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RESEARCH ARTICLE

Sacred histories of public health: leper asylums, patient protest and the twentieth-century medical–evangelical state in British India

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Abstract

How did the histories of biomedicine and Christianity coalesce during the heydays of bacteriology and tropical medicine in the early twentieth century? How can the focus on relatively underexplored sites in the historiography of scientific knowledge add to our insights about the links between the histories of imperialism, disciplinary institutions and scientific experiments? How does one conceptualize the presence and agency of captive patients in the colonized context? This article argues that a renewed focus on the colonial leper asylums in British India allows us simultaneously to raise these fundamental questions, which resonate with the newly emergent histories of global and colonial science and medicine. In addressing these questions, this article establishes these leper asylums as a unique site where colonized diseased subalterns encountered, suffered, engaged with and defied different strands of British power that were concurrently imperial, biomedical and Christian.

On 11 April 1939, Mr Anderson, the general secretary of the British Protestant organization Mission to Lepers (ML), wrote a letter to colleagues in London urgently seeking advice on an ongoing leper's strike at the mission's asylum at Ramachandrapuram in Madras Presidency in British India.[1] The ML, a British interdenominational body founded in 1874, functioned as the pre-eminent supra-evangelical Protestant organization working with leprosy.[2] The ML provided funds to and worked through a range of Protestant missionary societies (such as the London Missionary Society) across India and other parts of Asia. Anderson's letter was one among a string of panicked epistolary exchanges that ensued for two years between the various tiers of ML administration based in Ramachandrapuram, in other parts of India and in England.

These letters reveal that trouble began in Ramachandrapuram leper asylum in October 1938 when two Brahmin lepers, Achyutanandan and Venkota Rao, allegedly incited as many

[1] Letter from general secretary (Mission to Lepers – hereafter ML) to John Whitty, dated 11 April 1939, The Leprosy Mission, 80 Windmill Road, Brentford, Middlesex, TW8 OHQ (hereafter TLM). All TLM materials are from Box 113/1.

[2] For a history of ML see D.G. Joseph, 'Essentially Christian, eminently philanthropic: Mission to Lepers in British India', *Historia, Ciencias, Saude Manguinhos* (2003) 10(1), pp. 247–75; Lauren Wilks, 'Missionary medicine and the separatist tradition: missionary encounter with leprosy in late nineteenth-century India', *Social Scientist* (2011) 39(5–6), pp. 48–66.

as thirty asylum inmates to rebel.[3] By the end of the month, six lepers, whom the missionaries identified as the chief 'troublemakers', were dismissed by the mission administration. Refusing to leave the premises, the protestors built a shed at the entrance of the asylum and were being helped by the asylum inmates with food and provisions.[4] Over the next couple of years, this crisis escalated into an unresolvable deadlock between the missionary administration, the leper inmates and the local provincial government, leading to discussions on shutting down this Christian leper asylum altogether. The ML authorities both in India and in England were particularly worried that 'unless the situation is firmly dealt with, there is real danger of the same rebellious spirit spreading to other missionary institutions'.[5] In October 1938, D.L. Joshee, an Indian convert to Christianity and asylum superintendent, noted that patients were rebelling against the Christian authorities and regimen at the asylum. Joshee complained that the Brahmin lepers were inciting others 'to wear caste-mark and not to attend Church services'.[6] According to Joshee, patient grievances also related to the ways in which the local government's grant-in-aid was being spent – the lepers alleged that the missionaries were mismanaging government funds.[7]

The patient rebellion of 1938 was a complete shock to the ML administration. Missionary correspondences of the time endlessly reminisced about the long cordial relationship they had enjoyed with the British government for many decades. Their writings from the late 1930s revealed a concern among the missionaries about an imminent breakdown of this relationship with the imperial state administration. They feared that this was the consequence of the emergence of new Indian nationalist governments.[8] Following the provincial elections of 1937, the Indian National Congress had, for the first time, formed the government in eight Indian provinces, including Madras, which was a new political development mandated by the recent Government of India Act of 1935.

