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**TREACHEROUS MINDS, SUBMISSIVE BODIES:
CORPOREAL TECHNOLOGIES AND HUMAN EXPERIMENTATION IN
COLONIAL INDIA**

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Abstract

Whilst historians have extensively explored how hospitals, asylums or sanitation projects in British India reflected colonial ideas of racial difference, we know rather less about the influence of racial theories and stereotypes on technologies such as fingerprinting, evolved in colonial Bengal as an administrative tool but found applicable across the world, or, at the other extreme, “mesmeric surgery,” discarded in the metropole but experiencing a brief second life in colonial Bengal. Exploring these contrasting projects, both grounded in British theories about the nature of the bodies and minds of “natives,” the chapter suggests that the historiography of colonial medicine needs to expand its scope to include issues related to governmentality, corporeal technologies and knowledge-transfer within and beyond the British Empire.

Keywords

Fingerprinting, mesmerism, colonial Bengal, race, mendacity, submissiveness, William James Herschel, James Esdaile, human experimentation

Analyzing the “style of thinking” of colonial states, Benedict Anderson has remarked that their aim was “total surveyability” of the colonial domain. This transparency was sought through the construction of “a totalizing classificatory grid” that could be used to order “peoples, regions, religions, languages, products, monuments.” The grid ensured that one could identify and situate people and things in definitive ways – “that,” to quote Anderson again, “it was this, not that; it belonged here, not there.”¹ In this paper, I explore how projects for the definitive identification of individuals as well as human experimentation of dubious kinds were not shaped solely by an abstract drive for total classification but also by cultural convictions about the bodies and minds of the colonized. The vast literature on the history of colonial medicine has taught us much about the ways in which the management of epidemics, the institutionalization of laboratory research or the treatment of “lunatics”, to varying extents, drew upon and shaped ideas of racial difference. We know rather less, however, about the role of colonial conceptions of “native” bodies and minds in the emergence of such “scientific” and universally applicable technologies as fingerprinting in British India or, at the other extreme, in the brief second life that “mesmeric surgery,” out of favour in the metropole, experienced in colonial Bengal. Although both of these, their Indian roots have been explored in earlier studies, their relevance to the history of colonial medicine as well as colonial governmentality has not been fully assessed.²

The Submissive and Duplicitous Native

¹ Anderson does not address specific technologies of identification, although he does mention postcolonial Indonesia’s compulsory photo-IDs as an example of a residue of the colonial dream of total surveyability. See Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1991), 184, 185.

² See, for instance, Waltraud Ernst, ‘Esdaille, James (1808–1859)’, in *Oxford Dictionary of National Biography* [<http://www.oxforddnb.com/view/article/8882>, accessed 29 January, 2006]. For the broader contexts of Esdaille’s work, see Waltraud Ernst, “‘Under the Influence’ in British India: James Esdaille’s Mesmeric Hospital in Calcutta and its Critics’, *Psychological Medicine*, 25 (1995): 1113-23; W Ernst, ‘Colonial Psychiatry, Magic and Religion: The Case of Mesmerism in British India’, *History of Psychiatry*, 15 (2004): 57-71; and Chandak Sengoopta, *Imprint of the Raj: How Fingerprinting was Born in Colonial India* (London: Macmillan, 2003).

One recurrent theme in British discourse on Indians concerned the duplicity of natives. John Strachey, in his authoritative and influential handbook, *India* (first published in 1888), observed that ‘if lying be the test of dishonesty, it would be hard to equal the dishonesty that you meet with in India’.³ In 1899, Sir Edwin Arnold, translator of the *Bhagvad Gita*, warned that an ‘atmosphere of lies’ clung ‘like an evil mist’ to legal proceedings in India.⁴ As late as in 1914, an authoritative textbook of forensic medicine lamented that virtually in every case involving Indians, ‘more or less false evidence is given, whether it be from fear, stupidity, apathy, malice or innate deceit’ and that evidence was ‘generally supported by marvellously minute direct and circumstantial details’.⁵ Bengalis had the worst image of all. ‘It is not too much to assert’, George Otto Trevelyan (1838-1928) had observed in the 1860s, ‘that the mass of Bengalees have no notion of truth and falsehood’.⁶ More than two decades before Trevelyan, his uncle and old India hand Thomas Babington Macaulay (1800-1859) had put it far more floridly and famously: ‘What horns are to the buffalo, what the paw is to the tiger, what the sting is to the bee, what beauty, according to the old Greek song, is to woman, deceit is to the Bengalee’.⁷

But malice and dishonesty were not all there was to the Bengali character. The race was also quite astoundingly passive and indolent. The Bengali, remarked Macaulay, ‘shrinks

³ John Strachey, *India* (London: Kegan Paul, 1888), 286. On the importance of Strachey’s book in building British opinion on India for decades, see Eric Stokes, *The English Utilitarians and India* (Oxford: Clarendon Press, 1959; Reprint, Delhi: Oxford University Press, 1982), 137, 305.

⁴ Quoted in Vinay Lal, ‘Everyday Crime, Native Mendacity and the Cultural Psychology of Justice in Colonial India’, *Studies in History*, 15 (1999): 145-166, on p. 155. Lal’s illuminating article cites countless other examples of British observations on the same theme.

⁵ See L A Waddell, *Lyon’s Medical Jurisprudence for India with Illustrative Cases*, 5th edn (Calcutta: Thacker, Spink, 1914), 19 and for an even later elaboration of the same theme, see William Willcox’s contribution to the Discussion on Lancelot Sanderson, ‘Law and Order and Medicine in India in the Future’, *The Medico-Legal and Criminological Review*, 2 (1934): 129-40, at 137.

⁶ [George Otto Trevelyan], ‘Letter from a Competition Wallah: Letter VIII – About the Hindoo Character’, *Macmillan’s Magazine*, 9 (1863-64): 198-211, on pp. 205 and 207. Trevelyan’s letters were later published in book form: see G. O. Trevelyan, *The Competition Wallah* (London: Macmillan, 1864).

