	2,904		88	60	<i>Braga</i>	690	175	8, 48	41, 38
<i>Algarve</i>	1,752	27,851	80	28	<i>*Tavira</i>	408	120	8, 32	37, 4

Spain is above 3 times as large as England, & yet by their own Computation Contains but little more than five Millions of People, Suppose 5,100,000 the proportion then to England is as 1 to 4,76 7/13. England is near five times as populous as Spain. Portugal is generally thought to be no better peopled than Spain, upon that Supposition, it contains in proportion to the Extent abt. 958,312 Souls.

Fig. 2e: A table from Thomas Templeman's A New Survey of the Globe (London, 1729), Plate 8 Dominions of Spain

Templeman called these tables the “superficial Content of every Kingdom”³⁴² Aligning the word ‘superficial’ to a new form of knowledge, was provocative as the word was already used pejoratively to describe someone who lacked profundity or depth. However, superficial accurately captures the thin description that Templeman produced; his tables were designed to facilitate comparisons between states and to create whole world overviews.

Thomas Templeman was a classic armchair geographer. His survey of the world was produced in his study, as he made clear when describing his methods. He had

³⁴² Thomas Templeman, A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated (London, 1729), i.

purchased Herman Moll's two sheet 'New and Correct Map of the Whole World' (1719) as well as a large, and extremely expensive 28-inch globe from John Senex.



*Fig. 2f: Terrestrial table globe produced by John Senex, circa 1730
National Maritime Museum, Greenwich, London, Caird Collection*

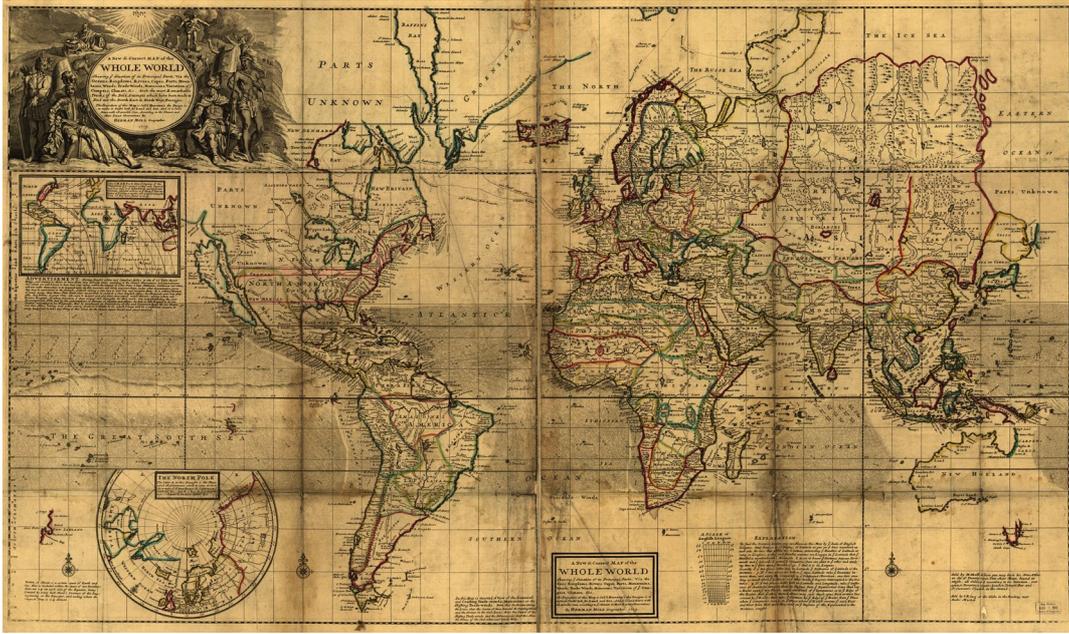


Fig. 2g: Herman Moll 'New and Correct Map of the Whole World' (London, 1719).
David Rumsey Map Collection.

Equipped with these luxury items, Templeman set about measuring the world. Moll's new map of the world enabled him to calculate areas by measuring the shapes on the map. But aware that the curvature of the earth made flat maps inaccurate, he refined his measurements by stretching strings across his Senex globe. Templeman collected these measurements into hand-drawn tables which were published as copperplate etchings. Expensive to print, Templeman's book of tables was intended as a luxurious supplement to a Moll map or a Senex globe. A strong patriot, he aimed to demonstrate that the "British Nation has no Superior upon the Globe, and the King of Great Britain no Equal."³⁴³ To facilitate comparison, for each state his tables listed the dimensions in miles, area in square miles, principal towns and cities and their distance from the capital, plus the distance from London.

Some of the tables were accompanied by notes discussing what was known about the size of the population. This, he believed, mattered politically more than land mass.

³⁴³ Templeman, *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated*, iv.

“’Tis from a probable Conjecture at the Number of People, and not the Extent of a Country, that we can form an adequate Judgement of its Strength and Power.”³⁴⁴

However, numbering the population tested the limits of what could be achieved from an armchair. Templeman only attempted to count European populations, and he was well-aware that his figures were conjectural. His words are worth reading in full:

I have in the following Sheets likewise attempted to Number the People, according to the best of my Judgement, that are supposed to subsist in most Countries and the most noted cities in Europe. A Calculation of this Nature, I am sensible, is liable to Censure and Objection, as being too much Conjecture, and the Dictates of Imagination.³⁴⁵

To produce his conjectures Templeman drew on a range of sources. For England he cited Sir William Petty as a single reliable source. Other sources provided him with a starting point. For Holland he found two sources and split the difference. For Prussia he had data about the number of burials and marriages in 1720. Working on the reasonable assumption that everyone alive died and, more dubiously, got married, Templeman multiplied the numbers of burials and marriages by 32, which was a current estimate of life-expectancy. By averaging the two resulting figures, he calculated the population of Prussia. As he had no equivalent data for other German states, he compared Prussia’s land mass to the wider German territory and created a multiplier. The result was a spuriously precise figure for the population of Germany: “the Number of Souls upon that probable conjecture will appear to be 10,183,663”.³⁴⁶

Russia was the only country where Templeman used a map alone as the basis for a population estimate. Noting that it was eight times as big as France, he reckoned its population “not to contain above 16 Millions of people”. However, alongside this claim he reported comments from a traveller, Captain Perry, who reported that “you may

³⁴⁴ Templeman, *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated*, iii.

³⁴⁵ Templeman, *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated*, iii.

³⁴⁶ Templeman, *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated*, Plates 13-17.

travel 50, 100, or 200 Russian Miles and not see a House. Such Countries must be thinly peopled.”³⁴⁷ Templeman made no claims for the population beyond Europe.

Estimates of the population of the whole world did not begin to circulate until the middle of the eighteenth century. Initial estimates varied wildly, sometimes within a single text. Johann Süssmilch in *Die Göttliche Ordnung (The Divine Order)* (1741) thought 1,080 millions the likeliest figure, but he conceded that 14,000 millions was also a reasonable possibility.³⁴⁸ Many geographers recognised the importance of populations but were hampered by the lack of reliable data. Anton Friedrich Büsching, whose *A New System of Geography* was genre defining, included tables of measurements of the earth’s size, but no data for the world’s population. However, he made numerous comments about the topic. He remarked for example that “Denmark is pretty well peopled: But some are of the opinion, that the number of inhabitants in this kingdom was formerly more considerable than it is at present”.³⁴⁹ Büsching was clear that populations were not static; his comments emphasised trends and changes. Other geographers adopted a similar approach, recognising demographics as a core topic of geography, while not including comprehensive data in their works.³⁵⁰

One British writer before Carey attempted to describe the population of the world. William Guthrie was a hack writer, who had written for the *Gentleman’s Magazine* with Samuel Johnson in the 1730s. In the 1760s, as we saw in the previous chapter, he turned to writing history³⁵¹ and then towards the end of his life geography. His *Geographical Grammar* was published in 1770, the year that he died. It was an immediate success in the English-speaking world, with 46 imprints from 1770 to 1843, plus numerous spin-

³⁴⁷ Templeman, *A New Survey of the Globe, or an Accurate Mensuration of All the Empires, Kingdoms and Islands in the World with Notes Explanatory and Political, Wherein the Number of People in All Ye Principall Countries and Cities of Europe Are Severally Calculated*, Plate 19.

³⁴⁸ Westergaard, *History of Statistics*, 73.

³⁴⁹ Anton Friedrich Büsching, *A New System of Geography: In Which Is Given, a General Account of the Situation and Limits, the Manners, History of the Several Kingdoms and States*, 6 vols. (London: Millar, 1762), 67.

³⁵⁰ Thomas Salmon, *A New Geographical and Historical Grammar* (London: William Johnston, 1749); Charles Theodore Middleton, *A New and Complete System of Geography : Containing a Full, Accurate, Authentic and Interesting Account and Description of Europe, Asia, Africa, and America* (London: J. Cooke, 1777).

³⁵¹ Okie, 'William Guthrie, Enlightenment Historian', *The Historian*. See Chapter 1.

offs and abridgements.³⁵² The *Geographical Grammar* was one of Carey's principal sources of information and needs therefore to be examined closely.

Guthrie classified the world using the standard arrangements of special geography. He produced descriptions of states, arranged by continent and subdivided into topics. He drew on wide range of sources including Büsching and Süssmilch. The success of his work in part can be explained by the novel way he presented information. Guthrie's *Geographical Grammar* provided powerful tabulated overviews of the world, that owed much to Templeman's superficial tables.

582 AFRICA

	Nations.	Length.	Breadth.	Chief cities.	Dist. & bearing from London.	Religions.
Barbary	Morocco	500	480	Fez	1080 S.	Mahometans
	Algiers	480	100	Algiers	920 S.	Mahometans
	Tunis	220	170	Tunis	990 S. E.	Mahometans
	Tripoli	700	240	Tripoli	1260 S. E.	Mahometans
	Barca	400	300	Tolemeta	1440 S. E.	Mahometans
	Egypt	600	250	Grand Cairo	1920 S. E.	Mahometans
	Blindulgerid	2500	350	Dara	1565 S.	Pagans
	Zaira	2400	660	Tegessa	1840 S.	Pagans
	Negroland	2200	840	Madiaga	2500 S.	Pagans
	Guinea	1800	360	Benin	2700 S.	Pagans
Up. Ethiopia	Nubia	940	600	Nubia	2418 S. E.	Msh. & Pag.
	Abyssinia	900	800	Gondar	2880 S. E.	Christians
	Abex	540	150	Doncala	3580 S. E.	Christ. & Pag.
	The Middle Parts, called Lower Ethiopia, are very little known to the Europeans.					
Lower Guinea	Loango	410	300	Loango	3300 S.	Christ. & Pag.
	Congo	540	420	St. Salvador	3480 S.	Christ. & Pag.
	Angola	360	250	Loando	3750 S.	Christ. & Pag.
	Benguela	450	180	Benguela	3900 S.	Pagans
	Matanan	450	240	No Towns	• • •	Pagans
	Ajan	900	300	Brava	3702 S. E.	Pagans
	Zanguebar	1400	350	Melinda or Mofambique	4440 S. E.	Pagans
	Monomotapa	960	660	Monomotapa	4400 S.	Pagans
	Monemuti	900	660	Chicova	4260 S.	Pagans
	Sofola	480	300	Sofola	4600 S. E.	Pagans
Ferrad. Nat.	600	350	No Towns	• • •	Pagans	
Caffaria or ? Hottentots	780	660	Cape of Good Hope	5200 S.	Most stupid Pagans	

The principal islands of Africa lie in the Indian seas and Atlantic ocean; of which the following belong to, or trade with the Europeans, and serve to refresh their shipping to and from India.

Islands.	Towns.	Trade with or belong to
Babelmandel, at the entrance of the Red Sea	Babelmandel	All nations
Zocotra, in the Indian Ocean	Calanfia	Ditto
The Comora Isles, ditto	Joanna	Ditto
Madagascar, ditto	St. Aurin	Ditto
Mauritiust, ditto	Mauritius	French
Bourbon, ditto	Bourbon	Ditto
St. Helena, in the Atlantic Ocean	St. Helena	English
Ascension, ditto		Uninhabited
St. Matthew, ditto		Ditto
St. Thomas, Anaboa, Princes-Island, Fernando	dit. St. Thomas, Anaboa	Portuguese
Cape Verd Islands, ditto	St. Domingo	Ditto
Goree, ditto	Fort St. Michael	French
Canaries, ditto	Palma, St. Christophers	Spanish
Madeira, ditto	Santa Cruz, Funchal	Portuguese
The Azores, or Western Isles, lie nearly at an equal distance from Europe, Africa, and America	dit. Angra	Ditto

Fig. 2h: Table of data on Africa, from William Guthrie's *A New Geographical, Historical, and Commercial Grammar* (London, 1774), 582

³⁵² Mayhew, 'William Guthrie's *Geographical Grammar*, the Scottish Enlightenment and the Politics of British Geography', *The Scottish Geographical Magazine*.

Guthrie's tables, with hand-drawn lines but typeset numbers and words, look recognisably more modern than Templeman's, but the content is similar. Arranged by continent, Guthrie listed the length and breadth of each area, the chief cities and their distance from London. However, Guthrie used a wider lens. Templeman studied Europe and his prime unit was the region; for Britain he gave figures for each county. Guthrie studied the whole world and his principal unit was the nation state.

Whilst Guthrie did not include population data in his tables, for many states he supplied a population statistic in the prose listing, alongside explanations about how the number was sourced or produced. For India he cited the historian Robert Orme's estimate that the population was 110 million.³⁵³ For Germany, which he thought hard to estimate, he settled upon 20 million, nearly double what Templeman had calculated 43 years earlier.³⁵⁴ Guthrie was careful to qualify his figures. Numbers he deemed reliable were always "about" rather than exact and he never let his readers forget that these were conjectural figures drawn from the best accounts he could find. Some of the figures he included with his own doubts attached; this "calculation is certainly overstrained", he noted about one estimate of the French population.³⁵⁵ However, there were other population questions where he thought it "was impossible to say any thing with certainty".³⁵⁶ He provided data for two thirds of the 23 European states he listed, for a quarter of the Americas and Asia, and for one African state, Morocco. Even so his data was significantly more comprehensive than any previous work, and it became the standard reference work on the topic for many years.

Guthrie's other innovation was to add a column to his tables for religion. Religious practices were a central component of eighteenth-century attempts to know the world. Indeed, many writers saw geography as a branch of Christian theology. Büsching argued that "the whole Universe taken together demonstrates the existence of a God, so the Earth in particular exhibits the most indisputable proofs of that great Truth."³⁵⁷ Büsching was a leading exponent of the role of geography in natural theology, the belief that science reveals God's design. For him the study of the whole world proved the

³⁵³ Guthrie, *New Geographical Grammar*, 537.

³⁵⁴ Guthrie, *New Geographical Grammar*, 412.

³⁵⁵ Guthrie, *New Geographical Grammar*, 368.

³⁵⁶ Guthrie, *New Geographical Grammar*, 195.

³⁵⁷ Büsching, *A New System of Geography: In Which Is Given, a General Account of the Situation and Limits, the Manners, History of the Several Kingdoms and States*, 1.

existence of God's design.³⁵⁸ Religious comparisons had been a feature of Templeman's *Survey*. Templeman distinguished Protestant kingdoms from those of Roman Catholics, calculating the total landmass of each, in an attempt to measure the relative power of the two branches of Christianity. He also included references to other religious practices, but the information he provided was sparse and did not cover every region. Büsching included far more detailed information in his listings about each nation's religious practices. Guthrie was the first British writer to present this information in tabular form, making his work an effective overview of the world's religions.

How to reduce knowledge and provide overviews of what was known was also a great concern of the encyclopaedists who were emerging at this time. When Ephraim Chambers introduced the first volume of his *Cyclopaedia* in 1727, he called for "the reduction of the vast bulk of universal knowledge into a lesser compass".³⁵⁹ A former employee of John Senex, the globe manufacturer, Chambers had similar markets in mind to Templeman when he began thinking about the need for a global overview. However, his ambitions were greater. Chambers self-consciously set out to produce the "best book in the universe", attempting to produce a summation of the scientific knowledge of his age, as Thomas Aquinas had encapsulated theological knowledge in *Summa Theologia*. His call for a reduction of knowledge was a response to the explosion of scientific knowledge in the seventeenth and eighteenth centuries. It was becoming impossible for an individual to read everything significant that was produced. Chambers set out to map what he called "terra cognita". He was providing two overviews: of the world and of knowledge itself.³⁶⁰

By the late 1780s, when William Carey began conducting his research into the world's religious populations, there were two principal British encyclopaedias. Abraham Rees brought together a large team to produce an extensively revised, new edition of *The Cyclopaedia* which was published between 1777 and 1788. William Smellie almost single-handedly wrote the first edition of the *Encyclopaedia Britannica*,

³⁵⁸ Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century*, 515-7.

³⁵⁹ Ephraim Chambers, *Cyclopædia; or, an Universal Dictionary of Arts and Sciences* (London: James & John Knapton, 1728), xxiv.

³⁶⁰ Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge: Cambridge University Press, 2001). See Chapter 5. Yeo relates the encyclopaedic desire to reduce knowledge to the earlier practice of keeping commonplace books.

published between 1768 and 1771. Both encyclopaedias employed tables of data to summarise a wide range of topics from the proportions of Greek columns to currency exchange rates. This tabulated data, sometimes purely numeric, at other times mixing numbers and text, provided readers with a powerful way to quickly gain an overview of a topic.

Rees and Smellie both excluded history and biography from the first editions of their encyclopaedias. In part this was an issue of space, but it was also a marketing decision as such information was already handled by historical dictionaries. For similar reasons geographical information was also kept to a minimum. *Britannica's* entry on 'Geography' provided a crisp, nine-page summary of the subject followed by five pages of maps and a two-page summary of the key facts of world geography.

G E O G R A P H Y.				
Division and subdivision.	Square miles.	Capital cities.	Distance and bearing from London.	Difference of time from London.
				H. M.
4. <i>Italy</i>	75,576	<i>Rome</i>	730 SE	0 52 E
5. <i>Germany</i>	181,631	<i>Vienna</i>	650 E	1 5 E
6. <i>Holland</i>	9,540	<i>Amsterdam</i>	132 E	0 18 E
7. <i>Denmark</i>	163,001	<i>Copenhagen</i>	480 NE	0 50 E
8. <i>Sweden</i>	228,715	<i>Stockholm</i>	720 NE	1 10 E
9. <i>Russia</i>	1,103,485	<i>Petersburgh</i>	1050 NE	2 2 E
10. <i>Poland</i>	226,414	<i>Warsaw</i>	766 SE	1 23 E
11. <i>Turkey in Europe</i>	212,240	<i>Constantinople</i>	1300 SE	1 56 E
12. <i>British isles</i>	105,634	<i>London</i>	First meridian.	
II. ASIA.				
1. <i>Turkey in Asia</i>	510,717	<i>Bursa</i>	1396 SE	1 58 E
2. <i>Arabia</i>	700,000	<i>Mecca.</i>	2240 SE	
3. <i>Persia</i>	800,000	<i>Ispahan</i>	2550 E	3 21 E
4. <i>India</i>	1,857,500	<i>Agra</i>	3780 E	5 15 E
5. <i>China</i>	1,105,000	<i>Pekin</i>	4380 NE	7 24 E
6. <i>Asiatic isles</i>	811,980			
7. <i>Tartary</i>				
1. <i>Chinese</i>	644,000	<i>Chinyan</i>	4480 NE	8 4 E
2. <i>Independent</i>	778,290	<i>Samarchand</i>	2800 E	4 26 E
3. <i>Muscovite</i>	3,050,000	<i>Tobolsky</i>	2412 NE	4 10 E

Fig. 2i: Extract of a table of global geographic information, from *Encyclopædia Britannica* (Edinburgh, 1771), 636

Britannica's tabular overview of the world clearly borrowed much from other works. The encyclopaedia's tables, like Guthrie's, were complete. For each of 76 states *Britannica* listed the size in square miles, the capital city, time difference and distance

from London. Much of this data was highly conjectural, but *Britannica* included no qualifications about its sources or how its numbers were derived from the measurement of maps or globes.

The vast prose listings of the geographical abstracts were being superseded by purely numerical tables of numbers. In prose population figures were clearly identified as conjectural estimates and carefully qualified. However, knowledge was now being compressed into tables and numbers, and conjectures about populations became detached from qualifications, explanations and doubts. Presented as pure numerical data, the boundaries were blurred between conjectures and fact.

The production of these facts about the world was largely a metropolitan, male activity. German statisticians and geographers were academics based in university cities: Süssmilch lived in Berlin, while Büsching moved between university posts in Göttingen, St Petersburg, Copenhagen and Berlin.³⁶¹ British geographers and encyclopaedists were different kinds of men, making a living from writing for commercial publishers. They lived in the metropolitan centres with easy access to books, libraries and scientific knowledge. William Smellie produced *Britannica* in Edinburgh; Ephraim Chambers, William Guthrie, Thomas Salmon and Abraham Rees were all men “of the middling sort”,³⁶² living and working in London.

A comprehensive view

The first writer published in English to list international population statistics in tables was Eberhard von Zimmermann. His *A Political Survey of the Present State of Europe* was published in London in 1788. Zimmermann studied eighteen European territories, numbering each state’s population and calculating the total population of Europe. For the first time human population was quantified in tables alongside details of each country’s physical geography.

³⁶¹ Bond, 'Enlightenment Geography in the Study: A.F. Büsching, J.D. Michaelis and the Place of Geographical Knowledge in the Royal Danish Expedition to Arabia, 1761–1767', *Journal of Historical Geography*.

³⁶² Mayhew, 'The Character of English Geography C. 1660-1800: A Textual Approach', 403.

Grand Divisions of Europe.	Areas of these States in square miles.	Proportion of the area of G. B. & Irel. to the other Eur. States.	Population.	Number of inhabitants on each square mile.	Proportion of the numbers of inhabitants in G. B. and Ir. to the population of other States.	Density of population in G. Br. and Irel. compared to the population of other countries.	Density of population in G. and Wal. alone compared to the population of other countries.
		G. B. & Irel. 100,928					
1. Russia (in Europe) —	1,104,976	1 to 10 $\frac{7}{10}$	20,000,000	20	10 to 19	545 to 100	7 to 1
2. Sweden —	209,392	1 - 2	3,000,000	14	37 — 10	7 — 1	10 — 1
3. Denmark —	182,400	1 - 1 $\frac{8}{10}$	2,200,000	12	5 — 1	82 — 10	117 — 10
4. Poland and Lithuania.	160,800	1 - 1 $\frac{6}{10}$	8,500,000	53	13 — 10	2 — 1	22 — 10
5. Germany —	192,000	1 - 1 $\frac{9}{10}$	26,000,000	135	100 — 237	10 — 12	28 — 27
6. The kingd. of Pruss. alone	22,144	1 - 2	1,500,000	67	73 — 10	16 — 10	20 — 11
7. France —	163,200	1 - 1 $\frac{6}{10}$	24,800,000	152	11 — 24	109 — 152	35 — 38
8. Holland —	10,000	10 - 1	2,360,000	236	42 — 10	100 — 216	35 — 59
9. Gr. Britain and Ireland	100,928	G. B. & Irel. to whole Eu. 1 - 26	11,000,000	109			
10. Switzerland —	15,296	6 - 1	1,800,000	117	6 — 1	109 — 117	140 — 117
11. Gallizia and Lodomeria	20,480		2,800,000	136	110 — 28	10 — 12	35 — 34
12. Italy —	99,000		16,000,000	180	10 — 16	100 — 165	7 — 9
13. Portugal —	27,376	3 $\frac{6}{10}$ - 1	2,000,000	65	6 — 10	160 — 100	28 — 13
14. Hungary and Transylv.	92,112		5,170,000	56	21 — 10	19 — 10	35 — 14
15. Spain —	148,448	1 - 1 $\frac{4}{10}$	10,000,000	68	11 — 10	16 — 10	35 — 17
16. Turkey —	182,560	1 - 1 $\frac{3}{10}$	7,000,000	38	16 — 10	28 — 10	70 — 19
17. Engl. and Wales alone	50,000		144,130,000 Medium: 7,000,000	140			
18. Austrian monarchy	180,400	10 - 17	10,611,000	109	110 — 196		

Fig. 2j: Table 1 estimating the populations of European states, from von Zimmermann's *A Political Survey of the Present State of Europe* (London, 1787), 6-7

Like other writers, Zimmerman drew on a wide range of written sources and he was careful to list the 31 German, French and British sources for his data.³⁶³ However, he presented his population data in numerical tables, which left little room for doubt, speculations or ranges of figures. For many of the European countries he listed there was no agreed or official population figure, but only for England and Wales, where the data was notoriously unreliable did Zimmerman indicate this, carefully labelling his figure of 7 million as a “medium” average of estimates. His table radically simplified the picture, presenting the population of Europe as a table of known numerical facts.³⁶⁴ Zimmermann’s achievements have long been recognised by statisticians and he features in many histories of the discipline. He is seen as one of the principal transitional figures between political arithmetic and nineteenth-century statistics.³⁶⁵

³⁶³ Von Zimmermann, *Political Survey*, 1-4.

³⁶⁴ Von Zimmermann, *Political Survey*, 6-7.

³⁶⁵ Both the classic disciplinary accounts credit Zimmerman as a key transitional figure: Westergaard, *History of Statistics*, 252; Pearson and Pearson, *The History of Statistics in the 17th and 18th Centuries*

In contrast William Carey does not feature in any histories of statistics, although his ambitions and arguably his achievements are greater than Zimmerman's. When his research was published in 1792, as *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathen* by far the longest section of the pamphlet was the twenty pages of tabulated data which examined the 'the present state of the world'. He introduced his figures with the comment that "The following Tables will exhibit a more comprehensive view of what I propose, than any thing I can offer on the subject."³⁶⁶

Unlike the encyclopaedists and special geographers, Carey was a poor man when he researched the world's population, but he was already marked as a unique intellect by his Baptist contemporaries. Fellow minister, Andrew Fuller visited Carey's village school regularly and has provided a detailed account of his friend's research methods.

I remember, on going into the room where he employed himself at his business, I saw hanging up against the wall a very large map, consisting of several sheets of paper pasted together by himself, on which he had drawn, with a pen, a place for every nation in the known world, and entered into it whatever he met with in reading, relative to its population, religion, etc. The substance of this was afterwards published in his Enquiry.³⁶⁷

Although Fuller was impressed by his friend's techniques for mastering and visualising information from a wide range of sources, no records have yet been found of exactly what Carey was reading. However, strong numerical correlations across dozens of numbers indicate that Carey was using information published in the most widely available geographical dictionary and encyclopaedia.³⁶⁸ *Encyclopaedia Britannica* and

against the Changing Background of Intellectual, Scientific and Religious Thought : Lectures by Karl Pearson Given at University College, London During the Academic Sessions 1921-1933, 127.

³⁶⁶ William Carey, *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens. In Which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, Are Considered* (Ann Ireland: Leicester, 1792), 38.

³⁶⁷ Carey and Carey, *Memoir of William Carey*, 30.

³⁶⁸ Carey's territorial data for larger states correlates closely with figures supplied by Salmon, *A New Geographical and Historical Grammar*; William Smellie, *Encyclopædia Britannica; or, a Dictionary of Arts and Sciences Compiled Upon a New Plan* (Edinburgh: Bell & Macfarquhar, 1771); and Guthrie, *New Geographical Grammar*.

William Guthrie's *New Geographical, Historical and Commercial Grammar* must be the key sources of Carey's population data.

Carey's approach was more comprehensive than either of his principal sources. *Britannica* divided the known world into 75 territories, Guthrie listed 113, William Carey provided data on 245. In part this was because Carey's approach was more fine-grained. *Britannica* divided Europe into 12 states. Carey, who listed many Scandinavian and Mediterranean islands and Swiss cantons individually, produced a list of 86 European territories. But Carey also included many territories that were simply absent from the other works. His Asian tables listed 67 regions. Guthrie's tables had data on twelve, whilst *Britannica's* had nine.

<i>ASIA.</i>				
<i>Countries.</i>	<i>EXTENT.</i>		<i>Number of Inhabitants.</i>	<i>Religion.</i>
	<i>Length. Miles.</i>	<i>Breadth. Miles.</i>		
<i>Ile of Ximo</i>	210	200	3,000,000	Pagans.
<i>----- Xicoco</i>	117	104	1,800,000	Ditto.
<i>----- Tfuffima</i>	39	34	40,000	Ditto.
<i>----- Iki</i>	20	17	6,000	Ditto.
<i>----- Kubiteffima</i>	30	26	8,000	Ditto.
<i>----- Matounfa</i>	54	26	50,000	Ditto.
<i>----- Fafiftia</i>	36	34	30,000	Ditto.
<i>----- Firando</i>	30	28	10,000	Ditto.
<i>----- Amacufa</i>	27	24	6,000	Ditto.
<i>----- Awafi</i>	30	18	5,000	Ditto.
<i>India beyond the Ganges</i>	2000	1000	50,000,000	Mahometans and Pagans.
<i>Indoftan</i>	2000	1500	110,000,000	Ditto.
<i>Tibet</i>	1200	480	10,000,000	Pagans.

Fig. 2k: Rows from a table estimating populations of Asian states, produced by William Carey. *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens* (Leicester, 1792), 47

Maps had two functions for Carey. He used the large paper map pinned on the wall to record the numbers that he had read, but like Thomas Templeman, he also used maps to measure territories that were not listed in his sources, so that he could calculate their unknown populations. Unlike Templeman, Carey could not afford a Senex globe, so he used his shoemaking skills to construct a large leather one. This home-made leather globe enabled him to account for the curvature of the earth as he measured the dimensions of states. Carey was explicit that he used these territorial measurements as the basis for calculating population figures for the "many countries. [where] we have no

accounts of the numbers of inhabitants that can be relied on”.³⁶⁹ There were only twelve places for which he did not produce a population estimate. Two were “undiscovered” arctic regions, the other ten were small pacific islands. Carey included demographic data for many more territories than any previous British writer.

Carey’s second principal innovation was to tabulate his data. Prior to Carey, William Guthrie’s *Grammar* was the most comprehensive source of global population figures in English, but Guthrie did not tabulate his data. In contrast Carey’s numbers, like Zimmermann’s, were stripped of doubts and qualifications. His tables were easy to grasp and provided readers with a new way of viewing the world as a whole; but alongside these gains, Carey’s superficial overview removed all doubts and qualifications from what was highly conjectural data.

Carey’s third innovation was to include columns in his tables on the religions practised across the world. This information was far more detailed and territory specific than any previous overview, indicating that he had collated information from a number of sources.³⁷⁰ Thomas Templeman and William Guthrie both included information about religions with their tables, but their researches only covered Europe and Asia. The most comprehensive information was contained in Charles Middleton’s *A New and Complete System of Geography*. Published in 1777, Middleton did not tabulate, but he aimed to provide a complete description of the world’s empires, kingdoms, provinces, and colonies. His listings included detailed summaries of what was known about each state’s religious practices. The entry on China, for example, distinguished various sects of Confucius, and found evidence of the presence of Judaism, Islam and Christianity.³⁷¹

By tabulating this religious information and attaching it to population data, Carey provided evangelicals with a new comprehensive view of the state of the world’s religions. He calculated the world’s total population to be 731 million. Then he totalled the different religions. Carey’s data showed that there were 44 million Protestants, 30 million Greek and Armenian Christians, 100 million Roman Catholics, 7 million Jews, 130 million Muslims and 420 million “still in pagan darkness”. He concluded that a vast

³⁶⁹ Carey, *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens. In Which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, Are Considered*, 62.

³⁷⁰ An important source was Middleton, *A New and Complete System of Geography : Containing a Full, Accurate, Authentic and Interesting Account and Description of Europe, Asia, Africa, and America..* Middleton did not tabulate, but included comprehensive information on religious practices.

³⁷¹ Middleton, *A New and Complete System of Geography : Containing a Full, Accurate, Authentic and Interesting Account and Description of Europe, Asia, Africa, and America*, 33.

proportion of the world's population were "in the most deplorable state of heathen darkness." Perhaps even worse, Jesuits and Islam had been making great strides converting the world. The consequence was a world that was "ignorant and very vicious".³⁷²

Carey had established a new form theologico-geography. His survey of the world was not intended like Büsching's thirty years earlier to use knowledge of the world to prove the existence of God, but rather to prove the large-scale absence of faith and demonstrate the need for action. A work of synthesis and much guesswork, the sources of *An Enquiry* were relatively commonplace, yet Carey used them to make startling conclusions that changed completely and irrevocably how the Baptist defined their purpose.

Persuasive numbers

In 1789, aged 28, William Carey moved to Leicester to take up a new position as a minister. He brought with him the research he had conducted into the state of the world's religions, and it provided the basis for the sermon he preached at his inaugural 'recognition service' in the city. From this point onwards, Carey preached sermons on the state of the world repeatedly. Unlike his friend Andrew Fuller, Carey was not primarily a theologian. His sermons focussed on the practicalities of global evangelism, which he compared to the spread of trade. The long history of Christianity and the more recent history of British international trade both showed that peoples across the world were "as capable of knowledge as we are."³⁷³ He made a business case for evangelism, examining the costs and likelihood of success. Baptists were in general not individually wealthy, but he argued that with tithes they could raise the funds to pay for a global operation. Carey built a financial model to prove this, drawing on the recent fund-raising boycott of sugar by anti-slavery campaigners. By forsaking certain luxuries, Carey argued, Baptists could donate 10% of their income, which would raise sufficient money to spread their faith across the globe.

³⁷² Carey, *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens. In Which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, Are Considered.*

³⁷³ Carey, *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens. In Which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, Are Considered*, 64.

Three years of preaching about his research to congregations in Leicester and across the Midlands proved the persuasive power of his numbers; but his plan to evangelise the world remained only a proposal. Carey had come to realise that he could never present the full picture orally. Statistical data was a form of information that was best delivered visually to readers in print. Carey believed that his audience needed to see his data for themselves.

Thomas Potts, a wealthy Baptist merchant, saw a manuscript copy of this research when Carey was visiting Birmingham. Asked why he had not published it, Carey cited costs and Potts decided to back him, giving Carey £10. “We will have it published by all means. I had rather bear the expense of printing it myself, then the public should be deprived of the opportunity of considering so important a subject.”³⁷⁴ A group of like-minded ministers from the Midlands, who had gathered around Andrew Fuller, offered to peer review his work before publication, to “see if anything can be omitted, altered or added... We found it needed very little correction,” commented John Rylands, one of this group.³⁷⁵

Carey arranged for his pamphlet to be elegantly typeset by a printer in Leicester. *An Enquiry into the Obligations of Christians to use Means for the Conversion of the Heathens* was sold for 1s 6d. As the print costs had been covered by Potts, all income from sales went to the newly formed Baptist Missionary Society.³⁷⁶ The pamphlet turned out to be a good propaganda tool and fundraiser. Carey argued that it was “not impracticable” to convert the world and he was believed. Within a few months Baptist churches in Britain began committing themselves to this new global vision. The first meeting of the Baptist Missionary Society was held in Kettering on October 2nd, 1792. The meeting was well-attended and raised £13 2s 6d. A meeting in Birmingham a month later raised over £70. Carey’s years of research and Thomas Pott’s £10 investment reaped instant rewards.

The new Baptist Missionary Society recognised that Carey’s statistics were persuasive. Rylands, Fuller and other members of the committee began to make

³⁷⁴ Francis Augustus Cox, *History of the Baptist Missionary Society, from 1792 to 1842... To Which Is Added a Sketch of the General Baptist Mission (Communicated Chiefly by the Rev. J. Peggs)* (London: Ward; Dyer, 1842), 8.

³⁷⁵ William Carey, *An Enquiry into the Obligations of Christians to Use Means for the Conversion of the Heathens. In Which the Religious State of the Different Nations of the World, the Success of Former Undertakings, and the Practicability of Further Undertakings, Are Considered.* (London: Hodder & Stoughton, 1891), xvi.

³⁷⁶ Smith, *The Life of William Carey, D. D.*, 32.

prominent use of the numbers in fund-raising campaigns. At their third meeting in Northampton on November 13, 1792, the committee approved an address to be printed and sent to Baptist churches across Britain. This fund-raising mailshot distilled into a few short paragraphs the information that the society thought would be most persuasive. The address began by clarifying the objectives of the society; it aimed to “evangelize the poor, dark, idolatrous Heathen, by sending missionaries into different parts of the world”. Next this short pamphlet explained the need for missionaries. Carey’s demographic research was the principal evidence of need. Capitalised for emphasis, the address noted that “It is a very affecting fact, that according to the lowest computation, there are at this moment above FOUR HUNDRED MILLIONS of our fellow-men in a state of pagan darkness.” The committee had realised that numbers were affective; the sheer number of pagans moved donors emotionally.

While four hundred million pagans were worth shouting about, the fundraising power of this information was intensified if readers were reminded of darker pagan practices. Alongside Carey’s statistics, Baptist pamphlets used evidence gathered by Captain Cook on his voyages. Baptist readers were reminded that pagans in New Zealand and Pacific islands were “in the habits of offering human sacrifices”.³⁷⁷ Widow-burning was potentially an even better example of human-sacrifice, but as we saw in the previous chapter in 1792 whether the custom still took place was strongly disputed. The custom would not feature in Baptist Missionary Society’s fundraising pamphlets until after William Carey had been sent to India and began studying it himself. However, the use of Cook’s eyewitness evidence alongside Carey’s data shows that Baptists were already aware that if sacrificial practices were yoked to statistics, this provided a persuasive picture of a world gripped by pagan savagery.

In its new journal the Baptist Missionary Society published increasing amounts of data. Through the 1790s articles in *Periodical Accounts* were peppered with statistics and tables of data. The figures, many of which were conjectures and models, helped them bring some business-like rigour to what must have often seemed an impossible task. As well as Carey’s figures about the numbers of pagans, they estimated the likely costs of the mission, recorded and publicised all donations and began to count the

³⁷⁷ *Periodical Accounts Relative to the Baptist Missionary Society*, 6 vols. (Clipstone, 1800), 8.

numbers of conversions. This conjectural data was used in fundraising, to support strategic decisions and increasingly to measure the success of campaigns.

Missionaries started to send in accounts of the conversions they had made in various parts of the world.³⁷⁸ These missions were not restricted to far flung colonies. There were a number of missions to Catholic Ireland, and in 1796 and 1797 the Society organised two summer missions to Cornwall. Missionaries toured the county and the results of their work were presented to readers of the *Periodical Accounts* in tabulated form.

ABSTRACT OF THE MISSIONARIES' JOURNAL

↻ In the third Column B. denotes Borough Towns and M. Market Towns—the others are Villages.

Time.	Preacher.	Town or Village	Place of preaching	Subjects.	Hearers.	Hour
1796						
July 4,	Bro. Saffery,	Saltash, B.	Baptist Meeting	2 Cor. xiii. 5	70	7 in the evening
5,	Steadman,	Cawsand†	Ditto Ditto	John i. 45	60	6 ditto
5,	Saffery,	Batus Fleming	Private House	Luke xiii. 23	40	8 ditto
6,	Steadman,	Landrake	Out of Doors	John xiv 6	100	7 ditto
	Saffery,	Ditto	Private House	Rom. ix. 33	80	9 ditto
7,	Ditto,	Liskeard, B.	Town Hall	2 Cor. vi. 20	} 500	7 ditto
7,	Steadman,	Ditto	Ditto	Acts xvi 31		
	Ditto,	Lostwithiel, B.	Under the Town Hall	Luke xix. 41, 42	} 150	7 ditto
8,	Saffery,	Ditto	Ditto,	Acts xiii. 38		
9,	Ditto,	St. Austle, M.	Market House	Heb. ii. 3	200	7 ditto

* Where the number of hearers was dubious, it is uniformly stated at the lowest computation.

† Cawsand is not in Cornwall, but only separated from it by a small rivulet, which divides it from Kingfand.

Fig. 2l: Rows from a table showing estimates of the size of audiences preached to during the first Baptist mission to Cornwall (1796), *Baptist Periodicals*, vol. 1, (Clipstone, 1800), 264-271

The missionaries estimated the size of the crowds in Cornwall. Some of the crowds were small, as in Tregony where they preached to 35 people, but elsewhere the missionaries attracted huge crowds. In Liskeard, Helston, Mousehole, Newlyn and Redruth audiences numbered between 500 and 700. In St Ives they claimed to have addressed 1000 people. They accepted that there might be a degree of inaccuracy, noting that “where the number of hearers was dubious, it is uniformly stated at the lowest computation.”³⁷⁹ Like Carey’s conjectures, these figures were rough estimates, which by being tabulated took on the appearance of hard facts.

³⁷⁸ See chapter 4 for a detailed account of the data from India.

³⁷⁹ *Periodical Accounts*, 264.

The Baptist Missionary Society operated across Britain and it kept excellent records, which indicate a great deal about the audience for these kinds of facts. To grow the missions the society had to keep raising more money. The Baptist Missionary Society kept accurate records of donations which it published at the end of each *Periodical Account*. These reveal a great deal not only about the society's financial position, but also about its donors. Historians have emphasised that it was very much a provincial organisation. Brian Stanley has noted the disinterest of London Baptists in the missions. For example, Dr Stennett, minister at Little Wild Street, London told his fellow London ministers to “stand aloof” from the new society.³⁸⁰ Stanley argues that the Baptist Missionary Society was the victim of “social prejudice and metropolitan disdain for rustic provincial initiatives”.³⁸¹

The financial records demonstrate that provincial branches of the Society, provincial Baptist churches and wealthy individuals outside London made significant contributions to fund-raising. In 1798-9, the year with the most complete records, the biggest single donations all came from outside London. The Scottish evangelical Robert Haldane was the largest donor giving the society £100. The Missionary Society of Glasgow raised £50, Hampshire and Wiltshire raised £38, Nottingham raised £36 and Frome in Somerset raised £27. In some areas, notably the East Midlands, Scotland and the South West, individuals of middling income contributed substantial sums, whilst churches in poor areas such as Soham and Boston contributed smaller amounts. Other areas, such as Ireland, Wales, the North East and South East, raised almost nothing.³⁸²

Baptist churches in London often supported other missionary societies, but there was strong individual support for the society in the city. The largest individual and group donations came from outside the capital, but London was by far the most significant donor region, contributing 38% of the society's income in 1798-9. However, many of the donors were not Baptists. Key members of the wealthy influential evangelicals who clustered around Battersea Rise in Clapham, such as Charles Grant, MP and Chairman of the East India Company, the banker and economist Henry Thornton MP and Samuel Thornton MP all subscribed.³⁸³ Joseph Butterworth, not yet

³⁸⁰ Stanley, *The History of the Baptist Missionary Society*.

³⁸¹ Stanley, *The History of the Baptist Missionary Society*, 18.

³⁸² Figures produced from an analysis of 'Subscriptions received from October 1798 to October 1799' in *Periodical Accounts*, Appendix, Volume VI. .

³⁸³ Tomkins, *The Clapham Sect: How Wilberforce's Circle Transformed Britain*. includes a useful 'Dramatis Personae of the Clapham Sect'

an MP but a wealthy legal publisher was also a subscriber.³⁸⁴ The successful cotton merchants Joseph Reyner and Joseph Hardcastle made a joint donation of £10.³⁸⁵

Most donors were male, but Baptist fundraising campaigns also reached a substantial female audience. Baptists strongly emphasised female education. Women of all ages, marital status and classes were expected to read tracts, and many would have read the Baptist Missionary Society's periodicals and fund-raising materials. 12% of named individual donors were women. The vast majority came from large cities. 70% came from London, and 10% more from Bristol and Birmingham. The only female donors from non-metropolitan regions came from the Baptist strongholds of the East Midlands and the South West. Women were recorded as Miss or Mrs, giving some indication of their marital status. One third were single women and it seems likely that many of the others were widows. There are no clear indicators of how married women responded to Baptist fundraising appeals as donations were nearly always attributed to the (male) head of the family. Only one family, the Burls from London, made a donation collectively.

The evidence of the donations does suggest that a broad audience of women and men, well beyond but including the metropolitan governing elite, could respond to arguments presented with statistical data. The society's ability to quantify its activities created a purposeful impression. The strong messages of its publications, conveyed simply with convincing data, helped it speak simultaneously to powerful metropolitan elites and provincial public opinion.

On 20th March 1793 the Harvey Lane chapel where William Carey had preached for nearly five years held a 'high day' of prayer and sermonising to mark the imminent departure of Carey to begin the Baptists' mission to the world.

Where in the world to establish the first mission had been the most difficult and pressing question for the Baptist Missionary Society. For the leadership of the society Carey's data had functioned as a form of spiritual market research. The society believed that "every human soul, when hearing the gospel, is bound to believe and obey it".³⁸⁶ To give every human the chance to hear the gospel was an immense practical task. The

³⁸⁴ 'Joseph Butterworth (1770-1826)' in D. R. Fisher, *The House of Commons, 1820-1832*, 7 vols. (Cambridge: Published for the History of Parliament Trust by Cambridge University Press, 2009), 473-7.

³⁸⁵ Joseph Reyner, obituary, *The Evangelical Magazine* (London: Williams & Smith, 1808), 123.

³⁸⁶ Carey and Carey, *Memoir of William Carey*, 48.

survey of the world and its calculations about the number of pagans, indicated its awesome scale, but also made it comprehensible. The numbers made it possible to make decisions and act. Carey had longed for a mission to the South Seas, but his own data crushed that dream. India was selected by the Baptist Missionary Society as the location for the first mission. According to Carey's statistics it was the most populous country in the world, and largely pagan. The numbers made a strong impression on Baptists. "We saw," said Fuller afterwards, that "there was a gold mine in India, but it was as deep as the centre of the earth".³⁸⁷

The society began to research the competition in India. They were aware that "Jesuits and popish missionaries" were propagating "their very defective and corrupt kind of Christianity." Baptists had no figures for Roman Catholic conversions, but they did have data from Protestant missions which had attempted convert pagans. The Danish mission to the Coromandel in the East Indies had "brought 18,000 Gentoos to the profession of Christianity" whilst the Moravian Brethren, operating in North America "in the year 1788... had in their societies nearly 15,000 converted heathen."³⁸⁸ These early missionary statistics impressed the Baptists, and helped persuade the committee and donors that a mission to India was viable.

Carey's tables had proved persuasive. They were at the centre of the initial fund-raising campaign and played a key role in the society's first major decision, determining where it established its first mission. The population figures for India, like those for much of the world, were pure conjecture, but such uncertainties did not limit the power of numbers to drive decision-making.

Baptists were not the only Christians to calculate the task of converting the world to Christianity. In 1808, inspired by William Playfair's historical graphs, which charted trade figures over long periods of time, the Rev Hugh Pearson, a young Church of England clergyman based at Oxford University, decided to show the historical trends of world religions over 1800 years, charting the spread of Christianity in yellow, Islam in red, and showing where 'paganism persisted' in grey.

³⁸⁷ Fuller's remarks cited in Smith, *The Life of William Carey, D. D.*, 57.

³⁸⁸ *Periodical Accounts*, 11-12.

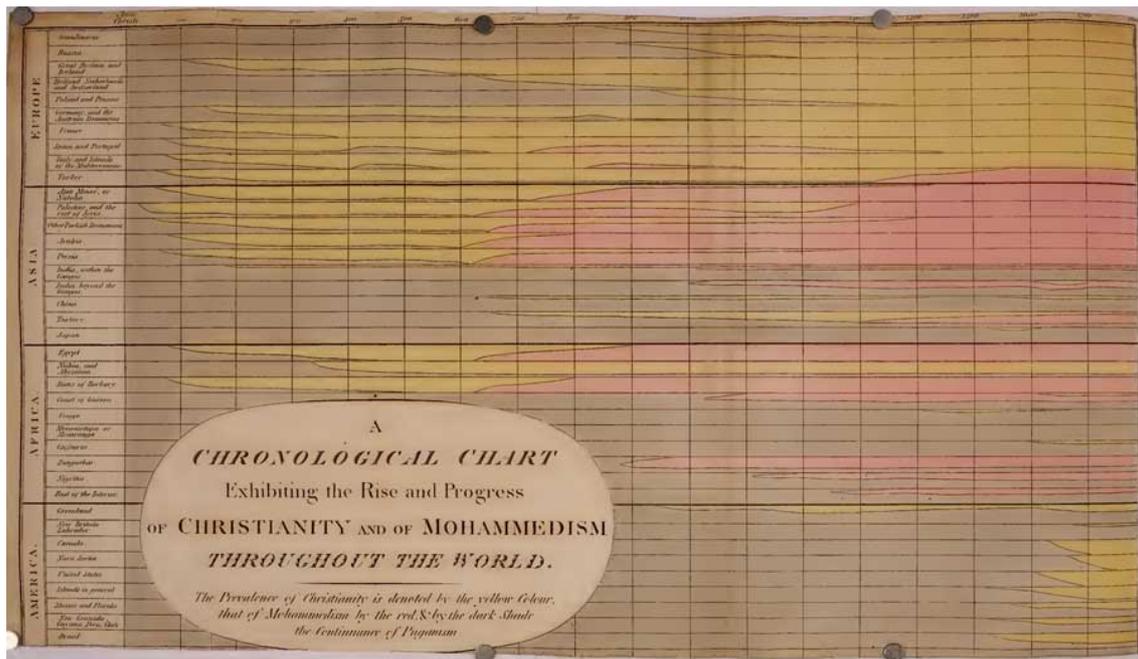


Fig. 2m: 'A Chronological Chart Exhibiting the Rise and Progress of Christianity and of Mohammedism throughout the world' from Rev. Hugh Pearson's *A Dissertation on the Propagation of Christianity in Asia* (Oxford, 1808)

Like Carey's tables, Pearson's graph attempted to provide an overview of the religious state of the world. Carey's count of pagans, Christians and Muslims had produced a frozen snapshot of the present state of belief. Reverend Pearson, adding time to the analysis, attempted to compare the relative states of the world's religions in different parts of the world over two millennia. There was of course no data to support the curves of his graphs. Even now in the twenty-first century attempts to quantify and compare the world's religions are considered highly speculative³⁸⁹ and controversial.³⁹⁰ However, Pearson's speculative graphs are further evidence that well before the explosion of social statistics in the mid-nineteenth century European thinking about social questions was becoming quantitative.

³⁸⁹ 'The Global Religious Landscape', <<http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/>>, accessed 10/03/2018.

³⁹⁰ 'Religion and Belief: Some Surveys and Statistics', <<https://humanism.org.uk/campaigns/religion-and-belief-some-surveys-and-statistics/>>, accessed 10/03/2018.

Conclusion

In many ways William Carey and the Baptist Missionary Society were unexceptional in their use of data. Like MPs in Westminster and metropolitan geographers and encyclopaedists, provincial Britons used the best available data to understand the world. In the late eighteenth century people recognised when there was an absence of reliable information, but they still needed to measure, assess, predict and compare. Some of the numbers they used to make knowledge and decisions were pure guesswork, other numbers such as counts of large crowds or a ship's cargo were rough estimates, others such as naval recruitment data or financial records of donations were the products of rigorous, reliable bureaucratic counts. Where there were gaps in knowledge people consciously made estimates, speculations and rough calculations.

Three factors made Carey's research into the world's population unusual and significant: his exclusive focus on tabulated data, which aligned his research with the latest statistical work in Germany; the inclusion of religious belief in his tables; and his desire to be comprehensive. The first Briton to attempt to calculate the populations of the world's religions, Carey was one of the first Europeans to produce a complete demographic dataset of the world's populations.

Largely unknown now, at the time Carey's conjectural numbers were found highly persuasive. His estimates of the numbers of pagans in the world spoke powerfully to women and men from many backgrounds. From widows in Bristol to MPs in Westminster, evangelicals across Britain were inspired by this data to make donations to fund mission work, whilst the Baptist Missionary Society's committee in Kettering used the data to consider where to establish its first mission.

However, some people recognised that their desire to understand the world numerically was running ahead of the availability of reliable data. Looking backwards in 1801, William Playfair remarked that "statistical knowledge, has... within these last fifty years, become a regular object of study."³⁹¹ But he also lamented the neglect of knowledge that meant that Britons knew how many died in the battle of Agincourt but not the population of their own country. Playfair called for a more "habitual and regular practice of collecting information".³⁹² Collecting data was about to become almost a

³⁹¹ William Playfair, *The Statistical Breviary; Shewing the Resources of Every State and Kingdom in Europe* (London: Wallis, 1801), 4.

³⁹² Playfair, *The Statistical Breviary; Shewing the Resources of Every State and Kingdom in Europe*, 9.

mania, of which the British census is perhaps the most well-known example. In the next two chapters we will see that Baptists and other evangelicals, already familiar with using data to fundraise and make key decisions, would increasingly demand that their overseas missions collect hard information. One result of these demands was that William Carey and other evangelicals in 1802 organised a survey of widow-burning that was designed to settle for good doubts about the custom's existence.

3

Spiritual Arithmetic

Evangelicals & the production of the first widow-burning statistics, 1797 - 1805

Before 1797, Britons had debated whether widow-burning was scarce or common, whether it was increasing or decreasing and whether there were caste or geographical variations, without attaching numbers of any kind to their thoughts. This changed at a meeting of the Court of Directors on 16 August 1797,³⁹³ when Charles Grant, a Director of the East India Company, presented a ‘Paper of Business’,³⁹⁴ in which he stated that “about thirty-three thousand” women were annually sacrificed on funeral pyres in Hindostan.³⁹⁵

Grant’s figure was a conjecture, but it had a powerful impact on British discussions about widow-burning and would have many consequences. One of the first, which this chapter examines, was that a small group of Britons decided to produce hard facts to support Grant’s conjectures. This chapter asks who, why, how and with what resources Britons in Bengal between 1802-1805 decided that conjectural numbers were insufficient and organised an ambitious survey to produce statistics about a custom that until then had remained almost completely out-of-sight of foreigners.

Charles Grant recognised that 33,000 widow-burnings per annum was a number that “probably far exceeds the general conception of Europeans”.³⁹⁶ In the previous sixty years Europeans had witnessed a widow-burning about once every four years,³⁹⁷ so there was clearly a discrepancy between his estimate and the number of reported

³⁹³ IOR/B/125, Court Minutes, Minutes of 16 Aug. 1797

³⁹⁴ Written in 1792, Grant's observations circulated first as a handwritten manuscript. The printed tract added extensive footnotes, including this calculation. The 1797 printed copy has been lost, but it was reprinted in 1811, without changes. For the publication history see Ainslie Thomas Embree, *Charles Grant and British Rule in India* (London: Allen & Unwin, 1962), 142.

³⁹⁵ Charles Grant, *Observations on the State of Society among the Asiatic Subjects to Great Britain, Particularly with Respect to Morals, and on the Means of Improving It* (London, 1811), 108.

³⁹⁶ Grant, *Observations*, 108.

³⁹⁷ See chapter 1.

sightings. To explain this gap Grant produced a detailed explanation of how his enormous total was produced:

Hindustan has been estimated to contain a hundred millions of inhabitants, and at least one-tenth of these to be Mahomedans. In the more opulent families of the three inferior tribes, particularly the Kheterees, the practice in question is occasionally followed. Suppose then the four original tribes to make up two-thirds of the Hindoos, that is, sixty millions, the Brahmin families, with a small proportion of the Kheterees, and a few of those belonging to the other two tribes, to constitute a tenth part of the four original tribes, or six millions, the heads of families in this number to be one-sixth, or one million, the deaths of these annually, one in thirty, and (a plurality of wives being in many of these families,) one woman only to be burnt for each, the number annually sacrificed in Hindostan will then be about thirty-three thousand.³⁹⁸

Rather than working up from the tiny number of known cases, Grant's conjectural number was produced by working down from estimates of the total Indian population. He concluded that there must be thousands of deaths in leading Brahmin families each year, and although widow-burnings were only "occasionally seen about English settlements", this must be because "by far the greater part takes place in the interior of the country, out of the view and intelligence of foreigners."³⁹⁹

As we saw in the previous chapter, in the late eighteenth century the desire to quantify often preceded the availability of hard information. Numerical estimates of this kind were standard in public life. Grant was quite explicit about what he was doing, stating to the Directors that "These data are all hypothetical and have little certainty".⁴⁰⁰ However, the era of conjectures and uncertainty was coming to an end. By the middle of the nineteenth century, hard facts - social statistics, annual commercial accounts and census data - had largely replaced such conjectures. In 1802, at the forefront of this movement, a small group of Britons decided to undertake two ambitious surveys of widow-burning in Bengal, generating two sets of social statistics about the custom, over a decade before the East India Company began producing its own statistical counts.

³⁹⁸ Grant, *Observations*, 108.

³⁹⁹ Grant, *Observations*, 107-8.

⁴⁰⁰ Grant, *Observations*, 108.

These statistical counts of widow-burning, the first of their kind, have been little studied. They are, for example, absent from histories of colonial knowledge, and from recent accounts of the development of Western sciences⁴⁰¹ and the social sciences⁴⁰² in nineteenth-century Bengal. There are a number of reasons for this absence, but the principal one is that the first counts of widow-burning have for 150 years been wrongly attributed to Baptist missionaries.

The source of this mis-attribution was John Marshman, the son of one of the first Baptist missionaries to India. In a history of the Bengal mission published in 1859, Marshman claimed that the Baptists organised several surveys of widow-burning.⁴⁰³ This claim was widely repeated in nineteenth-century accounts of the mission and its deeds, where Marshman's history was treated as a primary source.⁴⁰⁴ In the most comprehensive modern examination of the mission's work in India, the historian Daniel Potts repeated and strengthened Marshman's claim, arguing without any additional evidence that, "these investigations, the only ones of their kind, were made to show how relatively common the practice was, as well as to impart to the British government in India and Britain alike a 'feeling of national responsibility'".⁴⁰⁵ Brian Stanley, the historian who has most thoroughly examined the work of the Baptist Missionary Society in Britain, made a similar claim.⁴⁰⁶ It has become a key tenet of popular British and American Baptist history that the Baptists surveyed widow-burning to force indifferent colonial authorities to ban the custom; the claim features prominently on web sites for the British Baptist Missionary Society⁴⁰⁷ and William Carey University in Mississippi.⁴⁰⁸

⁴⁰¹ Pratik Chakrabarti, *Western Science in Modern India : Metropolitan Methods, Colonial Practices* (New Delhi: Permanent Black, 2004).

⁴⁰² The most recent example is Gottschalk, *Religion, Science, and Empire*, 188-93.

⁴⁰³ Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission*, 221.

⁴⁰⁴ There were numerous biographies of Carey the most important of which is Smith, *The Life of William Carey, D. D.*, 280.

⁴⁰⁵ E. Daniel Potts, *British Baptist missionaries in India, 1793-1837 : the history of Serampore and its missions* (Cambridge U.P., 1967), 146

⁴⁰⁶ Stanley, *The History of the Baptist Missionary Society*, 44.

⁴⁰⁷ 'William Ward', *BMS World Mission* <<http://www.bmsworldmission.org/about-us/our-heritage/origins/william-ward>>, accessed January 28 2012.

⁴⁰⁸ Margaret Joseph, 'William Carey: My Real Life Hero', *William Carey Bicentenary Celebrations of the Convention of Baptist Churches in Maharashtra, 1992* <<http://www.wmcarey.edu/carey/legacy/maharashtra/joseph2.pdf>>, accessed January 30 2012.

Few historians from outside the Baptist tradition have considered the first widow-burning surveys. In 1956 Kenneth Ingham, in one of the fuller accounts, stressed that the survey was produced by the Baptist mission, acting alone. Marshman was his sole source.⁴⁰⁹ More recently, in a global history of widow-burning produced in 2006, Jörg Fisch summarised what was known about the first surveys:

The first step towards systematic registration of, as far as possible all widow-burnings within a certain region was taken by British Baptist missionaries, completely independent of the state and in some regards even secretly, because, till 1813 the East India Company did not tolerate missionaries in areas under its control.⁴¹⁰

Over the next two chapters this thesis will show that almost all of these claims are wrong. There is a great deal of evidence, not least in Baptist primary sources,⁴¹¹ that although William Carey did play a significant role, the Baptist mission was not responsible for instigating or publishing the first study of widow-burning.

However, as this chapter will demonstrate, religion was an important factor. The first surveys were instigated by Reverend Claudius Buchanan, an evangelical Church of England vicar and Vice-Provost of Fort William College. Buchanan was a protégé of Charles Grant and they shared an evangelical agenda. This chapter will explore this agenda, but its focus will not be on theology, but on how the evangelical movement in Britain developed an intensely statistical mindset. Understanding this mindset helps explain why Grant numbered widow-burnings when speaking to East India Company directors, and why a decade later Buchanan instigated a large-scale study to count widow-burnings in Bengal. Reconstructed and re-attributed as evangelical, the first surveys are revealed in this chapter not as secret research, conducted completely independent of the East India Company state, but rather as the direct antecedents of the official statistics produced from 1815.

This chapter therefore looks at the collection of data about widow-burning within the context of Christian data collection. The chapter begins by exploring how and why

⁴⁰⁹ Ingham, *Reformers in India, 1793-1833*, 45; A history of British evangelicals in India also repeated Marshman's claims: Davidson, *Evangelicals and Attitudes to India*, 102.

⁴¹⁰ Fisch, *Burning Women*, 232.

⁴¹¹ Mani, *Contentious Traditions : The Debate on Sati in Colonial India*, 145.

evangelical churchmen counted. The middle sections examine the conditions in Bengal that enabled the survey's production, exploring British knowledge of widow-burning in the years immediately before the counts and the role of Fort William College as the institutional home of the survey. The final section reconstructs how the survey itself was conducted.

Evangelicals and data collection

For a long time, Christian churches had counted their congregations. This section examines aspects of this history, looking particularly at how in the eighteenth century, Protestant religious groups used numerical data to measure their successes and motivate their supporters.

Although the focus of attention will be on Protestant evangelicals and missionaries, there was nothing intrinsically Protestant or new about counting congregations. There are particularly good records from colonial churches about Roman Catholic counts, because this information was circulated widely in Europe. For example, in the sixteenth century the Portuguese established a network of Roman Catholic churches and schools along the east coast of India and what is now northern Sri Lanka. When this territory was seized by the Dutch East India Company in 1658, the Dutch examined the state of the churches and schools, and they found that the Jesuit clergy had kept good numerical records. Jesuits counted the number of villages and estimated the size of the local populations they hoped to convert. They also kept records of school and church attendance to measure the progress of their mission to India. In Mallagam the congregation was 600, in Mayletti 1500-1600, in Ondewil 900-1000, in Batecotte 2000. Each of these figures was a rough estimate based on observations. Trends were also recorded, priests noted in one village that the number of converts doubled each year. Every aspect of the Roman Catholic mission was designed to cope with huge numbers of pagans willing to be converted and educated. In Jasnapatnam 1000 schoolboys were being schooled, 200 boys in Mallagam, 8-900 in Batecotte, 600 in Paneteripou, 700 in Changane. A Dutch observer marvelled at the scale of the Portuguese churches in India; one in Achiavelli was "capable of containing 2000 persons." Reports of the Jesuits'

successful conversion of large numbers of pagans in the East Indies were published in Holland and then circulated across Protestant Europe, reaching England in 1704.⁴¹²

Protestants were slower than Roman Catholics to establish missions in the new European colonies. The first group to make a sustained missionary effort were Moravians. Founded originally in Saxony as a branch of Lutheranism for exiles from neighbouring Moravia, from the outset Moravians were committed evangelists, wanting to expand their congregations and convert the world.⁴¹³ Like the Jesuits, the Moravians looked for a host colonial power. They turned to Denmark, the only Lutheran power with a non-European empire. The Moravians established two missions with the Danish empire, one on the Caribbean island of St Thomas, the other in Greenland. Both missions counted their successes. Shortly after they arrived at St Thomas in 1733, the Moravians were reporting that 2-300 slaves attended their meetings. By the 1760s they had made 3000 converts of which 200 had become missionaries, sent to other Caribbean islands and South Africa. A detailed account of the St Thomas mission was published in Germany, with ethnographic information accompanying conversion statistics.⁴¹⁴ In Greenland the Moravians made their first converts in 1739; by 1762 the mission was reporting that 500 Inuits had been baptised.⁴¹⁵

British Protestants found such European data about colonial conversions profoundly inspirational. Missionary sources from India in particular, such as Herman Specht, inspired several generations of Britons.⁴¹⁶ Charles Grant, writing in 1797, was deeply impressed that the Dutch East India Company province of Jasnapatnam could report in 1688 that it “hath two hundred and seventy-eight thousand seven hundred and fifty-nine inhabitants; among whom there are Indians professing to be Christians, one hundred and eighty -eight thousand three hundred and sixty-four.”⁴¹⁷

Grant was strongly in favour of Christian expansion, having re-discovered his faith in India, after the death of two young daughters from smallpox in 1776. Before their

⁴¹² Philip Baldaeus, 'A Description of the East India Coasts of Malabar and Cormandel, with Their Adjacent Kingdoms and Provinces and of the Empire of Ceylon and of the Idolatory of the Pagans in the East Indies', *A Collection of Voyages and Travels* (London: Awnsham and John Churchill, 1704), 799-803.

⁴¹³ Ryrie, *Protestants*, 169-72.

⁴¹⁴ C.G.A. Oldendorp, *History of the Mission of the Evangelical Brethren on the Caribbean Islands of St. Thomas, St. Croix, and St. John*, Edited by Johann Jakob Bossard. English Edition and Translation by Arnold R. Highfield and Vladimir Barac, 4 vols. (Ann Arbor, 1987).

⁴¹⁵ Ryrie, *Protestants*, 169-71.

⁴¹⁶ Ryrie, *Protestants*, 146-50.

⁴¹⁷ Grant, *Observations*, 167.

death he rarely attended church, concentrating on making his fortune. Like many Company employees he gambled heavily and had lost large sums of money. Grant became convinced that his family tragedy was God's retribution for these sins. Like many of his contemporaries he was born again, becoming convinced that he could only go to heaven because his sins were atoned by Christ's death on the cross. Grant had become an evangelical.⁴¹⁸

The evangelical revival, which had begun in North America in the 1730s and 1740s, was sweeping through the English-speaking, Protestant world. Primarily a theological movement, evangelicals emphasised that all Christians were sinners, who could only be saved if they recommitted their life to God and put what they called 'vital religion' at the centre of their lives. Evangelical religion emphasised the importance of individual redemption. Individuals had to recognise the gift of Christ's atonement if they were to go to heaven. Evangelicals called this 'being saved' and it was a kind of mid-life conversion. Known as 'The Great Awakening', in Britain the evangelical movement had a number of strands. The most well-known group led by John Wesley became known as Methodists and they eventually splintered from the Church of England. Other Protestant dissenter groups were also theologically refreshed by the great evangelical awakening; William Carey for example became an evangelically-minded Particular Baptist whilst an apprentice shoemaker. In India Charles Grant found his vital religion within the established Church of England.

Sociologists have long linked the focus on individual salvation within Protestant evangelical theology with the emergence of individualist capitalism.⁴¹⁹ But, as this chapter will explore, the evangelical awakening also marked a sociological turn in British thought. Evangelicals had a vision for transforming society, aiming to bring salvation to as many people as possible. This was a movement born in mass rallies. The leading evangelicals toured the country, preaching in fields and large halls. They sought to influence the appointment of school leaders and parish clergy, aiming to insert vital religion into the hearts of as many Britons as possible.⁴²⁰ These strategies were successful, evangelical influence in England is recognised now by historians to have

⁴¹⁸ There has been no recent biography of Grant. The most comprehensive account remains Henry Morris, *The Life of Charles Grant : Sometime Member of Parliament for Inverness-Shire and Director of the East India Company* (London: John Murray, 1904).

⁴¹⁹ Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Parsons, T. (London: Routledge, 2002).

⁴²⁰ Tomkins, *The Clapham Sect: How Wilberforce's Circle Transformed Britain*.

been “widespread and pervasive”. By the middle of the nineteenth century over a third of Church of England clergy were evangelicals, and by the 1850s it is estimated that there were 2-3 million Anglican evangelicals out of a population of 18 million.⁴²¹

Believing they had a duty to save all human souls from eternal hellfire, evangelicals of all persuasions also committed themselves to global evangelism. British Protestants, who had previously not looked outwards, began to contemplate converting the world. In the 1730s John Wesley and George Whitefield established the first British missions to slaves in the American south, and at the same time a Welsh Anglican, Griffith Jones, contemplated a mission to India. After giving the idea much thought, he decided instead to establish a mission in Wales, setting up a network of schools teaching the Welsh language so that people could read the bible in their native tongue. Jones aimed to save as many Welsh souls as possible, and like the Jesuits and Moravians, he counted the progress of his mission.⁴²²

Although Moravian and Portuguese missionaries had counted conversions, their numbers were impressionistic. Griffith Jones added a new precision and rigour when collecting his missionary data. A brilliant organiser and fund raiser, Jones estimated that he could teach six pupils to read for 20 shillings if they were taught in Welsh rather than English. His schools kept careful records, and at the centre of his village school network he established an efficient bureaucracy. Jones collected information from each school about the size of the pupil roll, which enabled him to calculate the total numbers of schools and pupils. In 1738 he issued his first report. Published annually from then on, *The Welch Piety* provided donors with an overview of the mission. At the end of each edition of the report Jones summarised his progress with a table of data. In 1738 there were 37 schools; by 1766 *The Welch Piety* recorded 189 schools, educating 9029 pupils. Over 28 years his charity schools had educated 197,105 students.

⁴²¹ These figures were based on calculations originally made by the historian Ian Bradley. See Boyd Hilton, *The Age of Atonement: The Influence of Evangelicalism on Social and Economic Thought, 1785-1865* (Clarendon Press, 1991), 26; the power of Anglican evangelicals is also stressed by E. R. Norman, *Church and Society in England, 1770-1970: A Historical Study* (Oxford: Clarendon Press, 1976); for a contrasting account, which emphasises the threat posed to the established church by protestant nonconformity, see David Hempton, *Methodism and Politics in British Society 1750-1850* (London: Hutchinson, 1984).

⁴²² James E. Wyn, 'Griffith Jones (1684–1761) of Llanddowror and His "Striking Experiment in Mass Religious Education" in Wales in the Eighteenth Century', in Siegert, R., P. Hoare, and P. Vodosek (eds.), *Volksbildung Durch Lesestoffe Im 18. Und 19. Jahrhundert* (Bremen: Edition Lumière, 2012); Thomas Kelly, *Griffith Jones, Llanddowror, Pioneer in Adult Education* (Cardiff: University of Wales Press, 1950).

The Number of
W E L C H
CHARITY SCHOOLS and SCHOLARS
For Twenty-Nine Years past.

In the Year	Schools	Scholars
1737	37	2400
1738	71	3981
1739	71	3989
1740	150	8767
1741	128	7995
1742	89	5123
1743	75	4881
1744	74	4253
1745	120	5843
1746	116	5635
1747	110	5633
1748	136	6223
1749	142	6543
1750	130	6244
1751	129	5669
1752	130	5724
1753	134	5118
1754	149	6018
1755	163	7015
1756	172	7063
1757	220	9037
1758	218	9834
1759	206	8539
1760	215	8687
1761	210	8023
1762	225	9616
1763	279	1770
1764	195	8453
1765	189	9029
Total	4313	197105

Fig. 3a: A table of comparative education statistics showing numbers of charity schools and pupils, 1737-1765, from The Welch Piety (1765), 35

Collecting this high-quality information helped Jones to measure the progress of the schools, but it also helped him to fund-raise and grow his project. His use of data in all his annual reports was a recognition that information had value. He was not alone in recognising this. Other evangelicals developed a strong interest in using data to further their campaigns.

Perhaps the most effective group at doing this was the Society for the Abolition of the Slave Trade, founded in 1787 by Quakers and subsequently led by some of Britain's leading evangelicals. The society quickly developed a strong understanding of the propaganda value of statistical knowledge. They employed Thomas Clarkson, a recent Cambridge graduate, as a full-time organiser and propagandist. One of Clarkson's first tasks was to counter the arguments of pro-slavery opponents, who claimed that the slave trade was a vital nursery for recruiting and training sailors. Clarkson decided that this claim was best challenged with more accurate information. He travelled to Bristol and Liverpool to study the ship manifests - the lists of cargo, passengers and crew that ships were required to produce for Customs - and produced comprehensive tables of data comparing the survival rates for crews on slave ships with those on other ships.

Clarkson used his factual data to calculate that of crews that departed from Liverpool “more than a fifth perished”.⁴²³ The data showed that “more British seamen lost their life on the slave ships than in all other branches of British commerce put together, and that the slave trade was less valuable and less profitable than had generally been supposed.”⁴²⁴

An Account of the LOSS sustained in Twenty-four Slave Vessels from the Port of BRISTOL.		An Account of the LOSS sustained in Twenty-four Vessels in the NEWFOUNDLAND Trade.	
<i>Ships Names.</i>	<i>Number of Seamen lost.</i>	<i>Ships Names.</i>	<i>Number of Seamen lost.</i>
Africa	7	Surprise	0
Pearl	20	Somerfet	0
Jupiter	11	Catherine	0
Hector	8	Jenny	0
Emilia	8	Little Robert	0
Constantine	11	Unity	0
Alfred	6	Nancy	1
Jupiter	14	Bristol Packet	0
Sally	7	Friends	0
Waip	3	Ripley	0
Little Hornet	6	Harbourgrace Packet	0
Royal Charlotte	14	Active	0
Tryal	6	Ann	0
Emilia	9	Mermaid	0
Alexander	9	Surprise	1
Little Pearl	5	Brothers	0
Mermaid	2	Fly	0
Waip	6	Catherine	0
Brothers	32	Betty	0
Thomas	8	Friendship	0
Emilia	3	Jenny	0
Alert	4	Nancy	0
Royal Charlotte	2	Sally	0
Alexander	15	Nancy	0
	<hr/> 216		<hr/> 2

Fig. 3b: Two tables of maritime statistics comparing deaths of seamen in the slave trade ships with deaths in other shipping. The data was collected by Thomas Clarkson and published in his *Essay on the Impolicy of the African Slave Trade* (1788), 64, 67

Clarkson’s data on this and other topics was collated into a pamphlet, and the Society printed 15,000 copies.⁴²⁵ This use of data showed that statistics could play a significant role in campaigns that had wide appeal.⁴²⁶ Like Jones’ school statistics, the slavery abolitionist campaigns introduced a broad audience, including many dissenters and evangelical Anglicans, to the persuasive power of reliable data. Evangelicals were

⁴²³ Thomas Clarkson, *An Essay on the Impolicy of the African Slave Trade. In Two Parts* (London: J. Phillips, 1788), 57.

⁴²⁴ Robin Blackburn, *The Overthrow of Colonial Slavery 1776-1848* (London: Verso, 1988), 138.

⁴²⁵ Roger Anstey, *The Atlantic Slave Trade and British Abolition 1760-1810* (Atlantic Highlands, N.J.: Humanities Press, 1975), 233-5.

⁴²⁶ J. R. Oldfield, *Popular Politics and British Anti-Slavery: The Mobilisation of Public Opinion against the Slave Trade, 1787-1807* (London: Frank Cass, 1998).

measuring progress, making arguments, encouraging supporters and raising money with accurate data that they had commissioned and produced themselves.⁴²⁷

The Baptist Missionary Society was well-aware that its donors responded favourably to arguments made with data. William Carey's innovative statistics about the population of the world had played a crucial role in establishing the society, and the donor lists included many well-known members of the Society for the Abolition of the Slave Trade. As the society expanded its activities, the Baptists published various kinds of data to mobilise support. The committee counted costs, donations and conversions; and increasingly obliged missionaries in the field to provide them with data.

Carey arrived in Bengal in November 1793 and shortly afterwards was joined by William Ward and Joshua Marshman. The three missionaries began sending back to Northamptonshire figures about every aspect of their project to convert India to Christianity. They counted crimes,⁴²⁸ crowds,⁴²⁹ distances and speeds of travel,⁴³⁰ missions and missionaries,⁴³¹ populations,⁴³² print runs and distributions,⁴³³ pupils⁴³⁴ and employees,⁴³⁵ and most of all they calculated baptisms and conversions,⁴³⁶ congregations,⁴³⁷ income and expenses.⁴³⁸

The Baptists believed that conversion required a person to possess and read a bible in their own tongue. This was a complex and expensive practical task. The missionaries bought a printing press and numerous sets of type and began calculating how long it would take, and how much it would cost, to translate, print and distribute the bible to everyone in India.⁴³⁹ Money from England and America took well over a year to reach them, so the missionaries became adept at making financial predictions. They estimated

⁴²⁷ Seymour Drescher, *Abolition : A History of Slavery and Antislavery* (Cambridge: Cambridge University Press, 2009), 214.

⁴²⁸ IN/17 B William Ward Journal, 1800.6.22

⁴²⁹ IN/17 B William Ward Journal, 1800.3.21, 1801.10.12

⁴³⁰ IN/17 B William Ward Journal, 1799.6.16

⁴³¹ IN/13 Carey Letters to Fuller 1795-1802, 1806.11.18

⁴³² IN/17 B William Ward Journal, 1801.4.16

⁴³³ IN/21 53 Letters to the BMS written by Carey, Ward, Marshmen, Progress of the work 1802.7.28

⁴³⁴ IN/21 School & Converts 1803.1.29

⁴³⁵ IN/21 11 letters to other missionaries, Carey to Cran and Des Granges 1805

⁴³⁶ IN/21 Lists of converts 1802.7.16

⁴³⁷ IN/21 Present state of mission 1803.8

⁴³⁸ Records of income and expenses feature in most letters in IN/21.

⁴³⁹ IN/21 Technical abilities of missionaries 1804.9.25

average monthly outgoings and predicted annual print runs of tracts and bibles. Costs were always rising as “the great work... is constantly swelling”.⁴⁴⁰ The missionaries became skilled at presenting these swelling costs alongside a vision of an uplifting future to donors in England. They gathered demographic information about areas they planned to convert and used this information to model future print runs and created ambitious plans to justify their expenses. By 1805 they were asking the Baptist Missionary Society to consider a century-long project: “if you could send us out annually £2000 sterling it would be more than 100 years before Bengal alone could supplied with testaments.”⁴⁴¹

Whilst the missionaries understood the importance of numbers, their figures were not especially reliable. Their letters to England showed some awareness of tabulation⁴⁴² and elementary book-keeping;⁴⁴³ they were used to creating averages,⁴⁴⁴ and forecasting trends.⁴⁴⁵ Unlike East India Company bureaucrats, the Baptists had no formal training, no well-established information management methods and few actuarial skills. Their letters contrast sharply with East India Company correspondence. Baptists used irregular sized pieces of paper and filled every inch. There was little consistency in the presentation of their data from one letter to the next. The data which was tabulated in their letters was usually about money or print runs and distributions, and this data was not especially accurate. The figures for income were often rounded to the nearest 1000 rupee and numbers of bibles or tracts printed were similarly rounded to the nearest 1000.⁴⁴⁶ In contrast expenses, such as properties bought, and amounts owed were usually given to the nearest rupee. Although they counted baptisms and conversions, congregations, crimes, crowds, missionaries, populations, pupils and employees they did not tabulate this information, or present accurate counts like Griffith Jones. The inexactness of their figures echoed the data collected in India by Jesuits a century earlier. Figures were hardly ever qualified, except when they were estimating particularly large crowds. Indeed, the lack of accuracy about conversions might have been strategic; it made it difficult to be held too directly to account.

⁴⁴⁰ IN/21 1802.7.16

⁴⁴¹ IN/19 Bound Letters Joshua Marshman Marshman to Ryland 1805.6.27

⁴⁴² IN/21 Present state of mission 1803.8

⁴⁴³ IN/19 Marshman to Ryland 1806.5.25

⁴⁴⁴ IN/19 Marshman to Ryland 1805.6.27

⁴⁴⁵ IN/19 Marshman to unknown correspondent. Copy by Ryland. 1804.8.29

⁴⁴⁶ IN/17 B William Ward Journal 1805.1.1

The flow of information was two-way. The missionaries were hungry for news and wanted to know about the size of congregations in England. Asking “how many had been added?” to his former congregation in Leicester, William Carey was told that “above forty members have been added since Brother Carey left it”.⁴⁴⁷ The missionaries read the international missionary press and were well aware that their work was being quantified and compared internationally. Reading about “the glorious success in Africa and West Indies”⁴⁴⁸ as well as similar data from Europe and America,⁴⁴⁹ the missionaries wrote a great deal about their perceptions of their own progress and in bleaker moments worried that their mission to India might be in decline.⁴⁵⁰

As the numbers of missions multiplied worldwide, the demand for evangelical data continued to grow. The religious press in Britain and North America tried to quantify the success of global evangelism and in 1820 the *Missionary Register* produced a ‘Survey of the Protestant Missionary Stations throughout the World’ to give their readers an overview of developments.⁴⁵¹

Experienced at making arguments with data and required to continually evaluate ‘the state of the mission’,⁴⁵² in many ways it was obvious that Carey would become involved in a count of widow-burning. However, Carey lacked several vital resources to conduct a large-scale survey of widow-burning on his own; he lacked many of the bureaucratic skills and the mission was desperately short of money.

William Carey’s changing knowledge of widow-burnings

Neither William Carey nor the Baptist Missionary Society had thought much about widow-burning before he arrived in Bengal. Before he left Britain he knew little about India. Indeed, inspired by Captain Cook’s voyages,⁴⁵³ Carey had hoped to be sent to Tahiti because he found Cook’s tales of paganism horrific and alluring.⁴⁵⁴ Cook described vividly places in the Pacific where pagans enacted brutal, violent religious

⁴⁴⁷ *Periodical Accounts*, 60.

⁴⁴⁸ IN/21 53 Letters to the BMS written by Carey, Ward, Marshmen 1804.9.25

⁴⁴⁹ IN/17 B William Ward Journal 1802.5.23

⁴⁵⁰ IN/13 Carey Letters to Fuller 1804.2.27

⁴⁵¹ ‘Survey of the Missionary Stations Throughout the World in Their Geographical Order’, *The Missionary Register*, (June, 1820).

⁴⁵² IN/21 Present state of mission, 1803.8

⁴⁵³ Carey and Carey, *Memoir of William Carey*, 18.

⁴⁵⁴ Smith, *The Life of William Carey, D. D.*, 55.

rituals. At one site he counted forty-nine skulls of victims. Cook wanted his readers to understand that these were not archaic rites: “human sacrifices continue to be offered at the Friendly Islands.” Indeed, “bloody rites of worship are prevalent throughout all the wide extended islands of the Pacific Ocean.”⁴⁵⁵ Carey was stirred and saw a clear need in the Pacific islands for Christianity. However, based on his own statistical estimates of the population of pagans, the Baptist Missionary Society had decided to send him to Bengal not the Pacific, so Carey began looking for that region’s most prevalent sacrificial rites.

From the moment he landed in Calcutta in 1793, widows sacrificing themselves on their husbands’ pyres attracted William Carey’s attention. His thinking about the practice changed rapidly as he began to know India better and as he found new ways to understand the country, its religion and its customs. We have particularly good evidence of his thoughts because he corresponded regularly with Baptists in England. Letters were sent in both directions, enabling Carey and the Baptist Missionary Society to keep each other informed. These letters reveal a great deal about British knowledge of the custom just prior to the first counts.

Carey’s knowledge of widow-burning in the years 1792 – 1802 went through a number of distinct phases, which this section will study. First as a new arrival to India he formed initial impressions, which Baptists in Britain related to what was currently known in Europe. Second as Carey became able to read and speak Indian languages he was granted privileged access to new forms of orientalist knowledge. Third Carey became one of the few eighteenth-century Britons to witness a widow-burning. However, Carey and his fellow Baptists were statistically minded, and, despite the insights offered by these new forms of knowledge, they remained bothered by questions of prevalence.

As soon as he set foot in India William Carey began recording his initial impressions of the country. On Christmas Day 1793 a few weeks after he arrived, he wrote to the church in Leicester where until recently he had been minister. He reassured his former congregation that his predictions about the number of pagans had been correct; “he was”, he told them, “surrounded by heathens: all places in the country are

⁴⁵⁵ James Cook, *A Voyage to the Pacific Ocean*, 3 vols. (London: W. & A. Strahan, 1784), 41-44. Vol 2

full of monuments of idolatry.”⁴⁵⁶ He had already received a report of widow-burning, which he wrote about in this early letter. On a trip out of Calcutta to visit Nuddea, an eminent place of Hindu learning, he was told that widows there were burning on their husbands’ pyres. Indeed, “about a month ago two women devoted themselves in this manner.” Many leading British authorities were claiming that the practice no longer really existed, but in his first few weeks in India Carey had found evidence that this was wrong. To Carey the conclusion was clear, “burning women is a practice too frequent.”⁴⁵⁷

Carey’s letter to his former parishioners reached a wide audience. The Baptist Missionary Society used letters from missions to record progress and inspire donations to the cause. The Christmas letter to Leicester was included in issue one of *Periodical Accounts*, the society’s principal journal. Publishing Carey’s letter brought widow-burning to the attention of Baptist congregations across Britain.

However, the editors were clearly aware that Carey’s assertion about the frequency of widow-burning was not supported by his second-hand evidence. To bolster his claim they extensively annotated the letter, explaining that “a number of instances have been given to the public by Europeans who have been witnesses to the miserable scene.”⁴⁵⁸ They quoted at length the most recent British eyewitness account of widow-burning, written by William Hodges and published in 1793.⁴⁵⁹ They also cited Quintin Craufurd’s history of India, published three years earlier, which argued that the sacrifice of widows was widespread.⁴⁶⁰ These recent British accounts were supplemented by two particularly horrific older accounts: François Bernier had recorded that widows were buried with their husbands, leaving their heads exposed until men twisted their necks to finish them off;⁴⁶¹ whilst a Jesuit missionary in 1710 reported that 47 widows had thrown themselves into a huge burning pyre at one prince’s funeral.⁴⁶² This patchwork

⁴⁵⁶ *Periodical Accounts*, 55.Vol 1

⁴⁵⁷ *Periodical Accounts*, 56.

⁴⁵⁸ *Periodical Accounts*, 56.

⁴⁵⁹ Hodges, *Travels in India*.

⁴⁶⁰ Quintin Craufurd, *Sketches Chiefly Relating to the History, Religion, Learning, and Manners, of the Hindoos* (London: T. Cadell, 1790).

⁴⁶¹ François Bernier, *Voyages De François Bernier Docteur En Medecine De La Faculté De Montpellier, Contenant La Description Des Etats Du Grand Mogol* (Amsterdam: Paul Marret, 1724).

⁴⁶² Robert M. A. Millar, *The History of the Propagation of Christianity and the Overthrow of Paganism* (Edinburgh, 1723).

of references, two recent, two well-established, was the best evidence available to support Carey's assertion that the practice was frequent.

As Carey settled in Bengal he discovered that he had a facility for learning languages. He had begun learning Bengali on the ship to India, working with a fellow missionary to translate Genesis. He found it an easy language to learn. Sanskrit was much harder but working with a team of native scholars Carey produced a grammar and an English/Sanskrit dictionary.⁴⁶³ The ability to read Sanskrit and supervise teams of translators gave Carey access to Bengal's written culture. His understanding of the culture he was inhabiting started to move far beyond initial impressions and second-hand European accounts.

Carey was not the only Briton learning Sanskrit. An emerging colonial intelligentsia in Calcutta had also begun to see mastering India's written culture as the key to understanding Hinduism and governing Bengal. In a letter to the Rev. John Sutcliffe, written in October 1798, Carey mentioned that he was corresponding with Henry Colebrooke, a man "better acquainted with the Shanscrit than any person now living" and who "you might have seen in the *Asiatic Researches*".⁴⁶⁴ Colebrooke had originally learnt Sanskrit to pursue his interest in Hindu algebra, but he found himself drawn to translate and comprehend texts that might aid his working life as a judge. He had recently written a research paper analysing ancient Hindu regulations about widow-burning. This was part of an attempt by orientalist scholars to establish a body of Hindu law that could run alongside British law.

Colebrooke began 'On the Duties of a Faithful Hindu Widow', his essay on widow-burning, by responding to the "great want of judgement" of recent scholarship. He argued that to understand Hindu culture, Europeans should investigate ancient texts for fundamental principles: "it seems necessary on every topic, to revert to original authorities for the purpose of cancelling error or verifying facts already published." He thought Hindu customs were underpinned by a coherent body of religious rules, and that therefore it was a mistake to attempt to describe India's culture and society before the *Bhagavad Gita* and other key texts containing rules and precepts, *shastras*, had been translated. In this paper he attempted to summarise the rules about widow-burning,

⁴⁶³ Smith, *The Life of William Carey, D. D.*, 79-110.

⁴⁶⁴ IN/13 - 31 Letters to Sutcliffe, Carey to Sutcliffe, 1798.10.10

concluding, as if discussing common law, that “though an alternative be allowed, the Hindu legislators have shown themselves disposed to encourage widows to burn themselves with their husband’s corpse.”⁴⁶⁵

After reading this paper William Carey began corresponding with Colebrooke, who offered to lend him any *shastra* from his extensive personal collection of Indian manuscripts that the missionary wanted to read. This was a valuable offer because as Carey noted in a letter to John Sutcliffe, who was a Baptist minister in Olney, North Buckinghamshire, these texts were “extremely difficult to obtain”, adding that he was becoming more convinced that reading up on the “Worship and Mythology of the Hindoos” was essential to the Indian mission. Thus, in the late 1790s, despite being a missionary who was not officially allowed to be in India, Carey became a semi-detached member of the colonial orientalist team.

The first texts that Colebrooke supplied his eager correspondent were again about widow-burning. Carey had his own team of native translators in Serampore working on translations of the Bible. Together they produced a set of translations for Colebrooke. Although he was now collaborating with the colonial authorities, Carey also sent copies of these translations to the Baptist Missionary Society in Britain. He told Sutcliffe that the translations demonstrated that widow-burning was “one of the most singular and striking circumstances in the customs of this people and also very ancient”.⁴⁶⁶ Many of the regulations that Carey’s team translated were about time; the speed of disposal of a body after death was crucial for Hindus but this had implications for widows who wanted to burn. Was she within one day’s journey of the place where her husband died? What should she do if her husband died in another country or in war? If she had dependent children did that alter the obligation to burn? Reading and translating these ancient texts, William Carey like Colebrooke was coming to see Hindu religious practices as deeply rooted and perhaps unchangeable.

At the end of his essay on widow-burning Henry Colebrooke had made one significant claim that puzzled Carey: “It is certain that the instances of the widow’s sacrifices are now rare.”⁴⁶⁷ Colebrooke gave two grounds for believing this: his readings of ancient texts and the experiences of British men in India. The textual evidence was

⁴⁶⁵ H. T. Colebrooke, 'On the Duties of a Faithful Hindu Widow', vol. 4, (1795), 216.

⁴⁶⁶ IN/13 - 31 Letters to Sutcliffe, 1798.10.10 Carey to Sutcliffe

⁴⁶⁷ H. T. Colebrooke, 'On the Duties of a Faithful Hindu Widow', *Asiatic Researches*, vol. 4, (1795, 1795), 225.

that mourners were promised great spiritual rewards simply for attending a burning. Colebrooke suggested that the rewards “seem to authorize an inference, that happily the martyrs of this superstition have never been numerous”. This inference was supported by an “appeal to the recollection” of the British in India, “how few instances have actually occurred within his knowledge.”⁴⁶⁸ Colebrooke himself was a typical British resident; he had not personally witnessed a burning. Although eye-witness accounts of widow-burning attracted attention, they were undoubtedly scarce, and as we have seen hardly any current or former East India Company employees had themselves witnessed a burning.