⁷ T B Macaulay, ‘Warren Hastings’ (1841), in Macaulay, *Critical and Historical Essays*, [http://www.columbia.edu/itc/mealcac/pritchett/00generallinks/macaulay/hastings/txt_complete.html], sec.4, accessed June 9, 2013]. Macaulay served in India from 1834 to 1838; on his contributions to British ideas and representations of India, see Balachandra Rajan, *Under Western Eyes: India from Milton to Macaulay* (Durham, North Carolina: Duke University Press, 1999), 174-96.

from bodily exertion; and, though voluble in dispute ... seldom engages in a personal conflict ... There never, perhaps, existed a people so thoroughly fitted by nature and by habit for a foreign yoke'.⁸ Praising North Indians for their near-European 'manliness and vigour', John Strachey averred: 'But for the presence of our power, Bengal would inevitably and immediately become the prey of the hardier races of other Indian countries ... Englishmen who know Bengal, and the extraordinary effeminacy of its people, find it difficult to treat seriously many of the political declamations in which the English-speaking Bengalis are often fond of indulging'.⁹ Although ideas on the duplicity and passivity of Bengalis were primarily used, as in the statement by Strachey, to justify the (benevolent) despotism of the British, they also generated and enabled techniques and initiatives targeting the native body. Although some excellent research has been done on colonial interventions on criminal bodies, the reach of colonial corporeal technologies was wider and far more diverse.¹⁰ I shall establish that contention in this paper by examining the development of two techniques that were apparently very different in their nature, purpose and impact. Nevertheless, their histories were rooted in their perceptions about the psychological, moral, and racial characteristics of Indians (and more specifically, of Bengalis), and show how the colonial relationship was not simply limited to political or cultural subjugation but inscribed on the very bodies of the colonized.

⁸ T B Macaulay, 'Lord Clive' (1840), in Macaulay, *Critical and Historical Essays* [<http://www.columbia.edu/itc/meaac/pritchett/00generallinks/macaulay/clive/clive08.html>], accessed June 9, 2013.]

⁹ Strachey, *India*, 4, 336. The charge of Bengali effeminacy, interestingly, was partly endorsed by Bengali nationalists and inspired many initiatives to overcome it. See John Rosselli, "The Self-Image of Effeteness: Physical Education and Nationalism in Nineteenth-Century Bengal," *Past and Present*, 86 (February 1980): 121-48; Mrinalini Sinha, *Colonial Masculinity: The 'Manly Englishman' and the 'Effeminate Bengali' in the Late Nineteenth Century* (Manchester: Manchester University Press, 1995); and Indira Chowdhury, *The Frail Hero and Virile History: Gender and the Politics of Culture in Colonial Bengal* (Delhi: Oxford University Press, 1998).

¹⁰ On colonial interest in 'criminal bodies', see Clare Anderson, *Legible Bodies: Race, Criminality and Colonialism in South Asia* (Oxford: Berg, 2004); and Mark Brown, 'Ethnology and Colonial Administration in Nineteenth-Century British India: The Question of Native Crime and Criminality', *British Journal of the History of Science*, 36 (2003): 201-219. See also Radhika Singha, 'Settle, Mobilize, Verify: Identification Practices in Colonial India', *Studies in History*, new series, 16 (2000): 151-98; and Sengoopta, *Imprint of the Raj*.

Lying Natives, Truthful Bodies

As long ago as in 1684, the British physician and pioneer botanist Nehemiah Grew (1641-1712) had pointed out in the *Philosophical Transactions of the Royal Society* that the human finger tips were covered by ‘innumerable little ridges’ and the British engraver Thomas Bewick (1753-1828) had used his finger-marks in 1804 and 1818 to ‘sign’ his books on birds. In 1823, the Czech physician and physiologist Jan Evangelista Purkyne (1787-1869) had even classified fingerprints into nine different types. None of these observations led, however, to the creation of a system of identification by fingerprinting.¹¹ If necessity is the mother of invention, then the necessity to invent a scheme to identify individuals by some simple, indisputable marker was not acute at the time of Grew’s, or even Purkyne’s observations. Not acute, that is, in Europe. It was a different story in India. European anxieties about habitual criminals and other marginal people, to be sure, heightened over the nineteenth century, but they were almost negligible in comparison to the problems of identity and identification confronting colonial administrators.¹² It is scarcely surprising, therefore, that a viable system for the identification of individuals by fingerprints was first developed in British India, and not by a scientist, or even a policeman, but by a civil servant: William James Herschel (1833-1917), grandson of the astronomer who discovered the planet Uranus and son of the celebrated Victorian scientist John Herschel.¹³

Unlike his illustrious ancestors, William James Herschel had chosen a career in the Indian Civil Service and was posted in administrative positions in various parts of Bengal. In

¹¹ See Simon Cole, *Suspect Identities: A History of Fingerprinting and Criminal Identification* (Cambridge, Mass.: Harvard University Press, 2001).

¹² On European concerns with identification, see Alain Corbin’s essay ‘Backstage’ in *A History of Private Life*, vol 4, edited by Michelle Perrot (Cambridge, Mass.: Harvard University Press, 1990), 451-667.

¹³ The basic biography is well summarized in A. Spokes Symonds, ‘Herschel, Sir William James, second baronet (1833–1917)’, rev. Katherine Prior, *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004) [<http://www.oxforddnb.com/view/article/37539>, accessed June 10, 2013]. See also Eileen Shorland, ‘Sir William James Herschel and the Birth of Fingerprint Identification’, *Library Chronicle, University of Texas*, new ser., 14 (1980): 25-33.

1858, while negotiating with a Bengali contractor named Rajyadhar Konai for the supply of construction material, Herschel was worried that the man might later disown the contract. In the hope of frightening ‘Konai out of all thought of repudiating his signature thereafter’, Herschel, on a sudden whim, asked him to stamp the contract with a print of his right palm. After obtaining the print, he later recalled, ‘we studied it together, with a good deal of chaff about palmistry, comparing his palm to mine on another impression’.¹⁴ The use of the entire palm being inconvenient, Herschel wondered whether it might be better to use the finger tips for the purpose. He does not seem to have imagined, as yet, that the ridge-patterns of the finger tips were so distinctive and so enduring that disowning them might lead to conviction for perjury. All he sought at this point was a device to frighten Indians into truthfulness. ‘My executive and magisterial experience had’, Herschel explained, ‘forced on me that distrust of all evidence tendered in Court which did so much to cloud our faith in the people around us’.¹⁵

The real power of Herschel’s discovery became evident to him only after much experimentation with his own fingers and those of friends and visitors. Herschel was indefatigable in collecting specimens from friends and colleagues and his ‘fad’ became well-known wherever he was posted. He never encountered a duplicate pattern and as far as he could see from prints taken repeatedly from the same person across time, each individual’s ridge patterns persisted unaltered through time.¹⁶ Purely by chance, he seemed to have

¹⁴ William James Herschel, *The Origin of Finger-Printing* (London: Oxford University Press, 1916), 7-9. Many have wondered just why Herschel thought of this particular procedure. Herschel himself observed dismissively that there was nothing very original about it: instances had long been known of the hand, or the nail or even the teeth being used to ‘certify a man’s act, or a woman’s’. As a boy, he recalled, he had loved Thomas Bewick’s work on birds, although, by the time he had asked Konai for his hand-print on the contract, he had forgotten all about Bewick’s habit of affixing his thumb mark to his books. He also acknowledged that illiterate Indians used finger-dabs as signatures (*tip-soi*) but since those dabs were mere smudges without any identifying attributes, they did not, he asserted, inspire him to study the individuality of fingerprints. But even if he was wrong or dishonest about this and it was the supposedly unidentifiable *tip-soi* that had induced him to explore whether more carefully taken finger-marks might serve to record a person’s identity, his use of the whole palm remains a mystery.