In this respect the missionaries were also typical British residents. Although they had spent five years in Bengal and travelled more widely than many other Britons, William Carey and his fellow missionaries had not witnessed a single widow-burning. But despite this lack of personal experience and despite working closely with Colebrooke who thought it largely obsolete, Carey’s view that the custom was commonly practiced had not changed. Indeed, his convictions had recently been strengthened by evidence sent from England. In 1797 Charles Grant sent a copy of his *Observations* to Andrew Fuller, secretary of the Baptist Missionary Society.⁴⁶⁹ Grant’s calculation that there were 33,000 widow-burnings annually added powerful support to the Baptist view that widow-burning was a prevalent and significant issue. Grant was not the first European to estimate an annual total for widow-burnings,⁴⁷⁰ and in Calcutta he had encountered educated Hindus who conjectured that fifteen thousand widows burnt annually in Bengal. Clearly some Hindus were numerically quantifying the custom well before the British began to count widow-burnings.⁴⁷¹ William Carey decided to make his own enquiries. In 1798 he asked a Hindu he employed what he knew about the prevalence of widow-burnings and the answer supported his convictions: “But on enquiring of my Pandit if this was now practised, he advised me that it was, and that he had seen many instances of it himself.”⁴⁷²

⁴⁶⁸ *Asiatic Researches*, vol. 4, (1795, 1795), 225.

⁴⁶⁹ Davidson, *Evangelicals and Attitudes to India*, 55.

⁴⁷⁰ In France Voltaire had produced a much smaller estimate. Although translated and published in Britain, this estimate was not cited in British debates about the custom. See Chapter 1 p xx

⁴⁷¹ Counts of the Indian population also preceded British colonialism. See Guha, 'The Politics of Identity and Enumeration in India C. 1600-1990', *Comparative Studies in Society and History*; Peabody, 'Cents, Sense, Census: Human Inventories in Late Precolonial and Early Colonial India', *Comparative Studies in Society and History*.

⁴⁷² IN/13 - 31 Letters to Sutcliff, 1798.10.10

Although Carey was a willing contributor to the orientalist apparatus of research, translating Colebrooke's collection of rare manuscripts and helping to produce interpretative readings, he could see that Colebrooke's conclusions about present day social practices were unsupported and could be challenged by a simple procedure: asking people what was happening now. Almost casually, Carey was demonstrating that knowledge of the past could not answer every question about the present.

In 1799 Carey became one of the small group of eighteenth-century Britons who personally witnessed a widow-burning. Conscious that this was a rare experience, his account begins with the remark that he was an eyewitness "for the first time in my life".⁴⁷³ On 1st April, 1799, he wrote a long letter to John Rylands, a minister in Bristol and one of the co-founders of the Baptist Missionary Society, describing what he saw. This letter was published immediately in issue seven of the society's *Periodical Accounts* and helped to define Baptist attitudes to the practice.

Walking along the banks of the Hooghly river one evening, William Carey came across a group of people assembled for a funeral. Unlike previous British witnesses, such as Sir Francis and Lady Russell, Joseph Wilson and Joseph Cator, he did not know the funeral party, and unlike East India Company officials he had no responsibilities for what was taking place. Like many other European travellers, Carey had not actively sought out the funeral; this was a chance meeting. However, more unusually for a European, he could speak Bengali and he was also actively opposed to the practice, so Carey was not a passive observer. He remonstrated loudly with the mourners, the widow and her family, trying to persuade her not to do it. The mourners asked him to leave but he refused, and watched the widow climb onto her husband's funeral pyre and wrap her arms around the neck of the corpse. The dead man and his living wife were then covered in cocoa leaves and melted butter, before being set alight. Carey wrote that "It was impossible to have heard the woman had she groaned, or even cried aloud, on account of the mad noise of the people, and it was impossible for her to stir or struggle on account of the bamboos which were held down on her like the levers of a press." A printer as well as a preacher, Carey was familiar with the mechanics of the levers which held the woman down. Most eighteenth-century observers saw widow-burning as a

⁴⁷³ Baptist Missionary Society, *Periodical Accounts Relative to the Baptist Missionary Society*, 6 vols. (Clipstone, 1801), 24.

form of suicide. Women were admired for their bravery and the strength of their love. However, when the mourners told him it was “perfectly voluntary” and “a great act of holiness”, this infuriated Carey. He was convinced that the widow had no agency. She was trapped by a malevolent belief system. Held down in the flames by relatives, she was given no chance to escape and had no chance to repent. From a Baptist perspective this was not suicide, it was a “shocking murder”.⁴⁷⁴

Whilst recognising that it was a highly unusual event for Europeans to witness, watching the funeral strengthened his long-held conviction that the practice was prevalent. Carey’s knowledge of widow-burning had changed dramatically since he arrived in Bengal. He had read ancient shastras and the latest British research, he had spoken with Hindus about prevalence, and witnessed one himself. He was now convinced that widow-burnings were not voluntary or rare.

A study resourced by Fort William College

In May 1801 William Carey was appointed to teach Bengali at Fort William College, Calcutta. This was the start of a dramatic career change. Arriving in Bengal as a shoemaker turned minister and missionary, Carey became a Professor at the college at Fort William before founding his own university; an excellent example of what the historians Lambert and Lester have termed ‘imperial careering’.⁴⁷⁵ Carey joined the college convinced, but unable to prove, that Hindus were murdering large numbers of women. He knew that statistics could have a powerful impact on public opinion, but on his own he lacked the bureaucratic skills and resources to organise a survey. However, at Fort William College his presence became the catalyst that triggered the first large-scale statistical study of Hindu society.

The college Carey joined in 1801 was small and newly established. Founded in 1800 by a modernising Governor-General, Richard Wellesley, to train junior civil servants, the college aimed to prepare its students for the new political responsibilities of the East India Company. The college was not an independent university in the modern sense, Indeed, its very existence was an act of governance. It taught the

⁴⁷⁴ Society, *Periodical Accounts Relative to the Baptist Missionary Society*, 24-29.

⁴⁷⁵ David Lambert and Alan Lester, *Colonial Lives across the British Empire : Imperial Careering in the Long Nineteenth Century* (Cambridge: Cambridge University Press, 2006).

Governor General's vocational curriculum, all its costs were covered by the East India Company, and its students were all intended for government service.

In his 'Proposals' for the new college, Wellesley argued that the Company's long-established training procedures needed to be refashioned. The established administrative roles - writer, factor and merchant - were rooted in commerce and were now "utterly inapplicable to the nature and extent of the Duties discharged and of the occupations pursued by the civil servants of the Company".⁴⁷⁶ The employees of the East India Company could no longer be considered as simply the agents of a company; they were also the ministers and officers of a state and "their duties are those of statesmen in every other part of the world."⁴⁷⁷

Many leading figures within the East India Company thought Wellesley's new curriculum was far too ambitious; Warren Hastings complained that they were requiring "a greater effect of academical discipline than any which our own universities can boast".⁴⁷⁸ In fact for much of its existence, Fort William College was little more than a language school.⁴⁷⁹ Students were expected to develop a reasonable competence in Persian, become moderately fluent in common Hindustani and learn at least one local dialect, while continuing their education in classics and French.⁴⁸⁰ With this focus on languages there was little time for a broader curriculum and as the historian Chandak Sengoopta notes, it "never became an institution of higher learning in our sense."⁴⁸¹ He contrasts the college's vocational training with the impressive scientific learning in the Asiatic Society, which was located next door.

Most students had no specific interest in understanding the society in which they lived. Their heads were full of ideas brought from England. One student discussing what should be read to know India, thought *Arabian Nights* "the truest portrait of Asiatick manners we have in our collection... this work, which, as children, we have all heard with such fixed attention, and rapturous delight... is well worthy of our notice as men,

⁴⁷⁶ IOR H/487 'Governor General's notes with respect to the foundation of a College at Fort William', Calcutta, (August 1800).

⁴⁷⁷ IOR H/487 'Governor General's notes with respect to the foundation of a College at Fort William'.

⁴⁷⁸ IOR/H/488 Warren Hastings 'Sentiments and opinions on the institution of a college in Bengal' 18th Oct. 1801

⁴⁷⁹ IOR/H/488 1798-1814 Educational establishments in India and England.

Minutes by S. Davis (8th Aug. 1814, Portland Place) on the utility of the College

⁴⁸⁰ IOR H/488 J. Webbe to N. B. Edmonstone, Madras, 19th June 1802, relative to the study of the languages of India.

⁴⁸¹ Sengoopta, *Imprint of the Raj : How Fingerprinting Was Born in Colonial India*, 39.

as disclosing to curious observation the inmost recesses of Indian customs and beliefs.”⁴⁸² Many of the students lacked academic discipline and some acquired dangerous levels of debt; student life was notorious for its gambling, indolence and other pleasures.⁴⁸³

However, this picture does not fully describe the institution that William Carey joined in 1801. For five years, before the establishment of the East India College at Haileybury in 1806, staff at Fort William College attempted to teach many of the more innovative aspects of Wellesley’s curriculum. Although many of their students were lazy, the college also educated an influential generation of students, who went on to dominate public affairs in India.⁴⁸⁴ They were encouraged to discuss what it meant to be modern statesmen, and to debate how India might be reformed socially and religiously.⁴⁸⁵ Wellesley thought that to govern India the people needed to be studied. Students should learn “the history, languages, customs and manners of the people”.⁴⁸⁶ The remainder of this chapter will show how the leadership of the college used the investigations of the cultural custom of widow-burning as a means to insert a strong evangelical agenda into the government of India.

Charles Grant and fellow Clapham evangelicals thought it vital to influence the training of civil servants. Grant devoted almost as much time to this issue as he did to maintaining the East India Company’s monopoly on trade, because he saw this as a “preliminary step for the evangelization of India”.⁴⁸⁷ Two Church of England clergyman, Reverend David Brown and Reverend Claudius Buchanan, were appointed to lead the new college; both were Grant protégés, and both men had strong evangelical convictions.⁴⁸⁸

⁴⁸² *Essays by the Students of the College of Fort William in Bengal: To Which Are Added the Theses Pronounced at the Public Disputations in the Oriental Languages on the 6 February, 1801* (Calcutta: Company’s Press, 1802), 84.

⁴⁸³ B. S. Cohn, ‘The Recruitment and Training of British Civil Servants in India 1600-1800’, *The Bernard Cohn Omnibus* (Oxford University Press, 2004), 525.

⁴⁸⁴ See Chapter 5.

⁴⁸⁵ Ingham, *Reformers in India, 1793-1833*.

⁴⁸⁶ IOR H/487 ‘Governor General’s notes with respect to the foundation of a College at Fort William’.

⁴⁸⁷ Embree, *Charles Grant and British Rule in India*, 194.. Grant fought an extended battle with Wellesley over training and patronage 178-201.

⁴⁸⁸ Embree, *Charles Grant and British Rule in India*, 189-90.

Although Claudius Buchanan was appointed Vice-Provost, and Brown was made Provost, Buchanan was by far the more active and influential figure. He was characterised by others as an energetic and proficient organiser and his own claims to have been the driving force behind the establishment of Fort William College seem credible.⁴⁸⁹ Buchanan helped to write the statutes of the new college, establishing that it was “founded on the principles of the Christian religion”, and that it aimed “to maintain and uphold the Christian religion in this quarter of the globe.”⁴⁹⁰ The college’s logo captures these ambitions. Showing a sun beaming light onto India, it ostensibly illustrated the college’s classical motto, ‘From us returning Dawn brings back the day’, taken from Virgil’s *Georgics*. The allusion was classical, but for the leaders of the college, the enlightenment that India required to pull it from darkness was fundamentally conceived as Christian.⁴⁹¹



Fig. 3c: Logo of Fort William College, reproduced at the front of *Essays by the students of the College of Fort William in Bengal (Calcutta, 1802)*, i

⁴⁸⁹ Davidson, *Evangelicals and Attitudes to India*, 109.

⁴⁹⁰ Richard Colley Wellesley, *The Despatches, Minutes and Correspondence of the Marquess Wellesley, K.G. During His Administration in India* (London: Murray, 1836), 732. Volume 2

⁴⁹¹ Davidson, *Evangelicals and Attitudes to India*, 108-13. discusses the evangelical influence on the college curriculum.

The appointment of William Carey to the teaching staff further strengthened the evangelical influence on the college.⁴⁹² Buchanan and Carey quickly became close. Carey spent most of his weekdays in Calcutta, and when in the city he and Buchanan dined and worshipped together. They had much in common. Claudius Buchanan was also the son of a school-teacher and both came from provincial backgrounds. Buchanan was born in Scotland. He moved to London as a young man hoping to become a professional violinist. He was unsuccessful and lived in some poverty, but he gave up artistic ambitions and poverty when he met Clapham sect evangelicals and was born again. This rebirth placed Buchanan at the very centre of the evangelical establishment. The support they provided was practical as well as spiritual. He was lent money by Henry Thornton to study for a degree at Cambridge, where he studied mathematics for four years, receiving a college prize.⁴⁹³ Less gifted than Malthus,⁴⁹⁴ he was nonetheless one of a generation of influential Cambridge-educated evangelical clergymen interested in social questions and mathematics. Many of them would be recruited by Grant to teach at East India Company colleges.⁴⁹⁵ After Buchanan left Cambridge leading members of the Clapham sect continued to sponsor his career. Charles Grant, by then a director of the East India Company and Henry Thornton's neighbour, arranged for him to be appointed chaplain at Fort William and then Vice-Provost of the new college, where he taught Greek, Latin, English, Italian and Experimental Philosophy.⁴⁹⁶ Buchanan was in constant correspondence with his support network in England. He understood the issues that concerned the Church of England's leading evangelicals and the topics that might move evangelical public opinion.

Buchanan had spent all his professional life working in Calcutta and he was intrigued by Carey's wider knowledge of Bengal, flagging the appointment as a reason why the staff employed at the college were such a valuable intellectual resource. While there are no records of their private conversations, they must have discussed the fact that Carey had recently witnessed a widow-burning. They were both aware that Charles Grant estimated that 33,000 widows burnt each year. Together they had a combination

⁴⁹² Carey discussed the circumstances of his appointment and his relationship with Buchanan at length: IN/13 - 31 Letters to Sutcliffe; as did Joshua Marshman: IN/19 Marshman to Fuller, 1801.5.2

⁴⁹³ Hugh Nicholas Pearson, *Memoirs of the Life and Writings of the Rev Claudius Buchanan Volume 1*, (London, 1819), 1, p. 111.

⁴⁹⁴ Donald Winch, *Malthus*, (Oxford; New York, 1987), p. 11.

⁴⁹⁵ Thomas Malthus, William Dealtry, Berwick Bridge. See: B. S. Cohn, 'The Recruitment and Training of British Civil Servants in India 1600-1800', *The Bernard Cohn Omnibus*, (2004), pp. 527-9.

⁴⁹⁶ Davidson, *Evangelicals and Attitudes to India*, 110.

of mathematical, statistical, organisational and linguistic skills that would enable them to construct an ambitious project to end the prevalence debates. Certainly, within months of employing Carey, widow-burning was high on Buchanan's agenda. Carey was commissioned to investigate the practice and students began debating it in college.

The most important event of the college year was the 'Public Disputations' where the top students publicly recited academic papers in the language they had been learning. The event was structured like a debate, with a thesis defended by a prize-winning student and then opposed by two students, all speaking in their learnt language. The papers given in the disputations were later published in Calcutta and London in English and the native language. These public records of student work give a valuable insight into the teaching and thinking within the college.⁴⁹⁷

In its early years Fort William College was intensely self-conscious about its purpose and its knowledge-making. Students were asked to consider 'the advantages to be derived from an academical institution in India' and 'the best method of acquiring a knowledge of the manners and customs of the natives of India'. The most able students took these topics seriously, one noting that in the future, as governing officials, they would be responsible for the "happiness of thousands".⁴⁹⁸

A recurring theme in the student debates was whether history was a guide to the present. Many students argued that it was, echoing Henry Colebrooke's views. Colebrooke now occupied a senior position in the college as Professor of Hindu laws and Sanskrit.⁴⁹⁹ His own understanding of Hindu culture was not simplistic. He recognised regional differences and understood that beliefs and customs were evolving.⁵⁰⁰ However, these subtleties were lost on many students. In the disputations they mapped the past onto the present far more crudely than their professor. One student maintained that manners and customs were "to be found equally alive in their recorded

⁴⁹⁷ *Essays by the Students of the College of Fort William, 1801; Essays by the Students of the College of Fort William in Bengal: To Which Are Added the Theses Pronounced at the Public Disputations in the Oriental Languages on the 6th February, 1802* (Calcutta: Company Press, 1803); *The College of Fort William in Bengal*, ed. Buchanan, C. (London: T. Cadell and W. Davies, 1805); *The Public Examinations of the College of Fort William* (Calcutta: Fort William College, 1805).

⁴⁹⁸ *Essays by the Students of the College of Fort William, 1801*, 78.

⁴⁹⁹ Bernard S. Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton: University Press, 1996), 73.

⁵⁰⁰ Cohn, *Colonialism and Its Forms of Knowledge*, 72-75.

form, as in the passing scene of life”, another claimed that the past was “uniformly consistent” with the present, arguing that Hindu laws governed behaviour with “undeviating regularity”.⁵⁰¹

For students living in India, how to understand the country was a practical as well as an academic question. Discussing ‘the best method of acquiring a knowledge of the manners and customs of the natives of India’ one student remarked that he was keen to have “familiar, close and continued intimacy with society”. Another proposed that the best way to understand India was getting to know “respectable and intelligent natives, by obtaining admission to their homes”.⁵⁰² Taught by a large group of pandits recruited from across the country, including some of the most talented writers and scholars of that generation,⁵⁰³ the more self-aware students recognised the limits of their knowledge of the country and its culture. One student noted that because they were unable to travel far from the college, “our enquiry can scarcely be extended further than Calcutta”. Aware that contemporary India was a complex society, he observed that “we must be careful to distinguish the different sects, tribes, and countries. Would it not be ridiculous to group together men so totally dissimilar in religion and disposition.”⁵⁰⁴

Knowledge derived from the study of ancient texts was not yet being placed in direct opposition to the study of contemporary society, but the potential for fissures is obvious. These tensions came to a head in discussions about how to understand widow-burning, which had become a key question. What had in England been an academic dispute, debated between historians, was now disputed by leading teachers in the college. The Professor of Law thought it rare; his colleague, William Carey, in charge of teaching Bengali, profoundly disagreed.

This internal disagreement had a direct impact on student thinking. At the second public disputation, held on 29 March 1803, widow-burning was one of the three topics debated. William Chaplin presented his prize-winning English essay, proposing the motion that ‘The Suicide of Hindoo Widows by burning themselves with their deceased Husbands, is a practice repugnant to the natural feelings, and inconsistent with moral duty’. Chaplin drew on Henry Colebrooke’s researches, but he took an evangelical rather than orientalist position. He contended that widow-burning could only be

⁵⁰¹ *Essays by the Students of the College of Fort William, 1801*, 55.

⁵⁰² *Essays by the Students of the College of Fort William, 1801*, 85.

⁵⁰³ A. F. Salahuddin Ahmed, *Social Ideas and Social Change in Bengal, 1818-1835* (Leiden: Brill, 1965), 19.

⁵⁰⁴ *Essays by the Students of the College of Fort William, 1801*, 86.

understood within a Christian ethical framework and that India need to encounter the “religion of our Saviour” to become civilised. Chaplin argued that matrimony in all “civilised” countries was marked by reciprocity, principles of equity and protection of off-spring. Widow-burning was so contrary to these principles, that “it is in fact impossible to reconcile it with the idea of civilisation and humanity”. Hindus had been “perverted by a sanguinary religion” which has “stifled the voice of nature”. Unlike William Carey, Chaplin was not prepared to label it murder, but condemned widow-burning as suicide. The practice was contrary to natural law because it was overturning natural instincts of “self-preservation which God hath implanted in our natures, probably as a bar to the inhuman practice of suicide.”⁵⁰⁵ Chaplin’s stance reflected contemporary evangelical attitudes to suicide, which saw it as a sin.⁵⁰⁶

A new way of thinking about the prevalence of widow-burning also cropped up in Chaplin’s speech. Towards the end he made a rhetorical flourish, appealing directly to his audience’s sentiments: “Do I address a heart which does not join me in deprecating the sacrifice of so many innocent females annually devoted to this detestable ceremony?” Three months into 1803, the first survey returns were trickling in, and Chaplin’s rhetorical question demonstrated that already in college the returns were being conceived as an annual total. From now on annual totals, repeatedly and actively gathered, compared and speculated about, would come to dominate British thinking.

The cleverest students were richly incentivised to produce this kind of analysis. Chaplin was awarded a large gold medal and 1000rps for his essay.⁵⁰⁷ The prize equalled a month’s salary for the Provost of the college and was more than the annual salary of the highest paid Indian staff.⁵⁰⁸ The evangelicals had captured the academic agenda of the college and were using the generous resources of the East India Company to reward their favoured students. Students and college resources were also being channelled to support Buchanan and Carey’s statistical researches.

⁵⁰⁵ *Essays by the Students of the College of Fort William, 1802*, 62-65.

⁵⁰⁶ Major, *Pious Flames*, 158-62. discusses the impact of shifting attitudes to suicide on attitudes to sati; Samuel Ernest Sprott, *The English Debate on Suicide from Donne to Hume* (La Salle, 1961). is the classic account of earlier, more tolerant, English attitudes to suicide.

⁵⁰⁷ *Essays by the Students of the College of Fort William, 1802*, xxxiv.

⁵⁰⁸ Brown was paid 2500rps a month, translators 200rps. Lowest paid natives 5rps pcm. see IOR/H/488 1798-1814 Educational Establishments in India and England, Abstract of College Establishment, 1805.6.5

Surveying widow-burning: 1802-4

The information trickling into Fort William College in the spring of 1803 was the first quantitative data ever collected on widow-burning. A wide range of sources make it possible to reconstruct how this survey, the first large-scale attempt to collect social statistics in Bengal, was commissioned, financed and conducted in the three years that research was undertaken from January 1802 to 1804.

A nascent culture was developing in Bengal of Britons undertaking small-scale, independent, statistical studies.⁵⁰⁹ Such enquiries were thought to be easy to produce and understand. Sir James Mackintosh, speaking at the opening of the Literary Society of Bombay in 1804 commented that investigations into the “present state” of a country have “the advantage of being easy and open to all men of good sense.”⁵¹⁰ However, the collection of data was trickier than Mackintosh had imagined; he started but never completed his own statistical projects.⁵¹¹ But others were more successful. At the same time that Buchanan began his study of widow-burning, his colleague Henry Colebrooke was producing a highly statistical study of agriculture in Bengal,⁵¹² medical statistics were being gathered to shift government policy on vaccination,⁵¹³ and in 1801 the Resident of Benares organized a city count, counting the households and calculating the numbers of people in different occupations.⁵¹⁴

These British statistical surveys are well-known to historians of colonial knowledge as the first stirrings of the enumerative modality,⁵¹⁵ but Buchanan and Carey’s research into widow-burnings is known only to historians familiar with Baptist history. The surveys have been wrongly characterised as an independent, secretive product of the missions. As a result, despite being more rigorous and more ambitious than any of the other early British surveys, and as we will see in subsequent chapters, politically

⁵⁰⁹ B. S. Cohn, 'Notes on the History of the Study of Indian Society and Culture', *The Bernard Cohn Omnibus* (Oxford University Press, 2004), 148-53.

⁵¹⁰ Sir James Mackintosh, 'A Discourse at the Opening of the Literary Society of Bombay, Read at Parell, 26th November 1804', in *Transactions* (London: John Murray, 1819), vi.

⁵¹¹ Rendall, J., 'The Political Ideas and Activities of Sir James Mackintosh (1765-1832): A Study of Whiggism between 1789 and 1832', Ph. D. (London, 1972).

⁵¹² H. T. Colebrooke, *Remarks on the Husbandry and Internal Commerce of Bengal* (Calcutta, 1804).

⁵¹³ John Shoolbred, *Report on the State and Progress of Vaccine Inoculation in Bengal, During the Year 1804: Submitted to the Medical Board at Fort William* (Calcutta: Honorable Company's Press, 1805).

⁵¹⁴ Gottschalk, *Religion, Science, and Empire*, 188-9.

⁵¹⁵ Cohn, *Colonialism and Its Forms of Knowledge*, 8.

controversial and highly influential, the Fort William College surveys remain entirely absent from historical studies of Bengal's emerging empirical and statistical culture.

The empirical study that most directly influenced Buchanan's survey of widow-burning was produced in 1801 as part of a successful campaign to persuade the Governor-General to ban the sacrifice of children at Saugor. Buchanan described this survey in his own research, listing the forms of knowledge which had been used to inform Wellesley about the custom:

His Lordship had been informed that it had been a custom of the Hindoos to sacrifice children in consequence of vows, by drowning them, or exposing them to Sharks and Crocodiles; and that twenty three persons had perished at Saugor in one month (January 1801) many of whom were sacrificed in this manner.⁵¹⁶

Buchanan's objectives for his widow-burning research self-consciously emulated this prior study. Infanticide could be banned because it was properly known: its reasons were explained using Orientalist evidence from the *shastras*; its nature - how, where and when it happened - was understood; and its prevalence could be enumerated (23 children in one month).

Buchanan planned to present his findings about widow-burning to Wellesley and how to inform the Governor-General was clearly influencing his decision to count widow-burning, but this alone does not explain the scale or duration of his subsequent enquiries. After all infanticide was studied for one month in one location and then banned. The widow-burning survey, from its commencement in 1802, was conducted on an altogether more ambitious scale. The study took three years, covered a large area and employed a team of people.

The scale of the project was so ambitious that when William Carey was asked by Claudius Buchanan to help with his research, Carey initially misunderstood the commission. Carey assumed that he had received "an order from the vice President, through the medium of Mr Buchanan".⁵¹⁷ A fellow missionary, William Ward, wrote in his journal in January 1802 that "Government have instituted an enquiry".⁵¹⁸ That same

⁵¹⁶ Claudius Buchanan, *Christian Researches in Asia ... Fifth Edition* (London: T. Cadell & W. Davies, 1812), 45.

⁵¹⁷ IN/13 Carey Letters to Fuller, Calcutta letter, 1802.1.21

⁵¹⁸ IN/17 B William Ward Journal, 1802.1.5

month Carey wrote to Andrew Fuller, Secretary of the Baptist Missionary Society that he had been asked by Buchanan “to make every enquiry which I can into the number, nature and reasons of these murders [of widows], and to make as full a report as I can of the whole to Government.”⁵¹⁹

However, the Baptists were mistaken, Buchanan’s enquiry was not government sponsored research. There is no evidence in Fort William College or East India Company financial records that the survey was funded officially, the survey was never discussed in internal Company correspondence and its findings were not included in official Company records. In fact, by the time the survey was finished William Carey understood how it had been produced and funded. This research was a private, unofficial initiative, as he told Dr John Ryland, a leading Baptist minister based in Bristol, in 1807 when Ryland asked him why he had not mentioned his involvement. In reply Carey explained his role: “I, at his [Buchanan’s] expense, however, made the inquiries and furnished the reports”.⁵²⁰ Carey, as we shall see, was a key member of the research team, but it was Buchanan, not the East India Company or the Baptists, who established the questions, and funded the research. The final results were published under Buchanan’s name alone.

Alongside the figures, which were first published in 1805 in London and Calcutta, Buchanan included a full description of the survey’s methodology.⁵²¹ There was intense public interest in this innovative data about widow-burning; and many questions were asked about how it was produced,⁵²² so Buchanan wrote a number of accounts of his methods. The most comprehensive was contained in a lengthy letter he wrote to Zachary Macaulay in 1812.⁵²³ This letter became the basis of an article in the *Christian Observer*, explaining the survey’s methodology to that journal’s broad evangelical readership.⁵²⁴

These accounts, alongside Fort William College and East India Company records, plus Baptist letters and journals provide reasonable evidence about who was employed, circumstantial evidence about costs, and good evidence about how the surveys were

⁵¹⁹ IN/13 Calcutta letter to Fuller, 1802.1.21

⁵²⁰ Smith, *The Life of William Carey, D. D.*, 180.

⁵²¹ Claudius Buchanan, *Memoir of the Expediency of an Ecclesiastical Establishment for British India* (London: Cadell & Davies, 1805).

⁵²² See Chapter 4.

⁵²³ ‘Letter to Zachary Macaulay, March 1812’, in Hugh Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D.D* (New York: Kirk and Mercein, 1818), 458-9

⁵²⁴ Claudius Buchanan, ‘Burning of Women in Bengal’, *Christian Observer*, vol. 11, (April, 1812).

conducted and the data interpreted. This range of published and unpublished sources make it possible to reconstruct quite fully how Buchanan's unofficial, non-state survey successfully produced two sets of widow-burning statistics, over a decade before the East India Company began organising its own official counts.

Buchanan knew from the outset that he was producing widow-burning statistics for two distinct audiences: he was lobbying East India Company authorities in Calcutta to ban the custom and at the same time he was writing a book for general readers in Britain, using widow-burning to demonstrate India's need for an established Church, which he hoped to lead. To address both these audiences effectively, Buchanan thought it "necessary to ascertain the actual extent of the practice".⁵²⁵

Widow-burning was not the only Hindu practice that Buchanan was researching. He had identified a number of death rites to investigate: the sacrifice of children, sacrificial suicides by adults, the destruction of female infants, drowning of sick people in the river and the burning of widows on their husband's funeral pyre. Each practice was selected to shock those Britons who believed that Hinduism was benign into supporting the evangelical case. For most of these practices large-scale, statistical surveys were unnecessary. Buchanan's principal research method was to talk to his Hindu colleagues and collect the "evidence of the Pundits and learned Brahmin in the College of Fort-William".⁵²⁶ Widow-burning was the only religious custom studied by Buchanan that required teams of researchers in the field for months at a time, collecting evidence that would enable the production of statistical data.

Europeans had doubted the prevalence of widow-burning for centuries. Many influential Britons believed that it was almost extinct. Buchanan could hardly avoid recognising this, as the debate was raging within his own common room. As Buchanan later told Zachary Macaulay, the decision to organise a large-scale count was directly connected to "doubts... with respect to the existence and extent of the practice."⁵²⁷ Charles Grant's estimate was so far from the practical experience of East India Company staff that it had, if anything, inflamed the doubts. Buchanan's view was that people needed hard facts, not conjectures, if they were to accept widow-burning as a significant social problem. David Brown, Provost of Fort William College, wrote to Grant about this in January 1805. Buchanan's research would "confirm all you have

⁵²⁵ *Christian Observer*, vol. 11, (April, 1812), 223; *Christian Observer*, vol. 11, (April, 1812).

⁵²⁶ Buchanan, *Memoir*, 91.

⁵²⁷ *Christian Observer*, vol. 11, (April, 1812), 223.

written... You will find a series of facts in support of the representations which you have given of the Hindus, and of their idolatry, formally authenticated.”⁵²⁸ Collecting this data and settling a controversial issue would catapult Buchanan into a highly prominent position in the British public sphere.⁵²⁹

While long-established doubts pushed Buchanan towards a survey, William Carey’s previous success producing and campaigning with persuasive demographic data was a powerful pull factor. Both Buchanan and Carey were acutely aware that their respective churches and missionary societies were becoming accustomed to making decisions, measuring effectiveness and raising money with statistical data. The need for reliable numbers drove the project. From the outset Buchanan was absolutely clear that the production of statistical data was the purpose of the survey; they were “inquiring into the number of widows burnt annually”.⁵³⁰

The decision to produce an *annual* total was almost certainly a response to Grant’s estimate. Grant had calculated that there were enormous numbers of widow-burnings each year, and subsequent British research and debates became focussed on whether this estimate was accurate. The year was not a given unit. Other Hindu sacrificial rites did not lend themselves to annual counts: the ritual sacrifice of children had a significant month when it occurred, so that was the month that was counted; self-sacrifices in front of the Juggernaut only happened once a year, so British observers who wanted to understand it needed to be there on the appropriate day to witness it. Information about widow-burnings was unpredictable and sporadic, but funerals took place throughout the year. The survey sought to turn these sporadic events into coherent annual totals. This choice of unit had the effect of aligning widow-burning statistics with many other familiar Company and missionary data sets. The East India Company used calendar years for measuring expenses and incomes; Fort William College was required to produce annual abstracts, detailing all costs; William Carey annually reported costs and conversions to the Baptist Missionary Society.

Much data is collected annually to enable comparisons with previous years and forecast future years. Statisticians almost by definition examine trends, seeking patterns in the ebbs and flows of totals, looking at rolling averages, medians and deviations. But Buchanan, his colleagues and students at the college lacked some of these toolsets and

⁵²⁸ Davidson, *Evangelicals and Attitudes to India*, 146.

⁵²⁹ See Chapter 4.

⁵³⁰ IN/17 B William Ward Journal, 1802.1.5

more importantly also lacked the rationale to study fluctuations in the annual totals. It was a widely-held British belief that Hindu culture was relatively static. British arguments were primarily about the scarcity of widow-burning; at this stage discussions about trends were far less prominent. Buchanan and Carey organised two large-scale counts in 1803 and 1804, but they were not examining trends. There were, as we shall see, other methodological reasons for this being a multi-year project.

Initially Carey involved his fellow missionaries, William Ward and Joshua Marshman, in his enquiries. In April 1802 they witnessed a widow-burning in a village half a mile from the mission. In his journal William Ward described the event in great detail. This was the second burning witnessed by Baptists and Ward's 1802 account differs hugely from Carey's, which had focussed on the horror of the act and the lack of agency of the widow. This time, helping Carey to survey widow-burning, the missionaries consciously adopted an empirical mentality. In almost every sentence of Ward's long account he counted something: the funeral's distance from the mission; the numbers and ages of participants; the turns the widow and her son took around the pyre; the number of bindings used to tie down the widow. At the key moment as the widow was lead from the river towards the pyre, Ward pulled out his watch. "It could not be more than three minutes which I measured by my watch betwixt them coming from the water & their expiring in the flame."⁵³¹ Unlike Carey three years earlier who turned away from the pyre at this moment, the missionaries, in survey mode, stayed to the end, measuring how long it took for the flames to kill the widows. In many ways Ward's account of the burning that April reads like a parody of the enumerative modality. He knew that Carey had to number widow-burnings but, faced with making sense of a singular event, counted every inconsequential thing.

This was the end of the mission's involvement in Buchanan's project. The missionaries attended no more burnings that year. Believing that "inactivity... is the monster vice in this country"⁵³² the missionaries wrote daily accounts of their own ceaseless activities. If the widow-burning survey had been managed from Serampore or had occupied their time significantly, or had been of more than passing interest, it would have been recorded. The Baptists never worked on non-mission projects for free,

⁵³¹ IN/17 B William Ward Journal 1802.3.2

⁵³² IN/19 Bound Letters Joshua Marshman, Marshman to Fuller, 1804.7.20

and their dealings with the East India Company often involved protracted negotiations about fees, which they wrote about at length.⁵³³ The widow-burning survey, which was a large project, does not appear in any of their discussions of income or expenses which were formally detailed in quarterly letters to the Baptist Missionary Society.⁵³⁴ It does not appear that they were subcontracted to work on the survey.

Neither Carey or Buchanan witnessed any more burnings in 1802 or attempted to produce any statistical data. Instead they assembled a team. Numbers are rarely published with statements about the reliability of the clerks employed or accounts of the data collection procedures, but in this case, Buchanan employed Hindus to collect his data and for British audiences this required some explanation. In Bengal this was not unusual. Britons employed Indians to gather various kinds of information,⁵³⁵ and other social research conducted at this time was also based on information collected by Indians. For example, John Deane, a judge and magistrate,⁵³⁶ employed Zulfiakar Ali, his police chief, to collect information for his city survey of Benares and used Sital Singh to process the raw data into tables.⁵³⁷ But this data was not controversial or intended for public consumption. Buchanan's figures were challenging well-established claims about widow-burning's obsolescence, and he needed to make his facts valid for British audiences. He therefore clarified who was employed in each role, spelling out how the survey was supervised and how the data was verified. He explained that Hindus were employed simply for data collection:

[It] was made by persons of Hindoo cast, deputed for that purpose. They were ten in number, stationed at different places during the whole period of the six months. They gave in their account monthly, specifying the name and place; so that every individual instance was subject to investigation immediately.⁵³⁸

⁵³³ For example, the Asiatic Society contract negotiations are discussed at length in IN/19 Marshman to Fuller Journal, 1805.3.30

⁵³⁴ IN/21 53 Letters to the BMS written by Carey, Ward, Marshmen.

⁵³⁵ Peter Robb, 'The Ordering of Rural India: The Policing of Nineteenth Century Bengal and Bihar', in Anderson, D. and D. Killingray (eds.), *Policing the Empire : Government, Authority and Control, 1830-1940* (Manchester: Manchester University Press, 1991); Bayly, *Empire and Information*.

⁵³⁶ Ramchunder Doss and Henry Thoby Prinsep, *A General Register of the Honorable East India Company's Civil Servants of the Bengal Establishment from 1790 to 1842* (Calcutta: Baptist Mission Press, 1844), 89.

⁵³⁷ Gottschalk, *Religion, Science, and Empire*, 188-9.

⁵³⁸ Buchanan, *Memoir of the expediency of an Ecclesiastical Establishment for British India*, p. 103.

No other primary sources about the Hindu collectors have yet been found. Carey's biographer supposed that they must be "trustworthy natives".⁵³⁹ The historian Daniel Potts speculated that they were pundits from Fort William College and the Serampore mission.⁵⁴⁰ Over a hundred Hindus were employed at the college, and those employed as language teachers are named in Company records. If these pundits were employed for the survey they would have been drawn from a known pool of Indian intellectuals, celebrated now for their role in the Bengal literary renaissance.⁵⁴¹ There are also good records of mission employees. However, we will probably never know which pundits were directly involved.

How much the data collectors were paid is unknown, nor how much time they devoted to the enquiries. Indian staff were not highly rewarded. Fort William College was required to produce detailed abstracts of its expenses, in part because its start-up costs had been spectacularly high. There are good records of all employees and their monthly salaries. Pay differentials were high (500:1). Buchanan was the second most highly paid receiving Rs 2317 per month, the lowest paid unqualified servants received Rs 5. The native teaching staff were slightly better paid. Chief Munshis were paid Rs 200 monthly, their Seconds Rs 100 and Sub-ordinates Rs 40.⁵⁴²

William Carey was employed to superintend the count, with particular responsibility for managing the Hindu data collectors.⁵⁴³ Interested in the prevalence of widow-burning, used to managing Indian staff at the college and at the mission, speaking Bengali, and statistically minded, Carey was in many ways the perfect manager for the task. However, to many Britons the involvement of a Baptist dissenter would have made the data less reliable. When challenged,⁵⁴⁴ Buchanan was adamant therefore that this was a college run project. Carey's ability to speak local languages and his academic position at the college established his suitability: "Dr. Carey was employed by the officers of the college, he being the fittest person for such a service."⁵⁴⁵ Buchanan was careful both in the report published in 1805 and his later

⁵³⁹ George Smith, *The life of William Carey, D. D.*, (London, 1885), p. 180.

⁵⁴⁰ E. Daniel Potts, *British Baptist missionaries in India, 1793-1837: the history of Serampore and its missions*, (1967), p. 146.

⁵⁴¹ The historian Sisir Kumar Das has produced the fullest biographies of college staff: S K Das, *Sahibs and Munshis: An Account of the College of Fort William* (Orion Publications, 1978).

⁵⁴² IOR H/489 'Establishment of the College', Calcutta, (June 1805).

⁵⁴³ Claudius Buchanan, 'Burning of Women in Bengal', *Christian Observer*, 11 (April 1812), pp. 223–225.

⁵⁴⁴ Many doubted the data when it was published. See Chapter 4.

⁵⁴⁵ *Christian Observer*, vol. 11, (April, 1812), 223; *Christian Observer*, vol. 11, (April, 1812).

account of its production to demonstrate that the native collectors were tightly managed by Carey and working to a centrally determined method. The collectors were required to submit their returns at pre-established monthly intervals, using an agreed format, specifying the name and place where each widow-burning occurred. Carey translated the returns and delivered them regularly to Buchanan, who made them available for staff and students to inspect. This methodology strongly pre-figured the recording and verification methods devised by the East India Company when it started to officially count widow-burnings a decade later.

Buchanan did not state whether Carey was paid an additional fee for these responsibilities, but since Carey did not mention any extra income to the Baptist Missionary Society it is almost certain that he was not. It is likely that the collectors and Carey treated the research as part of their work at the college. Buchanan was adamant that he covered the costs of the survey, but it is more likely that he buried the staffing costs within the overall college expenditure. The use of college resources was easy to hide.

Although no data had been collected, by the end of 1802 a team had been recruited and the survey's methods were established.

In 1803 the team of Hindu data collectors roamed for a year across a large area of Bengal. Whilst it is certainly not the case that Fort William College was instituting a social research project on the scale of the Great Trigonometrical Survey of 1818, this was a large research project. In 1803 roaming collectors made "actual enquiry at all the villages and towns for 30 miles round Calcutta."⁵⁴⁶ The scale of this investigation impressed William Ward, who, as a missionary, was used to making journeys himself into outlying towns and villages to deliver tracts. He understood what was involved. Although Buchanan's survey was studying only a small part of Bengal, they were investigating an urban and rural area approximately 800 square kilometres in size, centred on Calcutta. This was a rapidly expanding city whose population had grown from 120,000 in 1750 to 200,000 in 1780, reaching 350,000 by 1820, making it perhaps the largest city in India.⁵⁴⁷

⁵⁴⁶ IN/17 B William Ward Journal, 1804.1.6

⁵⁴⁷ The rival for this title is Madras. See C. A. Bayly, *Indian Society and the Making of the British Empire* (Cambridge: Cambridge University Press, 1990), 68.

Collecting information about widow-burnings was not a simple bureaucratic process. Many statistics are produced by counting pre-existent local records or adding some new questions to a form. In this period the British authorities placed no obligation on Indian families to report or record widow-burnings. To count burnings required conducting investigations. It was also possible that the practice barely existed. Despite being in the country for eleven years, travelling widely and being interested in the custom, William Carey and his fellow missionaries had only encountered two instances before the 1803 survey began. In the first year of the survey the collectors made journeys around the region, asking for information about funerals where widow-burnings had occurred.

At the end of this first year of research Carey discussed the project with his fellow missionaries. Carey reported that the results of these enquiries showed that “No less than 430 widows have been burnt with their husbands in this circuit during the last year.”⁵⁴⁸ When this data was scrutinised within the college, these raw figures were deemed unreliable. Buchanan noted that “every individual instance was subject to investigation immediately”.⁵⁴⁹ It is clear that verification by students and staff was an active process, because when published the total for 1803 had been revised downwards to 275.

Roaming enquiries had produced unreliable data, so in 1804 the procedures were changed. This time ten people were stationed in locations around Calcutta for six months, which was an extraordinary commitment of human resources. In other respects, the second year was less ambitious. Buchanan decided to survey a smaller area, for a shorter time. The intention was to examine a twenty-mile, radial section of Bengal, centred on Calcutta, for six months. The collectors produced results for nine regions. The resulting statistical tables were organised geographically, with counts of widow-burnings in specific named locations, which were then grouped into regions with sub-totals, as well as an overall figure.⁵⁵⁰ Mapping these locations shows that although the intention was to study a radial section, collectors focussed their efforts along the main north-south arteries.

⁵⁴⁸ IN/17B William Ward Journal 1804.1.6

⁵⁴⁹ Buchanan, *Memoir*, 103.

⁵⁵⁰ See Fig. 4a, 152



Fig. 3d: The location of widow-burnings recorded in the 1804 survey, produced by mapping Buchanan's anglicized place names onto James Rennell's colonial map of Bengal.

The six-month total for 1804 was 116, which was slightly lower than the 1803 figure. After the data was published Buchanan was questioned about the discrepancy between the two numbers. "On being asked how he accounted for a smaller number in 1804," Buchanan "observed that the year 1803 was remarkable for a mortality among

the Hindoos, during the unhealthy season of the rains.”⁵⁵¹ Buchanan believed that he was observing an essentially static society, so he looked for a period of time when no extraordinary factors, such as unusually adverse weather, pushed up the death rate. Once a set of data had been collected over an ordinary period the survey could stop, and that is what happened. The 1804 total became Buchanan’s preferred number.

Conclusion

Intent on converting the world, from the mid eighteenth century onwards British evangelicals were numerically measuring many aspects of their activities. They measured the attendance at a national chain of Sunday schools in Wales, assessed the deaths of British sailors on slave ships and counted conversions in missions worldwide. The widow-burning survey was a further example of this trend.

Not Baptist, nor secret, the first survey of widow-burning was an evangelical project that made use of Company resources. It was not a government project, but neither was it, as has been repeatedly claimed, “completely independent of the state”.⁵⁵² Baptists were relatively marginal figures in India, but some Church of England evangelicals were powerful and influential. Evangelicals affiliated to the Clapham group were a significant and well-organised force within the East India Company in London and Bengal, and they used their control of civil service education to further evangelical aims. Fort William College resources made Buchanan’s researches into widow-burning an unusually large-scale and well-funded example of the amateur social science that was emerging in Bengal at this time. Run as a college project, the surveys also generated a substantial legacy. The widow-burning survey was a remarkable college project, which as a later chapter examines, had a lasting impact on a generation of students.

The numbers of burnings counted in 1803 and 1804 vastly exceeded the number seen by Europeans in the preceding sixty years. Buchanan and Carey had proved that in one small area of Bengal widow-burning was not extinct. However, placed alongside Charles Grant’s estimate, these figures seemed small. Grant’s model had predicted 30,000 burnings per annum, whilst the survey recorded 275 in 1803 and 116 in six

⁵⁵¹ *Christian Observer*, vol. 11, (April, 1812), 224.

⁵⁵² Fisch, *Burning Women*, 232.

months of 1804. Buchanan struggled to hide his disappointment; perhaps the numbers were small because they had refocussed the second year's survey on a smaller area. If they had stationed observers ten miles further out the total would have been "considerably greater".⁵⁵³

Committed to measuring every aspect of their mission to convert the world, evangelicals had become significant producers, consumers and users of data as they drove forward and measured a whole range of missionary projects. In the next chapter we will see whether evangelicals in Britain made any use of Buchanan's new statistical information about widow-burning, as they tried to change government and East India Company policy to allow missions to operate officially in India.

⁵⁵³ Buchanan, *Memoir*, 103.

4

The Document of Blood

The reception of the first widow-burning statistics, 1805 - 1813

The publication of Claudius Buchanan's *Memoir* in London in 1805 introduced Britons to a totally new kind of evidence about Indian widow-burning. Before this Britons had speculated on the prevalence of the custom, but estimates varied widely. Some thought widow-burning was a rare, almost obsolete, custom; others claimed the practice was widespread. Buchanan's book was the first published study to address this question with statistical data.

Long misattributed to Baptists, this set of social statistics has since the mid-nineteenth century been wrongly characterized in historical accounts as obscure, perhaps secret, Baptist information, which was produced to be presented to the Governor-General in Calcutta. There has been no historical discussion of the survey's publication in Britain or whether any Britons made use of this sociological information once it was published.

This chapter explores how this new set of statistics on "women who have burned themselves" was received and used.⁵⁵⁴ There were few comparable datasets in print at this time. This was one of the first social statistics produced by the British in India and perhaps also the first published set of British suicide statistics. Historical work on the public reception of statistical data has generally looked at a later era. Katherin Levitan has shown that by the middle of the nineteenth century British census data was being discussed by a range of social groups and used for a wide variety of political purposes.⁵⁵⁵ James Vernon recently remarked that he finds it paradoxical that nineteenth century government statistics were "feverishly consumed" by newspaper readers and members of statistical societies, despite being "dry as dust".⁵⁵⁶ However, little is known about the pre-existing audience for statistical information, which governments began to

⁵⁵⁴ Buchanan, *Memoir*, 102.

⁵⁵⁵ Levitan, *A Cultural History of the British Census*.

⁵⁵⁶ Vernon, *Distant Strangers: How Britain Became Modern*, 57.

feed with data. Buchanan's figures were designed to appeal to evangelical readers and studying their reception by this and other audiences provides some insights into how popular audiences at the start of the nineteenth century understood statistical information. Did this new kind of information influence how people thought and felt about widow-burning?

To answer these questions, this chapter first examines references to widow-burning after 1805 to see if Buchanan's innovative statistics had any impact, looking at whether this new information was used or ignored. Then I examine whether this new way of knowing widow-burning posed any specific difficulties for readers. Whether the statistics could be trusted became a politically important issue, so the second half of the chapter examines how Buchanan's data was challenged or accepted by different groups in the debates leading up to Parliament's renewal of the East India Company Charter in 1813.

Impact

Claudius Buchanan's *Memoir of the Expediency of an Ecclesiastical Establishment for British India; Both as the Means of Perpetuating the Christian Religion among our own Countrymen; and as a Foundation for the Ultimate Civilization of the Natives* (1805) was a short book that established its two main claims in its long title. The *Memoir* argued that East India Company staff were not attending church regularly and the best remedy was to formally establish the Church of England in India. Alongside this Buchanan promoted a wider, more revolutionary, evangelical agenda, arguing that an established church could transform Indian society by making it Christian.

Claudius Buchanan aimed his *Memoir* at a small but influential readership. Well-connected and an agile self-publicist, Buchanan conducted a campaign from Calcutta to get his book read by opinion formers in London and in British India. Buchanan was well connected. A protégé of the Clapham Sect, he was also instrumental in establishing the Calcutta branch of the British & Foreign Bible Society, which provided him with an enviable address book of influential contacts. He dedicated the book to John Moore, the Archbishop of Canterbury, but Moore died before the book went to print, so Buchanan arranged for a copy to be sent to the new archbishop, Charles Manners-Sutton. He also sent his research to other mission-minded bishops such as Beilby Porteus, the Bishop of London, to sympathetic East India Company directors, such as Charles Grant and Henry

Thornton, and to influential political figures such as William Wilberforce and Richard Wellesley, the former Governor-General who was now back in England.⁵⁵⁷ Buchanan also arranged for copies of his book to be sent to Calcutta, which he personally distributed to leading members of the government.⁵⁵⁸ Buchanan's connections and his publicity skills ensured that his book reached key establishment opinion formers, East India Company officials and Church leaders within a few months of publication.

In the months following publication Buchanan's *Memoir* received a small flurry of good reviews. *The British Critic* made the *Memoir* its lead story in March 1806, praising Buchanan lavishly: "very rarely can a book of such intrinsic importance as this come before the public."⁵⁵⁹ In May there were three more notices: in the *Christian Observer* Lord Teignmouth, the President of the East India Company and former Governor-General, called it "a work of singular value";⁵⁶⁰ *The Critical Review* said it was "truly benevolent and pious";⁵⁶¹ while *The Lady's Monthly Magazine* published a short but enthusiastic précis of the *British Critic* review.⁵⁶² In June *The Gentleman's Magazine* praised Buchanan's "clearness and warmth".⁵⁶³

All these early reviewers commented on the appendix. Lord Teignmouth "particularly recommend[ed] the perusal of this part of the volume" to *Christian Observer* readers, explaining that it "contains a variety of important, novel and interesting information on the superstitions of the Hindus."⁵⁶⁴ *The Lady's Monthly* similarly drew women's attention to Buchanan's facts, noting that there was "so much information at once curious and interesting."⁵⁶⁵ From the sacrifice of children, to the practice of climbing trees naked armed with horrid thorns, to "excessive" polygamy the appendix was a 35 pages long catalogue of horrors, designed to show pious readers in Britain why the natives of India needed civilising. Widow-burning had by far the longest entry in the appendix, supplementing a substantial account of the practice in the

⁵⁵⁷ For a full account of this campaign see Davidson, *Evangelicals and Attitudes to India*, 139-50.

⁵⁵⁸ Hugh Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D. D. : Late Vice-Provost of the College of Fort William, in Bengal* (New-York: Kirk and Mercein, 1818), 203.

⁵⁵⁹ 'Memoir of the Expediency of an Ecclesiastical Establishment for British India', *The British Critic*, vol. 27, (March, 1806), 217.

⁵⁶⁰ 'Review of Buchanan's Memoir on Civilizing India', *Christian Observer*, vol. 5, (May, 1806), 315.

⁵⁶¹ 'Book Review', *The Critical Review*, vol. 8, (May, 1806), 59.

⁵⁶² 'Memoir of the Expediency of an Ecclesiastical Establishment for British India', *The Lady's Monthly Museum*, vol. 16, (May, 1806), 344.

⁵⁶³ 'Review of New Publications', *The Gentleman's Magazine*, vol. 76, (June, 1806), 538.

⁵⁶⁴ *Christian Observer*, vol. 5, (May, 1806), 313.

⁵⁶⁵ *The Lady's Monthly Museum*, vol. 16, (May, 1806), 344.

main text of the *Memoir*. Appendix D was a ‘Report on the Number of Women who have burned themselves on the Funeral Pile of their Husbands within thirty Miles round Calcutta’.

This short, statistical paper was the product of the research undertaken at Fort William College to quantify the practice. It began with a numerical table of widow-burnings which had occurred within 30 miles of Calcutta between 15 April and 15 October 1804. Alongside this tabulated data Buchanan included a few brief notes about the survey’s methods, some qualifications about the accuracy of the figures, a monthly average, an annual total for 1803 and some suggestions about totals for the whole country.

REPORT of the Number of Women who have burned themselves on the Funeral Pile of their Husbands within thirty Miles round Calcutta, from the Beginning of Bysakh (15th April) to the End of Aswin (15th October), 1804.		APPENDIX.		103					
FROM GURRIA TO BARRYPORE.		Naktulla	-	-	1				
BHURUT Bazar	-	Byshnub Ghat	-	-	2				
Rajepore	-	Etal Ghat	-	-	2				
Muluncha	-	Russapagli	-	-	1				
Barrypore	-	Koot Ghat	-	-	2				
Maeenugur	-	Gurria	-	-	1				
Lasun	-	Basschuni	-	-	2				
Kesubpore	-	Dadpore and near it	-	-	3				
Mahamaya	-	FROM BARRYPORE TO BUHIPORE.							
Puschim Bahinc	-	Joynagar	-	-	2				
Bural	-	Moosilpore	-	-	1				
Dhopa Gach, hi	-	Bishnoopoor	-	-	3				
FROM TOLLEY'S NULLA MOUTH TO GURRIA.		Balia	-	-	1				
Mouth of Tolley's nulla	-	Gunga Dwar	-	-	1				
Kooli Bazar	-	Gochurun Ghat	-	-	2				
Kidderpore bridge	-	Telia	-	-	1				
Jecrat bridge	-	FROM SEEBPORE TO BALEEA.							
Near the hospital	-	Khooter Saer	-	-	1				
Watson's Ghat	-	Sulkea	-	-	3				
Bhobancepore	-	Ghoosri Chokey Ghat	-	-	2				
Kalee Ghat	-	Balee	-	-	3				
Tolley Gunge	-	Seebpore	-	-	1				
		FROM BALEE TO BYDYABATEE.		Kashipore	-	-	-	1	
		Serampore	-	-	-	-	-	1	
		Bydyabatee	-	-	-	-	-	1	
		Dhon-nagur	-	-	-	-	-	1	
		FROM BURAHNAGUR TO CHANOK.		Dukhineshwar	-	-	-	2	
		FROM BYDYABATEE TO BASSBAREEA.		Agurpara	-	-	-	4	
		Chundun-nagur	-	-	-	-	-	3	
		Chinchura	-	-	-	-	-	2	
		Saha Gunge	-	-	-	-	-	2	
		Bassbareea	-	-	-	-	-	2	
		Bhudreshwur	-	-	-	-	-	1	
		FROM CALCUTTA TO BURAHNAGUR.		FROM CHANOK TO KACHRAPARA.	Eeshapore	-	-	-	2
		Soorer Bazar	-	-	-	-	-	2	
		Burahnugur	-	-	-	-	-	2	
				Koomorhatta	-	-	-	2	
				Kachrapara	-	-	-	3	
				Bhatpara	-	-	-	1	
				Total (in six months) 116					

Fig. 4a: Table of widow-burning statistics, organised by geographic regions. From Claudius Buchanan's *Memoir* (London, 1805), 102-103

The numbers impressed reviewers. The *Critical Review* and *The British Critic* quoted the total for 1804 almost verbatim: “In the space of six months, one hundred and sixteen women were burnt alive with the bodies of their deceased husbands within thirty

miles round Calcutta, the most civilized quarter of Bengal.”⁵⁶⁶ Six months is an unusual time frame for statistical studies, and perhaps aware that this made the scale of the problem hard to comprehend, Buchanan also produced a monthly average, writing in the *Memoir* that there were “nearly twenty per month”.⁵⁶⁷ However, this figure sounded small and was not cited by any of the reviewers. The *Gentleman's Magazine* manipulated the number to fit into a time unit its readers would find more familiar: “the number... annually is on average, upwards of 200.”⁵⁶⁸ This was the first of many manipulations the figures would go through as they were re-interpreted by editors and writers for British readers. Statistics were a form of representation that encouraged people to make their own calculations and deductions. The *Gentleman's Magazine* total of 200 was a conservative annual average, given that the 1804 total doubled was 232 and the figure for 1803 was 275. Such caution would turn out to be uncharacteristic. Most of the later manipulations would massage the figures upwards. None of the reviewers examined the regional totals within the tables. Discussion focused entirely on the total. It was the overall quantity that mattered to early reviewers.

By the end of 1806 Buchanan's research had been recognised by a few British journals as original and was in the hands of key evangelical opinion formers in the Church of England, East India Company and Parliament. However, interest waned quickly. The *Gentleman's Magazine* review in June 1806 was the last that year and there were no reviews at all in 1807. Neither the book nor its statistics were picked up by any British newspapers. Good reviews did not translate into sales and there was no rush to produce new editions. Outside Britain the picture was no different. There is no evidence that the *Memoir* had any wider circulation within India beyond Buchanan's circles in Calcutta, and in these early years there were no translations, international editions or overseas reviews. The figures had been cited three times, but a year after it was published there were few signs that this data would have any wider political or intellectual significance or make any kind of international impact.

Then an event occurred which made Buchanan's research highly controversial. On Friday 9 January 1807 *The Times* carried a short news story about a “melancholy

⁵⁶⁶ *The Critical Review*, vol. 8, (May, 1806), 56.

⁵⁶⁷ Buchanan, *Memoir*, 104.

⁵⁶⁸ *The Gentleman's Magazine*, vol. 76, (June, 1806), 541.

catastrophe”. Six months earlier, at Vellore in Southern India, sepoy troops had mutinied, killing over a hundred British soldiers. In response 350 Indian soldiers were killed and another 350 wounded before the status quo was restored. An enquiry was launched, but before it could report, London and Calcutta began swirling with rumours that the sepoys believed that religious conversion to Christianity was about to be made compulsory.⁵⁶⁹ Many East India Company investors did not approve of missionaries, and a campaign for their withdrawal began in London. The first to put these concerns into print was Thomas Twining, son of the tea-planter and a leading proprietor. He wrote ‘A Letter, to the Chairman of the East India Company: On the Danger of Interfering in the Religious Opinions of the Natives of India; and on the Views of the British and Foreign Bible Society, as Directed to India’. Twining explicitly linked Buchanan’s project to establish Christianity in India with what happened in Vellore. Buchanan’s book didn’t merely symbolise the danger. The book itself, and its promotion, was a dangerous threat to the empire. That it was dangerous to interfere with Indian religious opinions was almost a founding principle amongst proprietors and many former Company employees. Twining believed that if the East India Company do not disavow “the visionary schemes of Mr Buchanan” the empire would last a year.⁵⁷⁰ He was not alone. John Scott Waring warned that Buchanan's *Memoir*, had “caused the greatest alarm throughout Hindostan”.⁵⁷¹ Company investors began to discuss the recall of missionaries from India

Within a few weeks of the publication of Twining’s public letter, pro-mission supporters began writing letters and pamphlets in support of Buchanan and missionaries. Newspapers, magazines and journals lined up on either side of the issue. Twining’s immediate threat to block missionary activity was fought off by Charles Grant, by now chairman of the East India Company, in a proprietors’ debate on 23 December 1807. Grant was not the only pro-mission director; some of the Company’s most senior figures were leading evangelicals.⁵⁷² Whether or not missions were a threat

⁵⁶⁹ *The Times*, like most commentators, thought religious offence the most likely trigger. There had been controversial changes to dress regulations (round hats as worn by the British were to replace turbans) that had caused “general dissatisfaction”, *The Times*, 9 January, 1807.

⁵⁷⁰ Thomas Twining, *A Letter, to the Chairman of the East India Company: On the Danger of Interfering in the Religious Opinions of the Natives of India; and on the Views of the British and Foreign Bible Society, as Directed to India* (London: Ridgway, 1807), 31.

⁵⁷¹ John Scott Waring, *A Letter to the Conductors of the Christian Observer* (London: Flint, 1808), xii.

⁵⁷² Twining’s pamphlet is a very good source on the intimate connections between the British & Foreign Bible Society and the upper echelons of the East India Company. The Company’s President, Lord

was a divisive question. It divided the board and created a fissure between some of the Company's most prominent directors and the vast majority of its investors. Outside the Company there was enormous interest, especially amongst evangelicals and the proprietors debate was widely reported in the press. It was the opening round of a long-running skirmish, which ran until the renewal of the Charter Act in 1813, when a clause was added to the East-India Bill, enabling 'Persons to Go Out to India for Religious Purposes'. Having initially been well-received but little noticed, in a few months in 1807-8 the *Memoir* had become highly controversial and its proposals were now a central topic of a divisive debate.

The scale of the controversy about promoting Christianity in India is well-known to historians, and since C.H.Philips's classic account, it is usually described as a 'pamphlet war'.⁵⁷³ Certainly the debate left a large printed trail.⁵⁷⁴ For this chapter I have widened the lens slightly further than previous studies and looked at international coverage and oral records. Calling the debate a 'pamphlet war', whilst catching the fury and intensity, suggests that the issue was only debated in print, but much of the debate was oral. At the local level, much of discussion took place in sermons, at meetings and in private conversations. Most of these were not recorded. However, the most influential speakers for and against missions made their voices heard in debates within the East India Company and in Parliament, as well as in high-profile sermons and campaign speeches, which were all well-documented.⁵⁷⁵

Widow-burning was directly referred to by about a third of the sources examined, from 1807 through to passing of the new Charter Act in 1813. Over 85% of those who discussed the custom focussed on its prevalence and referred directly to Buchanan's

Teignmouth, Chairman Edward Parry, Deputy Chairman Charles Grant and Henry Thornton, a director were all members. See Twining, *A Letter, to the Chairman of the East India Company*.

⁵⁷³ The first to use this phrase seems to be C. H. Philips, *The East India Company, 1784-1834* (Manchester: Manchester University Press, 1961), 163. The battle has long been memorialized by Baptist historians, see Marshman, *The Life and Times of Carey, Marshman, and Ward, Embracing the History of the Serampore Mission*, 333-79.

⁵⁷⁴ There have been two comprehensive modern studies: J. Fisch (1985), 'A Pamphlet War on Christian Missions in India 1807-1809', *Journal of Asian History*, 19; Karen Chancey (1998), 'The Star in the East: The Controversy over Christian Missions to India, 1805-1813', *Historian*, 60 (3), 507-22.

⁵⁷⁵ For this study over 140 printed contributions to the debate have been identified, of which over 130 have been examined. This is approximately 50% bigger than the largest previous study. Reprints are not counted in this total - many of the most popular contributions to this debate went through numerous editions.

statistics. Made relevant by the debate about the wisdom of propagating Christianity, the statistics reached a broad range of readers, well beyond the narrow group of opinion formers who were the book's original target.

Initially many journals and pamphlets quoted the figures directly. Once the debate was underway this became less common. The survey was still cited but pro-mission writers assumed that their readers were familiar with the actual numbers. Writers were now referring to the practice's annual frequency, prevalence, number or enumeration, without needing to cite the figures themselves. Thus, for example the *Eclectic Review* noted "what an amazing number of women are annually burned with the bodies of their husbands"⁵⁷⁶. Similarly, Andrew Fuller, secretary of the Baptist Missionary Society, could simply assert that widow-burning was "not an unfrequent spectacle of deliberate cruelty"⁵⁷⁷. For Edward Nares preaching at Oxford in 1808 the statistics needed little in the way of explanation: "see an enumeration of such ... in the Appendix to Dr Buchanan's Treatise".⁵⁷⁸

Major political titles such as the *Edinburgh Review*, the *Eclectic Review*, *The Quarterly Review* and the *British Review* had ignored the book on initial publication, but because of the debate about missions they became interested in what the statistics meant. At this time the market for intellectual journals, representing a range of political views, was growing. The *Edinburgh Review* sold over 7000 copies, *The Quarterly Review* about 5000.⁵⁷⁹ The monthlies were expensive, costing up to 2s, but could be read by the less well-off in coffee houses. Through these titles Buchanan's statistics reached a relatively small but influential group of readers.

The debate also made the statistics newsworthy, and they appeared on several occasions in *The Times* in 1812 and 1813.⁵⁸⁰ The circulation of *The Times* at this time was similar to the political periodicals, but the readership was much higher than the figures suggest. The Napoleonic wars had increased the appetite for news, but priced at

⁵⁷⁶ 'Review of Pamphlets on the Propagation of Christianity in India', *Eclectic Review*, vol. 4, (February, 1808), 167.

⁵⁷⁷ Andrew Fuller, *The Complete Works of the Rev. Andrew Fuller*, ed. Belcher, J. (Philadelphia: American Baptist Publication Society, 1845), 802.

⁵⁷⁸ Edward Nares, *A Sermon on the Duty and Expediency of Translating the Scriptures into the Current Languages of the East, for the Use and Benefit of the Natives: Preached by Special Appointment before the University of Oxford, November 29, 1807* (Oxford: University Press, 1808), 27.

⁵⁷⁹ Figures are from 'Appendix C, Periodical and Newspaper Circulation' in Richard D. Altick, *The English Common Reader: A Social History of the Mass Reading Public 1800-1900* (Chicago: University of Chicago Press, 1963), 391-96.

⁵⁸⁰ *The Times* 4 May, 1812 and 23 June, 7 August, 8 September and 7 October in 1813.

6d, *The Times* was beyond the reach of even middle-class families. The hiring out of newspapers, although illegal, was widespread. A newsman, having hired papers on the day of issue in London, at a penny an hour, would sell used copies to provincial readers for 3d the next day, or 2d a day later.⁵⁸¹ By 1813 Buchanan's figures were circulating well beyond the narrow group of influential metropolitan evangelicals he initially targeted. Well-informed readers in the cities and provinces, part of the educated public sphere, would have encountered the data many times, when the issue of missions to India was discussed in the various journals and papers that they read.

There was also widespread coverage in the specialist evangelical press. The statistics were cited in numerous issues of religious titles such as the *Christian Observer* and the *Evangelical Magazine*. Whilst not mass market in the modern sense, these were cheaper and had a wider circulation than the more upmarket political titles. The *Evangelical Magazine* for example sold 18-20,000 copies.⁵⁸² Dissenting readers of the religious press came from a variety of class backgrounds. Readers themselves understood that there was a class aspect to their debating Indian affairs. A contributor to the *Christian Observer* noted "we are too poor to be proprietors of India stock; yet we have the presumption to think, that with a moderate stock of general principles and a sincere love of Christianity, we are capable of forming a sound judgement on the questions under discussion."⁵⁸³

The Baptist Missionary Society was a notable exception. Its publications, the *Periodical Accounts* and the *Baptist Magazine*, both ignored Buchanan's *Memoir* and its new evidence. The Baptists were less ecumenical than other missionary societies, keeping their focus squarely on their own missionaries in India and elsewhere. This is compelling evidence that no-one within the society at this time believed the survey to be a Baptist production.

The figures circulated outside the capital and were cited in popular provincial titles such as George Miller's *Cheap Magazine*. A short-lived venture, the *Cheap* was priced fourpence monthly, and kept its costs down by being printed on low-grade paper. It aimed to reach Scotland's poor, billing itself as "The Poor Man's Fireside Companion".⁵⁸⁴ Miller wanted to inform his readers about current issues. Recognising

⁵⁸¹ Altick, *The English Common Reader*, 322-3.

⁵⁸² Altick, *The English Common Reader*, 391-96.

⁵⁸³ 'Review of Twining's Letter on Missions to Hindostan', *Christian Observer*, vol. 6, (December, 1807), 820.

⁵⁸⁴ Altick, *The English Common Reader*, 320.

that his readers would be unlikely to have access to Buchanan's books, this was the only magazine to reprint Buchanan's tables of data in full, alongside a lengthy discussion of other evidence of widow-burning's prevalence.⁵⁸⁵

Buchanan's statistics were reaching social groups far beyond the elites who usually determined Indian affairs. This was noted with horror by a number of East India Company proprietors, when they debated the issue. Mr Trower thought that the subject of missions had "great delicacy" but noted that "all other classes of people in the state were expressing their opinion about it".⁵⁸⁶ Another, Mr Lowndes, spoke against sectarians and lower-class Bible readers, and a third, Sir Abraham Hume remarked that "there was a mania for propagating Christianity amongst a certain class of persons."⁵⁸⁷

The widow-burning statistics had reached a broad range of social classes. The numbers and tables themselves seemed to require little explanation; editors assumed that those who were literate enough to read their articles were numerate enough to understand the data.

Claudius Buchanan returned to Britain from Calcutta at the end of 1808 to a storm of personal criticism. Thomas Twining believed that his proposals risked destroying the empire. Charles Stuart noted that "it is Mr Buchanan alone, I have been writing against."⁵⁸⁸ Some commentators argued that Buchanan's book was a thinly disguised job application to be the first Bishop of Calcutta, and that his ambitions had over-ruled his judgement. Even his supporters thought that he came across as too partisan. Lord Teignmouth, a strong advocate for missionaries, sounded a warning note that he found Buchanan's rhetoric "has less the air of a sober dispassionate investigation... than it has of an ex parte pleading".⁵⁸⁹ Despite these concerns, Buchanan was now famous in religious circles and he was asked to give a series of high-profile sermons in Oxford, Cambridge and London in 1809 and 1810 which were all printed and quickly ran

⁵⁸⁵ 'More Deplorable Effects of Heathenish Superstition', *The Cheap Magazine*, vol. 1, (September, 1813), 357-8.

⁵⁸⁶ *Debates at the General Court of Proprietors of East-India Stock, on the 22nd and 26th June, 1813, on a Bill Pending in Parliament for a Renewal of the Company's Charter: With an Appendix* (London: Black & Parry, 1813), 36.

⁵⁸⁷ *Debates at the General Court of Proprietors* 189.

⁵⁸⁸ Charles Stuart, *A Vindication of the Hindoos: Part the Second* (London: Black, Parry & Kingsbury, 1808), 57.

⁵⁸⁹ *Christian Observer*, vol. 5, (May, 1806), 315.

through numerous editions. However, he did not mention the statistics in his sermons, and the tables were not in fact reprinted until 1811, when new editions of the *Memoir* were published, first in Cambridge, then in London a year later.

Meanwhile Buchanan had been working on a new book, *Christian Researches in Asia*, which was also published in 1811. After the *Memoir* was finished, Buchanan had taken study leave and much of his new book was based on what he saw as he travelled around India. As in his previous book, Buchanan concentrated on sacrificial practices he knew would horrify British audiences. The nature of what he was looking for he made clear early on: “wherever I turn my eyes, I meet death in some shape or other.”⁵⁹⁰ Buchanan began his account of Hinduism with a new eyewitness account of the festival at Juggernaut in June 1806. The sacrificial suicides he personally witnessed there made for a powerful and horrifying chapter.

Buchanan was aware that there was still strong public interest in the suicide of widows, so the table of statistics was taken out of the appendix and promoted to the front of the book, accompanied by some expanded notes about how the data had been gathered.

	Women burned alive.
From Gurria to Barrypore; at eleven different places*	18
From Tolly's Nulla mouth to Gurria ; at seventeen different places.	36
From Barrypore to Buhipore ; at seven places. . . .	11
From Sæbpore to Baleea ; at five places.	10
From Baleea to Bydyabattee ; at three places.	3
From Bydyabattee, to Bassbareea ; at five places. .	10
From Calcutta to Burahnugur (or Barnagore ;) at four places.	6
From Burahnugur to Chanok (or Barrackpore ;) at six places.	13
From Chanok to Cachrapara ; at four places.	8
—————	
Total of women burned alive in six months, near Calcutta.	115

Fig. 4b: Table summarising the 1804 widow-burning statistics, showing the corrected total.
From Claudius Buchanan's *Christian Researches* (London, 1811), 36

⁵⁹⁰ Claudius Buchanan, *Christian Researches in Asia* (London: Cadell & Davies, 1811), 18.

For his new book, Buchanan modified how his statistics were presented, simplifying the data for readers unfamiliar with India. In the *Memoir* the survey results had been split into multiple tables, organised by region, but no-one in Britain ever discussed or queried the frequency of sati at any particular place. Buchanan modified how his statistics were presented. For *Christian Researches in Asia* the place names were removed, and the data was presented as a single table showing regional totals. The new title sold strongly, going through five British editions by 1812. There were six more editions by 1819 and it was still being reprinted in the mid-century.

At the same time that Buchanan's statistics were also finding an international readership. Evangelical networks crossed national as well as class boundaries. The *Memoir's* first US edition was published in Cambridge, Massachusetts in 1811. It was reprinted there again that year and went through multiple further editions in New York, Massachusetts and Vermont in 1812 and 1813. The new book, *Christian Researches*, was published almost simultaneously in the US and Britain. It quickly went through two editions in Boston in 1811 before being widely reprinted across the USA. Most of the editions were printed in a concentrated area - Baltimore, Philadelphia, Burlington, Wilmington, New York and Boston - but there were also editions as far north as Vermont, and Kentucky in the west. Editions of Buchanan's *Works* which combined the *Memoir* with *Christian Researches* went through numerous American editions. Concurrently the statistics started to be cited in American journals, appearing for example twice on the front page of Philadelphia's *The Bureau*.⁵⁹¹ The survey was becoming as well-known in parts of the US as it was in Britain. Evangelical networks spread the data across northern Europe as well as across the Atlantic. *Christian Researches* was translated into German and published in Stuttgart in 1813, and translated into Dutch and published in Rotterdam in 1814.⁵⁹² Both featured the sati tables in full.

Alongside newspaper coverage, the figures were also discussed in a number of books. Charles Stuart, Andrew Fuller, Beilby Porteus, Thomas Perronet Thompson, James Bryce, Hugh Pearson, Edward Nares and John William Cunningham all quoted

⁵⁹¹ *The Bureau; or Repository of literature, politics, and intelligence*, 18 & 25 April, 1812.

⁵⁹² Claudius Buchanan, *Neueste Untersuchungen Über Den Gegenwärtigen Zustand Des Christenthums Und Der Biblischen Litteratur in Asien* (J. F. Steinkopf, 1813); Claudius Buchanan, *Onderzoekingen Naar Den Toestand Des Christendoms in Azië: Benevens Eenige Berigten Aangaande De Overzettingen Der H. Schrift in De Oostersche Talen*, trans. Werninck, J. (A. Loosjes en J. van Baalen, 1814).

the statistics between 1806 and 1812. The figures even crossed into literary genres. Robert Southey's poem, *The Curse of the Kehama* (1810), featured a long account of a sati, plus a lengthy footnote which discussed the practice's prevalence and cited Buchanan's statistics.⁵⁹³ Shortly to become Poet Laureate, Southey's reputation was rising and *The Curse of the Kehama* sold well. Eight years after the data was collected, the statistics were still reaching new readers, both nationally and internationally. After a slow start, by 1811-13 the widow-burning research was not in any sense secret. The numbers had circulated widely, reaching an international audience.

Easy mistakes

The widow-burning data published in 1805 was a new social statistic. The custom had never been counted in this way before. However, tables of numerical data were an extremely familiar form of information. The wide circulation shows that this kind of numerical information could be easily understood. However, a closer examination reveals that readers faced two significant difficulties. There was a widespread lack of concern about arithmetical accuracy, and major sampling misjudgements led many people to grossly over-estimate the prevalence of sati.

The mathematics of early nineteenth-century statistics could never be described as difficult. Data was collected, categorised and totalled. The only mathematical operations required were basic addition and sometimes the creation of simple averages. Reviewers praised the clarity of Buchanan's information, but because the mathematics was clear, its methods were almost transparent. The tables were repeatedly published with a basic arithmetical error, which no-one noticed.

The 1805 edition of the *Memoir* presented the sati survey in nine tables, grouping the data collected by region. At the end Buchanan included a total of 116. This figure was wrong, the numbers in the published tables add up to 115. Where the mistake was made is unknown. It is possible that this was a printer's error, but Buchanan used the incorrect total several times in the main text, so it is more likely that the table was printed as supplied. The error was almost certainly a simple miscalculation and at some

⁵⁹³ Robert Southey, *The Curse of Kehama* (London: Longman, Hurst, Rees, Orme & Brown, 1810), 276-77.

point, after publication, it was spotted. In 1811 Buchanan republished the table, in a slightly different format, with the correct total.

Although Buchanan had a Cambridge Mathematics degree, that had not prevented him from making basic clerical errors. Such mistakes are embarrassing, but they went unnoticed. For six years a simple, easy to check, mathematical error was not challenged. After the publication of the corrected figures, even Buchanan's opponents used the revised total without comment.⁵⁹⁴ Despite it being the central fact in Buchanan's case, no-one commented at the time or subsequently on the revision of this key number.⁵⁹⁵ Numbers printed in tables seemed to dazzle readers.

Dutch and German editions of the *Christian Researches* used the corrected figures. But in America, where there were so many editions, Buchanan was unable to exercise any control over how his figures were published. In Boston in 1811 readers could buy editions with both totals. Hilliard & Metcalf printed several editions of the *Memoir* with the older, incorrect total; S. T. Armstrong published *Christian Researches* with the new figure. The preferred US edition was a single volume of the works of Buchanan. Benjamin Edes of Baltimore produced a typical example which featured the *Christian Researches* with the correct table at the front, and then, a few hundred pages later in the same volume, the *Memoir* with its different uncorrected total. Most printers assumed the tables were correctly printed if they matched previously published editions.

However, some printers did add up their printed tables, as is shown by an error Whiting & Watson made when setting the table for their 1812 edition (below left). The table from the London edition (below right) shows the row missing - highlighted yellow:

⁵⁹⁴ John Scott Waring, *Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia* (London: Ridgway, 1812), 33.

⁵⁹⁵ When Davidson published a detailed scholarly edition of the *Memoir* in 1998? the smallest text changes between the 1805 and 1812 editions were footnoted and analysed. The error was not commented upon. See also the 1848 editions...

	Women burned alive.		Women burned alive.
From Gurria to Barrypore ; at eleven different places*	18	From Gurria to Barrypore; at eleven different places*	18
From Tolly's Nullah mouth to Gurria; at seventeen different places	36	From Tolly's Nullah mouth to Gurria; at seventeen different places	36
From Barrypore to Buhipore; at seven places	11	From Barrypore to Buhipore; at seven places	11
From Seebpore to Ballea; at five places	10	From Seebpore to Ballea; at five places	10
From Balee to Bydyabattee; at three places	3	From Balee to Bydyabattee; at three places	3
From Bydyabattee to Bassbareea; at five places	10	From Bydyabattee to Bassbareea; at five places	10
From Calcutta to Burahnugur (or Barnagore;) at six places.	13	From Calcutta to Burahnugur (or Barnagore;) at four places	6
From Chanock to Kachrapara; at four places	8	From Burahnugur to Chanok (or Barrackpore;) at six places	13
	-----	From Chanok to Kachrapara; at four places	8
Total of women burned alive in six months, near Calcutta	109		-----
		Total of women burned alive in six months, near Calcutta	115

Fig. 4c: Whiting & Watson's table with missing data producing a revised total, from Claudius Buchanan's Works (New York, 1811), 36; compared with London edition - missing data highlighted

Whiting & Watson had accidentally missed out a row, then corrected the total to match what they had typeset. However, this attention to the arithmetic was highly unusual. The widespread repetition of Buchanan's uncorrected tables across the USA shows that most printers did not add up the figures that they published. Errors in a master edition were copied and went largely uncorrected.

This speaks to a wider truth about the publication of statistics. Modern statistics are complex and finding errors seems difficult - the task of graduate students not journalists or politicians.⁵⁹⁶ But difficulty is only half the story. Even when the data is simple, checking it is laborious and seems pedantic. Dazzled by the data, readers look but do not add up. They assume accuracy and wrong figures can circulate for years without comment.

⁵⁹⁶ For a recent example of an arithmetical error discovered in published data see Charles Arthur and Phillip Inman, 'The Error That Could Subvert George Osborne's Austerity Programme', *The Guardian*, (18 April, 2013).

Poor addition was not the only problem with Buchanan's totals. The research project had examined one area around Calcutta for six months, but what did this say about the total numbers in Bengal or India? Buchanan argued that his survey supported the claims made by Sir William Chambers, the respected Orientalist and translator,⁵⁹⁷ who estimated that "the widows who perish by self-devotement in the northern provinces of Hindoostan alone, are not less than ten thousand annually."⁵⁹⁸ However, Buchanan did not explain how he made this calculation.

At this time no reliable methods had been devised to sample accurately. Sampling is the examination of a small part of something with the intention of describing what the whole is like. Many academic disciplines have methods for getting from the micro to the macro, but in the early nineteenth century statistics was saddled with the legacy of political arithmetic, which had become notorious for its unreliable sampling techniques. As a result, early statisticians preferred complete counts like the census and avoided anything that looked like an estimate or calculation. Indeed, as the historian Theodore Porter recently observed, "sampling was rarely employed in public statistics before the very end of the nineteenth century."⁵⁹⁹ Because sampling was rare it is perhaps surprising that only two contemporary writers, Hugh Pearson and an anonymous writer who called himself 'A Bengal Officer', directly addressed this aspect of Buchanan's methodology.

Reverend Hugh Pearson was Buchanan's future biographer, the winner of a Buchanan-sponsored essay prize, and sympathetic to the mission cause. In *A Dissertation on the Propagation of Christianity in Asia*, Pearson discussed widow-burning, repeating Buchanan's claim that there were 10,000 widows annually burnt. Indeed, he suggested that this figure might be on the low side because others estimated 30,000 or 50,000 annually.⁶⁰⁰ However, in a footnote at the back of his book, Pearson revealed that he had doubts: "This calculation of Mr Chambers has been thought by competent judges to be somewhat exaggerated. Dr Buchanan's *Memoir* gives the

⁵⁹⁷ Buchanan cites no source for this figure.

⁵⁹⁸ Buchanan, *Memoir*, 94-95.

⁵⁹⁹ Theodore Porter, 'Statistics and the Career of Public Reason', in Crook, T. and G. O'Hara (eds.), *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York ; Abingdon: Routledge, 2011), 38.

⁶⁰⁰ Hugh Pearson, *A Dissertation on the Propagation of Christianity in Asia* (Oxford: University Press, 1808), 104.

number annually sacrificed within a definite circuit around Calcutta. But it may be doubted, whether an area of double the extent in any other part of the country would give any thing like his calculation.”⁶⁰¹ The reasons for Pearson’s doubts remain elusive. Who were the “competent judges” who thought Chambers exaggerated? Pearson didn’t say. He suspected that the area around Calcutta was unrepresentative but provided no evidence to support this judgement.

The other writer who challenged Buchanan’s sampling methods was published anonymously as a ‘Bengal Officer’, but is now known to be Charles Stuart.⁶⁰² At this time a Lieutenant-Colonel, Stuart finished his career in Bengal as a General. He believed, strongly, that Hindus did not require converting to Christianity. He was clearly on the opposite side of the debate to Pearson, but they shared similar doubts that a small sample could reliably produce a wider social statistic. Charles Stuart used his personal knowledge of Northern India, his “many years of residence”, plus the amount of travelling he had undertaken around the country, to support his observation that he had “never seen an instance, nor heard of any recent sacrifice... I apprehend, the custom has... much fallen into disuse.” Personal knowledge led Stuart to dispute Buchanan’s claims about prevalence. Stuart argued that Buchanan was using a geographic ratio, calculating square acres of the area he had surveyed and comparing that with the acreage of all of Northern India. This calculation assumed that the total number of widow-burnings must be in proportion to the number found in the area around Calcutta. But, objected Stuart, the area of Bengal that had been surveyed was “the most bigoted” part of India and therefore unrepresentative.⁶⁰³

Although it made a lot of suppositions about Buchanan’s methods this was a strong argument. Taking one area as representative of the whole is statistically unsound and was not, Stuart pointed out, something that required knowledge of India to understand. He used English suicides to make this point: “as well might we thus calculate for the British empire, on summing up the annual deaths, by self-devotement, of our countrymen in London.”⁶⁰⁴

⁶⁰¹ Pearson, *A Dissertation on the Propagation of Christianity in Asia*, 223.

⁶⁰² Fisch, 'A Pamphlet War on Christian Missions in India 1807–1809', *Journal of Asian History*, 33-34.

⁶⁰³ Charles Stuart, *Vindication of the Hindoos from the Aspersions of the Rev. Claudius Buchanan, M.A. With a Refutation of the Arguments Exhibited in His Memoir, on the Expediency of an Ecclesiastical Establishment for British India, and the Ultimate Civilization of the Natives, by Their Conversion to Christianity* (London: R. and J. Rodwell, 1808), 72.

⁶⁰⁴ Stuart, *A Vindication of the Hindoos: Part the Second*.

But supporters of missions were not predisposed to listen to the arguments of those who suggested widow-burning was rare. The custom seemed to clearly indicate the need for Christianity. Robert Southey, who as well as writing poems worked as the editor of the *Quarterly Review*, explained to his readers the significance of Buchanan's statistics for the pro-mission argument. Southey believed that data on "the extent to which it is practised" radically shifted who in Europe could claim to understand Hinduism. Before the data arrived, Southey noted, "there was a time when the custom of burning widows was disbelieved in Europe, as a fiction of lying travellers." Now the wheel had turned and armed with data, people who had not been to India could discredit personal knowledge and old fictions about "gentle Hindoos".⁶⁰⁵ Like most supporters of the missions Southey had no direct experience of the colonies, but he thought that the data enabled him to understand Hinduism better than men who had spent years in the country.

British attitudes to Hinduism were changing rapidly. Evangelicals thought pagans worldwide were trapped in a permanent state of misery by their religion. The only hope for social progress in India, as elsewhere, was the "elimination of Hinduism".⁶⁰⁶ This "hostility to Hinduism in the 1790s" as Bernard Cohn and the historian P.J. Marshall have both noted, "extended beyond Evangelical circles".⁶⁰⁷ They have identified a number of factors behind this shift of attitudes. Industrialisation and scientific developments made Britons aware of a widening gap between the two cultures. The British were rapidly expanding the territories they controlled, and these new colonial powers created an official dominant mind-set, which was less sympathetic to local beliefs and customs. Attitudes to widow-burning, as Andrea Major has shown recently, hardened concurrently. Widows "once lauded for her bravery, loyalty and conviction..." were "recreated as a passive, agency-less victim".⁶⁰⁸ However, the leadership of the East India Company and its investors remained reluctant to interfere with religion, fearing that it would provoke revolt. This led them to defend Hinduism and its social customs from evangelical claims. One question dominated the debate, who knew India

⁶⁰⁵ Robert Southey, 'Periodical Accounts Relative to the Baptist Missionary Society, Major Scott Waring, Twining, Vindication of the Hindoos, Etc. Etc', *The Quarterly Review*, vol. 1, (1809, 1809), 189.

⁶⁰⁶ Cohn, 'Notes on the History of the Study of Indian Society and Culture', in *The Bernard Cohn Omnibus*, 144.

⁶⁰⁷ Marshall, *The British Discovery of Hinduism in the Eighteenth Century*, 43.

⁶⁰⁸ Major, *Pious Flames*, 125.

best? Those who had spent years working there, or those in Britain who had access to social research?

Before the statistics were produced, arguments made by former Company employees with years of experience in India trumped whatever evidence evangelicals in England had managed to gather. The memory of such losses lingered. Commenting on Stuart's book, the *Christian Observer* noted in June 1808 that "we began to fear that we should have been forced to retreat before the artillery of 'local knowledge,' which was brought to bear upon us."⁶⁰⁹ Armed with Buchanan's data, the supporters of missions found it easy to dismiss such attacks. The *Christian Observer* noted that Company employees had gone to India as young men aged seventeen or eighteen with little education. Their knowledge of India could be discounted because it was highly subjective:

He has no *data*, except such as he may have casually obtained during his residence in India.... He must first ransack his memory for the materials, and then proceed to shape a regular conclusion. He must discover, not only the interpretation of the dream, but the dream itself.⁶¹⁰

Knowledge accumulated through personal experience, without the guidance of general principles of moral and political science and without reliable data collection methods could not be trusted. Evangelical users of the Buchanan's statistics were self-consciously aware that they did have *data* and were privy to a new form of social-scientific thinking. They believed that data enabled them to generalise and develop a "more enlarged mode of reasoning".⁶¹¹ Buchanan's statistics were helping to develop new ideas about who was competent to make decisions about India. They may not have been to India but armed with statistics evangelical Britons believed that they knew India better than East India Company employees. "Gentleman may have resided thirty years

⁶⁰⁹ 'Review of Pearson's Dissertation on Christianity in India', *Christian Observer*, vol. 7, (1808/06//undefined, 1808), 377.

⁶¹⁰ 'Review of a Bengal Officer's Vindication of the Hindoos', *Christian Observer*, vol. 7, (1808/02//undefined, 1808), 118.

⁶¹¹ *Christian Observer*, vol. 7, (1808/02//undefined, 1808), 117.

in India, and yet may be totally incompetent to form a correct judgement...”⁶¹²
 Judgements based solely on personal knowledge were easily dismissed.

The introduction of data was altering the terms of the debate. But Buchanan’s supporters guessed wrongly how his opponents would respond. Southey had speculated that this new statistical knowledge would “not perhaps now be credited” by current and former Company employees. In fact, Charles Stuart was exceptional. Until 1811 Buchanan’s data was largely unchallenged and accepted by many on all sides of the debate. That Buchanan had proved prevalence was clear to Sydney Smith, editor of the *Edinburgh Review* and one of the most aggressive and satiric of the anti-mission writers. Smith saw evangelism as disrupting the settled state of colonies, but even he accepted that widow-burning was a “savage custom... which it would be desirable to abolish”.⁶¹³ Writing to *The Times*, an anonymous ‘East-India Proprietor’ who was against missions acknowledged that “it cannot be denied, that these bloody and superstitious practices, now exist to a certain extent”.⁶¹⁴ This was a highly polarised debate, in which every successful criticism was amplified by a tranche of partisan commentators, yet Pearson and Stuart’s critiques were completely ignored, even by opponents of Buchanan. The general understanding of sampling was insufficient for their criticism to be politically effective. Many felt able to use the statistics, but few understood the implications of a methodological challenge.

Instead, as the debate wore on, even larger estimates of the total number of burnings began to circulate. Buchanan had claimed 10,000; a Cambridge fellow, John Cunningham, used the data to calculate his own figures claiming that: “50,000 females annually, in Hindustan, [are carried] to the funeral pyre... This number appears great but the calculations usually entered into upon this subject support it.”⁶¹⁵ In a similar vein *The Times* published a letter claiming that, “It is now well ascertained, that under the British Government, 20 or 30 thousand women are annually burnt alive, from mere

⁶¹² 'Review of Major Scott Waring on Indian Missions', *Christian Observer*, vol. 7, (1808/01//undefined, 1808), 59.

⁶¹³ Sydney Smith, 'Publications Respecting Indian Missions', *The Edinburgh Review or Critical Journal*, vol. 12, (April, 1808), 179.

⁶¹⁴ *The Times*, Tuesday, Sep 28, 1813.