¹⁵ Herschel, *Origin of Finger-Printing*, 7.

¹⁶ See H J S Cotton, *Indian and Home Memories* (London: Unwin, 1911), 68.

stumbled upon a foolproof way of identifying individuals, and he would realise how administratively useful such a tool could be when he was posted to Nadia as magistrate. That was in 1860, when Nadia was the nerve-centre of the so-called Indigo Rebellion.¹⁷ From the late eighteenth century, the East India Company had supported the cultivation of indigo in India, and especially in Bengal, by providing advances to European planters.¹⁸

The planters, in turn, entered into contracts with peasants (*rayats*), who had come to hate the meticulousness required in cultivating indigo and to resent the low profits.¹⁹ The indigo planters, however, were a powerful group and ran almost a parallel colonial regime of their own, there being few Europeans in rural regions except magistrates, many of whom were ready to turn a blind eye to the doings of other white people. The bullying of peasants, destruction of food crops, forging contracts, the forcible sowing of indigo, and countless other acts of petty despotism were only too frequent.²⁰ When the Government of Bengal ordered investigations of complaints of coercion, peasants in village after village began to rebel against the planters. It was only after the Government appointed a commission of inquiry into the indigo trade that the disturbances began to subside – the report was highly critical of the planters and the majority of magistrates.²¹

Violence and bullying were not all there was to the indigo business, however. Since the cultivation of indigo was done on contract, one easy way of compelling a peasant to grow the crop was to forge a contract. Likewise, for a peasant, an easy way of denying the obligation to grow indigo was to repudiate a genuine contract, alleging it to be a forgery.

¹⁷ On the indigo revolts, see Blair B Kling, *The Blue Mutiny: The Indigo Disturbances in Bengal, 1859-1862* (Philadelphia: University of Pennsylvania Press, 1966); and Amiya Rao and B G Rao, *The Blue Devil: Indigo and Colonial Bengal* (Delhi: Oxford University Press, 1992).

¹⁸ In the late eighteenth century, Joseph Banks, the President of the Royal Society and Scientific Advisor to the East India Company had urged its Directors to cultivate sugar, cotton, coffee and indigo – none of which could be grown in Europe – in India. See David Arnold, *Science, Technology and Medicine in Colonial India* (Cambridge: Cambridge University Press, 2000), 52.

¹⁹ See *Report of the Indigo Commission appointed under Act XI. of 1860, with the Minutes of Evidence*, available most conveniently in *House of Commons Parliamentary Papers*, 44 (1861): 335 *et seq.* on xviii.

²⁰ The *Report of the Indigo Commission* is full of examples; for independent confirmation, see John Beames, *Memoirs of a Bengal Civilian* (London: Eland, 1984).

²¹ This account relies on Blair Kling, *The Blue Mutiny*.

‘The Indigo disturbances in the district’, Herschel wrote, ‘had given rise to a great deal of violence, litigation, and fraud; forgery and perjury were rampant’.²² Documents submitted in court, he recalled, ‘were frequently worth no more than the paper on which they were written ... Things were so bad in this and other ways that the administration of Civil Justice had unusual difficulty in preserving its dignity’.²³ There just was no simple way of determining the whether a contract was real or forged, and as the magistrate in charge of pronouncing on such matters, Herschel came to appreciate the practical significance of his ‘hobby’.²⁴ In his testimony to the Indigo Commission, Herschel declared:

If personification at the time of signature, or false pleas of personification afterwards, were rendered impossible by any peculiar mode of signature, nine-tenths of the difficulty of forming a decision would disappear, and with it nine-tenths of the process necessary to bring the trial to an issue. I can suggest a signature of exceeding simplicity, which it is all but impossible to deny or to forge. The impression of a man’s finger on paper cannot be denied by him afterwards.²⁵

The inquiry commission ignored this suggestion completely and Herschel failed to convince the Government of Bengal to enforce the use of ‘finger-prints’ on contracts.²⁶

When appointed the Magistrate and Collector of the Hooghly District in 1877, Herschel finally had enough authority to go it alone. He demanded fingerprint signatures from those collecting pensions (because he suspected that many of the genuine pensioners had long died and been replaced by impersonators) and then instituted the use of fingerprints

²² Herschel, *Origin of Finger-Printing*, 11.

²³ *Ibid.*

²⁴ Herschel was in favour of summary punishment for anybody infringing a contract and never hesitated to rule against *rayats*, when he considered them to be in breach of contract. He repeatedly warned the peasants that he would enforce contracts impartially and if necessary, call in the military police to aid him. But he was equally strict with planters and was greatly disliked by them. See Kling, *Blue Mutiny*, 150-51.

²⁵ *Report of the Indigo Commission*, 573.

²⁶ Many years later, however, Herschel heard from a senior civil servant that the inaction had been motivated by the fear that the introduction of fingerprinting might well trigger a new controversy just when the indigo situation was improving. See Herschel, *Origin of Finger-Printing*, 14, 15.

in registration of deeds for sale of land or property.²⁷ Finally, he began to use it in the jail to ensure that a convict could not get somebody to serve out his sentence ‘for a consideration’, which, apparently, was common practice. In all of these areas, the technique worked exceedingly well. Fingerprinting, Herschel exclaimed in a letter to his wife, was ‘a miracle, a miracle from on High!’²⁸ Herschel failed again, however, to persuade the Government to use his technique and his work was not widely known when he retired in 1877. And after he retired from the civil service and left India, fingerprinting was discontinued even in Hooghly.²⁹ Back in England, Herschel continued collecting fingerprints but published nothing on his work in India.³⁰

The importance of Herschel’s work was first appreciated by Francis Galton (1822-1911), who, in the 1890s, was working on techniques for identifying individuals by their bodily features.³¹ The editor of *Nature* introduced him to Herschel, who was delighted to share his collection of prints with Galton. Having examined them, a stunned Galton declared: ‘There seems no persistence in the visible parts of the body, except in these minute and hitherto too much disregarded ridges ... They existed before birth, and they persist after death, until effaced by decomposition’.³² Here, obviously, was an ideal means of permanently identifying each individual. Although such identification was essential in the East – ‘While the natives of India and of Egypt have beautiful traits of character and some virtues in an exceptional degree, their warmest admirers would not rank veracity among them’, wrote Galton – it was far from inapplicable in Britain itself.³³ People saving money at the post-office savings bank, Galton suggested, should be asked to record their finger impressions in

²⁷ See Herschel, *Origin of Finger-Printing*, 18-21.