⁶¹⁵ John William Cunningham, *Christianity in India: An Essay on the Duty, Means, and Consequences, of Introducing the Christian Religion among the Native Inhabitants of the British Dominions in the East* (London: Printed for J. Hatchard, 1808), 92.

superstition.”⁶¹⁶ Buchanan’s small survey was being inflated into ever-larger estimates of the numbers of women burning themselves annually across Bengal and British India.

Statistical data displaced some but not all forms of personal experience. Those whose time in India suggested that widow-burnings were rare had their experience challenged, but eyewitness accounts of the practice were validated by the data and could no longer be dismissed as exaggerated tales of lying travellers.

The spectacle of widow-burning particularly appalled and thrilled missionaries, featuring prominently in missionary magazines and periodicals.⁶¹⁷ The historian Karen Haltunnen has noted that at this time reform movements were helping to change how people understood pain. Reformers were exposing previously accepted social practices as cruel and painful. “The literature of humanitarian reform targeted illicit cruelty by offering graphic treatments of its practices.”⁶¹⁸ However, before Buchanan published his statistics, graphic accounts of widow-burning were largely absent from mainstream publications. Such accounts had been easily dismissed as untypical, exaggerated or in some other way unrepresentative.

The widow-burning statistics made lurid accounts of the custom more valid. Writers discussed Buchanan’s data alongside long horrifying eyewitness accounts of women burning. For example, Robert Southey, whilst sharply criticising “the theatrical pageantry with which they have sometimes been represented to our imagination” included an eyewitness account by the Baptist missionary Joshua Marshman in a *Quarterly Review* article, alongside the data. Southey called it a “plain and faithful account of one at which he was present, scarcely two years ago”, but the text was so brutal it could have been drawn from the emerging genre of gothic horror.

Perceiving the legs hanging out, they beat them with the bamboo for some time, in order to break the ligatures which fastened them at the knees; (for they would not have come near to touch them for the world.) At length they succeeded in bending them upwards into the fire; the skin and muscles giving way, and discovering the knee-sockets bare, with the balls of the leg-bones: a sight this

⁶¹⁶ *The Times*, 4 May, 1812.

⁶¹⁷ See chapter 2.

⁶¹⁸ Karen Haltunnen (1995), 'Humanitarianism and the Pornography of Pain in Anglo-American Culture', *The American Historical Review*, 100 (2), 320.

which I need not say, made me thrill with horror; especially when I recollected that this hapless victim of superstition was alive but a few minutes before.⁶¹⁹

At the end of this account Southey noted drily, “nor is this an uncommon case”.

There was a growing understanding that different audiences understood the world in different ways. A writer needed to marshal a variety of kinds of facts to suit different minds. One critic noted that:

Men's minds in a state of mere nature are affected in different ways. Some, who may contemplate the idol Juggernaut with apathy, may be penetrated by the account of one hundred and fifteen females immolated on the funeral piles of their husbands in six months of the year 1804, and within thirty miles of Calcutta; particularly as the practice is notoriously prevalent all over India.⁶²⁰

The writer went on to note that if those statistics didn't “reach their hearts” perhaps the sacrifice of children at Saugor would do the trick.

However, it would be a mistake to argue that the statistics merely provided dry cover, making emotionally-charged eyewitness accounts respectable. The forceful repetition of widow-burning statistics in articles, letters, sermons, books and speeches challenges the argument still common now, that dry-as-dust statistics drain emotion from the political process. Accumulated horrors, like the numbers of deaths in a terrorist incident or a gas chamber, can land a very specific emotional punch. The widow-burning data shocked many readers across the Protestant world, especially when accompanied by horrific individual accounts.

Questions of trust

In September 1811, the *British Review*, a newly established conservative periodical, stated that it did not trust Claudius Buchanan's facts, because his judgement was clouded by his strong evangelical beliefs. A reviewer argued that sometimes Buchanan's “ardent spirit may... have prompted him, in this as well as in his former

⁶¹⁹ *The Quarterly Review*, vol. 1, (1809, 1809), 190-1.

⁶²⁰ 'Ix Review: Hindu Infanticide by Edward Moor & Christian Researches in Asia by Claudius Buchanan', *The British Review & London Critical Journal*, vol. 2, (September, 1811), 242-3.

publications, to overstep that delicate and almost imperceptible line which separates zeal from enthusiasm.” The suspicion that a line had been crossed, led the reviewer to “doubt the frequent recurrence”⁶²¹ of Hindu sacrificial practices. Doubts about Buchanan’s character were beginning to influence the reception of his facts.

Worries about Buchanan’s zeal were not new, but from 1805 to 1811 these had not led people to question his research. Indeed, from their first publication in 1805 Buchanan’s statistics had been trusted unconditionally by almost everyone who used or examined them. In part this was because Buchanan’s data confirmed for reformers in Britain what they wanted to hear, that India needed Christianity. But many opponents also accepted the data. They focussed their attacks on Buchanan’s core arguments about the practicability of Church establishment in India and the conversion of Hindus. His sociological facts about India were generally accepted or ignored.⁶²² The *British Review*’s attack in 1811 marks the beginning of a substantial shift. It was a sign of the survey’s growing importance in the debate that opponents of missions began to engage more actively with Buchanan’s statistics.

It is well-understood that the use of statistics depends upon them being thought trustworthy. There are different ways trust can be established, but historians of statistics broadly agree that gentlemanly trust remained vitally important for the reception of numerical data,⁶²³ long after it is thought to have been superseded in the scientific laboratory.⁶²⁴ The historian Tom Crook recently showed that “gentlemanly status remained important” in the new statistical societies of the 1830s. The London Society emphasised that its members were aristocrats and well-established gentlemen; the Manchester Society, which drew from less grand circles, similarly emphasised that its members were also gentlemen.⁶²⁵

⁶²¹ *The British Review & London Critical Journal*, vol. 2, (September, 1811), 232.

⁶²² Charles Stuart was a sole exception - but his vindication of the Hindoos was a maverick position.

⁶²³ Tom Crook, 'Suspect Figures: Statistics and Public Trust in Victorian England', in Crook, T. and G. O'Hara (eds.), *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000* (New York; Abingdon: Routledge, 2011). Taylor, 'Numbers, Character and Trust in Early Victorian Britain: The Independent West Middlesex Fire and Life Assurance Company Fraud', in *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000*. Classic account T. M. Porter, *Trust in Numbers : The Pursuit of Objectivity in Science and Public Life* (Princeton: University Press, 1995).

⁶²⁴ Shapin, *Never Pure : Historical Studies of Science as If It Was Produced by People with Bodies, Situated in Time, Space, Culture, and Society, and Struggling for Credibility and Authority*. See especially Chapter 8, “A Scholar and a Gentleman”: The Problematic Identity of the Scientific Practitioner in Seventeenth-century England.” pp 142-181

⁶²⁵ Crook, 'Suspect Figures: Statistics and Public Trust in Victorian England', in *Statistics and the Public Sphere : Numbers and the People in Modern Britain, C. 1800-2000*, 173.

Until the challenges of 1811 the widow-burning statistics were taken on trust, but it is not clear this trust was based straightforwardly on gentlemanly status. The widow-burning statistics were collected by William Carey, a dissenter and former shoemaker, with a team of Hindus. Claudius Buchanan himself, although now rich and well-connected, was the son of a Scottish teacher and scarcely a gentleman. Much of the audience for his research was far less rarefied than the statistical societies. Some evangelicals were gentlemen, but the majority were not. Indeed, poor, provincial dissenters saw the statistics as a way to challenge the policy position of gentlemen investors in London.

Although his books were finding new readers across Britain and internationally, Buchanan's authority in the metropolis was beginning to collapse and for the first time his research was closely examined. This section explores the effects that mounting distrust of Buchanan had on the use of his widow-burning statistics.

The first sustained examination of the trustworthiness of the statistics appeared anonymously in *The Day* newspaper at the end of 1811, a few months after the *British Review* had raised its doubts. The article 'Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia' was then almost immediately republished as a pamphlet in early 1812.⁶²⁶ John Scott Waring, the author, was one of the most active contributors to the debate about missions. Between 1808 and 1812 he wrote at least nine long pamphlets, which incited dozens of furious responses. Although he frequently attacked Buchanan's proposals for establishing the Church in India, until 1811 he completely disregarded the widow-burning statistics.

John Scott Waring was a controversial figure.⁶²⁷ A former Indian Army Major, he is now best known as the man appointed by Warren Hastings as his agent to defend him through his impeachment. However Scott Waring had no particular personal authority; indeed many of his fellow MPs judged him boring, relentless and inept.⁶²⁸ However

⁶²⁶ Originally the article was printed in *The Day* newspaper; Scott-Waring in his preface notes that he was asked to reprint it by "several Gentlemen I know" because of "that paragraph in the Speech of his Royal Highness the Prince Regent". The speech was given on January 7, 1812.

⁶²⁷ John Shore, *Considerations on the Practicability, Policy, and Obligation of Communicating to the Natives of India the Knowledge of Christianity: With Observations on the 'Prefatory Remarks' to a Pamphlet Published by Major Scott Waring* (London: Hatchard, 1808).

⁶²⁸ Hannah Barker, 'Waring, John Scott- (1747–1819)', in Goldman, L. (ed.), *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004).

Scott Waring's challenges mattered, because they were a public manifestation of views normally kept private. Opponents of missions rarely argued their case in print or in public debates. Even in the Court of Proprietors, they did not feel the need to defend their views. When an evangelically minded investor called Mr Bacon tried to state the case for missions he was heckled so loudly that he had to sit down and couldn't finish.⁶²⁹ Vested interests heckled because they were not inclined to debate. Scott Waring's challenges provide some insight into the opinions of those who usually felt little need to defend their views.

Scott Waring's attacks on the widow-burning data were prompted by their republication in Buchanan's new book and motivated by the forthcoming renewal of the East India Company Charter. The bill had begun its tortuous journey towards Parliament in 1808. Delayed by the war with France and East India Company financial problems, in November 1811 negotiations about renewal began in earnest between the government and the East India Company. Evangelicals hoped to add new clauses legitimating missions into the bill, and they increasingly saw Buchanan's research as the best available evidence of India's need for Christianity. For opponents of missions this made the statistics impossible to ignore.

Scott Waring's attack explicitly addressed issues of trust and authority: "I do not mean to impeach the moral character of Dr Buchanan. I have the firmest reliance on his honour and integrity, on any point unconnected with the propagation of Christianity in India. But when the human mind is clouded by bigotry, it is vain to expect impartiality, on certain topics."⁶³⁰ Scott Waring also attacked William Carey, whose involvement in the survey had only recently been revealed. In *Christian Researches* Buchanan had added a note explaining that the figures were produced under the "superintendence of the Professor of the Shanscrit and Bengalee languages in the College of Fort-William."⁶³¹ The professor was unnamed, but Scott Waring knew from the published college staff lists that this was William Carey, who was much better known as a Baptist missionary.⁶³² Scott Waring argued that Carey's involvement showed that the widow-burning statistics were produced by Baptists. Claims about the prevalence of the custom were flawed, because "the authority for the assertion is a Baptist Missionary."⁶³³

⁶²⁹ *Debates at the General Court of Proprietors* 237.

⁶³⁰ Scott Waring, *Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia*, 33.

⁶³¹ Buchanan, *Christian Researches in Asia*, 36.

⁶³² *The College of Fort William in Bengal*.

⁶³³ Scott Waring, *Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia*, 33.

There was a strong class aspect to this challenge. East India Company proprietors and Baptist missionaries were not from the same social classes. Sydney Smith, editor of the *Edinburgh Review* commented sniffily that, “if a tinker is a devout man, he infallibly sets off for the East.” Such snobbery masked real fears about what the missionaries might do. Smith thought missionaries “quite insane, and ungovernable; they would deliberately, piously, and conscientiously expose our whole Eastern empire to destruction, for the sake of converting half a dozen Brahmans, who after stuffing themselves with rum and rice, and borrowing money from the missionaries, would run away.”⁶³⁴ Scott Waring had made his own views about Carey clear in an earlier pamphlet in the debate: “He is narrow minded and intemperate. I am sure, you have too correct a taste to admire the puritanical cant that is contained in Brother Carey's letters.”⁶³⁵ Ascribing the survey to the Baptists was enough to make the widow-burning data untrustworthy, “the number is grossly exaggerated”.⁶³⁶

Scott Waring's challenge was noticed by all sides in the debate. It was clear now that some people would no longer accept Buchanan's evidence. An anonymous journalist writing in *The British Review* commented that because of “the critics of Dr. B.'s work” supporters of missions needed to be “particularly careful... to select our instances from authorities which even Mr Twining or Mr Scott Waring themselves could not hesitate to admit.”⁶³⁷ Informed opinion in London was starting to see Buchanan's evidence as damaged goods.

In February 1812 a group of leading evangelical MPs, William Wilberforce, Charles Grant, Henry Thornton, James Stephen and Thomas Babington, took charge of the campaign to insert clauses into the new Charter to legitimate the presence of missionaries in India. Before Scott Waring's challenge, Buchanan's figures had been accepted unequivocally by this group. Now they trusted the data a little less and needed reassurance that the figures were reliable. Wilberforce and Zachary Macaulay took charge of establishing the credibility of the data. Wilberforce wrote to Macaulay: “I

⁶³⁴ *The Edinburgh Review or Critical Journal*, vol. 12, (April, 1808).

⁶³⁵ John Scott Waring, *A Letter to the Rev. John Owen, A.M. In Reply to the "Brief Strictures on the Preface to Observations on the Present State of the East India Company". To Which Is Added a Postscript; Containing Remarks on a Note Printed in the Christian Observer for December, 1807*, (London, 1808).

⁶³⁶ Scott Waring, *Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia*, 33.

⁶³⁷ *The British Review & London Critical Journal*, vol. 2, (September, 1811), 244.

found the other day that some Anglo Indians... were discrediting and causing others to discredit Buchanan's Account of the burning of Hindoo widows round Calcutta... I have written to Dr Buchanan."⁶³⁸ Buchanan was asked to respond to Scott Waring's pamphlet and clarify the "fact of the burning of women".⁶³⁹

Buchanan provided Wilberforce and Macaulay with a defence that did not depend on his personal status or reputation. He stressed that the whole college was involved in the data's production. The survey was based on information provided by "ten persons, of the Hindoo cast.. [who] sent in their returns, written in the Bengalee language, every month; and the Professor delivered them regularly to the vice-provost of the college; and every person who wished it, was at liberty to see them." There were also checks after publication. Wilberforce asked Buchanan to defend his data from charges made by opponents of missions that it "should have been published in the East where it could have been contradicted".⁶⁴⁰ Buchanan fully obliged: "Copies of the Memoir were in the hands of the members of government: the subject was discussed in almost every company, and no exception was taken, in any public manner, to the accuracy of the report."⁶⁴¹ The survey was a collective enterprise.

Rather than relying on systems of gentlemanly trust, Buchanan asked readers to trust his methods, emphasizing that his data had been subject to peer review and official oversight. Wilberforce was reassured by these answers and in May 1812 he wrote to Zachary Macaulay about how to defend the statistics from attacks: "You may hear the same stories and therefore I send you the contradiction of them."⁶⁴² He provided Macaulay with a detailed account of how the statistics were verified, highlighting his proximity to India's government:

His memoir, which contains the account of the burnings for thirty miles round Calcutta in 1804, as stated by Dr Carey, came out in Calcutta in 1806; that Dr B staid [sic] in Calcutta till 1808, talking with all the learned people about every part of the memoir and that the burnings were never denied; that he, in the service of

⁶³⁸ 'Letter to Zachary Macaulay May 1812', William Wilberforce, *The Correspondence of William Wilberforce (Revised & Enlarged Edition)*, 2 vols. (Philadelphia: Perkins, 1846), 97.

⁶³⁹ Buchanan letter to Zachary Macaulay, March 1812 in Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D. D. : Late Vice-Provost of the College of Fort William, in Bengal*, 457.

⁶⁴⁰ Wilberforce, *Correspondence*, 97.

⁶⁴¹ *Christian Observer*, vol. 11, (April, 1812), 223.

⁶⁴² Wilberforce, *Correspondence*, 98.

government, presented a copy of his work to government and desired that any error might be pointed out, but none was discovered.⁶⁴³

Buchanan's decision to distribute his book in Calcutta had been a wise move, as its uncontroversial reception gave his research a semi-authorised status. As far as Wilberforce was concerned peer review by current government officials neutralised the challenges of opponents in London, such as Scott Waring, who had personal experience of India, but had returned to England thirty years previously in 1781.⁶⁴⁴

Wilberforce needed to assess the trustworthiness of Buchanan's statistics in March 1812 because he wanted to make immediate use of them. Petitions were a powerful tool in the anti-slavery campaigns and Wilberforce, campaigning to change the East India Company Charter, once more turned to this familiar method.⁶⁴⁵ He began writing letters and holding meetings, using his established national network of anti-slavery activists to organise petitions demonstrating that the public supported his case.

The most compelling evidence that Wilberforce found Buchanan's defence convincing was the extent to which the widow-burning statistics featured in this national petition campaign. In May 1812, six months after Scott Waring's attack, the *Christian Observer* printed one of Wilberforce's campaign letters.⁶⁴⁶ His 'Letter to a Friend on the duty of Great Britain to disseminate Christianity in India' included both of Buchanan's main statistics: the 1803 annual figure and the 1804 six-month total. Wilberforce estimated that the annual total of widow-burnings could be "calculated... at between thirty and forty thousand in the whole of Hindostan."⁶⁴⁷ Buchanan's data was still considered the most reliable evidence of the scale of this problem.

The 1812 petitions were a dress rehearsal, because the assassination of the Prime Minister, Spencer Perceval in May put the Charter debate on hold. A year later when the

⁶⁴³ Wilberforce, *Correspondence*, 98.

⁶⁴⁴ Barker, 'Waring, John Scott- (1747–1819)'.

⁶⁴⁵ See Seymour Drescher (2007), 'Public Opinion and Parliament in the Abolition of the British Slave Trade', *Parliamentary History*, 26 Supplement.

⁶⁴⁶ Robert Isaac Wilberforce and Samuel Wilberforce, *The Life of William Wilberforce*, 5 vols. (London: John Murray, 1838), 103.

⁶⁴⁷ William Wilberforce, 'Letter to a Friend on the Duty of Great Britain to Disseminate Christianity in India', *Christian Observer*, vol. 11, (May, 1812), 266. Wilberforce complained that his hastily written letter was printed.

debate resumed and petitioning began in earnest, Buchanan's statistics still remained central in Wilberforce's campaign. Regional organisers were sent the widow-burning statistics to remind them that Hinduism was not peaceable but bloody. Writing to Hannah More to ask her to collect signatures in Bristol, Wilberforce commented "you have read Buchanan".⁶⁴⁸ The evidence was so well-known amongst evangelicals that by 1813 this was all that needed to be said.

Soon petitions were arriving daily at Parliament. On May 13, the Earl of Derby presented a petition from Warrington, Lord Erskine presented four more from London, Bath, Cornwall and rural Somerset, and Earl Grey presented one collected in Sunderland, Wearmouth and Monwearmouth in the Country of Durham.⁶⁴⁹ East India Company proprietors like Sir Abraham Hume, who opposed the introduction of missionaries, began complaining about the "immense multitude of petitions".⁶⁵⁰ Hume was right to worry. 908 petitions containing over half a million signatures were presented to Parliament between March and June 1813.⁶⁵¹ Across Britain religious opinion was convinced that India needed to be Christianised. We have seen that by 1813 the widow-burning figures were being read by readers of popular provincial magazines, newspapers and missionary journals. However, many people could not read, and the press was not yet a mass medium. The petition campaign, with its huge numbers of signatures, introduced many more people, including men and women who were not readers, to the widow-burning data.⁶⁵²

Wilberforce used this outpouring of popular opinion to add weight to the personal influence he could wield behind the scenes. At a meeting with Lords Buckingham and Castlereagh in May 1813, resolution thirteen was tabled. There would be a Commons debate the following month about whether to officially sanction missionaries.⁶⁵³ However, timetabling a debate was not winning it, as Wilberforce knew from his failed attempts to amend the Charter Act in 1793. Wilberforce commented "The truth is, and a dreadful truth it is that the opinions of nine tenths or at least of a vast majority of the

⁶⁴⁸ William Wilberforce, 'Letter to Mrs Hannah More', Wilberforce and Wilberforce, *The Life of William Wilberforce*, 103.

⁶⁴⁹ 'East India Company Affairs, Propagation of Christianity in India', House of Commons, 26: 827-73 (22 June 1813), 105-6.

⁶⁵⁰ *Debates at the General Court of Proprietors* 189.

⁶⁵¹ Davidson, *Evangelicals and Attitudes to India*, 249.

⁶⁵² The central role that women played in these debates is made clear in the female petition campaigns of the 1820s, organised to ban widow-burning. See Chapter 5.

⁶⁵³ Davidson, *Evangelicals and Attitudes to India*, 249-50.

House of Commons would be against any motion which the friends of religion might make.”⁶⁵⁴

The Church Missionary Society was less pessimistic. Hopeful that MPs were open to persuasion, they turned to Buchanan’s researches, which they still considered the most persuasive evidence available. In March 1813 the society paid for the printing and distribution of a new book from him, *Colonial Ecclesiastical Establishment: being a brief view of the state of the colonies of Great Britain, and of her Asiatic empire in respect to religious instruction*. The book was of course widely and favourable reviewed by the evangelical press, but at this point, weeks away from the parliamentary debate, the opinions of reviewers counted for little. The opinion of decision-makers was all that mattered. Buchanan therefore arranged for it be printed in “rather large type for the old hands”. This was his final attempt to persuade the people who now counted. Again widow-burning data featured prominently. MPs and East India Company proprietors were supplied with a full set of corrected statistics and an account of the survey’s collection and verification methods.⁶⁵⁵

“It cannot fail,” thought Josiah Pratt, secretary of the CMS, “of producing conviction in the minds of so many MPs.”⁶⁵⁶ Accordingly every member of both houses of Parliament was given a free copy and on 12 April the committee of the Church Missionary Society confirmed that 800 copies had been distributed.⁶⁵⁷ Buchanan’s reputation had survived Scott Waring’s attacks, and in March 1813 his research was still thought, by pro-mission campaigners, to be the evidence most likely to convince MPs.

Unfortunately for the Church Missionary Society, Buchanan’s status as a convincing authority on Hinduism received a major blow on 19 May 1813. A month before the Charter Act debates in Parliament and the General Court of Proprietors, Charles Buller, the MP for West Looe and a former senior official in the Bengal Revenue department, made a wounding public attack on Buchanan’s trustworthiness. Buller wrote a public letter to the Court of Directors of the East India Company, which directly challenged Buchanan’s account of suicides and immoral behaviour at the Juggernaut festival.

⁶⁵⁴ Wilberforce and Wilberforce, *The Life of William Wilberforce*, 102.

⁶⁵⁵ Church Missionary Society MSS, Buchanan to Pratt, Kirby Hall, 21 January 1812.

⁶⁵⁶ Church Missionary Society MSS, Pratt to T.Thomason, London, 22 March 1813.

⁶⁵⁷ Davidson, *Evangelicals and Attitudes to India*, 235-40.

Buchanan's examination of the festival's morality had been published two years earlier in *Christian Researches in Asia*. Buchanan made a visit to the Juggernaut Temple in Orissa in June 1806. A sober, pious bachelor, Buchanan found the Hindu festival overwhelming. He complained of "obscene stanzas", "indecent gestures" and lewd dancing by boys with priests. Amongst these depravities, he found evidence that human sacrifice was a fundamental Hindu practice, "wherever I turn my eyes, I meet death in some shape or other." Buchanan witnessed one suicide before the Juggernaut cart and heard evidence of two more. As well as these three sacrificial suicides, he claimed to have seen piles of bones.⁶⁵⁸

However, Buchanan was not the only British witness at the festival that June. Charles Buller attended the same event in an official capacity. In his public attack on Buchanan, Buller emphasised his qualifications to judge what he saw. He had spent a long time at the event; he was well-qualified to understand what he was witnessing as he had written the regulations that governed the festival; and he was a gentleman, accompanied by other gentlemen and their wives. Indeed, he claimed, "there was not a single lady at the station who did not accompany her husband to see the procession."⁶⁵⁹ None of these gentlemen or ladies had witnessed any sacrifices or indecency. The Juggernaut festival was an entertaining afternoon spectacle for officers and their wives. Buller claimed Buchanan's account was full of "very exaggerated and unfounded opinions". This was a devastating attack, coming from a well-liked MP, who was considered a gentleman "of perfect probity, politeness, truthfulness and a ...solid type."⁶⁶⁰

Buchanan responded swiftly with two furious letters to the Court of Directors on 25 May and 8 June, which like Buller's letter were also published publicly. Buchanan observed that he and Buller had never met in Calcutta, despite both residing there for eight years and that Buller was not part of the group of Britons researching the customs and practices of the Hindus. Buchanan tried to "not impute a bad motive" to those who disagreed with him, but claimed that many who did had an "imperfect education" in

⁶⁵⁸ Claudius Buchanan, *Christian Researches in Asia; with Notices of the Translation of the Scriptures into the Oriental Languages* (Cambridge: J. Deighton ; London : Cadell & Davies, 1811), 17-34.

⁶⁵⁹ 'Copy of a letter from Charles Buller, Esq. to the Court of Directors of the East India Company; dated the 19th May 1813:--detailing the conduct of the Bengal Government, with reference to the temple of jaggernaut', PP 224.

⁶⁶⁰ Thomas Carlyle cited in R. G. Thorne, *The House of Commons, 1790-1820* (London: published for the History of Parliament Trust by Secker & Warburg, 1986).

England and had developed bad habits from “long intercourse with Indian scenes.”⁶⁶¹ This was as far as Buchanan could go. He was unable to accuse Buller of lying about the immolations, and he conceded a great deal of ground. He agreed that it was true that ardent zeal had perhaps produced “too high a colouring in statement”. This was a weak defence. It left both the Juggernaut evidence itself, and Buchanan’s own reputation, exposed.

Although Buller presented the festival as an entertaining outing, he did not deny that suicides occurred. Buller accepted suicide as a fact of Hinduism, a fact which in no sense diminished his ability to enjoy the spectacle. He, and his fellow Company officials, felt no duty of care. Indeed, Buller asked, how could government intervene? One might “with as much justice censure our Government at home, for not preventing suicide in the variety of ways in which we are informed it is practised, as they may the Government abroad, for not preventing the immolations in question.”⁶⁶² Suicides in Britain and India were random, rare, unpredictable occurrences, quite beyond the scope of governments to influence or prevent.

Buchanan saw it quite differently. He thought that immolations probably occurred at numerous other Bengali festivals, but to know “the exact truth” about the prevalence of human sacrifices at festivals the Bengal government would need “to require every village... in Bengal and the adjoining provinces to make a report of the number of suicides for the last twenty years.”⁶⁶³ Such a survey would show, like the widow-burning statistics were already showing, that festival suicides were not infrequent, individual acts, surviving rare relics of old traditions. Sacrificial suicides, Buchanan argued, were better understood as a social phenomenon. Statistics could demonstrate that ancient tenets of Hinduism actively constructed the lives being led by modern day Indians. Evangelicals were positing a moral duty of care on the British government to introduce Christianity and promote radical social changes.

As soon as Buller’s attack on Buchanan was made public, Wilberforce began looking for alternative sources of information about sati. The new religious clauses in the East India Company Charter were due to be debated in the Commons a month later, so he wrote immediately on 28 May to Robert Southey to ask him if he had “any other facts” in addition to those in the article that might help prove the duty or practicability

⁶⁶¹ PP 10 (331).

⁶⁶² PP 224.

⁶⁶³ *Christian Observer*, vol. 11, (April, 1812), 225.

“to christianize the natives of Hindostan”.⁶⁶⁴ Buller’s attacks were forcing Wilberforce to hurriedly re-assess which facts he could use.

Before Buller’s letter was published Buchanan was confident that he had fought off all challenges. In April 1813 he commented about his widow-burning data, that “this Report... remains un-contradicted by any authority to this day.”⁶⁶⁵ In May, one month before the parliamentary debate, his reputation as a witness was in tatters. It looked possible that none of his research would be usable in Parliament. The forthcoming parliamentary debate would test whether the widow-burning figures could survive these doubts about Buchanan’s personal trustworthiness.

Into Parliament

Claudius Buchanan was unable to attend the Charter Act debate. “The circumstances of my health render it impracticable for me at present to move to London.”⁶⁶⁶ This turned out to be a wise call, because whether or not he could be trusted became a central topic when the debate took place on 22 June. The second speaker, Sir Henry Montgomery, the MP for Yarmouth, a former cavalry officer in India, stockholder and close associate of Lord Wellesley, told the House, that “he considered Dr Buchanan as an imposition on this country and a libel on India.”⁶⁶⁷ It seemed that the gentlemanly attacks on Buchanan had been successful.

Wilberforce, the main speaker in favour of missions, had already decided to rid his argument of any evidence that depended upon Buchanan’s reputation. He explained that if he could “establish my positions by other witnesses, against whom no such prejudices prevailed as had been excited in Dr Buchanan’s instance, prudence suggested to me the expediency of preferring them.” Wilberforce knew if he was to be trusted himself, he would have to ditch Buchanan’s evidence. This he was prepared to do and he could not have put it more plainly: “I have not grounded any of my assertions on the authority of Dr Buchanan”.⁶⁶⁸

⁶⁶⁴ Wilberforce, *Correspondence*, 120.

⁶⁶⁵ Claudius Buchanan, *Colonial Ecclesiastical Establishment: Being a Brief View of the State of the Colonies of Great Britain, and of Her Asiatic Empire in Respect to Religious Instruction* (London: Cadell & Davies, 1813), 125.

⁶⁶⁶ Letter to a friend (unidentified) Kirby Hall, April 1813 in Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D. D. : Late Vice-Provost of the College of Fort William, in Bengal*, 480.

⁶⁶⁷ *Hansard*, 26, 829.

⁶⁶⁸ *Hansard*, 26, 866.

However, widow-burning remained central to his case. Wilberforce knew that “the House must have anticipated my mention of the burning of widows on the funeral pile of their deceased husband.”⁶⁶⁹ To use the data as evidence Wilberforce decided to reattribute its production. Scott Waring’s recent insistence that the survey was a Baptist production provided enough cover; Wilberforce was able to attribute the survey to William Carey and the Baptist missionaries. This was a fig leaf defence. Buchanan’s 1803/4 surveys were well-known to MPs. They had all been provided with a printed copy of his research a few months earlier and all the debates about the figures’ methods and verification procedures were common public knowledge. The figures were not produced by the Baptists and everyone knew it.

Wilberforce’s sleight of hand went unchallenged, but questions remain about why the figures were needed at all given that the data was eight years old and Buchanan’s reputation had been brought seriously into question. Wilberforce was a diligent researcher and he used evidence of many kinds to support his case. Comparing the widow-burning statistics with these other sources helps to explain their importance as well as their resilience to challenges.

Wilberforce began his speech by accepting that unlike many of his fellow MPs he could not “speak on India from my own personal observation”.⁶⁷⁰ In Parliament there were over a hundred Anglo Indian MPs with a significant Company background (service in India for King or Company or direct involvement in Leadenhall St) and there were at least another sixty more who held East India Company stocks.⁶⁷¹ Wilberforce argued that these MPs needed to understand that Hinduism was holding back social progress and to accept that Indians were capable of religious change. To do this they would need to disregard their personal knowledge of India.

Systematic research into Hinduism and Christian India, argued Wilberforce, had revealed the limits of knowledge acquired through personal experience. He reminded MPs of recent select committee evidence from a “gentleman of high character, of acknowledged talents and information, who had passed thirty years in India, and who... possessed for a full ten years a seat in the Supreme Council in Bengal”.⁶⁷² Lord

⁶⁶⁹ *Hansard*, 26, 859.

⁶⁷⁰ *Hansard*, 26, 833.

⁶⁷¹ Appendix 1 ‘Lists of East India Interests in Parliament 1780-1834’. List VIII ‘Parliament: November 1812 - June 1818’ Phillips, *The East India Company, 1784-1834*, 323-25.. Stockholder numbers were estimated by Phillips p307.

⁶⁷² *Hansard*, 26, 837.

Teignmouth had testified that despite all this time in India he knew nothing about Christians in India until back in England, when he read about a survey of religions in southern India.⁶⁷³ A gentleman with considerable personal experience of India could still learn from research that was being published in the metropolis. Wilberforce believed that his ability to synthesise this research qualified him to speak about India: “I do not presume to address them on this important question, without having studied it with the most strenuous and persevering diligence.”⁶⁷⁴ He called on MPs to “seriously turn their minds to the subject” and to abandon the “prevailing prejudices of men around them”.⁶⁷⁵

The prevailing prejudice Wilberforce most wanted to shift was the belief that Hindu culture was benign. This, he suggested was an alien idea, which came from “French sceptical philosophers”⁶⁷⁶ who wanted to discredit Christianity by showing that pagan countries were more peaceful, innocent and amiable. Wilberforce believed that this was profoundly to misjudge Hinduism. To demonstrate the “moral degradation of the Hindoos”,⁶⁷⁷ he examined perjury, violent robbery, polygamy, murder of the sick and elderly, widow-burning, infanticide and what he termed “disgustingly indecent exhibitions”.⁶⁷⁸ For each of these practices Wilberforce provided evidence from what he dubbed “a long and melancholy train of witnesses”, citing individual opinions of leading officials such as G. Dowdeswell (Superintendent-General of Police) and Sir James Mackintosh (recorder of Bombay).⁶⁷⁹ When he printed his speech, he provided footnoted evidence of each witness’s role in India and length of time in the country. Wilberforce emphasised this evidence was produced by men who were “upon the spot... while the natives were actually under their view.” This contrasted this with former Company employees in London who made “general inferences from individual instances” which they barely recalled.⁶⁸⁰

⁶⁷³ Wilberforce does not indicate his source, but it seems to have been Lord Teignmouth who on March 30 told the Commons that “I have no personal knowledge but I have heard read of conversions since I left Bengal which I received as creditable and authentic” *East-India Question. Abstract of the Minutes of Evidence Taken in the Hon. House of Commons before a Committee of the Whole House to Consider the Affairs of the East India Company* (London: Cox, 1813), 25.

⁶⁷⁴ *Hansard*, 26, 833.

⁶⁷⁵ *Hansard*, 26, 837.

⁶⁷⁶ *Hansard*, 26, 840.

⁶⁷⁷ *Hansard*, 26, 850.

⁶⁷⁸ *Hansard*, 26, 863-4.

⁶⁷⁹ *Hansard*, 26, 850-57.

⁶⁸⁰ *Hansard*, 26, 851.

Only two of these degraded Hindu practices, perjury and widow-burning, were evidenced with systematic research. The prevalence of perjury was given a very full account by Wilberforce. The government under Wellesley had produced an opinion survey of judges and magistrates about the general character of the natives, focussing especially on their perceived tendency to lie. The survey aimed to be comprehensive and to address the contemporary prevalence of the problem. The survey concluded that perjury “prevails in all directions”.⁶⁸¹ Whilst no statistics accompanied this judgement, the perjury survey was systematic, officially organised, published and peer reviewed. The only other Hindu practice to be evidenced as fully was widow-burning, which featured even more prominently in Wilberforce’s speech.

It was, Wilberforce began, the number of widow-burnings in India that mattered, more than almost anything else that could be said about it. Indeed, “the prevalence... is rather necessary for me to insist.” Although Buchanan’s figures were by this time very well-known, the data seemed to contradict the common knowledge of MPs who were former Company officials. No MP claimed to have personally witnessed a widow-burning in a House of Commons debate. Wilberforce addressed this experiential knowledge indirectly, using the views of a historian and former Company employee as a proxy for the common-sense beliefs of MPs. In his introduction to Firishtah’s *Persian History of Hindostan*,⁶⁸² Alexander Dow had “stated the custom to have become almost extinct.” But, Wilberforce commented “sorry I am to say, that this is far from being the truth.” Wilberforce explained, that he was going to produce evidence that “whatever may have been formerly the case, the practice now exists in a very inconsiderable [sic] degree.”⁶⁸³ Out-of-date knowledge, based on personal experience, was wrong.

Despite Wilberforce’s preference for systematic knowledge, his speech reveals that most of what he knew about Indian society was based on recorded personal observations. There was very little sociological data about British India available in London. Apart from the widow-burning numbers there were only three figures in Wilberforce’s speech that were not very rough estimates. He had Baptist figures for the print runs of an offensive pamphlet, he knew the annual income of three missionaries and he had military statistics for the number of Sikh cavalymen. The widow-burning figures were still valued despite the doubts about Buchanan’s personal reliability as a

⁶⁸¹ *Hansard*, 26, 849.

⁶⁸² First published in 1768, Dow’s history was republished in 1803 and 1812.

⁶⁸³ *Hansard*, 26, 859.

witness, because, although eight years old, this research was still the most persuasive information available.

The 1813 Charter Act was passed with clauses allowing missionaries into British India. When Lord Castlereagh introduced these clauses, he concluded his speech with a thought about the benefits that he thought Christianity might bring India. He hoped it “might lead them away from many immoral and disgusting habits; such as the sacrifice of women, for instance.”⁶⁸⁴ Widow-burning had become the prime example of an immoral Hindu habit. Previously a disputed custom, whose prevalence was doubted, the statistics had convinced many Britons that Hinduism constructed and impeded the lives led by Indians. For evangelicals, social progress in India required the dismantling of a religion and they envisioned a new era of Christian enlightenment for India. Buchanan’s novel social statistics had helped to produce a substantial shift in British policy, permitting the propagation of Christianity in India.

The numbers of widow-burnings had been one of the central facts in this case, but the precise numbers mattered less. In 1812 the corrected survey total had been circulating widely in Britain for over a year, but in this correspondence Wilberforce used the old incorrect total of 116. This was an easy error to make, as he had been sent a copy of the *Memoir* when it was first published and might easily not have noticed that the figures had been corrected. But in the parliamentary debate he misquoted the figures completely, claiming in his speech that in 1804 “130 widows were burnt in six months.”⁶⁸⁵ This speech had an after-life in print. *The Times* reported it, and Wilberforce arranged for it to be published by Hatchard with additional material that he had been unable to use in Parliament. Both printed copies used the rogue figure,⁶⁸⁶ as did Hansard, later that year.⁶⁸⁷ In 1814 *The Pamphleteer* reprinted the speech with the same

⁶⁸⁴ Hansard, 26, 828.

⁶⁸⁵ The evidence for this is Thomas Hansard’s account of the debate. Hansard at this time usually based his accounts on newspaper reports, but *The Times* had abridged Wilberforce’s long speech. *The Times*, 23 June, 1813. Instead Hansard was supplied with a written draft of the speech, with additional material that Wilberforce had not given to Parliament. The figure of 130 given by Hansard is therefore not simply a record of an oral slip.

⁶⁸⁶ William Wilberforce, *Substance of the Speeches of William Wilberforce, Esq. On the Clause in the East-India Bill for Promoting the Religious Instruction and Moral Improvement of the Natives of the British Dominions in India, on the 22d of June, and the 1st and 12th of July, 1813* (London: Hatchard, 1813), 45.

⁶⁸⁷ Hansard, 26, 866.

error,⁶⁸⁸ and via evangelical networks the error crossed the Atlantic, appearing in the *Christian Disciple* in Boston in May 1816.⁶⁸⁹

Perhaps the exact figure did not matter, because the survey's total had always struck Wilberforce as being on the low side. In the *Christian Observer* he wrote that "during the first six months of 1804 the whole number of burnings proved to be considerably above 116."⁶⁹⁰ To Parliament he stressed that the significance of the small sample was that it could be used to justify larger totals: "the whole number of these annual sacrifices of women... is estimated, I think, in the Bengal provinces, to be 10,000." He emphasized that this calculation supported older estimates made by a gentleman, William Chambers, "the highly respected brother of the late Sir Robert Chambers", who had "uncommon proficiency in the native languages".⁶⁹¹ Gentlemanly status remained important for MPs.

Parliament contained many MPs who had lived and worked in India, yet no member claimed to have witnessed a widow-burning or have any personal knowledge of the practice. This might have produced a counter-narrative that the practice was scarce; but no-one challenged the estimate that 10,000 widows were burning annually in Bengal. It seems clear that Pearson and Stuart's doubts about the reliability of Calcutta as a geographic sample had not found an audience amongst MPs, who accepted that the widow-burning data trumped their own personal experiences.

Wilberforce's political instincts were correct. The larger figure had more impact. In *The Times* coverage of the debate, the 1803/4 survey figures were not reported. The only figure cited was the estimate, and in the paper's report this figure became a fact.

He [Wilberforce] then read many documents to prove that the custom of women burning themselves, or rather of their being compelled to burn themselves, had grown to such a pitch, that 10,000 had been burnt in one year in the Bengal provinces alone.⁶⁹²

⁶⁸⁸ Abraham John Valpy, *The Pamphleteer* (London: Printed by A.J. Valpy ... ; sold by Gale, 1814), 73.

⁶⁸⁹ 'Summary of the Speeches of Mr Wilberforce on the Clause in the East India Bill for Promoting the Religious Instruction and Moral Improvement of the Natives of India', *The Christian Disciple*, vol. 4, (May, 1816), 145.

⁶⁹⁰ *Christian Observer*, vol. 11, (May, 1812), 266.

⁶⁹¹ *Hansard*, 26, 859.

⁶⁹² *The Times*, 23 June, 1813.

There was no general understanding, in or out of Parliament, that such a small survey could not countenance these estimates. Big numbers were politically powerful, but how they could be reliably generated was little understood. This devaluation of personal experience came at a price. It led Wilberforce, like many others, to ignore warnings about the custom's rarity and grossly over-estimate the prevalence of the widow-burning.

Buchanan's figures were nearly a decade old by the time Wilberforce used them, but he did not feel this qualified their accuracy. Indeed, he emphasised that the figures described the present state of affairs as it "*now exists*".⁶⁹³ For years after they were first published the figures seemed up-to-date. In 1808 the *Evangelical Magazine* had noted that the Memoir featured the "number of some who have *lately* burned themselves"⁶⁹⁴ Four years ago could seem quite "lately" because of the speed of travel. Letters took six months to travel by ship from Calcutta, so 'news' from India was always at least six months old.

There was no need to show any trends because the underlying model of Hindu culture was static; its social practices were thought to have continued unchanged for centuries. A single set of figures showing significant prevalence could prove that widow-burning was not an extinct custom. The only reason to use different figures would be if a better survey appeared: one that was in some way more complete, or more official. Buchanan argued that the lack of challenges was itself authenticating:

If there had been any doubt of its general accuracy the Government could have directed a similar Report to be made at any period during the last seven years. For the fact may be proved at any time. The same persons who made the first Report or persons equally well qualified are on the spot to make a second. But the truth is the Bengal Government had no wish to authenticate the document of blood.⁶⁹⁵

⁶⁹³ *Hansard*, 26, 859.

⁶⁹⁴ 'Review of Religious Publications (Buchanan's Memoir)', *Evangelical Magazine*, vol. 16, (February, 1808).

⁶⁹⁵ Buchanan, *Colonial Ecclesiastical Establishment: Being a Brief View of the State of the Colonies of Great Britain, and of Her Asiatic Empire in Respect to Religious Instruction*, 125-6.

Buchanan's survey had run for three years from 1802-1804 and finished when in 1804 he produced a figure that had "general accuracy". An early reviewer clarified how contemporary readers understood such general accuracy: "probably that is a number which hardly at all exceeded the average of deaths in the same way for several centuries."⁶⁹⁶ For Buchanan and his readers there was no need to repeat the 1804 survey because it was a typical year, with no untoward weather or diseases. This was a representative year, and therefore close to the 'average' of centuries.

No-one in Parliament or outside challenged these assumptions, and the 1804 figures remained definitive and representative until new official figures displaced them fifteen years later. These later figures produced annual totals for the whole of British India that were never higher than 4% of the totals estimated for Bengal in 1813, confirming an obvious truth, known to everyone who had spent time in India, that widow-burning was rare.

Conclusion

On the back of debates about converting India to Christianity, Buchanan's widow-burning statistics had become well-known within the East India Company and Parliament. The numbers reached people from a range of social backgrounds in Britain and interested Protestants in northern Europe and the United States. This was a new form of knowledge that almost anyone who could read or count could understand. Not secret, the figures were easy to use, widely circulated and persuasive.

Many people found this new sociological data convincing. It spoke particularly to evangelicals from many backgrounds. Already used to measuring their activities and campaigning with data, they could see the opportunities the statistics provided to challenge East India Company policy positions on Christianity. Statistical knowledge provided a new way of knowing India, where distance and lack of personal experience became a virtue. They could now argue that "the investigation and comparison of facts [should be] carried on at such a distance from the scene of action, as precludes the probability of prejudice or partiality".⁶⁹⁷

⁶⁹⁶ *The Critical Review*, vol. 8, (May, 1806), 56.

⁶⁹⁷ John Weyland, *Letter to Sir Hugh Inglis on the State of Religion in India* (Windsor: Knight, 1813), 4.

Attacks from those who opposed missions were intense, as Buchanan himself later recollected: “I understood some time ago, that the statement in my publications which chiefly provoked animadversion, was that which referred to the burning of women.”⁶⁹⁸ The data survived highly personal attacks on Buchanan, because he produced a viable defence, which did not depend on gentlemanly trust. Even Scott Waring, the nemesis of evangelicals, by 1812 accepted that female sacrifice “did take place... every month”.⁶⁹⁹ On both sides of the debate, the custom’s widespread prevalence became an accepted fact.

Although easy to use, the printed numbers dazzled many readers. There was little ability to reason with or challenge the data. Valid criticisms that the survey was not representative went unheeded. Buchanan was using a small sample to predict total numbers of widow-burnings in India. The inherent difficulties of these calculations were little understood, and many people accepted that the data proved that large numbers of widow-burnings were taking place across India.

That up to 50,000 women might be burning annually in British India was anything but a dry statistic. The numbers were usually accompanied by gruesome accounts of the suffering of widows. British audiences were horrified that so many women were dying painful, brutal deaths. Counted and calculated, widow-burning had become a terrifying mass phenomenon. Evangelicals began to argue that this was a significant humanitarian problem for the British state. The debate was shifting from seeing widow-burning as a symptom of Hindu degeneracy, to seeing it as a problem in its own right. Indeed, Wilberforce for a while believed that “independent of the cause of Christianity, the cause of humanity was more interested in this question than even on the question of the Slave Trade.”⁷⁰⁰ Buchanan signalled this shift when in his final work on the topic he argued that the duty of care went beyond establishing the Church in India.

⁶⁹⁸ Letter to S. R. Lushington, Esq., Kirby Hall, Borobridge, 29th June, 1813. In Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D. D. : Late Vice-Provost of the College of Fort William, in Bengal*, 485.

⁶⁹⁹ Scott Waring, *Remarks on the Rev. Doctor Buchanan's Christian Researches in Asia*, 33.

⁷⁰⁰ *The Times*, 23 June, 1813.

Is it possible that the British Parliament will permit even one innocent female, a British subject, to be solemnly devoted to death if it may be prevented? Is there not then some ground for the interference of the Legislature?⁷⁰¹

The political focus was shifting to the eradication of the practice. Previously thought rare, perhaps extinct and in a realm beyond the state's control, the statistics were establishing widow-burning as a practice which the state ought to manage.

⁷⁰¹ Buchanan, *Colonial Ecclesiastical Establishment: Being a Brief View of the State of the Colonies of Great Britain, and of Her Asiatic Empire in Respect to Religious Instruction*, 126-7.

5

An Information Panic

New knowledge, new worries, new actions

On 4 January 1815 Montague Turnbull, the senior legal administrator at the central criminal court in Calcutta, sent every magistrate in Bengal 'Form No. 7'. A blank table split into seven columns, Form 7 was designed to collect details of every widow-burning in British India. To compile this data magistrates were required to interview each woman who planned to burn, ask each the same set of questions and record their answers. Form 7 was issued to standardise what was asked and how the widows' answers were recorded.

NAME.	Age.	Cast.	Name and Cast of her Husband.	Date of Burning.	In what Police Jurisdiction.	REMARKS.

Fig. 5a: 'Form No. 7'
reproduced in PP 18 (749), 44

Data scientists now call this kind of data 'structured'. There are different ways of structuring data. In this case Form 7 was using a flat model, like a modern spreadsheet, where all the data in a given column are similar values and all the data in a single row is related. Structured data of this kind is easy to count,⁷⁰² and it was clear from the outset that Form 7 was designed to produce statistics. Butterworth Bayley, the chief architect of the policy, had told Turnbull that the aim was to produce "an abstract of the annual

⁷⁰² Although simpler to analyse statistically than unstructured data, statisticians and social scientists still debate how best to analyse structured data. See: Ian Plewis and Gillian Raab (1999), 'Editorial: Modelling Structured Categorical Data', *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, 162 (3).

reports regarding the number of women burnt on the funeral piles of their husbands”.⁷⁰³ It was planned to be an ongoing task. Magistrates were told that they would be required to submit annual returns for their district on a copy of Form 7, “as early as practicable after the close of the present and each succeeding English year.”⁷⁰⁴

A new era had begun. Ten years earlier Claudius Buchanan had collected unofficial statistics by sampling a small area of Bengal around Calcutta. Now the leadership of the East India Company required official statistics about widow-burning, and this time the aim was to produce a complete count, not a small sample. In Fort St George, as in Calcutta and Bombay, the “Governor in Council desires to be informed what number of widows have sacrificed themselves”.⁷⁰⁵ An ancient practice, found in many cultures across the world, this was the first time that any government had tried to measure its prevalence statistically with a complete count.⁷⁰⁶

There have been many studies of the East India Company’s widow-burning regulations and of the campaigns to ban the custom, and many historians have commented on the sheer quantity of statistical information in the East India Company archives.⁷⁰⁷ Although there have been no previous studies of how this government data was produced, received or used, some commentators have posited that counting widow-burning profoundly changed how the British authorities acted. The French anthropologist Catherine Weinberger-Thomas argues that colonial administrators became impersonal and coldly rational in their dealings with widows and their families;⁷⁰⁸ echoing the commonly-held view that social statistics encourage bureaucrats to treat people as mere numbers, acting without emotion or humanity.⁷⁰⁹ In contrast, the historian Christopher Bayly argues that the figures produced an “information panic”, turning what should have been a minor issue into a significant political problem.⁷¹⁰ This chapter challenges whether either cold rationality or panic is a good or full enough account of the impact of statistical knowledge on decisions made by bureaucrats,

⁷⁰³ PP 18 (749), at 44.

⁷⁰⁴ PP 18 (749), at 41.

⁷⁰⁵ PP 18 (749), at 270.

⁷⁰⁶ Fisch, *Burning Women*, 44.

⁷⁰⁷ Gilmartin, 'The Sati, the Bride, and the Widow: Sacrificial Woman in the Nineteenth Century', *Victorian Literature and Culture*, 141.

⁷⁰⁸ Weinberger-Thomas, *Ashes of Immortality: Widow Burning in India*. For a fuller discussion of these issues see introduction, pp 13-18.

⁷⁰⁹ A recent version of Weber's argument can be found in Vernon, *Distant Strangers: How Britain Became Modern*.

⁷¹⁰ Bayly, *Empire and Information*, 171.

looking at what occurred when new official statistics about widow-burning were produced and circulated. Were the numbers used or ignored by officials, political leaders and campaigners, and did the production of social statistics change how the British governed India?

Although much theorised, until recently there has been little empirical analysis of what actually occurs inside organisations, governments and the public sphere when statistical information is introduced into debates and decision-making. Sociologists have only recently begun exploring these questions,⁷¹¹ and in this chapter I will be adding a historical perspective to these studies. East India Company records, collected in the parliamentary papers and the India Office library, provide an exceptionally detailed source of information about how this organisation introduced, processed, published and acted upon a new form of information. There were many heated public debates in India and Britain about the East India Company's widow-burning policy, and these have also been well-catalogued by historians. Together these sources make it possible to examine the effects of the new data on internal and external discussions.

The historian Peter Burke has observed that "a social history of knowledge obviously needs to be concerned with the ways in which different groups of people acquire, process, spread and employ knowledge."⁷¹² In this chapter I am broadly following Burke's divisions. The first half looks at the acquisition and processing of data about widow-burning, the second examines how this knowledge was circulated and used. Burke treats these as distinct processes, but I shall be arguing that in the case of widow-burning statistics, the production and use of this new knowledge about widow-burning became deeply entangled. Company administrators became fixated on the public's reception of the official statistics. The chapter opens by looking at how the Company established a functioning statistical regime in early nineteenth-century India. The central section of the chapter looks at how trends in the data shaped debates first within the East India Company and then outside the Company in Indian and British public spheres. The chapter concludes with an examination of how aware officials in

⁷¹¹ Berman and Hirschman, 'The Sociology of Quantification: Where Are We Now?', *Contemporary Sociology*, 2. They note that "the sociology of quantification is still very far from having general claims or a common theoretical language"; Espeland and Sauder, whose most recent work studies the impact of academic league tables on universities, students and employers, also comment on the lack of work in this field. Espeland and Sauder, *Engines of Anxiety: Academic Rankings, Reputation, and Accountability*, 19-38.

⁷¹² Burke, *A Social History of Knowledge II*, 11.

India were of the mounting pressure from evangelicals in Britain who were campaigning, petitioning Parliament and challenging the East India Company's leadership to eradicate the custom.

The production of an official fact

The speed with which the East India Company state generated a statistical total for widow-burnings certainly contrasts with some of its other statistical activities. Most notoriously, as the historian Peter Gottschalk has described recently, the All-India census took seventy years to accomplish. Early attempts to count the population of India began in 1801, with some short-lived and highly localised surveys of smaller cities.⁷¹³ These provided numerical snapshots of the Indian population in a few arbitrary locations, but the full resources of the colonial state were not directed towards a census until 1871. The early surveys show that some colonial administrators had demographic intentions, but the state appeared to lack the resources, or capabilities to perform large-scale population counts until much later in the century. The East India Company state was small, employing very few civil servants, and India was not yet the statistical power-house that it later became. Collecting data about widow-burning from the whole of British India in 1815 was therefore an ambitious undertaking.

In devising Form 7, Turnbull clearly expected officials to be able to act uniformly, but whether this was possible was not obvious. Colonial government at the periphery of empire was not a well-oiled machine. The historian Jon E. Wilson has demonstrated in a number of works that whilst central administrators created "a world of letters, ledgers and account books that had its own pristine order... [and] paperwork created new centres of British power, whether in Calcutta, Bombay, Madras or London",⁷¹⁴ British magistrates in remote parts of Bengal did not follow the dictates of central administrators. Many did not even cut the pages to open the complex legal digests that they were sent by their superiors.⁷¹⁵ With little time or inclination to process new knowledge, magistrates in remote districts left many of the legal instructions issued by the central courts unread and instead trusted their intuitions when they made

⁷¹³ In Bengal there were city surveys of Bardwan, Allahabad, Murshibad, Dacca and Benares (1801-1832). Gottschalk, *Religion, Science, and Empire*, 189.

⁷¹⁴ Jon E. Wilson, *India Conquered: Britain's Raj and the Chaos of Empire* (Simon & Schuster, 2016), 128.

⁷¹⁵ Wilson, *The Domination of Strangers*, 83.

decisions.⁷¹⁶ Low-level officials did not read many of the documents they were given, but were they more easily directed when required to count and produce statistical data?

The East India Company's decision to count every widow-burning in British India is therefore puzzling, not least because it was highly successful. By 1817 the central court in Calcutta was discussing "detailed and abstracted" data about widow-burning collected across Bengal in 1815 and 1816. Equivalent datasets were produced shortly afterwards by the Bombay and Fort St George presidencies. The successful production of annual widow-burning statistics challenges our understanding of the early nineteenth-century, colonial state. It raises many questions, not least how and why the Company was able and willing to mobilise resources to understand this particular issue statistically.

To consider these questions I begin by looking at the pre-conditions that made this undertaking possible, before examining the work that was undertaken to implement the government's demand for a complete count of the widow-burning population.

Butterworth Bayley first proposed collecting official data on widow-burning in 1805, and for the remainder of his time in India he remained doggedly interested in the question of how many widows burnt each year. For twenty-five years Bayley theorised, oversaw and shaped British policy on this issue. He wrote the first draft of the regulation in 1805, he oversaw the introduction of the statistical regime in 1815 and, as he recollected in London when he was Chairman of the East India Company, he "himself framed the law by which suttee was abolished" in 1829.⁷¹⁷ In each evolution of British policy Bayley retained a commitment to the production of statistics. He was such a powerful force that the development of his interest in widow-burning and his commitment to data must be seen as fundamental pre-conditions for the successful production of official facts.

An old Etonian, Bayley was born into one of Manchester's most prominent dissenting families. He was no cultural relativist. As a student at Fort William College Bayley became a strong supporter of missions,⁷¹⁸ and in college debates he opposed the

⁷¹⁶ Wilson, *The Domination of Strangers*.

⁷¹⁷ *The Times*, March 19, 1840.

⁷¹⁸ Philip Carter, 'Bayley, Thomas Butterworth (1744–1802)', *Oxford Dictionary of National Biography* (updated 2004) <<http://www.oxforddnb.com/view/article/1756>, accessed 29 April 2017>.

motion that ‘Asiatics were capable of as high degree of civilisation as Europeans’.⁷¹⁹ Widow-burning particularly repulsed him; he thought it was “horrid and revolting... [and] should be prohibited and entirely abolished.”⁷²⁰ Although Bayley spent a significant part of his adult life organising empirical studies of widow-burning, his desire to abolish the practice was clear in 1801 when he was still a young student, before any official or unofficial numerical data had been gathered. His desire to eradicate the custom was fundamentally an ethical and cultural judgement.

Bayley’s interest in statistics was shaped at Fort William College. Students were actively involved in the production of the survey of widow-burnings for their Vice-Provost, Claudius Buchanan, helping to collate the returns and critique the results. A gifted linguist,⁷²¹ Bayley was William Carey’s most promising student and the two became close, maintaining their friendship and evangelical ties long after Bayley graduated.⁷²² Carey managed the team who gathered widow-burning data from villages around Calcutta. Bayley was a student in 1802 when the survey was established, he graduated in 1803 while it was producing its first results and was working as an assistant in the Governor-General’s office nearby when the survey in 1804 produced a set of figures that seemed to prove conclusively that widow-burning was a prevalent practice. In itself this was a profound learning experience, but what happened to the widow-burning data collected at Fort William College also powerfully demonstrated the persuasive power of statistics. Bayley and his fellow students saw the data they had helped to produce become the subject of intense scrutiny and debate within the Company, in the British Parliament and across the evangelical world.

In 1805, a year out of college, Bayley was asked to draft a new policy on widow-burning by Richard Wellesley, the Governor-General. Committed to the principle of ending the practice, but also strongly conservative and opposed to reforms that would jeopardise British political authority, Bayley thought that the key challenge was to determine how abolition might practicably be achieved without upsetting Hindu religious opinion. From the outset he saw sociological knowledge as an effective tool for the government to manage and ultimately end widow-burnings. In his report to Wellesley he argued that geographical variations in the prevalence of widow-burning

⁷¹⁹ *Essays by the Students of the College of Fort William, 1801*, vi.

⁷²⁰ PP 18 (749), at 27.

⁷²¹ Bayley won prizes in Hindustani and Persian, and was top student in Bengali. *Essays by the Students of the College of Fort William, 1802*, ix.

⁷²² Smith, *The Life of William Carey, D. D.*, 233; Potts, *British Baptist Missionaries in India*, 156.

demonstrated that in parts of India “more rational opinions are prevalent”.⁷²³ Bayley believed that with better knowledge, they could govern more effectively:

After information has been obtained of the extent to which the practice is found to prevail, and of the districts in which it has fallen into disuse, or in which it is discountenanced by the principal and most respectable classes of Hindoo inhabitants, it may be immediately abolished in particular districts, and be checked and ultimately prohibited in the other parts of these provinces.⁷²⁴

Understanding where widow-burnings did *not* occur would enable the authorities to identify where the more ‘rational’ Indians lived. The government would be able to target geographically the introduction of regulations and thus more effectively drive out barbaric pagan practices. Bayley believed that a new rational statistical regime could deliver social and religious reform discretely, without violent repercussions.

When Wellesley was recalled to London later that year, Bayley’s proposed regulations were shelved,⁷²⁵ but he remained committed to his original plan. In 1810 Bayley became a judge in Burdwan, a city 85km north west of Calcutta in West Bengal. He used his new position to establish a small pilot project, organising two complete counts of widow-burnings in his district for several months in 1811-12 and 1812-13. These studies produced the first state sponsored data on the practice. For each funeral, officials collected the widow’s name, her age, the number of children, and her husband’s caste.⁷²⁶ Bayley reported the results in a letter to Montague Turnbull, the Register of the central law courts, stressing the official status of his findings: “I find by official returns that not less than 114 women have burnt themselves... in this district.”⁷²⁷ Like the earlier college surveys Bayley’s data suggested the custom was widely prevalent. In a few months he had counted many more widow-burnings than British travellers, traders and colonial officials had witnessed in several centuries of engagement with India.

⁷²³ PP 18 (749), at 27.

⁷²⁴ PP 18 (749), at 28.

⁷²⁵ A wide range of explanations have been offered for the East India Company’s ‘failure’ to regulate or ban widow-burning in 1805. Wellesley’s return to Britain, the uprising in Vellore and British colonial indifference to the plight of Indian women are the most popular.

⁷²⁶ *The Baptist Magazine* (J. Burditt and W. Button, 1813), 155-6.

⁷²⁷ PP 18 (749), at 37.

Bayley's experiences in Burdwan also further developed his beliefs that his regulations would have the effect of "restraining and diminishing the frequency of this inhuman sacrifice".⁷²⁸ He argued that the results in this district demonstrated that once Hindus recognised that the widow's free-will mattered to British authorities, Brahmins and male family members would be less willing to force widows to burn. Like Mughal rulers, Bayley had come to believe that if widows were required to register they could be dissuaded from dying with their husbands.⁷²⁹ Bayley claimed that five widow-burnings had been prevented since he issued his instructions. He made an uncharacteristically emotive appeal internally within the Company for the continued regulation of widow-burning, explaining that he would feel "deep regret" if the courts in Burdwan overturned his instructions after his departure.⁷³⁰

Bayley was convinced that he had developed a policy that would both cause and demonstrate its own success. His proposal attracted support within legal and evangelical circles. John Harrington, a prominent evangelical and senior judge, forwarded Bayley's findings to Sir George Nugent, the Vice President of Bengal, and the data collected in Burdwan was passed to William Carey, who sent it to England. The figures were published as a small, unattributed statistical table in the *Baptist Magazine* in April 1813,⁷³¹ where it attracted the attention of Claudius Buchanan. In a public letter sent on 25 May to the Court of Directors, which was also published by Parliament, Buchanan drew attention to the new widow-burning survey.⁷³² He summarised the findings: "seventy females had burned themselves in the months of May and June last, leaving 184 orphans."⁷³³ However, this data from Burdwan, published anonymously in the Baptist press, without any description of its methods or official status, received little further attention in Britain.

In 1805 Bayley's proposals to regulate and count widow-burnings had not been adopted. As a young, junior administrator his influence depended upon the patronage of Wellesley, who left India before the regulations could be introduced. Ten years later Bayley had acquired real administrative power. In 1814 he was appointed secretary to the revenue and judicial departments of the government of Bengal, one of the most

⁷²⁸ PP 18 (749), at 37.

⁷²⁹ Mughal attempts to reduce the number of burnings were well-known to Europeans. See Chapter 1, p33

⁷³⁰ PP 18 (749), at 37.

⁷³¹ *The Baptist Magazine*, 155-6.

⁷³² (1813), 'Imolations on the Funeral Pile in May and June, 1812', *The Baptist Magazine*.

⁷³³ PP 10 (331).

senior civil servant posts in British India. Bayley did not rise alone; he was part of a generation of former students of Fort William College, who formed a formidable network.⁷³⁴ Montague Turnbull, the Register who introduced Form 7, had followed an almost identical track to Bayley at the college. Also a prize-winning student of William Carey's, Turnbull was at the college for all three years of the widow-burning surveys. Many of the other administrators, who helped implement the new statistical policy, had known each other as students. William Chaplin, who was largely responsible for the data produced in Bombay, had graduated with Bayley. Like him a talented linguist, they attended the same classes. Henry Shakespear, who became a leading legal administrator, graduated with Turnbull. Walter Ewer who became Bengal's superintendent of police in 1817 graduated a year later in 1806. Whilst many of its graduates were lazy and second-rate, Bayley's colleagues and friends were the elite, prize-winning students who by 1815 occupied powerful positions shaping the central administration of the East India Company state.⁷³⁵

Fort William College thus played a crucial role as an incubator for the successful collection of social statistics in 1815. A network of former students saw widow-burning as a prevalent social problem that needed reform. The college surveys had provided them with practical experience of the collection and political use of data, which Bayley had developed further in his later trials. When widow-burning regulations were finally introduced in 1815, there had been four previous surveys of the practice, and Bayley had been involved in all of them. As a provincial judge he had established that reliable data could be produced if magistrates and police were organised effectively, and more importantly he had become deeply committed to the policy of regulation seeing it as the means to end widow-burning.

There was also support in London for more information about the custom. Unofficial widow-burning statistics had been strongly challenged in the furious debates leading up to the new Charter Act of 1813. As a result some evangelicals concluded that their case could be made more effectively with official statistics. In March 1812, Claudius Buchanan wrote to Zachary Macaulay, arguing that the best way to prove or disprove his survey's findings would be "the government instituting a public and

⁷³⁴ David Kopf, *British Orientalism and the Bengal Renaissance. The Dynamics of Indian Modernization, 1773-1835* (Berkeley: University of California Press, 1969), 67-126.

⁷³⁵ For lists of prizewinners see *The College of Fort William in Bengal; Essays by the Students of the College of Fort William, 1801; Essays by the Students of the College of Fort William, 1802*; for their subsequent careers see Doss and Prinsep, *A General Register*.

official investigation of the same kind”.⁷³⁶ In London and Calcutta influential figures now recognized that the small unofficial survey produced at Fort William College provided a model for a new kind of governmentality.

To organise a complete count of widow-burnings in British India, Bayley and Turnbull would need to build an effective statistical bureaucracy. However, this did not require them to develop any new bureaucratic methods, as the East India Company had well-established, robust procedures for data-collection. The Company already enforced standardised approaches for answering letters and writing reports. Strict guidelines were in place, which were familiar to all employees who kept written records. These were designed to turn handwritten records into a paper database. All records were carefully numbered, catalogued and classified. Clerks were required to draw vertical lines down each page to create a wide left-hand margin, which could be filled with meta-data - subtitles, attributions and notes - turning lengthy reports compiled by multiple officials into retrievable data.⁷³⁷

As well as standardised reports magistrates were already required to produce a great deal of structured data. The central court in Calcutta demanded that provincial courts produce tabulated lists of data about a wide range of topics such as the names of prisoners on remand, the crimes reported to magistrates, and crimes “of an heinous nature”. In 1815 such tabulated data made up approximately a quarter of a standard month’s judicial correspondence.⁷³⁸ Information was handwritten in pen, using red ink for lines and black for data. There were two principal kinds of structured tabular data: detailed lists, listing individual cases over many pages, plus one-page numerical overviews, known as ‘abstracts’.

To create structured data about widow-burning Turnbull and Bayley simply further standardised these existing procedures. Bayley had established whilst a judge in Burdwan, that if given clear commands magistrates and police officers could supply reliable and consistent information. Now he aimed to scale up the study to cover the whole of British India. To produce good statistics, uniformity would need to be

⁷³⁶ Buchanan letter to Zachary Macaulay, March 1812 in Pearson, *Memoirs of the Life and Writings of the Rev. Claudius Buchanan, D. D. : Late Vice-Provost of the College of Fort William, in Bengal*, 457.

⁷³⁷ Ogborn, *Indian Ink : Script and Print in the Making of the English East India Company*, 67-103; Bowen, *The Business of Empire*, 151-81.

⁷³⁸ IOR/P/131/56.

rigorously enforced. With Form 7 Turnbull supplied magistrates with a precise template for a summary of the data he wanted them to collect annually. He even specified the title of the report, with blank spaces to be filled in. Magistrates were required to return an 'Annual Report on the number of Hindoo women who have burnt themselves on the funeral piles of their husbands, in city... during the year....'.⁷³⁹

The pre-conditions were favourable. Influential administrators were committed to the problem, they planned to use procedures that were familiar and easy to follow, and they had conducted a number of successful pilot studies over a thirteen-year period. In the following section we shall explore whether or not Bayley and Turnbull had over-estimated the bureaucratic capabilities of the Bengal judicial system.

A total count of widow-burning in British India was a large-scale undertaking. Over fifteen years thousands of women were interviewed by large numbers of police officers, magistrates and senior officials. The new regulations reconfigured how people worked and behaved right across India. The procedures imposed by British authorities to gather widow-burning data established new kinds of work, new responsibilities and new forms of compliance.

The fundamental source of information was the widow and her family. The system of registration was never compulsory; widows were expected to co-operate with the British government. Prior to the introduction of regulations, very few Britons in positions of authority encountered the practice. Indian families contacted the British authorities only if they needed permission to build a pyre in a particular location or if a Briton was closely acquainted with the deceased. Occasionally families had to deal with the interference of Britons who stumbled across a funeral. These encounters could be aggressive, especially when the Britons were missionaries.

The regulations introduced a form of pre-death certification that was highly unusual for British officials, but familiar to Indians who had lived in Mughal controlled areas of India. Widows registered their intent to die and were then expected to submit to a cross-examination by a British magistrate to check that they met a number of qualifying conditions before the funeral could take place. No information survives about how these interviews were practically conducted. Answers were recorded in English, so the

⁷³⁹ PP 18 (749), at 44.

interviews must have provided some additional work for translators.⁷⁴⁰ Widows were asked to provide their age, name and caste; the name and caste of their husbands; the date they planned to die and the location where the funeral would be held. The widow was required to reveal whether she was pregnant or had any young dependent children; and to prove that she wanted to die and was not being coerced. Many women co-operated fully with these requests, as they had similarly submitted to cross-examination under Mughal rule. Between 1815 and 1830 well over 8000 women attended such interviews, often with relatives.⁷⁴¹ Without this co-operation the statistics could not have been generated.

The British were terrified of inflaming public opinion, so instead of publicising the new regulations directly to Indian families, the police were charged with approaching the newly widowed and arranging interviews. A new system of policing had been established in 1793. Direct employees of the Company, police officers, known as *darogas*, were recruited locally. Managed by the local British magistrate, officers were responsible for an area about twenty miles square, which they policed by employing between twenty and fifty constables.⁷⁴²

Montague Turnbull produced clear instructions for the police in Bengal to standardise how they dealt with widow-burnings. These were translated into Persian, Bengali and Hindustani, then printed and distributed to the 500 *darogas* in Bengal. Officers were given a summary of the new regulations and an operations' manual, which outlined the practical measures that they were expected to take. The manual stressed the need for vigilance and for speed. A death could occur at any time and police needed to move quickly. Police were advised that they should seek the "earliest information" and take "immediate measures" to meet the widow and arrange for her to be brought to the magistrate.⁷⁴³

There is no evidence that widows or their families in any way tried systematically to evade interviews, but it is of course likely that many funerals remained unrecorded,

⁷⁴⁰ Spivak memorably wrote about magistrates mis-transcribing Indian names during these interviews. She did not refer to the role local translators must have played in the transcription of family data about the widows onto official forms. Spivak, 'Can the Subaltern Speak? Speculations on Widow Sacrifice', in *Colonial Discourse and Post-Colonial Theory: A Reader*.

⁷⁴¹ It is possible to give a total for the number of recorded deaths but not for the total number of interviews which is higher.

⁷⁴² Robb, 'The Ordering of Rural India: The Policing of Nineteenth Century Bengal and Bihar', in *Policing the Empire : Government, Authority and Control, 1830-1940*, 127-30.

⁷⁴³ PP 18 (749), at 31-37.

invisible to police surveillance. Certainly, British authorities worried greatly that the information the police gathered was incomplete. From 1817 they considered introducing regulations to compel widows to register with the police; but fears that this would be counter-productive and provoke protests always held them back. In Bengal, especially, they were aware that they were dependent upon a police force that had a poor reputation. Police were badly paid, there was a large turnover of staff and recruitment was difficult. Officers had a reputation with their colonial masters for being unfit and slow to act.⁷⁴⁴ Worries about police competence surfaced continually. Form 7s were submitted with qualifications that many funerals took place without a police presence.⁷⁴⁵ Senior administrators complained that magistrates had not been “sufficiently explicit” about “whether or not police officers were present”.⁷⁴⁶ Aware of these concerns some magistrates submitted their annual data with reassurances that “Police officers were present in every instance”.⁷⁴⁷

Initially Turnbull and Bayley hoped that the police would compile the raw information about widow-burnings themselves. On 29 April 1813 police officers were instructed by Montague Turnbull “to insert in their monthly reports every instance of a suttee taking place within their respective *thannahs*”.⁷⁴⁸ This directive failed to produce an adequate supply of data and there are no published statistics for 1813 or 1814, so in January 1815 Turnbull revised the instructions, issuing Form 7 to make British magistrates responsible for recording the funerals where widow-burnings took place.

Whilst the Indian police were required to act speedily, British oversight was conducted at a more leisurely pace. Widows had to make appointments to see magistrates, where they were asked to supply a date when they proposed to die. On the appointed day police officers, and occasionally magistrates, attended the funeral to assure compliance. Magistrates kept records and submitted their annual returns by April each year, using the templates supplied by the court.

Form 7 structured the collection of data, but it also restructured the behaviour of widows, magistrates and police at the local level. Before the regulations were introduced, British magistrates had dealt with widow-burning in an ad hoc manner,

⁷⁴⁴ Robb, 'The Ordering of Rural India: The Policing of Nineteenth Century Bengal and Bihar', in *Policing the Empire: Government, Authority and Control, 1830-1940*, 128.

⁷⁴⁵ PP 20 (354), at 125.

⁷⁴⁶ PP 24 (518), at 146.

⁷⁴⁷ PP 28 (178), at 26.

⁷⁴⁸ PP 18 (749), at 37.

processing a small number of cases, as and when they arrived. Since no obligation had been placed on widows or their families to report burnings, few magistrates encountered the practice, and they only recorded it and passed on knowledge about it if they wanted guidance from higher authorities. The collection of data turned a sporadic, unstructured, decentralised, rare encounter into a regular, managed, structured, bureaucratic process.

The procedures were designed to be easy to follow and they were effective. Magistrates across Bengal followed them diligently, creating a remarkably consistent, homogenous data set. The least structured, most heterogeneous data was produced in the ‘remarks’ column, where magistrates could record their thoughts about individual cases. Magistrates in districts such as Burdwan and Hooghly, where the practice was most prevalent, wrote fewer and shorter remarks than areas such as Jessore, Dacca and Saran, where it was infrequent. As the new procedures became more routine, magistrates only remarked on the most exceptional aspects of cases. The regular registration of widows established certain widow-burnings as normal and others as outliers; those that conformed to the standard type could pass without comment.

Magistrates were told that the regulations required their “utmost attention”, whilst being warned to proceed with “circumspection” because the matter was “delicate”.⁷⁴⁹ However, magistrates who failed to enforce regulations precisely as directed were themselves treated with very little delicacy. They could be investigated by the state and disciplined. In April 1817 William Blunt, Acting Superintendent of Police in the Lower Provinces of Bengal, was asked to investigate the facts of a case that occurred within the jurisdiction of Joseph Sage, magistrate of Backergunge. Sage had permitted the funeral of girl who was under the age sanctioned by the regulations. Butterworth Bayley wrote to Sage personally, issuing a strong reprimand:

It is a matter of astonishment that you should have considered yourself warranted in acting officially... in a mode entirely at variance with the ordinary and regular course of official proceedings.⁷⁵⁰

Magistrates were left in no doubt that they were required to act exactly as instructed. Warned that the Governor-General was deeply displeased, Joseph Sage could do little

⁷⁴⁹ PP 18 (749), at 37.

⁷⁵⁰ PP 18 (749), at 53.

more than apologise and indicate that he felt “deep concern and regret” for his behaviour.⁷⁵¹ The full weight of the East India Company command structure was deployed to ensure that magistrates acted in a unified and consistent manner.

No instructions were issued about how to handle the emotions generated by these encounters. Few British officials had witnessed a widow-burning before the regulations were introduced. Now it had become a standard part of the job. There are few records about they felt about this new task. Most magistrates across Bengal, whatever they felt in private, strove for a calm bureaucratic detachment in their written notes. Unlike missionaries they buried their feelings, adopting a tone of studied neutrality even when discussing the funerals that they attended. Only a few, such as Robert Bird, who was a magistrate of Gazeepore,⁷⁵² felt able to record more complex feelings in official reports:

If it were desired to portray a scene which should thrill with horror every heart, not entirely dead to the touch of human sympathy, it would suffice to describe a father, regardless of the affection of his tender child... with tearless eye leading her forth...to the assembled multitude, who with barbarous cries demand the sacrifice, and unrelentingly delivering up the unconscious and unresisting victim to an untimely death, accompanied by the most cruel tortures., But this is not the place to make pictures but to state facts.⁷⁵³

Junior officials were encountering many more funerals than their predecessors and expected to professionalise their responses. Bolt, like other magistrates, understood that the collection of facts was meant to be an affectless activity. He was expected to regulate his responses, suppress any horror he felt and strive to approach the custom in a calm rational manner. But as his letter indicates, magistrates were not simply filling in forms. Many magistrates witnessed the burnings that they recorded and some of them found this horrific.

From 1815 a new regular timetable was established for British discussions and policy-making about widow-burning. It took five months for all the data compiled on Form 7s to reach the central court in Calcutta. The administration of judicial information was handled by the clerks in the Register’s office. In June they presented an

⁷⁵¹ PP 18 (749), at 54.

⁷⁵² Doss and Prinsep, *A General Register*, 32.

⁷⁵³ PP 18 (749), at 136.

overview of the data to senior judges in the court for analysis. The overview was presented in two tables. Tabulated 'detailed statements' listed every widow-burning that year in the Presidency. The detailed statements were followed by a numerical abstract, with total figures for each division and for the presidency as a whole.

A B S T R A C T.				A B S T R A C T.			
Zillahs or Cities.	N ^o of Sutees.	Zillahs or Cities.	N ^o of Sutees.	Zillahs or Cities.	N ^o of Sutees.	Zillahs or Cities.	N ^o of Sutees.
DIVISION OF CALCUTTA :		DIVISION OF DACCA :		DIVISION OF MOORSHEDABAD :		DIVISION OF PATNA :	
Bardwan - - -	50	Bakergunge - - -	1	Beerbhoom - - -	1	Behar - - -	-
Chinsurah and Chaudernagore - - -	-	Chittagong - - -	5	Bhaugulpore - - -	3	City of Patna - - -	2
Cuttack and Balasore - - -	9	City of Dacca - - -	4	Dinagore - - -	1	Ramghur - - -	2
Hooghley - - -	73	Dacca Jelalpoore - - -	1	City Moorsheedabad - - -	3	Sarun - - -	12
Jessore - - -	7	Mymensingh - - -	-	Purneah - - -	2	Shahabad - - -	4
Jungle Mehals - - -	34	Sylhet - - -	-	Rangpore - - -	1	Tirhoot - - -	-
Midnapore - - -	4	Tipperah - - -	20	Rajshahye - - -	-	-	-
Nuddeah - - -	50	-	-	-	-	-	-
Suburis of Calcutta - - -	25	-	-	-	-	-	-
24 Pergunnahs - - -	2	-	-	-	-	-	-
Total - - -	253	Total - - -	31	Total - - -	11	Total - - -	20
						DIVISION OF BENARES :	
						DIVISION OF BAREILLY :	
						Allahabad - - -	3
						City Benares - - -	13
						Bundelcund - - -	7
						Goruckpore - - -	14
						Ghazeepore - - -	8
						Juanpore - - -	1
						Mirzapore - - -	2
						Agrah - - -	-
						Allyghur - - -	-
						Bareilly (Zillah) - - -	2
						Cawnpore - - -	5
						Etawah - - -	4
						Furruckabad - - -	1
						Moradabad - - -	3
						Seharunpore, S. D. - - -	-
						Seharunpore, N. D. - - -	-
						Total - - -	48
						Total - - -	15
TOTAL OF SIX DIVISIONS - - - - -				- 378			

(Copy-)
(signed) M. H. Turnbull, reg^r.

Fig. 5b: 1815 Bengal widow-burnings, tabulated by East India Company Divisions, reproduced in PP 18 (749), 81

At the end the Register signed the abstract, establishing with his signature that this was official data authorised by his office.

The production of data began to influence strongly *when* decisions about policy were made by senior administrators in India. The availability of a second year's set of widow-burning statistics triggered the first senior-level discussions. A formal review of the widow-burning policy by the Register and senior judges took place on 25 June, 1817. Before this date senior officials, like magistrates, discussed widow-burning sporadically, when a specific issue needed their attention. But once the regular publication of new data was established, this pattern of annual policy reviews was repeated with similar meetings on 4 June, 1818 and 21 May, 1819. Collated in the spring, analysed in mid-summer, the production of widow-burning data was establishing a decision-making timetable for policy makers.

Like magistrates, senior officials aimed to have calm and detached reviews of the policy. For the first review of the policy in June, 1817, a comparative table was produced, which showed that there had been a rise in the number of widow-burnings.

				<u>1815.</u>			<u>1816.</u>
Calcutta Division	-	-	-	253	-	-	289
Dacca - ditto	-	-	-	31	-	-	24
Moorshedabad ditto	-	-	-	11	-	-	22
Patna - ditto	-	-	-	20	-	-	29
Benares ditto	-	-	-	48	-	-	65
Bareilly ditto	-	-	-	15	-	-	13
				<u>378</u>			<u>442</u>

Fig. 5c: The first comparative table was produced in June 1817, PP 18 (749), 101

At this review there was no discussion about the rising numbers. Indeed, senior officials were more worried that the numbers were too low. They were certainly a tiny fraction of what had been estimated. It had been predicted that 10,000 women burnt in Bengal alone, but the first official data suggested that the practice was far less prevalent than feared. Discussions in 1817 focussed principally on improving the quality of the data. Senior administrators questioned whether the police were being vigilant or acting quickly enough. They discussed compelling families to report widow-burning, but this was rejected and informing the state remained voluntary. However, some procedures were tightened. The need for discipline was emphasised. Magistrates were told that they should be more “careful” and that they must “adhere strictly in future to the orders which have been issued”.⁷⁵⁴ Form 7 was amended so that the central courts could track how quickly funerals took place, but Montague Turnbull kept the bureaucratic task simple, reducing the number of columns.

NAME.	Age.	Cast.	Name and Cast of her Husband.	Date of Burning.	In what Police Jurisdiction.	REMARKS.

⁷⁵⁴ PP 18 (749), at 102.

Name and Cast of the Widow.	Her Age.	Name and Cast of her Husband.	Date of Husband's Death.	Date of Suttee.	REMARKS.

*Fig. 5d: Iterative changes to 'Form 7'.
Top as first issued, below as amended in 1817,
PP 18 (749), 44, 132*

All changes to the data collection process were deliberated carefully and procedures were only changed occasionally. Form 7 was only amended once more, in 1824, because a new Register, John Reid, realised that new instructions asking magistrates to identify the background of deceased husbands had created bureaucratic confusion the year before. Some magistrates had created a new column for occupation, others had put the information in 'remarks'. Calling for "uniformity" Reid added a new fifth column designated "Profession and Circumstances of the Husband."⁷⁵⁵

The procedures for processing and interpreting the widow-burning data once it had been collected also evolved slowly. Turnover of staff at the centre of the administration in Bengal was low, and this ensured a consistent approach. The Register's office, which managed the production of judicial statistics, attracted able staff, who recognised that working in this office was a stepping stone to the most senior administrative roles. In the early years of the widow-burning statistics the Registry was run by former prize-winners from Fort William College. Later Registers were all high-flying graduates of the East India College at Haileybury and had been taught by Malthus. The first of these, Paul Marriot Wynch was a "highly distinguished" prizewinning graduate in 1810.⁷⁵⁶ He was placed in charge of preparing reports in 1816, having been an assistant to Turnbull since 1812. Wynch made no significant alterations to the presentation of the data. The first real changes were introduced in 1823 by a new team of Haileybury graduates, William Hay McNaghten and John Fleming Martin, who re-designed the format of reports, to highlight widow-burning trends in each division of Bengal over the previous

⁷⁵⁵ PP 24 (518), at 147.

⁷⁵⁶ *The Christian Observer for the Year 1810* (London: J. Hatchard, 1811), 800.

five years. These slow iterative changes helped the Company to produce a highly robust and comparable set of statistics from 1815-1830.

With the assistance of thousands of participants Butterworth Bayley and Montague Turnbull had successfully established an information gathering regime in Bengal that could produce consistent official data about widow-burning year after year. The unusual bureaucratic arrangements requiring widows to pre-register their deaths produced data efficiently but would later become controversial, as the policy effectively created a new form of state-sanctioned suicide. However, as an information system it worked as intended.

The new procedures had produced new information, new kinds of encounters and new ways of thinking and acting. Officials at all levels in these early years strove for a spirit of rational detachment. The horrors involved in attending multiple burnings was kept private. In public, and especially in written reports, a detached emotion-less pose was relatively easy to maintain, particularly while the organisation was focussed on methodologies and not results. However, this period when officials could adjust their data collection procedures, and worry that figures were too low, was short-lived. The institutional focus soon turned to statistical trends, which would generate new fears and doubts.

Upward trends & rising panic

At the end of 1817 the total number of recorded burnings in Bengal was 707, up from 442 the year before. In 1818 the annual total rose again for the fourth year running to 839. Although still far lower than the estimates produced a decade earlier, the rising total was plain to see. The numbers of widow-burnings recorded by the state in Bengal more than doubled between 1815 and 1818.

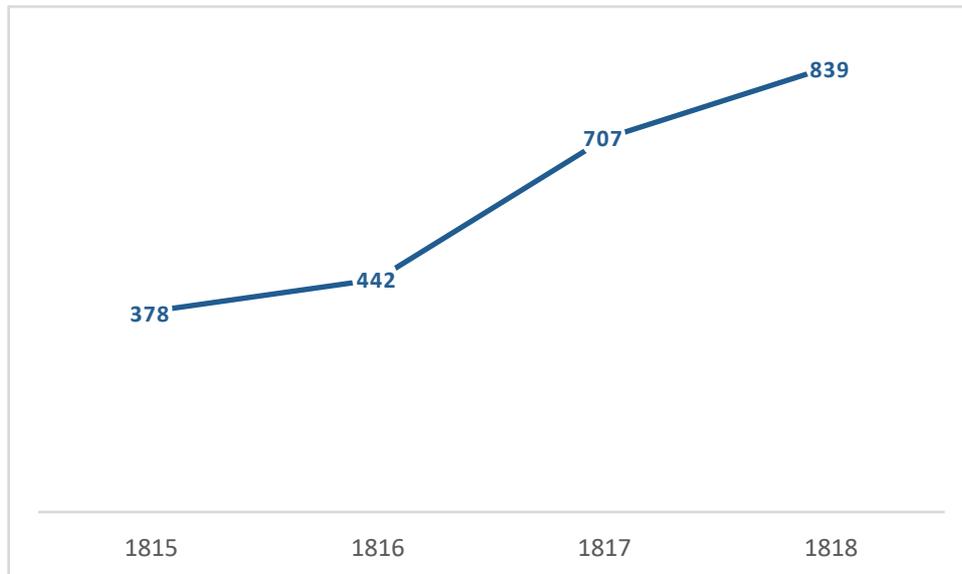


Fig. 5e: Graph showing numbers of widow-burnings in Bengal 1815-1818

Discussions at the senior level in Calcutta switched away from flaws in the data gathering process to focus on the trends. The new Register, William Dorin could see that the upward trend demanded some kind of explanation. When he published the figures for 1818 in May 1819, he added a new detailed analysis of the data. He admitted his “concern” at the fourth year of rises and posited two explanations: an outbreak of cholera and the extra vigilance of the police. However, Dorin was unable to sidestep more fundamental worries. The rising numbers led him to fear that that the policy itself was the problem. He worried that it was having a “contrary effect” to what was intended, stimulating rather than reducing the number of widow-burnings.⁷⁵⁷ Looking to sugar this bleak pill, Dorin dug further into the data. He produced a small statistical table examining the ages of widows who were burning.

⁷⁵⁷ PP 18 (749), at 221-22.

100 and upwards.	90 and upwards.	80 and upwards.	70 and upwards.	60 and upwards.	50 and upwards.	40 and upwards.	30 and upwards.	20 and upwards.	Under 20	TOTAL.
2	8	44	69	149	126	153	127	122	49	839

Aged 25 and under - - - - - 98.

Fig. 5f: William Dorin's table showing the age distribution of widows who burnt in 1818.
PP 18 (749), 222

Although the overall picture was concerning, William Dorin was hopeful that his superiors might find “some satisfaction” that the vast majority of widows who died were now of adult age.⁷⁵⁸ At least one aspect of the policy, the prohibition on child brides killing themselves, appeared to be working as planned. This news failed to calm Dorin's superiors. Lord Hastings, the Governor-General, made it clear that the “progressive augmentation” of the annual totals was the principal cause for “apprehension”. Hasting's main worry was that the government was effectively sanctioning widow-burning and that this was leading to it being performed with “greater confidence”.⁷⁵⁹

The Register and Governor-General were exhibiting the first symptoms of what the historian Christopher Bayly has called an “information panic” about widow-burning.⁷⁶⁰ Bayly saw these panics as over-reactions. “Horrible as sati was, it was more of a symbolic issue than a major social problem and it must be remembered that fewer than 1000 widows were burned each year during the 1820s according to official figures.”⁷⁶¹ Bayly argued that the panic was the result of a knowledge gap. British officials had acquired general statistical knowledge, but in the shift from traders to governors they had lost touch with Indians and no longer knew the people they governed. It was this lack of knowledge that caused them to panic.

⁷⁵⁸ PP 18 (749), at 222.

⁷⁵⁹ PP 18 (749), at 242.

⁷⁶⁰ Bayly, *Empire and Information*, 165-78.

⁷⁶¹ Bayly, *Indian Society and the Making of the British Empire*, 122.

Bayly is correct that the numbers of widow-burnings were low relative to the total number of deaths in Bengal each year, but numbers of suicides and murders in all cultures are usually relatively small, except during wartime.⁷⁶² When the first annual suicide statistics were produced for Great Britain the figures showed that there were 1,349 suicides in 1857. The relative infrequency of suicide does not negate its importance as an indicator of social problems. Rising suicide rates cause concern whenever they occur, often producing panics about social conditions in prisons, armed forces, factories and universities. Widow-burning, like suicide, had been identified as a social indicator and its numbers were rising sharply. In most bureaucratic cultures this would cause alarm.

Bayly's explanation also has a significant weakness because it denies what senior officials themselves said about their concerns. Both Hastings and Dorin were clear that it was not lack of knowledge, but new knowledge about the increasing numbers that was worrying. This section examines how senior officials thought about and responded to trends in the widow-burning data and asks whether the strong feelings of panic were only the result of distance from or fears of Indians, or whether they were in some way also generated by the data itself.

Butterworth Bayley had made the ongoing collection of widow-burning statistics a key part of the registration policy, so that the Company could analyse trends in the data. He was confident that the trend would be downwards. This was a substantial shift in British thinking about the issue. When Claudius Buchanan and William Carey had surveyed widow-burning around Calcutta a decade earlier they aimed to prove only that the practice still existed. They conducted two surveys only to eradicate methodological errors and unrepresentative factors. Bayley in contrast saw widow-burning as a practice that could be diminished and then eradicated. His policy came with a predicted outcome, moving the British away from an argument about the present or past, towards a conception of the future.⁷⁶³

⁷⁶² See Christian Goeschel, *Suicide in Nazi Germany* (Oxford: Oxford University Press, 2009), for an in depth study of the phenomenon of rising wartime suicide rates.