²⁸ See Eileen Shorland, ‘Sir William James Herschel and the Birth of Fingerprint Identification’, 30.

²⁹ See note from F W Duke dated 6 January 1893, University College London Library Services, Galton Papers 172/5B.

³⁰ See ‘Sir William Herschel’, *The Times*, 27 October 1917, 9.

³¹ See Galton, *Finger Prints* (London: Macmillan, 1892); Paul Rabinow, ‘Galton’s Regret: Of Types and Individuals’, in Paul R Billings (ed.), *DNA On Trial: Genetic Identification and Criminal Justice* (Plainview, NY: Cold Spring Harbor Laboratory Press, 1992), 5-18; and Simon Cole, *Suspect Identities*, pp. 99-113.

³² Galton, *Finger Prints*, 98, 10.

³³ Francis Galton, ‘Identification Offices in India and Egypt’, *Nineteenth Century*, 48 (1900): 118-26, at 119.

the deposit book ‘and that these should be used as a means of identification, when the depositor sought to draw money from a post-office where he was not known’. It was so easy to learn the rudiments of matching fingerprints that ‘it might well be part of the training of many minor civil servants, postmasters, Public Trustee employees, War Office and Admiralty pension-officers, and many other similar officials’.³⁴ Despite Galton’s persistent pleas, however, none of those ‘civil’ uses of fingerprinting were ever seriously considered in Britain. It was only the Home Office that showed interest in fingerprints.

From the mid-nineteenth century, administrators, policemen and politicians in Britain had been much concerned with identifying so-called habitual criminals, who, it was widely believed, constituted a distinct class and should be punished more severely than first-time offenders.³⁵ To achieve that, however, the police needed a foolproof system whereby a *specific* prisoner could be identified as having committed other crimes before the present one but there was, as yet, no simple, reliable and inexpensive method to do so.³⁶ Fingerprinting was cheap as well as reliable but to use fingerprinting in routine police work, one needed a reliable and easily searchable system whereby a fingerprint, whether one found at a scene of crime or one taken from an individual suspect, could be compared with prints (with identities) on record. But an easily-searchable database of fingerprints seemed impossible to create. The infinite diversity that made the ridge patterns unparalleled as identifiers also made it impossible to order them systematically.

That problem, too, was to be solved in Bengal by the Inspector General of the Bengal Police, Edward Richard Henry, with considerable assistance from two Indian sub-inspectors

³⁴ Pearson, *Life, Letters and Labours of Francis Galton*, 3A: 156-57.

³⁵ See Leon Radzinowicz and Roger Hood, ‘Incapacitating the Habitual Criminal: The English Experience’, *Michigan Law Review*, 78 (1980): 1305-89; and ‘Papers relating to the Bill for the More Effective Surveillance and Control of Habitual Offenders in India and Certain Connected Purposes’, in *Selections from the Records of the Government of India (Home Department)*, 300 (Calcutta, 1893), British Library Asia, Pacific and Africa Collections, MF 1/530-534.

³⁶ On identification procedures in British police forces in the late nineteenth century, see C E Troup, A Griffiths, M L Macnaghten, *Report of a Committee appointed by the Secretary of State to Inquire into the Best Means Available for Identifying Habitual Criminals* (Command Paper C-7263), 1894, in the *House of Commons Parliamentary Papers*, 72 (1893-94): 209-91.

Azizul Haque and Hem Chandra Bose, but it would take us far beyond the remit of this paper to explore its technicalities here.³⁷ The availability of a classificatory scheme, as one might expect, led to the immediate introduction of fingerprinting in police work in India. Rather more surprising was the mighty resurgence in its ‘Herschelian’ applications. All military and civil pensioners were now fingerprinted, as were all executants of deeds.³⁸ Even more reminiscent of Herschel’s experience during the Indigo Revolts was the use of fingerprinting in the Opium Department. As with indigo, opium was cultivated by *rayats* – who were not particularly fond of the crop and contracts with whom were often forged by middlemen. This had finally come to an end because ‘the finger impression of the payee is now required to authenticate acknowledgment of receipt’.³⁹ Similar problems with contracts for indentured labourers were also resolved by fingerprinting.⁴⁰ Huge organisations like the Survey of India or the Post Office maintained registers of their employees’ thumb impressions and ‘if a particular man is dismissed for misbehaviour, a photo-zincograph of his impression is sent to all the working parties, which ensures that he cannot again get taken on, even by assuming a false name’. From 1895, illiterate people were required to sign for money orders and postal

³⁷ See E R Henry, *Classification and Uses of Finger Prints* (London: HMSO, 1901). Generally on Henry, see F E C Gregory, ‘Henry, Sir Edward Richard, baronet (1850-1931), *Oxford Dictionary of National Biography* [<http://www.oxforddnb.com/view/article/33822>, accessed 14 February 2006]; and Maurice Garvie, ‘The Life and Times of Sir Edward Henry’, *International Criminal Police Review*, No. 480 (2000): 24-31. On the role of the two Indian sub-inspectors Azizul Haque and Hem Chandra Bose in developing the so-called Henry classification, see Radhika Singha, ‘Settle, Mobilize, Verify: Identification Practices in Colonial India’; and Shreenivas and Saradindu Narayan Sinha, ‘Personal Identification by the Dermatoglyphic and the E-V Methods’, *Patna Journal of Medicine*, 31 (1957): 97-108.

³⁸ Henry, *Classification and Uses of Finger Prints*, 6-7. Since the introduction of the technique, Henry claimed in his annual report for 1896, ‘cases have been instituted in twenty districts for false personation and convictions obtained in twenty-five cases, in which sentences varying from seven years to six months have been inflicted’. See E R Henry, *Report on the Administration of the Police of the Lower Provinces, Bengal Presidency for the year 1896* (British Library, Asia, Pacific and African Collections V/24/3202).

³⁹ Henry, *Classification and Uses of Finger Prints*, 7.