⁷⁶³ This supports Koselleck's contention that there was at this time a general shift from eschatological conceptions of the future to "the rational forecast" and "the prognosis". Koselleck, *Futures Past : On the Semantics of Historical Time*, 17.

However, the numbers were rising not falling, and Bayley's superiors worried that the policy itself was causing this to happen. Reviewing four years of data in 1819 Lord Hastings, the Governor-General, established two targets. First, he set a trigger: if the numbers continued to rise, the current policy of state-registered suicide would have to end. Second, he set a brake: any new regulations should be held back "until the doubts which now exist in regard to the causes of the increased prevalence of the sacrifice shall be removed".⁷⁶⁴ The statistics were enabling Hastings to manage decision-making about widow-burning in a new way. He was using trends in the data to model and structure future decisions and to set targets.

Lord Hasting's targets were sent to all the superintendents of police in the Western and Lower Provinces. A copy was also sent to the government of Bombay, which distributed it to all the criminal judges and magistrates in that presidency. Across India British officials, at every level, were made aware that the numbers were rising and that this was causing concern at the highest levels of government. Even in the most remote districts, magistrates and police officers were conscious that the Governor-General desired the number of burnings to come down.

Right down the chain of command colonial officials began to worry about the number of widow-burnings in their region. One symptom of this concern was that regional courts started to produce tabulated summaries of the trends in their districts.

Abstract Statement, exhibiting the comparative number of Suttees ascertained by the Magistrates in this Division (exclusive of Cuttack) to have taken place in their several Jurisdictions, during the years 1815, 1816, 1817, and 1818.

ZILLAHS.	1815.	1816.	1817.	1818.
Burdwan	50	67	97	135
Jungle Mehaults	34	39	43	61
Midnapore	4	11	7	22
Jessore	7	13	21	23
Nuddeah	50	56	85	78
Hooghley	72	51	112	141
24 Pergunnahs	2	3	20	31
Suburbs of Calcutta	25	40	39	43
	244	280	424	534

Fig. 5g: An abstract statement produced by the Patna court showing widow-burning trends in their division 1815-1818, PP 18 (749), 218

⁷⁶⁴ PP 18 (749), at 242.

Courts were aware that rising figures in these tables required explanations. Magistrates and judges used the explanatory letters that accompanied their annual census returns as an opportunity to discuss the latest trends. The Register's report summarised these comments, giving the senior judiciary an annual overview of the opinions and explanations of magistrates and judges across Bengal about the trends in their area of jurisdiction. For example in April 1818 James Pattle, a judge at the Provincial Court of Appeal in Calcutta, wrote that he was deeply concerned that the data in his division clearly "exhibits the frequency of these abominable sacrifices, so progressively and materially increased".⁷⁶⁵ He discounted cholera as an explanation, and called for a total ban, arguing that the current British policy was inciting Hindu "jealousy and opposition".⁷⁶⁶ This was controversial and his fellow judges in the division sent a separate letter arguing that they thought cholera, not British policy, was the most likely explanation. Before the statistics were collected, British judges had very rarely discussed widow-burning. The data was producing new kinds of debate and new kinds of disagreements.

Concern about rising trends infected every level of the administration. Magistrates who in the first years of the survey had been "pleased" to submit their annual returns on time worried if their figures now demonstrated an increase. The letters they wrote accompanying their returns were formulaic and the sentiments they expressed were conventional, but it is striking how they were pleased when figures went down and felt "sorry" and "regret" when "this custom is becoming more prevalent".⁷⁶⁷ Magistrates were accepting a degree of responsibility for the statistical trends in their district, apologising for increases and taking a little personal credit when figures came down.

⁷⁶⁵ Doss and Prinsep, *A General Register*, 281-2.

⁷⁶⁶ PP 18 (749), at 218.

⁷⁶⁷ PP 18 (749), at 177.

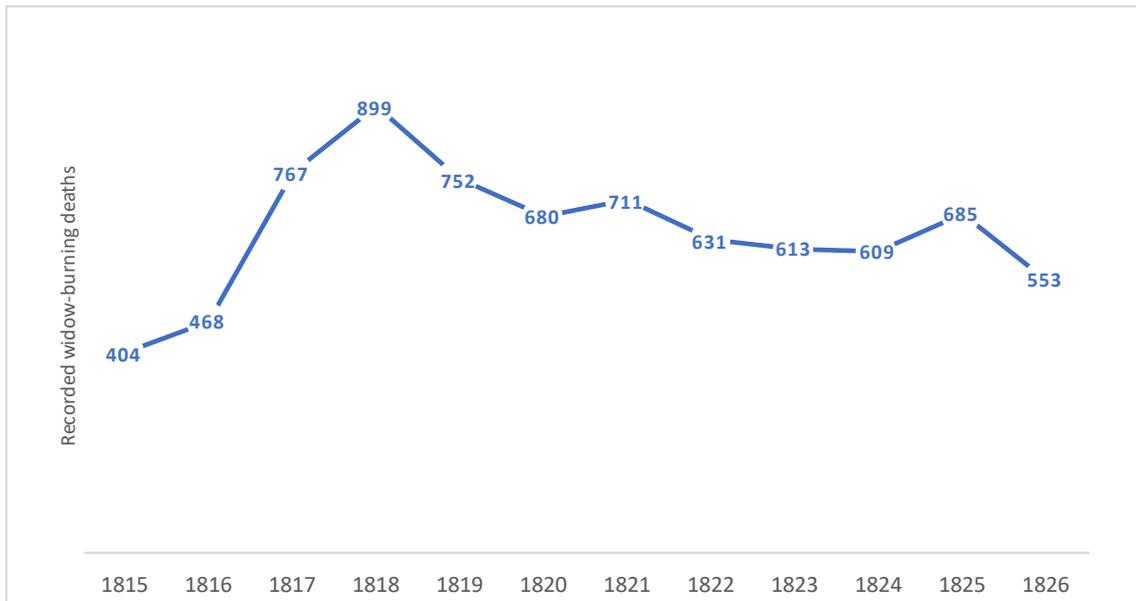


Fig. 5h: Graph of recorded deaths from widow-burning in British India 1815-1826

Senior officials also felt some responsibility for the overall trends. 1819-20 was a period of bureaucratic respite. Numbers of widow-burnings started to drop and the collection of data became a more regular bureaucratic routine. The collective relief was tangible. The good news about widow-burning trends was trumpeted by the Governor-General, who wrote to the Court of Directors as soon as numbers began to fall. “It will be satisfactory to your honourable court to observe the reported decrease in the number of these sacrifices during the year 1819, compared with the returns for the preceding year”.⁷⁶⁸ Similarly a year later the administration reported that “The Governor-General has much satisfaction in remarking, that the number of suttees reported to have taken place during the past year, 1820, is less than the preceding year, and that compared with the number reported in the year 1818, it exhibits a reduction of 242.”⁷⁶⁹ Previous rises, were now confidently attributed to cholera, while the much lower figures of 1815-1816 “would naturally be defective” because the procedures were still being established. Two years of falling figures indicated to senior administrators that the policy was working as planned.

⁷⁶⁸ PP 17 (466), at 6.

⁷⁶⁹ PP 17 (466), at 64.

Numbers now dominated internal Company discussion. This change was noted when the 1823 figures were introduced: “The papers now... contain little more than numerical returns, and the bare opinions of several highly respectable public officers on the general question.”⁷⁷⁰ Other forms of knowledge were displaced. Eyewitness accounts, conversations with religious leaders, orientalist interpretations of Hindu texts and the analysis of historical accounts which had featured prominently in East India Company explanations of widow-burning had by the middle of the 1820s become far less important sources of information. No-one within the Company administration referred to old estimates or to the unofficial statistics produced by Fort William College. The quantity of non-numeric information fell, and the government focussed on official social statistics, in part because the trends were positive.

In this brief, more confident period, senior administrators trumpeted what they saw as good news. In July 1821, looking at the data that had been collected for 1820, Bayley re-affirmed his belief that if the policy was maintained widows “will gradually become disposed to abandon the practice”.⁷⁷¹ The positive trends were encouraging officials to look forward and make positive predictions. Discussions about widow-burning were moving into the future tense.

However, as time went on and more data was collected, the future looked less positive. In 1821 and 1825 the numbers of widow-burnings rose slightly. These trends, little more than a blip statistically, produced some anxiety. Magistrates who submitted increased totals apologised for the “very lamentable increase”. One judge described the figures as a “reproach to our Government”.⁷⁷² Some officials felt obliged to reassure central authorities that the situation was under control. “Police officers were present in every instance” one magistrate commented, as he submitted his higher totals. The new Governor-General wrote to the directors in London about the latest figures. Lord Amherst described himself “feeling as I do, the bitterest disappointment at the sudden increase to the number of suttees in 1825”.⁷⁷³

Bayley wrote a long minute about the 1825 data where he described the figures as “lamentable”. The latest data filled him with uncharacteristic uncertainty and gloom. He had always believed that the policy of registration, plus the collecting and sharing of

⁷⁷⁰ PP 24 (518), at 153.

⁷⁷¹ PP 17 (466), at 65.

⁷⁷² ‘Remarks and orders on the suttee Report and Statement for the year 1825’ PP 28 (178), at 24-32.

⁷⁷³ PP 28 (178), at 133.

information about widow-burning would bring about an end to the horrific practice. Contemplating the new rising figures, Bayley admitted that he had to “cease to indulge the hope” that widow-burnings would be eradicated this way and that he was “unable to discover any satisfactory explanation” for why the practice was rising again.⁷⁷⁴ For the first time he began to consider the need for an outright ban. Rather than increasing the ability of the state to rationally manage and gradually phase-out widow-burnings as he had predicted, the statistics were producing new kinds of uncertainty.

However, these laments were short-lived. In 1826 the figures fell, and Bayley was able to report that “the number of human victims decreased.” Circumstances were again “satisfactory” and, putting aside the doubts of the previous year, Bayley argued that the policy was working as originally planned to prevent and reduce the practice of widow-burning.⁷⁷⁵ Lord Amherst echoed this opinion in his letter to the directors of the Company, writing that the policy was having “the happy effect of a gradual diminution” and could foresee “at no very distant period, the final extinction of the barbarous rite of suttee.” All worries could be put aside because the figures this year were “exceedingly gratifying”.⁷⁷⁶

Feelings within the Company were oscillating as the figures rose or fell. Statisticians now like to remove the effects of unusual and unpredictable factors from their figures. They have developed a battery of techniques, such as rolling averages and standard deviations, which could be applied to these figures to explain whether there was anything to worry about. Indeed, the medium-term trends were remarkably close to Bayley’s original predictions, but in the 1820s British officials had no access to such techniques, and their feelings fluctuated with the figures.

Data collection introduced many regularities into the East India Company’s dealings with widows and their families, but it also exposed officials to a new regular unknown each year – whether that year’s figures would show a rise or fall. At all levels of the Company administrators fixated on this question. When the numbers of burnings fell the organisation was pleased, when the number rose the leadership said it was bitterly disappointed.

⁷⁷⁴ ‘Mr Bayley’s Minute’ PP 28 (178), at 123-5.

⁷⁷⁵ PP 28 (178), at 214.

⁷⁷⁶ PP 28 (178), at 216.

Workers often need to signal that they identify with corporate objectives and saying that something is upsetting can indicate little more than an individual's concern to appear to care about their work. On the other hand, the amount of time an organisation devotes to an issue is a good metric of how much it concerns them. Difficult decisions and issues that are worrying tend to take up more time. Throughout the period under study, widow-burning was a relatively obscure practice that took up little time compared with other issues. However, because the Company collated all its correspondence on the issue, it is possible to quantify the amount of attention given internally to widow-burning from 1787-1828, and to see whether it changed after statistics were introduced.⁷⁷⁷

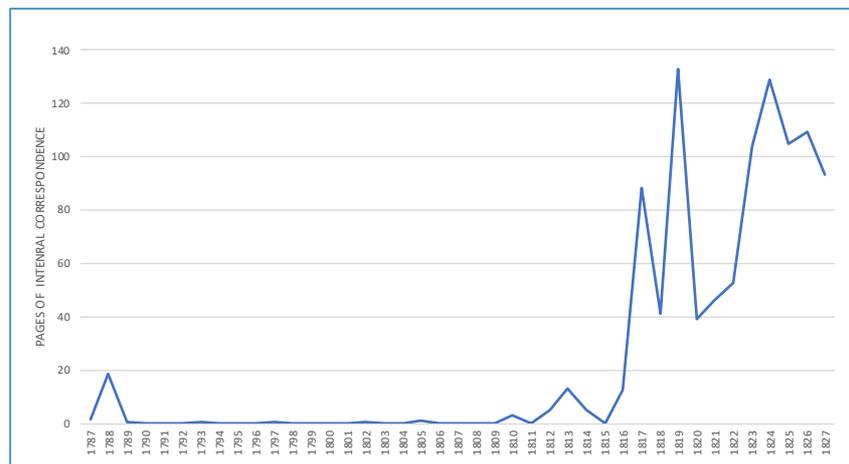


Fig. 5i: Graph of East India Company paperwork on widow-burning 1787-1828. Units: pages of printed correspondence collected in the parliamentary papers

Before 1815, British officials dealt very sporadically with widow-burning. Many years there were no cases complex enough to require written communication. Governmental discussions took two principal forms. Officials discussed individual cases and occasionally reviewed policy positions. These were both sporadic events; many years there were no cases discussed and reviews of policy had occurred only twice, in 1805 and in 1812. Sometimes, as happened in 1788, a particularly complex

⁷⁷⁷ Because Parliament printed its papers on standard sized paper, in a standard font, the published Parliamentary Papers make it possible to quantify the size of paper trails within the East India Company. A word-count, although feasible, would reveal little more.

case could occupy a considerable amount of time, with officials writing lengthy letters as they resolved what needed to be done.

After 1811, as Bayley began planning and implementing the new regulations, the quantity of paperwork started to rise. Administering the regulations, managing the survey and discussing the results produced a great deal of paperwork and led to a huge increase in the amount of time devoted to the topic. It is noticeable that the East India Company directors never remarked on the costs of the time their employees were spending counting widow-burning; they never created a budget or attempted to calculate the costs of administering the regulations. The time government officials spent collecting, collating and analysing this data was an unaccounted bureaucratic cost.

Every year from 1816 onwards produced more internal paperwork than had ever occurred in any of the pre-data years. In part this reflected a general trend in the Company. Internal correspondence was rapidly increasing in length on all topics. Procedures were more demanding and better educated bureaucrats were becoming more verbose. In the 1790s general letters were often only thirty or forty paragraphs long, whilst by the 1830s 100 paragraph letters were common.⁷⁷⁸ However, the increase in correspondence on widow-burning far surpassed this underlying trend. The production of annual widow-burning data from 1815 created a substantial, additional workload, which generated a lengthy paper trail of letters, minutes of meetings, statistical reports and policy reviews.

After statistics were introduced in 1815 the amount of paperwork about widow-burning oscillated wildly from year to year. This data can be compared with the numbers of widow-burnings which were also oscillating, to see if there are any correlations between workloads and the fluctuating numbers of burnings. Did the panic about the numbers translate into more activity?

⁷⁷⁸ Bowen, *The Business of Empire*, 169.

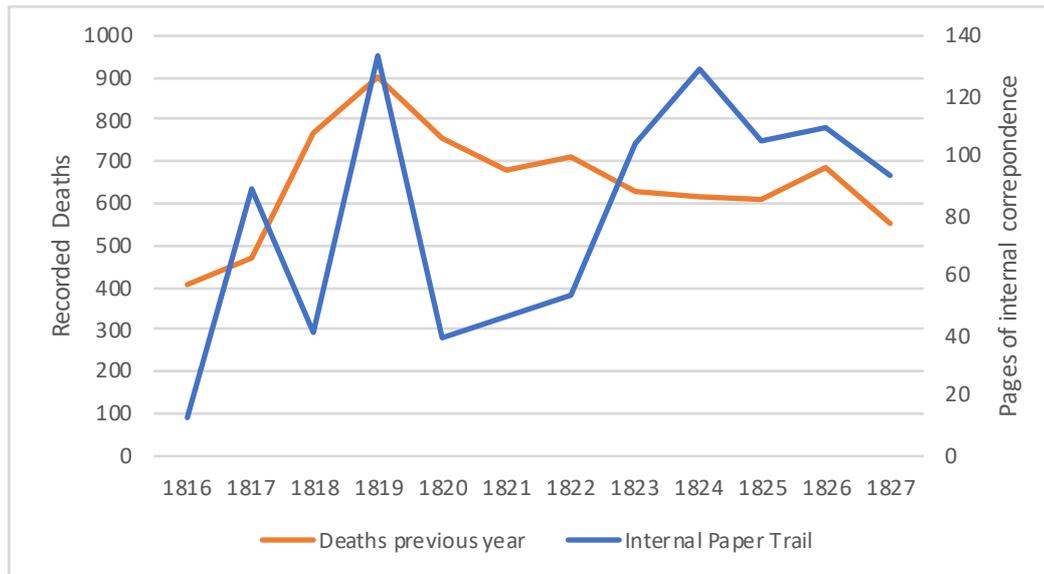


Fig. 5j: Graph showing the numbers of widow-burning deaths and quantities of internal paper work 1816-1827

The first spike in the quantity of discussions and correspondence was in 1817, which was the year that the statistics were first discussed internally. As we have seen discussions at this early stage focussed on tightening procedures. Even though the numbers of deaths continued to rise, the quantity of discussion fell back in 1818, as no new methods or regulations were proposed. 1819 was the year that the rising number of widow-burnings became unavoidable, leading to a huge spike in paperwork as the central administration analysed and debated the issue and then issued new instructions to every magistrate in Bengal. The quantity of paperwork fell back in 1820 as the numbers of widow-burnings started to fall. In 1823 as numbers of burnings increased the quantity rose again substantially. The quantity of paperwork was rising and falling in line with the latest statistics. When numbers were rising, the Company anxiously sought explanations and took actions. In those years the issue took up more of their time.

The production of data was meant to rationalise policy-making, but one of its most observable effects was to create a new form of volatility. It was not lack of information, but the new kind of information that was producing specific problems; confidence in the policy rose and fell annually depending on whether the latest numbers had gone down or up. Instead of certainties the administration became mired in ever greater uncertainty.

At the highest-level officials were forced to admit that there were “considerable doubts”⁷⁷⁹ about the meaning of the figures. These worries would be amplified in the mid-1820s when officials became aware of the intense scrutiny that the widow-burning data was receiving from significant sectors of Indian and British public opinion.

From secrecy to transparency

While the earlier unofficial widow-burning statistics were designed by Claudius Buchanan to appeal to British evangelical audiences, there is no evidence that the East India Company intended its official figures for public consumption. Indeed, the Company prided itself on the secrecy with which it conducted its affairs. The habit of secrecy was inculcated by the leadership of the Company, as the historian H.V. Bowen, who has produced the most thorough study of the internal bureaucracy in London, explained, “directors always endeavoured to prevent any new information about the Company’s affairs reaching the public domain before they had themselves the opportunity to digest it.”⁷⁸⁰ Bowen described procedures in London, but the limited circulation of widow-burning data before the 1820s demonstrates that this culture of secrecy extended to India. The first widow-burning statistics collected in 1815, 1816 and 1817 were circulated to British officials in Bengal, Bombay and Fort St George, but were not passed on immediately to London. New information was carefully digested for several years before being shared with the directors in London. The first discussions about the rising numbers of burnings took place without oversight or interference from the London stakeholders - the Court of Directors, Parliament and the stockholders - and for several years the upward trends were unknown to the British press and wider public opinion.

The administration in Calcutta also kept the results of its early statistical investigations secret from other interested parties in India. Baptist missionaries, who had long recognised the propaganda value of widow-burning, had recently established a number of magazines in Bengal, aimed at European and Indian readers. In 1818 they founded the *Dig Darsan* (or the India Youth Magazine), the *Samachar Darpan* (a weekly newspaper written in Bengali) and *The Friend of India* (an English language

⁷⁷⁹ PP 18 (749), at 244.

⁷⁸⁰ Bowen, *The Business of Empire*, 162.

paper).⁷⁸¹ They used these publications to promote a number of causes, including vigorous calls for the British government to regulate widow-burning. “When will British India be free from blood?” one article asked.⁷⁸² It is clear however, that Baptists in India did not have privileged access to the new statistics. In July 1819, when Bayley and other senior officials were worrying about a sharp *increase* in the numbers, an article in the *Friend of India* declared that the number of burnings “scarcely at all decreases.”⁷⁸³ Later that year the magazine calculated that if two million Indians died annually it was likely that “ten thousand widows [were] consigned to the flames every year” - the missionaries were still using the old estimate. In 1820 the *Friend of India* featured multiple articles on the issue, none featured the official statistics. Butterworth Bayley might well have “acquired a lifelong interest in missionary work”⁷⁸⁴ through his friendship with his teacher William Carey at Fort William College, but he kept his new data away from his old mentor.

From 1815-1819 the East India Company successfully kept official widow-burning statistics out of the public sphere in India and Britain. But this state of affairs did not last long. Indians were of course aware that the British were making widows register before burning, and a new urban middle class, the *bhadralok* (respectable folk),⁷⁸⁵ began to discuss and interpret this new British policy. After the abolition of censorship in 1818 publishers in Bengal founded a number of new English language and vernacular newspapers: the *Bengal Gazette*, the first Indian owned vernacular newspaper, was founded in 1818; the Hindu-owned and religiously conservative *Samachar Chandrika* was founded in 1821 by Bhawanicharan Banerji; the same year Ram Mohan Roy founded the reform-minded *Sangbad Kaumudi*, which published simultaneously in English and Bengali. The growing controversy about widow-burning was a key topic in these papers, alongside education, government revenue policy and free trade. Journalists were aware of the British counts and interested in what the statistics demonstrated. In March 1819 a Calcutta newspaper remarked that widow-burning was “practised more in Bengal than any other place in India.” In June another paper mentioned that in “Hoogly one hundred cases... took place. Last year it was two hundred... Compared to other

⁷⁸¹ Ahmed, *Social Ideas and Social Change in Bengal*, 80-82.

⁷⁸² *Friend of India : Monthly Series* (Serampore: Mission Press, 1820), 208.

⁷⁸³ *Friend of India : Monthly Series* (Serampore: Mission Press, 1819), 330.

⁷⁸⁴ Katherine Prior, 'Bayley, (William) Butterworth (1781–1860)', *Oxford Dictionary of National Biography* (updated 2004) <<http://www.oxforddnb.com/view/article/1758>, accessed 18 March 2017>.

⁷⁸⁵ Mani, *Contentious Traditions : The Debate on Sati in Colonial India*, 42-65.

districts, the Hoogly district records more cases daily.”⁷⁸⁶ However, whilst writers had access to some districts’ figures, in 1819 access to the full data seems to have been limited, and official figures did not appear in prominent articles about the custom. For example, socially conservative Hindus such as Radhakanta Deb defended the practice, without referencing the figures.⁷⁸⁷ The leading Hindu reformer, Ram Mohan Roy wanted to persuade Hindus to abandon the practice, but he similarly made his case without reference to the official statistics. In a pamphlet written in 1818, Roy discussed whether “the practice of fastening down widows on the pile was prevalent throughout Hindoosthan”.⁷⁸⁸ He argued that it was not, but he made no use of the new data here or again in his pamphlet of 1820 on the same topic.⁷⁸⁹

However, in 1822 Ram Mohan Roy’s writings took a decidedly more statistical turn, when he wrote that “the number of female suicides in the single province of Bengal, when compared with those of any other British provinces is almost ten to one”.⁷⁹⁰ Whilst not citing the data directly, Roy’s claim was statistically accurate on the basis of the available information, indicating that he had knowledge of the official statistics. In March 1822 a Calcutta newsletter published “a table of comparative figures for *sati* during the years 1815-17.”⁷⁹¹ East India Company official data, which had been secret, was now being published in the Bengali language press and interpreted by Indian journalists and campaigners. The data was also being discussed by British residents in India. A British correspondent wrote in appalled terms to the *Bombay Courier* in October 1824 to describe the “satanic joy” he had observed on the faces of mourners when he happened to be an eyewitness at a widow-burning. He felt that his European neighbours were oblivious to the horror that surrounded them. They thought widow-burnings a “rare occurrence”, but he knew that across India “hundreds of our fellow subjects may be burnt alive” per year.⁷⁹² Unlike the Baptists only four years earlier, he knew enough about the official data to be horrified that there were hundreds, not tens of

⁷⁸⁶ Upendra Thakur, *The History of Suicide in India. An Introduction* (Delhi: Munshi Ram Manohar Lal, 1963), 172-74. All translations by Thakur.

⁷⁸⁷ Ahmed, *Social Ideas and Social Change in Bengal*, 30-31.

⁷⁸⁸ Rammohun Roy, *A Conference between an Advocate for and an Opponent of the Practice of Burning Widows* (Calcutta, 1818), 23.

⁷⁸⁹ Rammohun Roy, *A Second Conference between an Advocate for and an Opponent of the Practice of Burning Widows Alive* (Calcutta: Baptist Mission Press, 1820).

⁷⁹⁰ Rammohun Roy, *Brief Remarks Regarding Modern Encroachment on the Ancient Right of Females According to the Hindoo Law of Inheritance* (Calcutta: Unitarian Press, 1822), 9.

⁷⁹¹ Thakur, *The History of Suicide in India. An Introduction*, 174.

⁷⁹² 'Letter to The Bombay Courier, 16 Oct 1824', reprinted in PP 24 (518), at 214.

thousands of burnings. Both Ram Mohan Roy and the evangelical letter-writer had aligned their claims with the official statistics.

In India the public sphere was starting to debate widow-burning with official statistics. This was part of a larger shift in debates about the widow-burning policies of the East India Company that was occurring in the early 1820s, which moved from being conducted in almost total secrecy to taking place with a high degree of information transparency.

On 20 June 1821 Thomas Fowell Buxton, MP for Weymouth and Melcombe Regis, introduced a motion calling for the publication of ‘Copies or Extracts of all Communications from India, respecting the Burning of Females on the Funeral Piles of their Husbands’. Parliament was increasingly using its powers to hold the East India Company to account, demanding the publication of documents and data on a wide range of issues from the quantity of sugar it sold to the number of ships it employed. Fowell Buxton, who was an evangelical and close associate of William Wilberforce, compelled the East India Company to reveal all its widow-burning correspondence in part because he hoped to change Company policy and ban the custom itself, but mainly to encourage the Company to promote Christian education in India. Fowell Buxton believed, like many evangelicals, that if Britons fully understood the savagery of Hinduism, they would act to eradicate the religion.

Fowell Buxton’s motion established an on-going duty of transparency about widow-burning. Whilst secrecy was much prized by the Company, there is no evidence that directors resisted or systematically attempted in any way to conceal information from government on this issue. Thousands of pages were published in parliamentary papers in 1821, 1823, 1824, 1825, 1827, 1828 and 1830 containing all the Company’s correspondence, minutes and discussions about widow-burning. One result of this transparency was that from this point onwards all the Company’s statistical information about the custom was placed in the public realm.

It is a testament to the East India Company’s efficient filing systems that the production of the first parliamentary paper on widow-burning took just over five months to be completed. Like the production of data, this was a substantial, labour intensive activity. The Company took on extra clerks when such requests were made

and there was considerably more overtime at East India House.⁷⁹³ The Company appears not to have costed the time employees spent collating information in London, just as it did not cost the counts in India. The production of information was regarded as a necessary operational cost. However, MPs were well aware that the printing of parliamentary papers was expensive. In March 1828 Sir M W Ridley “called for costs of papers connected with a number of subjects including widow-burning.”⁷⁹⁴ Ridley’s intervention did not prevent the publication of papers in November 1828 and 1830; but the series ceased immediately after the ban in 1830.⁷⁹⁵

As the series of parliamentary papers progressed they became increasingly statistical, reflecting the growing importance of numbers in Company discussions of this issue. The first paper, published in November 1821, included the statistical information gathered by the Company from 1815 to 1818, but it contained much else, including all Company correspondence and discussions from the 1780s onwards. This first parliamentary paper was, amongst other things, a history of British official dealings with the custom. Subsequent papers contained only the latest statistics and discussions about the trends.

For the first time, Britons could discuss the present state of widow-burning with an authorised set of official statistics, which appeared at regular intervals. June was the month when the latest statistics were announced in India, November, every other year, was when they were made public in Britain. The one exception was a statistical overview published in July 1825. The shortest paper of the series, the July paper, was entirely composed of numerical data collected since 1815 from all regions of British India.⁷⁹⁶ The biannual publication of large amounts of new data in November encouraged readers in Britain to focus their attention ever more tightly on the statistics and the trends in the widow-burning data. This section explores the impact of this new sociological data on British debates.

Interestingly the new statistical information made little impact inside the House of Commons. MPs debated widow-burning fully only once after Parliament began publishing papers on the topic. The Commons had its own long-established procedures

⁷⁹³ Bowen, *The Business of Empire*, 164.

⁷⁹⁴ ‘Printing Expenses of the House’, House of Commons, *Hansard*, 18: 989 (06 March 1828).

⁷⁹⁵ Data from 1829 onwards is therefore missing from the Parliamentary Papers.

⁷⁹⁶ PP 24 (508).

for scheduling debates and the timing of this one in June 1825, eighteen months after the previous figures were published and a month before the publication of a statistical overview, was clearly not determined by the flow of information. In Calcutta the availability of new figures prompted immediate high-level discussions about trends. In Westminster MPs were happy to debate widow-burning with figures that had been published eighteen months earlier.

There were many indicators in this debate that MPs were relatively unaccustomed to incorporating social statistics into their arguments. Even intelligent MPs who knew India well found interpreting data difficult. Sir Edward Hyde East, former chief justice in Calcutta, made two speeches in the debate. In one speech he claimed that he was “convinced, that the sacrifices had been considerably increased by the repeated discussions in Parliament on the subject.” In the second speech he “applauded the local authorities for their successful efforts in reducing the number of sacrifices.” These claims were completely opposite and Hyde East was ridiculed for his slip. Fowell Buxton noted that his fellow Parliamentarian had “first charged him with increasing the number of immolations: in the second speech, their numbers were said to have declined considerably.”⁷⁹⁷ But Fowell Buxton’s own arguments, although less muddled, similarly struggled to make political capital from the official data. He felt the official annual figures were rather small, so reached for a larger total, noting that “in five years, there had been, in the province of Bengal alone, 3,400 females burnt on the funeral piles of their husbands.” This still sounded small, so he inflated the number further: “The real amount, in all probability, went far beyond the official returns. Gentlemen conversant with India had assured him, that the real numbers were nearer 10,000.”⁷⁹⁸ This was the old conjectural figure, used by Buchanan and Wilberforce, which had been circulating since the 1790s. Relying on these old unofficial estimates rather than the new facts put Fowell Buxton in a weak position. Old arguments resurfaced, pitting the knowledge of those with experience of India against those, like Fowell Buxton, without. An MP, defending the long-standing Company opposition to religious interference, made it clear that he had “had considerable experience in this matter, from a long residence in India”. Other old hands reiterated the old argument that it would be “highly dangerous” to interfere.⁷⁹⁹ New official statistics had not transformed the balance of power in

⁷⁹⁷ ‘Hindoo Widows - Female Immolation’, House of Commons, *Hansard*, 13: 1044-7 (6 June 1825).

⁷⁹⁸ *Hansard*, 13, 1044.

⁷⁹⁹ *Hansard*, 13.

parliamentary debates; evangelical MPs failed to exploit the new figures and MPs generally remained wedded to well-established positions and customary sources of information.

Outside Westminster the publication of the official statistics in November 1821 did not initially set public opinion alight. Fifteen years previously Claudius Buchanan's data on widow-burning had taken a few years to interest British public opinion and the new, official statistics followed a similar trajectory.

The British press, especially outside London, was at first almost entirely indifferent to the new data. For example, the *Morning Post*, *Royal Cornwall Gazette* and *Trewman's Exeter Flying Post* all reported on the publication of the parliamentary paper in November 1821, which they thought "interesting". But they were drawn to British eyewitness accounts of widow-burnings and ignored the statistics. Editors assumed their readers preferred exciting stories. In 1823 an account of a widow's escape from the funeral pyre and her subsequent rescue from the river by a British Captain and a Deputy Postmaster was published in *The Morning Post*, *The Bristol Mercury*, the *Royal Cornwall Gazette*, the *Falmouth Packet* and the *Plymouth Journal*. The lengthy articles, in some cases over 4000 words, about this "suttee and its unexpected result",⁸⁰⁰ contrast sharply with the almost total absence of stories in the provincial press about the second set of widow-burning statistics, which were published in 1823 by Parliament.

The *Oriental Herald*, a new publication specialising in news from India, ran a lengthy article about widow-burning in 1824. The paper complained that the parliamentary papers "have now been before the public for some time, but they have excited no sensation compared with their importance".⁸⁰¹ The editor, James Silk Buckingham, was a notorious critic of the East India Company, but if the provincial press was a reasonable gauge of the British public mood, then he had called its indifference correctly.

However, not all provincial readers obtained their information from newspapers. The first evangelical group to really grasp the campaigning potential of the official data

⁸⁰⁰ *The Morning Chronicle* December 30, 1823.

⁸⁰¹ James Silk Buckingham, *The Oriental Herald and Colonial Review* (London, 1824), 554.

was the leadership of the Baptist Missionary Society. Long statistically minded, Baptists from the East Midlands had been using data of various kinds to persuade their congregations in provincial cities and towns across Britain to fund missions since the 1780s. Baptist missionaries such as William Ward in tracts aimed at donors regularly conjectured that tens of thousands of Hindu women were burning annually across India. Baptists in provincial British towns were thus accustomed to hearing that India was a sacrificial dystopia, where widow-burnings took place in huge numbers.

Amongst religious readers, Claudius Buchanan's unofficial data was still circulating. Numerous editions of his books were published in the 1820s. But Baptist leaders stopped referencing this data as soon as they had access to the official figures. The authority of the new data clearly mattered. Baptist publications repeatedly pointed out that the statistics were "the official statement, signed by the English magistrates."⁸⁰² They believed that the East India Company was most powerfully condemned for its failures to spread Christianity and prevent widow-burnings with its own official statistics.

Official counts of widow-burnings were 90%-95% lower than estimates had suggested. To some extent this punctured evangelical visions that widows were burning in every village. But Baptist fundraisers remained wedded to old conjectures that this was a large-scale problem, so they found multiple ways to inflate and dramatize the smaller official figures for their readers. They conjectured that there were many more deaths as yet unaccounted for, predicting that "Two Thousand widows burnt or buried alive every year in India".⁸⁰³ They used various strategies to make the totals more vivid. Readers were asked to imagine that the widows were all burnt together simultaneously in Calcutta. Alongside striking images, they fantasised that they could record the sounds of widows burning and play them back to audiences in Britain:

Oh! that I could collect all the shrieks of these affrighted victims, all the innocent blood thus drunk up by the devouring element, and all the wailings of these ten thousand orphans, losing Father and Mother on the same day... and carry them through every town of the United Kingdom.⁸⁰⁴

⁸⁰² William Ward, *Farewell Letters to a Few Friends in Britain and America, on Returning to Bengal, in 1821* (London: Black, Kingsbury, Parbury and Allen, 1821), 85.

⁸⁰³ Ward, *Farewell Letters*, 85.

⁸⁰⁴ Ward, *Farewell Letters*, 86.

Although the official data was slightly disappointing, it could still be used as the basis for horrifying visions, which Baptists hoped would unsettle audiences in provincial British and American towns and cities.

Evangelicals of all denominations had long recognised that information about widow-burning could be a fruitful way to target women donors. The *Missionary Register* in June 1813 had made a direct appeal to “every Christian woman” to give money to missions in India, using estimates of large numbers of widow-burnings as the key motivator.⁸⁰⁵ Ladies Associations were a good way to reach potential donors. 229 such associations were formed across Britain between 1807 and 1830. The majority of these were philanthropic and evangelically inspired, and they provided women with a new way to organise and campaign. Groups such as the Ladies Bible Associations, which raised funds to distribute bibles to unbelievers, were more successful and widespread than their male counterparts.⁸⁰⁶

Fund-raising campaigners thought women, like men, responded to statistical arguments. William Ward, raising money for a Baptist college in Serampore, told the Ladies Association of Liverpool that there were “75,000,000 of your own sex” in India, and that in 1817 “706 women, widows, were either burnt alive or buried alive”. Ward, a journalist before he was a missionary, was expert at transforming data into vivid pictures. 706 women, he explained, corresponded to “two females roasted alive every day in one part of British India”. Describing in detail what took place at a burning he emphasised the “screams” of the widow and the betrayal of the first-born son, who lit the pyre of “the mother who fed him from her breast”. This was a “miserable world, full of the habitations of cruelty.”⁸⁰⁷

Such appeals could produce results. In 1821 the Ladies Committee of the British & Foreign School Society raised £521.9s to send a woman to teach in Calcutta,⁸⁰⁸ following an appeal that had drawn attention to the “thousands of orphans” produced by

⁸⁰⁵ Midgley, 'Female Emancipation in an Imperial Frame: English Women and the Campaign against Sati (Widow-Burning) in India, 1813–30', *Women's History Review*; Midgley, *Feminism and Empire: Women Activists in Imperial Britain, 1790-1865*.

⁸⁰⁶ Unpublished paper presented by Jane Rendall, Birkbeck 23.2.2015. See also Nicola Reader, 'Female Friendly Societies in Industrialising England 1780– 1850', Ph.D. (University of Leeds, 2005).

⁸⁰⁷ *The Times*, Jun 4, 1821.

⁸⁰⁸ Midgley, *Feminism and Empire: Women Activists in Imperial Britain, 1790-1865*, 76.

immolations.⁸⁰⁹ Widow-burning statistics helped persuade women across Britain to give money to suppliers of female education and missionaries.

By the mid-1820s evangelical activists had begun to focus more tightly on British policy towards widow-burning, rather than using the practice as a means to fund-raise for missions, bibles or schools and colleges. One of the earliest public meetings calling for a ban was held at the County Hall at Bedford on 28 April 1823. Convened by the High Sheriff, this was a meeting of conservative, evangelical “gentry, clergy and other inhabitants.” The Bedford campaigners called on “Great Britain to exercise its power” and prohibit “the practice of burning Hindoo Widows alive on the Funeral Piles of their Husbands”. They organised a petition which prominently featured data from the “Official Returns now before the public”.⁸¹⁰ Unlike newspaper editors, campaigners in Bedford thought their provincial audiences would find the statistics compelling and persuasive.

The Bedford petition was the first of many. Petitioning to ban widow-burning was largely a provincial movement. In 1827 petitions were instigated in Manchester,⁸¹¹ York, Rochdale, Colchester, Derby, Loughborough and Retford.⁸¹² Petitions were produced by the ladies of Worcester,⁸¹³ Protestant dissenters in Kettering and members of an independent chapel in Blackburn, Lancashire.⁸¹⁴ The most active and most statistically-minded group was the Society for the Abolition of Human Sacrifices in India, which was based in Coventry. Formed in 1828, the Society aimed to organise “petitions to Parliament from every part of Great Britain and Ireland”. The Coventry Society published a stream of pamphlets, articles in the evangelical press and books, which were mostly written by Rev James Peggs, who also toured the country speaking to church congregations and to branches of the Society which sprung up in evangelical strongholds such as London and Birmingham. These activities were all designed to persuade the religious public to lobby Parliament for abolition.

⁸⁰⁹ *The Missionary Register*, 1820.

⁸¹⁰ *The Missionary Register* (London Church Missionary Society, 1823), 250-52.

⁸¹¹ James Peggs, 'An Appeal to Britain Recommending the Abolition of the Practice of Burning Hindoo Widows', (Coventry: The Coventry Society for the Abolition of Human Sacrifices in India; H. Merridew [Printer], 1829) at 16.

⁸¹² James Peggs, *The Suttees' Cry to Britain* (London: Seeley & Son, 1827), 80.

⁸¹³ 'Burning of Hindoo Widows', House of Commons, *Hansard*, 22: 644 (18 February 1830).

⁸¹⁴ 'Petitions against Burning Widows in India', *Journal of the House of Commons* (London, 1830), 235.

Like the Baptists, the Coventry campaigners put official statistics at the centre of their campaign to abolish widow-burning. The most widely distributed pamphlet the society produced was a short 16-page summary of their case, which was designed to persuade huge numbers of people quickly. Thousands of copies were circulated to Protestant congregations across Britain.⁸¹⁵ A statistical abstract of the East India Company's official figures was placed prominently at the front of the pamphlet.

1815	378	1821	654
1816	442	1822	583
1817	707	1823	575
1818	839	1824	572
1819	650	1825	639
1820	597	1826	580
Total in twelve years 7,216 widows buried or burnt alive.			
In the Madras and Bombay Presidencies, the official statements for nearly ten years, 635. Grand total, 7,851.			

Fig. 5k: Table summarising East India Company data produced by the Society for the Abolition of Human Sacrifices for their pamphlet 'An appeal to Britain' (Coventry, 1829), 5

The pamphlet's final section was a guide for activists about how best to bring about abolition. The campaigners believed the public's horror of widow-burning, expressed through petitions, might be able "to accomplish the abolition of Suttees (and consequently of other inhuman practices in India)". They called for the mobilisation of large numbers of supporters. Recognising, in the wake of the anti-slavery and Charter Act campaigns that "congregational petitions are easily procured and may be multiplied to almost any extent", they added a template petition, which they encouraged congregations to reprint. The model petition attacked the Company's policies on widow-burning, focussing specifically on the company's statistical data which showed that policies "have rather tended to increase than to diminish the number of human sacrifices".⁸¹⁶

The Coventry Society was determined to stay abreast of new information, and it kept updating the figures in its pamphlets, incorporating the latest official data. It believed that public opinion would be best moved with the most recent information

⁸¹⁵ Midgley, 'Female Emancipation in an Imperial Frame: English Women and the Campaign against Sati (Widow-Burning) in India, 1813–30', *Women's History Review*, 106.

⁸¹⁶ Peggs, 'An Appeal to Britain Recommending the Abolition of the Practice of Burning Hindoo Widows', at 16.

about “the magnitude of the evil” and that the British authorities would act if they understood the magnitude of public opinion. The campaign was effective. Petitions began to pour into Parliament from across Britain.⁸¹⁷ Between 1823 and 1830 there were 107 petitions calling for the East India Company to change its policy on widow-burning. The vast majority of these were prompted by the Coventry campaign.⁸¹⁸ The Company’s data about widow-burning, once secret, was now reaching a very broad cross-section of the British population.

This was further evidence that a mass evangelical audience could be inspired by statistical data to mobilise, sign petitions and donate money. In particular the 1820s campaigns against widow-burning demonstrated that women were also able to consume and be inspired by numbers. The historian Clare Midgley has shown that 20% of the petitions were sent by female groups. Women from Leicestershire, Derbyshire, Gloucestershire, Warwickshire, Lancashire, Cambridgeshire, Worcestershire, Hackney, Northamptonshire, Liverpool and Cornwall were motivated by the campaign to send petitions. Like male petitioners, these women came from a mix of rural towns and industrial cities, their locations reflected the areas where evangelicals and religious dissenters were most well-organised.

In London the statistics were used by wealthy evangelicals to apply pressure on the East India Company. Evangelical investors and directors had long argued that the Company should abandon its policy of non-interference in religious affairs. Following the Napoleonic wars the make-up of East India Company stockholders had changed dramatically. Foreign investment, which had made up 25% of shareholdings in 1754, declined to about 10% by 1830. A new group of provincial investors put money into the Company who “were in some ways quite different from their metropolitan counterparts.”⁸¹⁹ A significant proportion were women, and many were evangelicals who thought India should be Christianised.

The most vigorous evangelical investor was John Poynder. One of the earliest members of the Church Missionary Society, Poynder was also a founding member of the British India Society,⁸²⁰ an evangelically-minded group which promoted social reform and the spread of Christianity. He agitated repeatedly on a range of issues such

⁸¹⁷ Midgley, *Feminism and Empire : Women Activists in Imperial Britain, 1790-1865*, 82.

⁸¹⁸ Midgley, 'Female Emancipation in an Imperial Frame: English Women and the Campaign against Sati (Widow-Burning) in India, 1813–30', *Women's History Review*, 106.

⁸¹⁹ Bowen, *The Business of Empire*, 110-16.

⁸²⁰ (1821), 'British India Society', *The Asiatic Journal*, 12, 99-100.

as infanticide and education as well as widow-burning. Poynder had no personal experience of India. He was a solicitor, who worked in London his entire professional life. Poynder campaigned vigorously on widow-burning, writing to newspapers and speaking at meetings of proprietors. On 22 March 1827, when this issue was raised at one such meeting, Poynder spoke to his fellow investors for over three hours about widow-burning. He spoke extremely rapidly and quietly, focussing his arguments intensely on the statistics. It was, *The Times* reported, quite difficult to listen to his painstaking summaries of the data. One of his fellow proprietors grumbled that he had “unnecessarily taken up much of their time in proving from voluminous documents what they all admitted”. However, the official facts made it much harder to shout down Poynder, which was how investors had dealt with evangelicals in the past.⁸²¹ Most proprietors now accepted his argument that stockholders were accessories to the deaths of Indian widows if they did not act, because through their investments they sanctioned all the actions of the Company. His motion, that “in the case of all Rites, or Ceremonies, involving the destruction of Life, it is the duty of a Paternal Government to interpose for their prevention”, was overwhelming carried, with only five proprietors voting against, four of whom were directors.⁸²²

Under pressure from its own investors, as well as a broad swathe of provincial public opinion, the East India Company’s policy on widow-burning was also subjected to sustained analysis in *The Times*. In the eighteenth century, newspapers had not thought widow-burning newsworthy. *The Times*’ long engagement with the issue began during the Charter Act debates; the paper published over twenty articles which mentioned the topic from 1805-1813. This engagement intensified in the 1820s. From 1820 to 1830 it published nearly forty articles and letters, covering the issue whenever it became newsworthy.