⁴⁰ Henry, *Classification and Uses of Finger Prints*, 8. Recruiters of indentured labourers (i.e., those agreeing to serve abroad for a fixed number of years, usually in plantations in far-flung parts of the British Empire from the British Caribbean to Natal) frequently resorted to ruses to entice illiterate villagers into signing such bonds. Fraudulent contracts were common and so were repudiations of contract by labourers who discovered too late the falsity of the stories of untold riches and wonderful lives in foreign climes. On the history of indentured labour, see Hugh Tinker, *A New System of Slavery: The Export of Indian Labour Overseas* (London: Oxford University Press, 1974) and Madhavi Kale, *Fragments of Empire: Capital, Slavery and Indian Indentured Labor Migration in the British Caribbean* (Philadelphia: University of Pennsylvania Press, 1998).

savings accounts with their thumb-prints.⁴¹ The Medical Department of the Bengal Presidency stopped issuing medical certificates without recording the thumb impression of the patient.⁴² The potential applications of fingerprinting in colonial administration seemed as unlimited as the mendaciousness and duplicity of Queen Victoria's Indian subjects.

Once fingerprinting had been established in India, it was adopted in Britain itself, but at first, *only* for the identification of criminal recidivists. Although the police would secure permission to use fingerprinting for other kinds of offenders, the technique would never be allowed out into the 'civil' sphere. Henry himself was appointed Assistant Commissioner of the Metropolitan Police and charged with supervising the transplantation of the imperial sapling on home soil. Scotland Yard's Fingerprint Bureau was founded in 1901 and the first conviction on fingerprint evidence occurred the very next year. What was a universal technique for identification in India came to be reserved in Britain for criminals, and only for those regarded as the most incorrigible. No less a figure than Francis Galton regretted this restriction. His student and biographer Karl Pearson emphasized that Galton 'did not think finger-prints were useful solely as a matter of criminal identification' and it was 'almost a catastrophe that the process of finger-printing should have become tainted in the popular mind by a criminal atmosphere'.⁴³ Galton's laments and other pleas notwithstanding, the bodies of law-abiding British subjects were left inviolate and the numerous 'Herschelian' applications, developed to combat Indian mendacity, were never welcomed into the metropole.

Mesmerism in Hooghly: Animal Magnetism and the British Bengali

Let us now turn to what is apparently a completely different kind of corporeal intervention – invasive surgery or, more precisely, anaesthesia in preparation for such surgery. Reliable

⁴¹ *Ibid.*, 8.

⁴² *Ibid.*, 7-8.

⁴³ See Pearson, *The Life, Letters and Labours of Francis Galton*, 3A: 156-57.

chemical anaesthetics came into use in the West in the late 1840s but that was preceded by a brief but controversial period of experimentation with anaesthesia by mesmeric influence. Few topics in the history of European medicine and psychology are more intriguing than mesmerism and its offshoots, the most enduring of which has, of course, been hypnotism.⁴⁴ The originator of mesmerism, Franz Anton Mesmer (1734-1815), claimed to have discovered that all living beings possessed an intangible magnetic fluid, which could be influenced by a healer through ‘magnetic passes’ (slow and sweeping hand movements that came very close to the patient’s skin but did not touch it).⁴⁵ Eventually, the subject being mesmerized would fall into a trance and could manifest many strange phenomena ranging from loss of sensation to clairvoyance. From the late 1830s, there was keen medical as well as popular interest in mesmerism in Britain. John Elliotson (1791-1868), Professor of Practical Medicine at University College London, performed many spectacular public demonstrations of mesmeric techniques on his hospital patients. Although Elliotson had to resign from his university post after the credibility of one of his subjects was challenged, he remained an enthusiast and published extensive reports on the applications of mesmerism in *The Zoist*, a journal he co-founded in 1843.⁴⁶

Mesmerism was known to produce insensibility but it was only after the 1842 amputation of the leg of a mesmerized labourer in Nottinghamshire that the anaesthetic utility of mesmerism began to be discussed widely.⁴⁷ Although anaesthetic gases like nitrous oxide had been known for many years, there had been no serious effort by surgeons to use them for

⁴⁴ On the relationship between mesmerism and hypnotism, see Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (Chicago: University of Chicago Press, 1997), 184-85.

⁴⁵ There is a vast literature on the general history of mesmerism. For comprehensive overviews, see Henri F Ellenberger, *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry* (New York: Basic Books, 1970), esp. 53-109; and Alan Gauld, *A History of Hypnotism* (Cambridge: Cambridge University Press, 1992). Winter, *Mesmerized*, is the most comprehensive study of mesmerism in Victorian Britain, but see also Roy Porter, ‘Under the Influence: Mesmerism in England’, *History Today*, 35 (September 1985): 22-29; and Fred Kaplan, ‘“The Mesmeric Mania”: The Early Victorians and Animal Magnetism’, *Journal of the History of Ideas*, 35 (1974): 691-702.

⁴⁶ On Elliotson, see Elizabeth S Ridgway, ‘John Elliotson (1791-1868): A Bitter Enemy of Legitimate Medicine?’, pts 1 and 2, *Journal of Medical Biography*, 1 (1993): 191-98; 2 (1994): 1-7.

⁴⁷ See Winter, *Mesmerized*, 42.

anaesthesia and surgical anaesthesia by ether came in only in the mid-1840s.⁴⁸ For a few years before the introduction of ether, mesmeric anaesthesia came to be well-known – and was very controversial.⁴⁹ In the history of those controversies, the Scottish surgeon James Esdaile (1808-1859), working in distant Bengal, was to play a role that was arguably more significant than that of any European practitioner.

Esdaile was born in Scotland and trained in medicine at the University of Edinburgh. In 1830, he joined the East India Company, arriving in Bengal in 1831. From 1839 to 1846, he was in charge of a hospital at Hooghly – the same Hooghly where, more than three decades later, William Herschel would launch the official use of fingerprinting – and Esdaile’s success with mesmeric surgery here led to his transfer to Calcutta, where he was put in charge of a new mesmeric hospital. His work received much praise from the Governor-General Lord Dalhousie, who made Esdaile a presidency surgeon in 1848. Esdaile left India in 1851 and retired from the East India Company’s service in 1853. He became the vice-president of the London Mesmeric Infirmary but his research on mesmerism never seriously advanced beyond his Indian experiments, and he died in relative obscurity in 1859.⁵⁰

Esdaile had become aware of mesmeric phenomena from the early reports by John Elliotson.⁵¹ Shortly before his first experiment, he wrote to a friend in England, ‘What think you of this new mystery, Mesmerism? For my part, I am thinking seriously about it, and cannot help suspecting that we have hit upon one of Nature’s great secrets. I keep myself

⁴⁸ See A J Youngson, *The Scientific Revolution in Victorian Medicine* (London: Croom Helm, 1979), 42-72.

⁴⁹ Winter argues that ether, the administration of which was by no means as simple then as it was to become later, was endorsed by powerful sections of the medical profession in order to keep mesmerism out of orthodox practice. See Winter, *Mesmerized*, 178-83. For examples of contemporary reports, debates and controversies, see *The Zoist: A Journal of Cerebral Physiology and Mesmerism*, 3 (1845-46): 207-216, 380-389, 490-497; 4 (1846-47): 1-8.

⁵⁰ On Esdaile, see Ernst, ‘Esdaile, James (1808–1859)’; Ernst, “‘Under the Influence’ in British India””; Ernst, ‘Colonial Psychiatry, Magic and Religion’; and Winter, *Mesmerized*, 187-212.

⁵¹ Esdaile was so keen to establish his complete lack of bias that he sometimes appeared to contradict his own admission that he had grown interested in mesmerism after reading Elliotson’s writings on the subject. ‘I had never read a Mesmeric book, when I made my first experiment’, he claimed at one point, ‘and having succeeded in getting nature to speak, I determined to listen only to her for some time ... all that I know about Mesmerism has been acquired by reading the book of nature, without guide or interpreter’. See James Esdaile, *Mesmerism in India and its Practical Application in Surgery and Medicine* (London: Longman, 1846; reprint, New York: AMS Press, 1976), 73.

perfectly neutral, and hear the *pro* and the *con*. If it turns out to be a delusion, I shall be happy to assist in digging its grave'.⁵² Whether or not one takes this statement at face value, there is no reason to assume that Esdaile was a zealot on the subject. His first venture into mesmeric research was, he claimed, entirely fortuitous.⁵³ A prisoner named Madhab Kaura with a double hydrocele had been brought into his hospital and treated, as was routine at the time, by tapping of the fluid and injection of a corrosive substance into the scrotal sac. The latter, expectedly, was severely painful and Esdaile thought of using mesmerism to abate the pain. Placing the patient's knees between his own, Esdaile made mesmeric passes but it was only after an hour that they had a significant effect. 'All appearance of pain now disappeared; his hands were crossed on his breast, instead of being pressed on the groins, and his countenance showed the most perfect repose. He now took no notice of our questions, and I called loudly on him by name without attracting any notice'.⁵⁴

To test the genuineness of the trance, the patient was pricked repeatedly with a pin, then 'fire was ... applied to his knee, without his shrinking in the least' and finally, he was given a strong solution of ammonia to inhale, which 'seemed to have revived him a little'. Offering him a drink, Esdaile 'took the opportunity to give, slowly, a mixture of ammonia so strong that I could not bear to taste it; this he drank like milk, and gaped for more'.⁵⁵ All of this was done in the presence of a local judge and the Collector since it was essential to have the testimony of 'intelligent witnesses'. The witnesses were suitably impressed and signed a statement declaring that they were 'thoroughly convinced that there was a complete

⁵² Esdaile, *Mesmerism in India*, 35.

⁵³ There is some evidence suggesting that Esdaile had already been practising mesmeric techniques on prisoners and others. For details, see Ernst, 'Esdaile, James (1808-1859)'.

⁵⁴ Esdaile, *Mesmerism in India*, 44-45.

⁵⁵ *Ibid.*, 45-46. Later, the patient complained of pain in the sites 'tested' for insensibility and Esdaile declares that he immediately decided never 'to put a patient to the "question" in this way again. It is only excusable for the first time, when we can hardly believe the evidence of our senses'. See *Ibid.*, p. 54. Such 'tests' were also criticised by John Elliotson, but he blamed them not on Esdaile himself but on the unreasonable demands of sceptics. See Elliotson's remark inserted into a report by Esdaile in *The Zoist*, 4 (1846-47): 42-43.

suspension of sensibility to external impressions of the most painful kind'.⁵⁶ Esdaile was now confident enough to perform actual surgery under mesmeric anaesthesia. Since the other side of the same patient's hydrocele remained to be treated, he was again mesmerized a few days later. A group of European witnesses was brought in, including the governor of the French colony of Chandannagar (Chandernagore). The operation went ahead without any sign of the patient feeling the slightest pain. When he woke up, he was in some pain but not in agony and there was an unexpected bonus – his chronic diarrhoea seemed to have been relieved. 'What a blessed prospect this opens to sufferers who may be sensible to the Mesmeric influence', gushed Esdaile. 'Although I should never succeed again, I will in future think, speak, and write of Mesmerism as being as much a reality as the principle of gravitation, or the properties of opium'.⁵⁷

He did not deny that mesmeric influence might have a mental dimension, but no such mental influence could have acted in the present case, 'for the individual is only one (?) degree above the brutes, and if his mind can be acted upon, I suspect it must be by some one who has more sympathy with his mental constitution'.⁵⁸ Many other patients followed Madhab Kaura and most were operated on for hydroceles or scrotal tumours.⁵⁹ Virtually all the early patients were Indians, almost all of them belonging to the poorest classes, and mesmericism, Esdaile discovered, was also of use in a variety of non-surgical conditions from retention of urine and rheumatism to nervous headache and hiccups.⁶⁰ After the first few cases, he stopped inducing the trance himself and left that tedious task to his native assistants. 'I never mesmerise now', he wrote to John Elliotson in 1846, 'for others do the work just as

⁵⁶ Although Budden Chunder Chowdaree (Badan Chandra Chowdhury), the Indian sub-assistant surgeon and 'élève of the Medical College', also signed the statement, his testimony alone, evidently, would not have sufficed. It was *European* endorsement that counted. See Esdaile, *Mesmerism in India*, 43, 45, 48.

⁵⁷ *Ibid.*, 57-58.

⁵⁸ See the report in *The Zoist*, 4 (1846-47): 21-50, on p. 25. This sentence was omitted from *Mesmerism in India* (see pp. 58-59).

⁵⁹ A total of 73 operations were performed under mesmeric anaesthesia over the first eight months. See Esdaile, 'Mesmeric Facts', in *Mesmerism in India*, pp. xxi-xxiii. On the prevalence of scrotal elephantiasis in Bengal, see *Ibid.*, pp. 227-32.