The publication of each parliamentary paper prompted detailed analysis in *The Times*, so there were notable clusters of articles from November to January. The first parliamentary paper was examined in November 1821 in a series of long, 3000-word articles.⁸²³ In December 1823 the paper again published a lengthy article which analysed the latest trends. The paper argued that “the average shows not only a direct

⁸²¹ See Chapter 4, 172.

⁸²² *The Times*, March 22, 1827.

⁸²³ *The Times*, November 22, 1821; *The Times*, November 23, 1821. These two articles make clear that the series was intended to be completed by a third article which would examine the data from 1815-1818. This article was never published.

falling off of the numbers, but a determined tendency to decrease". The downwards tendency might have indicated to *The Times* that the East India Company's policy was working as Butterworth Bayley had predicted. In fact, the paper read the data as proving the very opposite, arguing that the decline was evidence that the practice could easily be banned.

This critique of Company policy reflected its long-held sympathies, as well as arguments that were occurring amongst its metropolitan readers. The data prompted *The Times* to make forceful attacks on East India Company officials. It called British leadership in India "weak and worthless", claiming that the authorities treated Hindus with too much "tenderness" and had a "dread of unsettling the peace". Meanwhile officials and investors who favoured a total ban were praised for being "manly".⁸²⁴

Similarly emotive language was used when the third set of data was published in November 1825. The paper found it "gratifying to observe that the revolting practice now appears to be on the decline".⁸²⁵ Again in November 1827 the paper commented on "the unnecessary sacrifice in India of above 700 widows annually".⁸²⁶ In January 1829 it published a furious letter from an anonymous evangelical investor, which began with a summary of the latest "average of these four years alone (without going any further back) will present the appalling number of 576 human beings of the most tender sex devoted to a cruel and untimely death in a single year". The proprietor attacked the "criminal apathy" of British authorities, calling the policy "toleration of murder".⁸²⁷

The publication of official statistics in parliamentary papers had given Britons a new way to discuss widow-burning. Unlike Buchanan's data the Company's statistics were official, unarguable and produced annually. Widow-burning, although less prevalent than predicted, was proven as a current religious custom. The data reached a broad audience and helped turn widow-burning into an issue in its own right. The statistics became the primary content of many speeches and articles; the latest trends were keenly analysed and the regular pattern of publication created a timetable for debates. Each new dataset provided new opportunities for evangelicals, journalists at *The Times* and letter-writers to attack East India Company officials and policy. The new

⁸²⁴ *The Times*, December 26, 1823.

⁸²⁵ *The Times*, November 08, 1825.

⁸²⁶ *The Times*, November 15, 1827.

⁸²⁷ *The Times*, January 2, 1829.

statistics unleashed powerful emotions in Britain and provided the means for intense public attacks on senior East India Company officials.

The most enthusiastic users of the data were strongly religious and this coloured how they used it. As the East India Company began actively contemplating a ban, the evangelical campaigner John Poynder used letters to *The Times* to pile as much public pressure as he could onto the Company. He wrote repeatedly to the paper about widow-burning, and the Company's data was crucial to his case. Poynder regularly updated the data that he cited, using the latest figures until February 1831 when he calculated that a nine-year average showed that "666 women have been burnt annually".⁸²⁸ This figure, the number of the beast in the Book of Revelations 13:18,⁸²⁹ struck him as so significant that no further calculations were necessary. From then on this was the number he used, repeating as late as 1837 that "the annual sacrifice to Moloch of 666 wretched widows (for such was the precise average of the parliamentary returns for ten preceding years)."⁸³⁰

From 1815-1820 the authorities in Calcutta had been able to assess the impact of their new policy without external scrutiny. They had analysed the early figures and refined the regulations with a degree of emotional detachment, but this detachment had crumbled as they contemplated four years of rising numbers. Now the figures were being scrutinised by the East India Company directors and stockholders, the press, and increasingly by a significant section of public opinion. Critics of the Company had been handed an easy tool for measuring the success or failure of its widow-burning policy.

The impact of public opinion

The era without oversight was over, and pressure was being strongly applied to the leadership of the East India Company, especially in London. Officials had to cope with the double challenge of inconclusive statistical trends and intense public interest. In this final section I explore how aware officials were of this scrutiny.

While Company directors in London read that they were unmanly in *The Times* over breakfast and had face-to-face encounters with hostile evangelical investors at

⁸²⁸ *The Times*, February 2, 1831.

⁸²⁹ For a contemporary discussion of this superstition see Henrietta Maria Bowdler, *Practical Observations on the Book of the Revelations Intended to Point out the Many Useful Instructions It Contains, Independent of Its Prophetical Meaning* (London: Rivington, 1787).

⁸³⁰ *The Times*, October 18, 1837.

stockholder meetings, news of British public interest reached officials in India less directly. However, Britain and India were not entirely separate spheres; although communication was slow, people and knowledge moved between the two countries.

Historians increasingly recognise the important role of go-betweens in knowledge production.⁸³¹ Two key figures, who had been in London when the parliamentary papers were published, returned to India shortly afterwards. William Ward, the Baptist missionary, who had played a key role in publicising the official figures to evangelicals in Britain, returned to Calcutta at the end of 1821. The second, John Harrington, was one of the most senior Calcutta judges and a leading evangelical within the Company. He had also been in London when the papers were published and spoke at public meetings with William Ward.⁸³² Harrington returned to Calcutta in 1823 and warned his fellow judges and the Governor-General that the parliamentary papers had “excited much interest”.⁸³³

Knowledge travelled in a variety of other ways. Britons in India corresponded with friends, family and colleagues, and they also imported huge numbers of books, journals and magazines from Britain. Articles that seemed particularly significant were reprinted in the local press. In 1824 the Baptist missionaries used their English language magazine, the *Friend of India*, to reprint an article from a British journal, the *Missionary Register* which cited the official statistics. As we saw in Chapter 4, the Protestant publishing network stretched from North America to India and articles thought important circulated widely. Once the data was published and written about in England, it became available to readers in Bengal. Official statistics thus reached a broad readership of Britons and Indians in Bengal via circuitous routes.⁸³⁴

Many Company officials read both British and Bengali newspapers. Whilst there is little recorded evidence about their individual responses to the coverage of widow-burning, the evidence that is available shows that officials found it alarming that Parliament was publishing all internal Company correspondence about widow-burning. The chief judge William Leycester, for example, complained bitterly that internal discussions were being made public: “these reports will spread like the flames of a

⁸³¹ Simon Schaffer et al. (eds.), *The Brokered World : Go-Betweens and Global Intelligence, 1770-1820* (Uppsala Studies in History of Science, Sagamore Beach, Mass.: Science History Publications, 2009).

⁸³² *The Times*, May 28, 1821.

⁸³³ PP 24 (518), at 8.

⁸³⁴ 'Bedfordshire Petition against the Burning of Hindoo Widows', *Friend of India*, vol. 7, (February, 1824).

suttee, and be read in places where none of us should like to appear” he grumbled.⁸³⁵ Some officials were acutely aware that they were being abused personally. Leycester was accused in the Baptist press of *not* acting “like a Christian” because he did not believe in interfering with Hindu customs.⁸³⁶ Near the end of a thirty-year judicial career, and now most concerned with managing the botanical gardens in Calcutta,⁸³⁷ Leycester found this such a worrying accusation that he made an “appeal to the protection of the government” to remove the “stigma”.⁸³⁸

However, in complaining Leycester was exceptional. Knowing that all internal Company correspondence would be made public, few officials were confident or reckless enough to record their true feelings about this public scrutiny in writing. However, their levels of concern can be measured in other ways. Before 1823 the quantity of paperwork each year mirrored the rising and falling quantity of burnings. The numbers of burnings determined how much time the issue took up. However, once the statistics were published in London, the overall quantity of paperwork started to rise substantially, independent of the latest trends.⁸³⁹

A significant cause of this rising bureaucratic workload was that officials were now anxiously assessing the state of public opinion. The mood of Indian public opinion particularly worried British administrators. The British governed India with a small number of troops and administrators, and their authority depended on consent as well as coercion. Officials could never agree whether or not an outright ban of widow-burnings would be an easy reform or would inflame public opinion and cause irreparable damage to the British state. As late as 1830, when the ban was finally introduced officials were worried about the risks of “commotion” in areas where the custom was prevalent.⁸⁴⁰ From the first introduction of the new registration policy officials had been asked to look out for “any general symptoms of jealousy, tumult, or opposition to the interference of police officers.”⁸⁴¹ Initially these ‘general symptoms’ were monitored informally by magistrates and judges, who reported what they observed in their

⁸³⁵ PP 28 (178), at 229.

⁸³⁶ 'Letter to the Friend of India' April 15, 1828 reprinted in PP 28 (178), at 229-30.

⁸³⁷ Doss and Prinsep, *A General Register*.

⁸³⁸ PP 28 (178), at 229.

⁸³⁹ See fig. 5j.

⁸⁴⁰ PP 28 (178), at 215.

⁸⁴¹ PP 18 (749), at 34.

correspondence, but this approach was gradually replaced by more formal methods that aimed to quantify the state of Indian public opinion.

Liberalising the press in 1818 had been a controversial move, and the British authorities almost immediately began to monitor it, developing a particular interest in circulation data. Some papers proudly publicised their subscription records; the *Calcutta Journal*, a radical liberal paper claimed to have collected a thousand subscribers within three years. Alexander's *East India Magazine* boasted that the Bengal press rivalled London for circulation and frequency. Several authors wrote books assessing the influence of the press, and George Stockwell, the Postmaster General, introduced regulations to monitor circulation statistically.⁸⁴² Evangelicals kept their own circulation data, as further evidence of their missionary activity. While Butterworth Bayley was President of the Calcutta School Book Society from 1817 to 1830, he introduced a system collecting circulation statistics for the missionary press. The results might have been alarming for an administration used to keeping information secret. The Baptists' Bengali youth magazine, *Dig Darsan*, for example, claimed to have a circulation of 61,250.⁸⁴³

Widow-burning aroused intense public interest and was seen by many newspaper editors as a key topic to cover as they grew their readership. The local press wrote about the topic repeatedly and articles often recycled information that had been published in official reports.⁸⁴⁴ Knowledge of the wide circulation of these articles would have increased the anxieties of many officials.

The authorities made a number of attempts to gauge the opinions of groups thought influential or crucial for the maintenance of public order. In 1821 the courts surveyed Indian police officers and British magistrates to see what they thought would be the likely impact of a ban,⁸⁴⁵ and in 1823 there was a call to assess the "feelings of the native army [which] has not hitherto been touched upon at all in any of the opinions

⁸⁴² Leicester Stanhope, *Sketch of the History and Influence of the Press in British India* (London: Chapple, 1823); Sandford Arnot, *A Sketch of the History of the Indian Press, During the Last Ten Years, with a Disclosure of the True Causes of Its Present Degradation; Proved to Have Been Produced by the Extraordinary, and Hitherto Unheard-of Conduct of Mr. James Silk Buckingham*. (London: William Low, 1829).

⁸⁴³ Ahmed, *Social Ideas and Social Change in Bengal*, 95.

⁸⁴⁴ The best study of Indian public opinion and press coverage of widow-burning is Ahmed, *Social Ideas and Social Change in Bengal*, 108-28.

⁸⁴⁵ PP 24 (518), at 242-3.

which have been submitted to government.”⁸⁴⁶ In 1829, before banning widow-burnings outright, Lord Bentinck, the new Governor-General, instigated a survey of army officers to check that troops would be loyal. The British were acutely aware that their military power was dependent on native troops. The mutiny of Sepoys in Barrackpore in 1824 strengthened the fears of the leadership that any tightening of its policies on widow-burning might serve as a warning to Hindus that the British intended wider religious reforms. As a result the British anxiously assessed the troops’ feelings about the custom.⁸⁴⁷ Fear of violent responses to anything that looked like religious interference was a primary concern. The opinions of women were completely absent from these assessments. The leadership was worried about the threat of male violence if it further regulated widow-burning.

Officials were now doubly anxious; to their fluctuating worries about the numbers of burnings they added constant worries about the state of public opinion in India and Britain. The quantity of paperwork about this topic started to rise, even as the numbers of burnings dropped back slightly. The senior leadership was trapped in a position that has long been recognised by contemporary and more recent commentators as “distressed uncertainty”.⁸⁴⁸ The Company could not decide what to do, and many internal Company discussion papers bear witness to this stasis. Looking for a way out of this impasse, the judge John Harrington was commissioned by the leadership in Bengal and London to write a series of briefing papers discussing different policy options. Like other senior officials, Harrington could not make up his mind what needed to be done and kept stalling. His minute from 1824, nine years into the regulatory regime, is typical. He included testimonies from four judges who called for a ban, but Harrington argued, as he had in a number of previous papers, that abolition was not timely right now. Instead he called for regulations first drafted in 1817 to be approved. These would criminalise family members who failed to report a planned widow-burning and ban all assistance. Nothing was done. Harrington made the same call again three years later in 1827, but again, nothing happened.

The indecision at the top of the Company had many causes: indifference to Indian widows; fears of violent native reaction to religious interference; the resistance of proprietors to any change that might devalue their stocks; ruling class distaste for

⁸⁴⁶ PP 24 (518), at 153.

⁸⁴⁷ PP 20 (354), at 353.

⁸⁴⁸ Ingham, *Reformers in India, 1793-1833*, 49.

evangelicals and dissenters. Such underlying factors were constants that delayed decisive action to ban widow-burning.⁸⁴⁹ But there was also another fundamental factor, which has not been recognised by historians that have looked at this stasis. Decision-making had become data-driven, but the new evidence was not producing greater clarity. When the numbers of burnings were rising, successive Governor-Generals wanted to rip up the current policy, but as soon as the numbers started going down they saw no need to act. As the data never settled into a clear pattern, the leadership could not decide whether Bayley's policy of social reform was working. Bayley had always believed that the data would enable the Company to act. He thought it would indicate regions where the practice was so infrequent that it could safely be banned, but as time went on even he admitted that the likely locations of Indian opposition to abolition were "difficult, certainly to conjecture".⁸⁵⁰ The fluctuations in the data were making it impossible to determine where and how the Company should act.

In the past the Court of Directors had rarely bothered themselves with the issue of widow-burning. However, the regular supply of information from India, plus growing scrutiny in London, made the topic unavoidable. Although still drawn from a narrow, wealthy, metropolitan class of men, the makeup of the Court had changed substantially since the 1790s. Then only a quarter of directors had direct personal experience of India, but by 1834 it is estimated that two thirds had first-hand knowledge.⁸⁵¹ The new generation, many of whom had been in India when the Vellore mutiny took place, were highly resistant to campaigns for social reform. Lobbied by evangelicals to ban widow-burning, Henry St George Tucker, for example, remarked that he would never back "any abstract proposition whatever".⁸⁵²

On 17 March 1824 directors "discussed for several hours" plans to send new instructions about widow-burning to India. These discussions were driven by the statistical data and focussed tightly on the trends. After examining the most recently available data for 1820, the directors observed "that the number of these sacrifices has in general progressively increased". They feared that the current regulations by

⁸⁴⁹ Major, *Pious Flames*, 184-225; Mani, *Contentious Traditions : The Debate on Sati in Colonial India*; Potts, *British Baptist Missionaries in India*, 144-58.

⁸⁵⁰ PP 28 (178), at 125.

⁸⁵¹ Bowen, *The Business of Empire*, 131.

⁸⁵² John William Kaye, *The Life and Correspondence of Henry St. George Tucker, Late Accountant General of Bengal and Chairman of the East India Company* (London: Richard Bentley, 1854), 346.

“legalizing the practice increased the number”.⁸⁵³ The Court of Directors told the Governor-General in Bengal that widow-burning had become “a matter of infinite concern” because “there is no symptom of diminution at any of the principal places.”⁸⁵⁴ Until the numbers started falling, widow-burning would remain a priority at the highest levels of the Company.

Alongside the numbers of burnings, the directors assessed the state of internal Company opinion in India. To do this, officials in London were tasked with summarising the views expressed by magistrates and judges in the internal correspondence. The directors then felt qualified to inform the Governor-General in Calcutta that “a great number of the most able and experienced servants of the Company, including members of your court of Nizamut Adawlut and superintendents of police” supported a ban and think this can be done without “evil consequences”.⁸⁵⁵

However, the directors remained uncertain about public opinion in India. They called for “further inquiry on the spot”, determining that until this was understood “no decision should be passed, or final opinion expressed at present by the authorities in England.”⁸⁵⁶ This inability to act was attacked by campaigners for reform, who as we have seen, accused the directors of immorality and questioned their masculinity. The Company’s indecisiveness on this issue became so notorious, that it became a general metaphor for inaction. In 1838 *The Times*, in an editorial calling for a robust defence of attacks on the Church of England, asked rhetorically “are we to linger until the suttee is performed, and console our virtue by wringing our hands over the ashes?”⁸⁵⁷

Conclusion

Widow-burnings, which had been very rarely encountered in the past, turned out to be relatively easy to count. Magistrates and police officers could be compelled to adopt standardised procedures, and this plus the cooperation of large numbers of Indian women and their families, enabled the Company to establish a highly functional information machine. Although it did not count the population until 1872, from 1815

⁸⁵³ PP 20 (354), at 2.

⁸⁵⁴ PP 20 (354), at 2.

⁸⁵⁵ PP 20 (354), at 30.

⁸⁵⁶ PP 24 (518), at 20.

⁸⁵⁷ *The Times*, April 13, 1838.

the East India Company had established that it was capable of collecting judicial statistics from large areas of British India.

As a result, the governance of widow-burning became more scientific. Officials debated trends, made predications, and queried the data to answer specific questions. Overall numbers of burnings were far smaller than predicted, and officials in the early years made calm adjustments to their procedures and methods, looking to make the data more complete.

However, this period of scientific detachment was short-lived. As numbers of widow-burnings continued to rise, this produced anxieties that the policy was not working as intended, and the amount of time senior officials devoted to the issue increased substantially. Far more time was spent managing widow-burnings than before the registration policy was introduced. The amount of time they devoted to the issue and the measures they considered taking depended upon that year's trend. The shifts of mood and the changes in workload were clearly in part a response to underlying fears of violence and disorder, but it was the data itself which created the volatility. If the numbers of burnings had edged upwards the leadership was filled with doubts and worries; if the numbers had dropped a little they became complacent. Administrative panics were not new, but these fluctuations, which were regulated by the production of data, were uniquely statistical.

Once Parliament voted to make all correspondence about widow-burning public, the intense scrutiny in Britain and India amplified the significance of the data. When the new data was published officials knew that readers would be poring over the latest trends. As a result, the issue became more of a priority occupying more time at all levels of the Company. The official statistics had produced a new way for the Company to be held to account.

6

Conclusion

Great Britain [is] the Guardian Angel of the Christian World... fighting for herself and for the rest of mankind, in the cause of Religion, of Order, and of Human Happiness.

*A sermon preached by Reverend Claudius Buchanan at the opening of the New Church of Calcutta, February 1800.*⁸⁵⁸

Without the presence of evangelicals in Calcutta it is unlikely that the East India Company would have produced social statistics about widow-burning. Rather than impeding the development of empirical decision making, evangelicals were actively encouraging the collection and use of statistics. Gathering information about Indian religious practices was thought vitally important by clergymen and missionaries because their political ambitions were far-reaching. The Reverend Claudius Buchanan told the governing classes of Calcutta, when he preached at the opening of the New Church, that the British state should be fighting to establish its religion and to promote social order. By so doing it would increase the human happiness of all mankind. Church of England evangelicals combined conservative politics with revolutionary evangelism, calling for a total transformation of Indian society, led by the state and an established church.⁸⁵⁹

Although a minority, evangelicals were well-placed to shape the imperial body politic in Calcutta. Several directors of the East India Company were strongly evangelical and they grasped the importance of controlling education. They appointed two protégés of the Clapham sect to lead Fort William College, the new training institute established by the Company in Calcutta in 1800 to prepare civil servants to govern. Claudius Buchanan was Vice Provost for eight years and in that time he used college resources to organize an ambitious survey of widow-burning. Conducted by

⁸⁵⁸ Claudius Buchanan, *A Sermon, Preached at the New Church of Calcutta, before the Right Honorable the Earl of Mornington, on Thursday, February 6th, 1800; Being the Day Appointed for a General Thanksgiving* (Calcutta: Honorable Company's Press, 1800), 20.

⁸⁵⁹ The classical account of the tensions is: Stokes, *The English Utilitarians and India*, 27-40.

college employees, overseen by senior college staff and reviewed by students, the survey was in effect a college project. With this project, which he ran with William Carey, the Baptist missionary, who he had appointed Professor of Bengali, Buchanan taught a generation of future administrators that social issues could be counted.

Buchanan's data was published in London in 1805 and the data's reception there showed that evangelical readers were not in any sense indifferent or hostile to statistics. Indeed, the innovative social statistics about widow-burning were enthusiastically received, circulating widely amongst Protestants in Britain, Europe and the USA. The numbers shocked such readers, who were horrified that so many widows were killing themselves in this way. Although these were new facts about widow-burning, this kind of statistic was not an unfamiliar form of information. Evangelicals had become avidly interested in reading and interpreting numerical information about the size of the world's population and the size of existing Christian, pagan and Muslim congregations in far-flung places, as they thought about where to site new missions.

Evangelicals produced as well as consumed numerical information, using it to further their own interests. By the late eighteenth-century, churches, Sunday schools, anti-slavery campaigns, missionary societies and printers run by evangelicals were using data to organize and promote their work. This passion for statistical data was so pronounced that in 1821 *The Evangelical Magazine and Missionary Chronicle* coined the term 'Spiritual Arithmetic' to describe how religious evangelism was now aligned with "the science of numbers". The magazine explained to its readers that blessings were delivered in "number, weight and measure".⁸⁶⁰ William Carey, the Baptist missionary, was at the forefront of this trend. His calculation of the world's population in the 1780s launched the Baptist Missionary Society and the widow-burning data he helped to collect in Bengal played a significant role in legitimating the presence of Christian missionaries in British India.

The college project to count widow-burnings directly inspired the official counts. Butterworth Bayley, the official responsible for the regulations that produced the statistics, had been the leading student of his generation at Fort William College when Buchanan's survey was taking place. At college, Bayley became strongly committed to evangelical causes. He stayed close to William Carey, his former teacher, making

⁸⁶⁰ 'Spiritual Arithmetic', *The Evangelical Magazine and Missionary Chronicle*, vol. XXIX, (January, 1821).

regular donations to support Carey's Baptist missionary schools.⁸⁶¹ After college, Bayley continued to research widow-burning. Working as a district judge he organized several small-scale statistical studies and became convinced that the British state could be safely harnessed to actively interfere and change Hindu practices. These trials appeared to indicate that if widows were required to register with a magistrate before burning, this procedure alone would reduce the numbers of burnings, without causing civil unrest. When he was promoted to a more senior administrative role he introduced a policy of registration, the only time in British law that people who planned to commit suicide have been asked to register beforehand. The annual statistical counts were established at the outset to measure the effectiveness of the policy and Bayley set the target of substantially reducing the numbers of burnings.

For Bayley the desire to reduce the numbers of burnings could not be separated from his desire to eventually eradicate Hinduism and its practices altogether. This was a desire shared by Buchanan, Carey and many evangelicals at this time. Without this strong evangelical motivation, plus the practical example of the earlier counts organized by Buchanan and Carey, the British colonial state would not have been motivated, or thought it possible, to collect data about widow-burning.

The efficient production of social statistics in 1815 and each year afterwards, challenges many of our perceptions of the Company's bureaucracy in Bengal at this time. Certainly, British colonial officials could be lazy, the grinding paperwork was often subcontracted to junior clerks and "extended lunch breaks and long siestas divided the day".⁸⁶² While it was hard to make magistrates read the complex legal digests produced by the central authorities, it was much easier to make them count. It became an imperative for all magistrates to produce rigidly structured information about widow-burning each year on standardized forms. That this was successfully implemented across British India from 1815, adds further weight to Miles Ogborn's claims that the East India Company was effectively standardizing its bureaucracy at this time. Ogborn identifies a desire for "fixity, uniformity" and "a degree of consensus on imperial governance" within the Bengal administration.⁸⁶³ In the case of widow-burning statistics, views were strongly divided about the policy, but procedural consensus was

⁸⁶¹ Prior, 'Bayley, (William) Butterworth (1781–1860)'.

⁸⁶² Charles Allen and Michael Mason, *Plain Tales from the Raj : Images of British India in the Twentieth Century* (London: Futura, 1976), 219-30.

⁸⁶³ Ogborn, *Indian Ink : Script and Print in the Making of the English East India Company*, 231-38.

strictly enforced. Senior officials sharply reprimanded any magistrate who deviated in any way from their instructions. Although the civil service in British India was small, the chaos of British rule at the peripheries can be overstated. Some bureaucratic reforms were highly effective and the colonial state was able to produce judicial statistics about the suicide of widows in British India forty years before the home British state could produce national suicide figures.

Britain's emergence as a statistical powerhouse in the late nineteenth century was the result of top-down scientific, political and bureaucratic developments centred on London and the British state did lag behind its European neighbours, especially France, in the production of centralised social statistics. However, this does not mean that the British public sphere was numerically deficient. Non-state organisations such as Church schools, missionary societies and anti-slavery campaigners counted and measured their activities, and social statistics were officially produced by British colonial bureaucracies and local state authorities. The consumption of this information was not confined to a metropolitan political elite; as this study demonstrates, data could circulate widely and stimulate political activity by women and men across Britain, from a broad range of social classes. This suggests that a fourth factor, adding to the three identified by Tom Crook,⁸⁶⁴ lies behind the rapid development of British social statistics from the 1830s: the new science of society was developed within a highly receptive, statistically-minded culture.

The widow-burning statistics were put to many uses. I want to highlight initially the ways in which this new form of information acted as a determinant, shaping action and thoughts. There were six particularly strong consequences.

First, the production of official data timetabled how the British managed the issue. The American sociologist Paul Starr noted that statistical systems have “different kinds of periodicity”.⁸⁶⁵ Starr saw this as a sampling question, since different frequency of counts produce different empirical conclusions; but this case study has shown that timetables shaped actions as well as findings. Prior to the statistical regime British dealings with widows and their families were low frequency and sporadic. Eyewitness encounters were extremely rare and a tiny number of problematic burnings were

⁸⁶⁴ Crook, *Governing Systems : Modernity and the Making of Public Health in England, 1830-1910*, 63-69.

⁸⁶⁵ Starr, 'The Sociology of Official Statistics', in *The Politics of Numbers*, 49-50.

discussed internally. Outside the Company, in the British public sphere, the custom was not unknown, but there was no chronological pattern to its appearance in books, news stories or representation on the stage. The first set of unofficial figures made the topic controversial and newsworthy, but as a single, standalone dataset did not alter the schedules of debates. However, after 1815 what had been rare became routine. At every level of the Company the production and publication of annual statistics created a timetable that repatterned when officials worked, made decisions and were given instructions and information. The publication schedules also determined the timings of debates in the public sphere, regulating when newspapers wrote about the issue and when activists produced new pamphlets. Only the House of Commons was immune; its debates on the issue were sporadic and not related to the publication of new information.

Second, the widow-burning statistics introduced a new way of viewing India from a distance. Before the numbers were published, ‘old-hands’ had a powerful hold within the Company and their first-hand knowledge of India was used to keep others away from policy decisions made in Parliament, the Court of Directors, and the Court of Proprietors. The data created a new form of expertise. Campaigners who had never been to India were able to find trends and sociological patterns in the widow-burning data that were unknown to Company employees with many years of experience on the ground.

Third, the ongoing production of comparable statistics shifted the focus of British debates away from the past towards a dynamic understanding of the present state of India, encouraging predictions and speculations about future trends. Prior to the numbers, when Britons considered widow-burning they read long, closely observed eyewitness accounts of individual cases. Close-looking revealed what the custom was and how it operated. Looking at the history of previous encounters provided the long view, so in the eighteenth century it was historians who made sociological judgements about the cultural significance and prevalence of the custom. Sociological counts did not erase history entirely, it still mattered that the custom was long-standing, but the distant past was no longer seen as a reliable guide to present practices. The first set of statistics provided a static view of the present – Carey and Buchanan’s tables counted six months of cases in one region. With the introduction of annual counts, the numbers became dynamic and time-based analysis was now possible. In 1825 Parliament published tables summarising a decade of cases in British India. The present was now

understood in relation to its recent past and probable future. Each new year enabled observers in the UK to see longer trends. Implicit in the publication of these extended time sequences was the hope that by standing further back the picture would become clearer.

Fourth, the publication of data transformed its political potential. If the data had remained secret it would have had few effects. The obligation placed on the Company to publish all its correspondence on *sati* was a political masterstroke, orchestrated by Thomas Fowell Buxton, the evangelical MP. The publication of numbers had created a new form of transparency, one that offered serious opportunities for those who sought to use colonialism as a vehicle to introduce fundamental religious and cultural changes.

Fifth, although appearing transparent and easy to understand, the numbers dazzled many readers. Simple errors went unchallenged. MPs regularly cited the figures wrongly, and printers and newspaper editors reproduced tables of data containing basic numerical errors. Unlike words which are endlessly polished and corrected as they circulate, numbers are harder to look at and no-one noticed when they didn't add up. Their reliability was taken on trust. Likewise, more complex challenges to sampling errors went unheeded. Although the statistics provided a new lens through which to view current social practices in India, the data itself was hard to look at directly.

Sixth, the introduction of a new target culture had a profound impact on official emotions. Widow-burning, like suicide more generally, was a rare practice, but once it became a key indicator it took up significant amounts of Company time and produced new kinds of anxiety. From top to bottom, officials at every level of the East India Company were aware that these numbers should fall, and their anxieties became acute as they realised that public opinion, in Britain and to some extent India, was focussed on the trends. How much officials worried fluctuated in response to whether the numbers were going up or down. The numbers themselves were hard to look at, but like dazzling headlights they were also hard to escape. The amount of activity and discussion within the Company oscillated sharply in line with widow-burning trends. This was a new form of group panic, induced by the statistical targets.

A recent study of US law schools has shown that where a school ranks in the national system of statistical rankings has become the principal driver of its decision-making. Schools set themselves targets and the failure to meet these targets produces

intense organisational anxieties. Then the executive and senior administrators start to worry, lengthy explanations are sought and there is a search for levers to pull. Such statistically induced panics can profoundly alter how an organisation functions.⁸⁶⁶

Nobody dies when a law school panics about its rankings. But when a state, particularly a colonial state, panics and starts pulling levers to change behaviours the potential consequences for its subject are acute. In the 1820s the East India Company started to experiment with increasingly coercive and sadistic policies as it attempted to force the numbers of widow-burnings to move in the right direction.

At the lower levels of the Company officials were acutely aware that the number of widows burning on funeral pyres was a matter of “infinite concern”,⁸⁶⁷ both to directors in London and large swathes of British public opinion. A number of officials acted independently to try to bring the figures down in their regions. In 1824 Thomas Cuthburt introduced a local regulation in his district forbidding landholders from permitting widow-burnings to take place in their villages or on their estates. Landowners could be fined or imprisoned. The Company prized conformity, and Cuthburt was strongly reprimanded for “deviating from the instructions which you have been furnished with for your guidance in such cases”.⁸⁶⁸ At the same time he was also commended for bringing the numbers down. A profound uncertainty was afflicting the organisation, making some of its judgements about its employees’ actions erratic and contradictory.

One junior official was unreservedly praised by his superiors for devising a widow-burning policy that seemed to be bringing the numbers down. On 27 September 1823 Captain H.D. Robertson, a magistrate in the Southern Concan, issued special regulations for the construction of funeral pyres in his district. “No combustibles were allowed to be used, excepting grass and the cusby straw”; pyres made of wood were banned. As well as specifying the materials in the bonfire, Captain Robertson regulated the size and shape of its construction. Built properly, a Robertson funeral pyre was described by one eyewitness as resembling a “hay shed”.⁸⁶⁹ He was not the first British magistrate to consider the construction of funeral pyres. R.K. Arbuthnot, a colleague from the same region, had championed quick burning pyres, noting that “suffering

⁸⁶⁶ Espeland and Sauder, *Engines of Anxiety : Academic Rankings, Reputation, and Accountability*.

⁸⁶⁷ PP 20 (354), at 2.

⁸⁶⁸ PP 28 (178), at 240-1.

⁸⁶⁹ PP 24 (518), at 194.

could be very slight... if the pile is properly constructed” out of wood in the normal manner.⁸⁷⁰ Arbuthnot favoured wood, Robertson straw, and their choices of materials reflected two completely different approaches to the question of the widows’ suffering.

Captain Robertson wanted to increase the pain experienced by widows as they died on the pyre. This was made very clear when he attended a burning shortly after his regulations came into force. Robertson timed the burning with his watch and realized that the pyre, although constructed “under my superintendence”, was burning far too quickly. The thickness of the straw bales “opposite the suttee's head was equal to three bundles” and this produced an intense and suffocating heat which killed the widow almost instantly. Watching her die, Robertson reflected ruefully that “I ought to have been more scrupulous in regulating their thickness just opposite to the woman's head”.⁸⁷¹ He decided to adjust his regulations, making the straw thinner so that the death was slower and more painful. While Arbuthnot had sought to minimize pain, Robertson’s pyre regulations were explicitly intended to cause maximum pain.⁸⁷²

The morality that lay behind this plan was statistically driven. Robertson believed that by increasing the pain of death on the pyre he had devised an effective prevention system that would discourage women from burning with their husbands. The statistics had created a moral economy that justified increasing individual pain if it reduced the overall number of deaths.

Worries about rising numbers were particularly acute in this region of the Bombay presidency. When the widow-burning regulations were first introduced the Governor had informed the Court of Directors that the practice had “entirely ceased” in Bombay. Indeed, it was “so rare that no judgement could be formed of the effects of those measures.”⁸⁷³ The data initially supported these claims. From 1815-1818 no widow-burnings were recorded in Bombay, but then the numbers started to climb. In most districts numbers remained low, but one region, the Southern Concan where Captain Robertson was a magistrate, was almost singlehandedly responsible for the rising numbers.

⁸⁷⁰ PP 20 (354), at 148.

⁸⁷¹ Ibid., at 152.

⁸⁷² The fullest account of the Robertson regulations can be found in Kenneth Ballhatchet, *Social Policy and Social Change in Western India 1817-1830* (Oxford: University Press, 1957), 283-291. See also Jörg Fisch, *Burning Women* (London: Seagull, 2006), 274.

⁸⁷³ PP 17 (466), at 132-3.

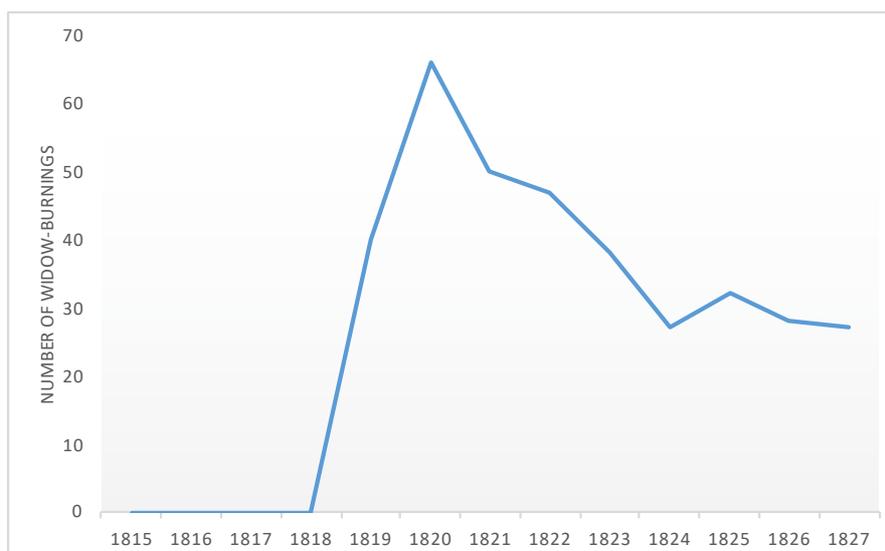


Fig. 6a: Graph showing the numbers of widow-burning deaths recorded by British magistrates in the Southern Concan, 1815-1828

The official British funeral pyre, introduced by Robertson, was known as the ‘New Pile’. Although this was a local initiative, the New Pile attracted broad support. W. Newnham, Chief Secretary to the Governor, noting that he was personally anxious to “diminish the number of suttees”, praised its “humanity”.⁸⁷⁴ In June 1824 T. Barnard wrote a minute which analysed the New Pile. He called it an “ingenious device” because it rendered a death on the pyre “too long for human nature to endure”.⁸⁷⁵ Reports began to filter in of the pile’s effectiveness. A. D. Blane, assistant magistrate in charge of the Southern Concan, reported that “It is highly satisfactory to observe a considerable diminution in the number of suttees. Much doubtless is owing to the operation of the reformed system suggested by Captain Robertson.”⁸⁷⁶ The Pile was discussed and praised in the English language press. In October 1824 a British correspondent wrote to the *Bombay Courier* about a widow-burning he had recently witnessed, comparing in detail its construction techniques against the specifications of Robertson’s official pyre.⁸⁷⁷ Mountstuart Elphinstone, the Governor of Bombay, wrote to the Court of Directors in London praising “the judgement, humanity and persevering

⁸⁷⁴ PP 24 (518), at 195.

⁸⁷⁵ PP 24 (518), at 209.

⁸⁷⁶ PP 20 (354), at 141.

⁸⁷⁷ PP 24 (518), at 214.

zeal evinced by Captain Robertson in the attainment of an object which promises so materially to diminish, among Hindoo widows, the practice of self immolation.” The Governor noted with satisfaction that “since the promulgation of the rules, six widows had been induced to abandon the resolution to burn.”⁸⁷⁸

When news of the pile reached Britain, Captain Robertson’s ideas were taken seriously at the highest levels of the East India Company and praised in the British press.⁸⁷⁹ The directors seriously considered the practicability of making Robertson’s New Pile mandatory. The empirical evidence suggested that the pile was effective but fears about the dangers of interfering with religious practice held sway and they did not approve the widespread introduction of an official British bonfire.

This was a new and distinctly statistical form of bureaucratic sadism, where pain was deliberately caused to enforce a numerically determined measure of social progress. Rather than encouraging rationality, for over a decade the fluctuating figures had produced stasis. Psychologists who study decision-making, such as Daniel Kahneman, argue that “organizations are better than individuals when it comes to avoiding errors, because they naturally think more slowly and have the power to impose orderly procedures.”⁸⁸⁰ These procedures, he argues, make them more capable than individuals of rationally handling data. But information panics show that these rational capabilities should not be over-estimated. Strong emotions are connected with successfully meeting targets, and if they are not being met, decision-making can freeze, an institution can panic, becoming anxious, irrational and highly contradictory. If the problem persists states can act violently. In this case the executive in London froze, uncertain how to proceed and the leadership in India became willing to sanction any policy that might reduce the numbers of burnings, however cruel.

The statistics were used to justify new forms of cruelty, but they also generated new forms of care and affection. Like anti-slavery data, the widow-burning statistics reached mass audiences in the early nineteenth century, and the plight of Indian widows moved people across the Protestant world.

⁸⁷⁸ PP 24 (518), at 163.

⁸⁷⁹ *Caledonian Mercury* November 17, 1825.

⁸⁸⁰ Kahneman, *Thinking, Fast and Slow*, 431.

The publication of new figures helped to timetable these campaigns, but the fluctuations themselves had less impact. Campaigners always looked for ways to make the numbers vivid. They recalculated the raw data to produce unusual totals that would make the figures speak to their audiences. Women in Liverpool were told by missionary fundraisers that government data showed that “two females roasted alive every day in one part of British India”.⁸⁸¹ When making these calculations campaigners preferred to use the latest data, mainly to demonstrate that it was an ongoing issue. Whilst India remained Hindu widow-burnings would still occur. In this sense the political use of statistics by evangelicals was fundamentally driven by their beliefs, not empiricism.

It is striking how many women were moved to act by the statistics. The petitions they organised in England were early examples of collective female political action. Dissenters from middling and working backgrounds were also numerate enough to respond passionately to data. Whether this popular numeracy was a distinctive feature of Protestant evangelical culture, or whether other popular organisations, groups and societies were also using numbers to manage themselves, measure their progress and further their interests, is a question that needs more study.

That the public cared about the numbers of burnings worried the Company intensely. When Lord Bentinck was appointed Governor-General in 1828 he was clear that the strength of public opinion meant the Company must change tack. Bentinck responded by introducing a total ban. He recognised the risks but argued that “man must be reckless” when pursuing a moral good. His moral bravery should not be overstated. It was clear from his reasoning that Lord Bentinck was acutely aware that it might be personally reckless not to act. He had been in Britain prior to being appointed Governor-General and whilst there he recognised that it was a “very general opinion that our interference has hitherto done more harm than good”. He knew he risked being accused in the British press of “the crime of multiplied murder; if I could hesitate in the performance of this solemn obligation. I have been already stung with this feeling.”⁸⁸²

Bentinck presented his ban as an empirical as well as moral decision. In his famous minute on *sati* published in November 1829, he stressed that various statistics were at the forefront of his mind. Bentinck had beside him the latest official data, the previous years’ figures plus the results of an opinion survey of army officers which demonstrated

⁸⁸¹ *The Times*, Jun 4, 1821.

⁸⁸² William Henry Cavendish Bentinck and C. H. Phillips, *The Correspondence of Lord William Cavendish Bentinck, Governor-General of India 1828-1835* (Oxford: University Press, 1977).

that the majority believed that their troops would not rebel if the custom was banned. Bentinck was the fifth Governor-General to be supplied with annual data about the custom. Interpreting this data had become a habitual process, and one small consequence was that Governor-Generals could now confidently read trends, provide explanations and make the numbers fit whatever story they wanted to tell.⁸⁸³

However, the empiricism of British leaders should not be exaggerated. Although he took account of the data, Bentinck was happy to cast aspersions on its reliability, suggesting as an aside that he doubted if the fall in 1828 “be real”. Bentinck suggested that the decline over the previous few years could simply be the result of the police making the numbers “appear so in the returns”.⁸⁸⁴ Falling numbers did not help the case for a ban, and Bentinck would not be tied to inconvenient facts.

Significantly reducing the number of burnings counted by the state was the principal aim of the ban introduced by Bentinck. Thirteen years of fluctuating figures had killed any hope that the British could phase out widow-burnings through education or civilization. Social progress was now dependent not on encouraging rationality but on “our power to enforce it”.⁸⁸⁵

Devising regulations that would supply the state with sufficient powers to enforce a ban was entrusted to Butterworth Bayley. 27 years after he first became involved as a student in the Fort William College survey, and fifteen years after he devised the previous regulations, this was his final direct intervention in the issue. Widow-burning was banned; any form of aiding or abetting by family members, religious leaders or neighbours was classed as murder. Once again Bayley placed the production of information at the heart of the new regulation, but this time the obligation was not to seek permission but to act as an informant. A new responsibility was placed on all family and neighbours to supply information to the police about an intended burning; failure to report became a serious crime.

When they distributed Form 7 in January 1815, Butterworth Bayley and Montague Turnbull had envisaged that collecting data about widow-burning would be an ongoing task for colonial officials, and so it turned out to be. After the ban *suttee* continued to be

⁸⁸³ By 1830 there were comparable discussions about thuggee statistics. Bentinck and Philips, *The Correspondence of Lord William Cavendish Bentinck, Governor-General of India 1828-1835*, 426.

⁸⁸⁴ Bentinck and Philips, *The Correspondence of Lord William Cavendish Bentinck, Governor-General of India 1828-1835*, 336.

⁸⁸⁵ Bentinck and Philips, *The Correspondence of Lord William Cavendish Bentinck, Governor-General of India 1828-1835*, 337.

listed as a separate item in Indian crime statistics, and the figures were published in British parliamentary papers as part of the annual *Statement of Moral and Material Progress and Condition of India*. The colonial bureaucracy was by this period producing large numbers of crime statistics, as well as many other economic and social statistics. The widow-burning statistics had become merely one row in the table. Like most social statistics the collection and publication of data about the custom had become an ongoing and uncontroversial bureaucratic task for the Indian state. Two centuries later the practice is still counted and *sati* is listed alongside murder and suicide, with its own row in India's judicial statistics. The introduction of official statistics in 1815 had introduced a permanent change in the way that the state in India managed the custom.

The figures recorded since 1830 suggested that the ban was a success. For example in 1845 Indian crime statistics recorded only one case, in Madras, where nineteen people were found guilty of aiding and abetting.⁸⁸⁶ In this settled phase, which lasted far longer than the brief period of information panic, recorded levels of widow-burnings largely accorded with the intentions of policy-makers. The numbers were low and barely fluctuated. Perhaps the practice really had become less prevalent or it had simply relocated away from British oversight. Individual episodes could provoke heated discussion in newspapers but did not lead to panic or calls for an adjustment of policy. Unlike the earlier figures, these were numbers the British state could live with.

In this era of statistical stability, old anxieties had not entirely vanished, though. When, occasionally, the annual *Statement of Moral and Material Progress* had to record evidence that the practice had increased, as occurred in Oudh in 1860, the authorities reacted harshly. That year five widow-burnings were recorded, and officials recorded that:

A considerable number of Suttee cases occurred simultaneously in the early part of the year. Severe punishments were awarded in every case, and measures taken to make known the determination of Government to suppress peremptorily this class of offence.⁸⁸⁷

⁸⁸⁶ PP 40 (2269), at 4; PP 23 (443), at 132.

⁸⁸⁷ PP 39 (385), at 198.

Relatively small increases in the numbers of widow-burnings were now a trigger for strong coercive action. The colonial authorities pulled every lever hard to make sure numbers dropped back down. In this case explanations for each burning were provided for the Governor General and the severe punishments included the removal of property rights for all members of one village. Truly sadistic regulations such as official bonfires had been shelved as soon as the ban proved effective; but the authorities continued to impose strongly repressive measures, creating hostile environments to keep the figures low.

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