⁶⁰ Esdaile, 'Mesmeric Facts', and *Mesmerism in India*, pp. 64-65, 173-88.

effectually, and it was killing me. I wonder that you do not keep a mesmeric corps too; but I have a great advantage in the docility and patience of my agents and patients'.⁶¹ 'The mesmeric power', he observed, 'is a far more general gift of nature than has hitherto been supposed'.⁶² As his clientele grew, Esdaile also began to use water that had been mesmerized by him and which, when given orally, produced mesmeric effects.⁶³

The Government of Bengal appointed a seven-member committee to assess the worth of Esdaile's work. Although the committee's report was not unanimous, a majority found mesmeric surgery to be deserving of support.⁶⁴ Esdaile was transferred to Calcutta to head an 'experimental mesmeric hospital', where he could establish 'the applicability of this alleged agency to all descriptions of cases, medical as well as surgical, and all classes of patients, European as well as native'.⁶⁵ His work would be open to scrutiny by visitors appointed by the Government. The hospital was funded only for a year and during his time there, Esdaile continued to perform the usual scrotal operations on Indians under mesmeric anaesthesia. He also used mesmerism to treat patients with nervous and psychiatric disorders and many of these latter patients were European. The results were reportedly good, but there was much criticism too. One medical observer declared that all the effects were faked by the patients and the time and attention required to mesmerize each patient was considered by many observers to be exorbitant.⁶⁶

The hospital closed after a year, as originally scheduled. Influential people, including Governor-General Lord Dalhousie, considered it to have been successful and Esdaile was

⁶¹ See *The Zoist*, 4 (1846-47): 294-95.

⁶² Esdaile, *Mesmerism in India*, p. 12.

⁶³ The transfer of mesmeric influence to water was considered to be possible by many mesmerists, but the question was controversial even at the time. For Esdaile's defence of the concept, his procedure and case reports, see Esdaile, *Mesmerism in India*, pp. 156-65. For a contemporary report that was generally supportive but pointed out that the mesmerized water 'had no effect on a European officer, who ventured to take a large draught of it', see 'Dr Esdaile's Mesmeric Feats, *The Zoist*, 3 (1845-46): 386-87.

⁶⁴ Extracts from the report of this committee were published (with editorial comments from John Elliotson) in *The Zoist*, 5 (1847-48): 50-62.

⁶⁵ See *The Zoist*, 5 (1847-48): 62.

⁶⁶ See Ernst, "'Under the Influence" in British India', pp. 1114, 1116

promoted to Presidency Surgeon in recognition of his achievements. The recognition did not in fact help Esdaile to continue his work, since there was now no hospital where he could practise mesmerism. There were many demands from the indigenous elite of Calcutta for a mesmeric hospital, but the Government was unwilling to fund it.⁶⁷ Eventually, a group of Indian and British residents of Calcutta raised the funds to open a new mesmeric hospital as part of a charity dispensary. Esdaile was appointed as its superintendent, but this institution does not seem to have been as active as its predecessor, and it definitely lost status by being associated with a charity dispensary. After Esdaile left India in 1851, he was succeeded by Alan Webb, who taught anatomy at the Calcutta Medical College. The fortunes of the hospital showed little improvement, however, and it closed toward the end of the decade.⁶⁸ The introduction of ether and then chloroform by the end of the 1840s, in any case, had undermined mesmeric anaesthesia more effectively than any of its medical critics ever could.⁶⁹

Much has been written on Esdaile, the enduring value of his work, and on what the strange career of mesmerism in colonial India reveals about the relationship of science with magic, superstition and Eastern exotica.⁷⁰ It is not the aim of this paper to rehearse those discussions or to question their conclusions. Instead, I would like to emphasize how Esdaile's work was grounded in particular conceptions of the psychological, moral and cultural nature of Indians. Esdaile always claimed that different races responded differently

⁶⁷ For a petition to Lord Dalhousie signed by more than 300 'native' gentlemen, see *The Zoist*, 6 (1848-49): 119-20.

⁶⁸ See Winter, *Mesmerized*, pp. 206-210.

⁶⁹ Although British surgeons did not initially find chemical anaesthetics very easy to use or even particularly dependable, Alison Winter has suggested that they welcomed them because they seemed more 'scientific' than mesmerism. See Winter, *Mesmerized*, p. 176. Whether one agrees entirely with that argument or not, it cannot be doubted that mesmeric anaesthesia as applied by Esdaile needed considerably more time and manpower than the colonial government was willing to support, especially when a cheaper and apparently more reliable chemical means was available. On this point, see Ernst, "'Under the Influence" in British India', pp. 1117-18.

⁷⁰ See, for instance, William Kroger's Introduction and Supplemental Reports in James Esdaile, *Hypnosis in Medicine and Surgery* [orig. *Mesmerism in India* (1850)] (New York: Julian Press, 1957), i-xxxvii; and L Puflos, 'Mesmerism Revisited: The Effectiveness of Esdaile's Techniques in the Production of Deep Hypnosis and Total Body Hypoanesthesia', *American Journal of Clinical Hypnosis*, 22 (1979-80): 206-211. On the association with magic, see Waltraud Ernst, 'Colonial Psychiatry, Magic and Religion'.

to mesmerism. ‘Men’, he asserted, ‘are nearly the same all the world over: an universal vital law reduces all to the same level of animal, and the cooly, therefore, may be able to mesmerise the philosopher’.⁷¹ He even went out of his way to interact with local magicians and healers, arguing that their techniques often worked because they were fundamentally mesmeric in nature.⁷² The effects of mesmerism, Esdaile declared, were the same ‘on the banks of the Thames, and the Seine, the Rhine, and the Hooghly’.⁷³

There was considerable strategic justification for such Enlightenment-style assertions. If Esdaile’s reports were to be deployed in defending the interests of mesmerism in Europe, as was done, for instance, by John Elliotson in issue after issue of *The Zoist*, then it was imperative to avoid the impression that mesmerism worked only on the ‘lower’ races. ‘Dr Esdaile relates a few interesting facts which presented themselves unexpectedly to him in his Asiatic patients’, wrote Elliotson in one of his editorials, ‘and are *precisely the same as astonished us in England on their first occurrence* – proving that they occurred *according to the laws of nature*, and that the human beings who manifested themselves were *not impostors, as the uninformed foes of mesmerism clamorously declared*’.⁷⁴ Esdaile and Elliotson remained consistent in their universalism, although an occasional unguarded admission can be found in their reports.⁷⁵

At the same time, however, Esdaile insisted that Indians were ideal experimental subjects because of their *difference* from Europeans. First of all, mesmerism was unknown there under its modern name and it was inconceivable that ‘some clever rogue’ would know

⁷¹ Esdaile, *Mesmerism in India*, 27.

⁷² *Ibid.*, p. 20, and for an account of Esdaile’s dealings with ‘one of the most famous magicians in Bengal’, *Ibid.*, pp. 21-23. Elsewhere, he said that ‘jar-phoonk’ conducted by Indian folk healers was mesmerism pure and simple. See Esdaile, ‘Second Half-Yearly Report of the Calcutta Mesmeric Hospital from 1st March to 1st September 1849’, *The Zoist*, 7 (1848-49): 353-63, on p. 362.

⁷³ Esdaile, *Mesmerism in India*, p. 60.

⁷⁴ See *The Zoist*, 6 (1848-49): 151, emphases added.

⁷⁵ When Esdaile returned to Britain, he tried to use mesmerism in medical conditions. In a report sent to *The Zoist*, Esdaile argued that Europeans were most susceptible to mesmerism when ill: ‘the depressing influence of disease will be found to reduce Europeans very often to the impressionable condition of the nervous system so common among the Eastern nations’. ‘Dr Esdaile and Mesmerism in Perth’, *The Zoist*, 10 (1852-53): 419-25, on p. 422.

enough to feign to be mesmerized.⁷⁶ More importantly, the low mental and moral status of poorer Indians ensured that there could be no question of collusion with a European doctor. It went almost without saying that ‘the difference in *morale* [between doctor and patient] is so great ... as to preclude all sympathy, and to often amount to actual antipathy, and mutual repulsion’.⁷⁷ The reality of mesmerism could never be adequately proved by experiments upon ‘some highly sensitive female of a nervous temperament, and excitable imagination, who desired to submit to the supposed influence’. What was special about his own studies was that they began with a man like Madhab Kaura, ‘the very worst specimen of humanity ... a Hindu felon of the hangman cast’.⁷⁸ Successful inductions of mesmeric trance in such individuals meant that the imagination and ‘mental sympathy’ did not play any role in mesmerism – animal magnetism was purely a *physical* force like electricity or magnetism, exactly as its champions in the West had been suggesting.⁷⁹ ‘My patients and I’, Esdaile declared, ‘have probably too little in common to admit of mental sympathy between us’.⁸⁰

The other great advantage of working with poor Indian patients was the range of experimentation that was permissible. One could test insensibility by burning the patient with fire or acid or sticking pins into him without any hesitation. One could also afford to ignore the shock experienced by many patients on ‘coming out’ of the trance. The first few moments after the end of the trance was a ‘trial of the nerves, to which it would be very imprudent, and unsafe, to subject any but such singularly impassive beings as my patients ... *I would not dare to take such liberties with European temperaments*’.⁸¹ The best thing about working with the people of Bengal, however, was that ‘the people of this part of the world

⁷⁶ Esdaile, *Mesmerism in India*, p. 73.

⁷⁷ *Ibid.*, pp. 27-28.

⁷⁸ *Ibid.*, pp. 40-41.

⁷⁹ *Ibid.*, pp. 59, 264-65.

⁸⁰ The ‘higher mental manifestations’ of mesmerism, Esdaile remarked, were eminently deserving of investigation, but that task could only be attempted where there was ‘mental sympathy’ between the mesmerist and his patient. See Esdaile, *Mesmerism in India*, 28.

⁸¹ *Ibid.*, 248, emphasis added.

seem to be peculiarly sensitive to the mesmeric power'. It was obvious why Bengalis were more impressionable than Europeans since it was an established fact that 'a depressed state of the nervous system' facilitated the exertion of mesmeric influence. And nobody had a more depressed nervous system than Bengalis. 'Taking the population of Bengal generally', Esdaile explained, 'they are a feeble, ill-nourished race, remarkably deficient in nervous energy; and natural debility of constitution being still further lowered by disease, will probably account for their being so readily subdued by the Mesmerist'. The mesmerist found his task much easier with such a primitive and passive people:

we have none of the morbid irritability of nerves, and the mental impatience of civilised man, to contend against ... The success I have met with is mainly to be attributed, I believe, to my patients being the simple, unsophisticated children of nature; *neither thinking, questioning, nor remonstrating, but passively submitting to my pleasure*, without in the smallest degree understanding my object or intentions.⁸²

Colonial India and its 'natives', in short, provided the optimal conditions for establishing the truth of the doctrine of animal magnetism – '*passive obedience* in the patient, and a sustained attention and patience on the part of the operator'.⁸³

Conclusion

Many historians have remarked that colonial India represented a huge laboratory where novel social, administrative and corporeal interventions, often of dramatically novel kinds, could be tried out far more freely than in the metropole.⁸⁴ In that metaphorical laboratory, indigenous Indians, of course, served as very literal guinea-pigs, but their role has yet to be extensively analyzed. In this paper, I have explored how two colonial experiments invaded, in very

⁸² *Ibid.*, 14-15, emphasis added.

⁸³ *Ibid.*, *Mesmerism in India*, 34, emphasis in the original.

⁸⁴ For samples of such statements, see Zaheer Babar, *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (Albany: State University of New York Press, 1996), 8; Thomas Metcalf, *Ideologies of the Raj*, 29; Winter, *Mesmerized*, 173.

different ways, the bodies of the colonized and did so on the basis of specific, racialized concepts of the psychology and character of a sub-set of Indians. The reason why fingerprint identification was developed by a colonial administrator in Hooghly was not because William James Herschel knew more than Grew or Purkyne about the individuality of ridge patterns, but because the British in India urgently needed a weapon to combat what they regarded as the *innate* duplicity of Bengalis. Although fingerprinting was found to be universally valid, its colonial applications were to remain far more numerous and they were usually driven by the perceived need to combat the dishonesty of ‘natives’.

With mesmeric surgery, the brutish nature of Indians was a vital presupposition but the venerable trope of native mendacity was entirely absent. The reasons for that absence are not difficult to identify. Unlike fingerprinting, mesmeric surgery was not only known in Europe but very controversial; one major aim of Esdaile’s experiments was to provide valuable supportive evidence to metropolitan defenders of mesmerism who, because of the controversies surrounding the practice, no longer had the opportunity to conduct much human experimentation. Esdaile argued that if mesmerism worked on a race as ignorant, passive and mindless as the Bengalis, then mesmerism could not be based, as metropolitan sceptics alleged, on mental suggestibility. But it was also essential to rule out conscious imposture and that explains the absence of any reference to the fabled dishonesty of Bengalis in Esdaile’s writings.

For Macaulay, the duplicity and passivity of Bengalis had represented two sides of the same coin. When we juxtapose the history of Herschel’s work on fingerprinting and Esdaile’s mesmeric operations, however, we can appreciate that the two themes were not necessarily inseparable in conceptual terms. One useful way of appreciating the diversity of British ideas of Indians and their material significance, this paper suggests, is to investigate how specific ideas of ‘native’ character governed particular uses of ‘native’ bodies. Much, needless to say,

has been written on colonial ideologies and racial stereotypes and the literature on colonial medicine is no less voluminous. What this paper argues is that the two approaches can be fruitfully combined by broadening the idea of the 'medical' to include all bodily interventions, regardless of their professional provenance, goals and current scientific status.