Building on this local but vibrant episode of patient protest in the penultimate decade of the British Raj, this article conceptualizes a more enduring and comprehensive history of colonial leper asylums than has been attempted in the past. This article focuses on the period from about 1898 (when the British colonial government passed the Leper Act) to the era of decolonization in the 1940s, and situates the 1938 Ramachandrapuram protests within that long history. Such a focus on leper asylums in British India enables this article to contribute to the historiography of colonial science and medicine in following three distinct ways.

First, there exists a rich scholarly literature that questions the boundaries between religion and the sciences.[9] Many studies on the colonial context explore the links between medicine and the colonial state.[10] Others investigate the connections between Christian evangelization and modern European colonial states.[11] Historians of missionary science,

[3] Letter from the general secretary to Superintendent D. Joshee, 16 February 1939, TLM; letter from Rev Timpany to W.H.P. Anderson, 1 April 1939, TLM; general secretary (ML) to Sir John Whitty, dated 11 April 1939, TLM.

[4] Rev. Timpany to W.H.P. Anderson, 1 April 1939, TLM.

[5] Rev. Timpany to W.H.P. Anderson, op. cit. (4).

[6] Letter from D.L. Joshee to W.H.P. Anderson (general secretary), 23 October 1938, TLM.

[7] Letter from D.L. Joshee, dated 1 January 1938, TLM.

[8] Letter from general secretary (ML) to D.L. Joshee, 19 April 1939, TLM.

[9] This is a rich field – for a classic discussion of the post-Darwinian relationship between science and religion see Bernard Lightman, 'Victorian sciences and religions: discordant harmonies', *Osiris* (2001) 16, pp. 343–66. For a recent study see Renny Thomas, *Science and Religion in India: Beyond Disenchantment*, New York: Routledge, 2022.

[10] For pioneering works see Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness*, Cambridge: Polity Press, 1991; David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India*, Berkeley: University of California Press, 1993.

[11] Hilary Carey, *God's Empire: Religion and Colonialism in the British World, 1801–1908*, Cambridge: Cambridge University Press, 2011; Andrew Porter, *Religion vs Empire? British Protestant Missionaries and Overseas Expansion,*

on the other hand, have examined the scientific and medical activism of Christian missionaries in the colonies.[12] In most cases, these fields of study are considered discrete and pursued independently of one another. Indeed, the historiography that explores the close intersections between the colonial state, Protestant missionaries and medicine during the twentieth-century rise of tropical medicine and bacteriology is remarkably sparse.[13] Despite some exceptions in case of studies that focus on colonial Africa, neither the historiography of leprosy, nor missionary science, nor colonial medicine has adequately examined the enduring nature, depth and texture of these close interactions.[14] This article redresses this gap in the historiography.

It proposes that the expression 'medico-evangelical state' is a pertinent way to encapsulate the deep, sustained and inalienable synergies between the medical, Protestant and governmental establishments in British India. The first section elucidates this argument by focusing on the most important principle behind leper asylums in India: segregation. It shows how various European medics, missionaries and bureaucrats in India actively collaborated in promoting the strategy of segregation that propelled the proliferation of leper asylums in British India. Interactions between European medics, missionaries and bureaucrats in India also shaped the backbone of institutional life in the leper asylums by aiding infrastructures and enforcing the everyday routine of inmates. Christian missionaries relied on state support for the material foundations of segregation, including land, buildings and administrative costs. The missionary idea of medical cure almost always remained tied to evangelical perceptions of morality and sin.[15] Wellesley Bailey, the founder of the ML, for instance, believed that, along with scientific advances, it was ultimately God's grace that had the power to 'cleanse the lepers'.[16] Given this, as the following sections elaborate, everyday routine in the segregated world of leper asylums was structured in a way that blurred the distinctions between faith and science, prayer and medicine, the spiritual and the pathological, the patient and the devotee, as well as the scientist and the missionary.

Second, this focus on the medico-evangelical state further enables this article to reinforce recent efforts to question conventional understandings about the geographies in which scientific and medical knowledge was produced in the colonies.[17] One of its aims is to establish the extent to which lesser-known and under-studied missionary-run leper asylums were significant sites of scientific and medical experiments in colonial contexts.

1700–1914, Manchester: Manchester University Press, 2004; Norman Etherington (ed.), *Mission and Empire*, Oxford: Oxford University Press, 2011.

[12] John Stenhouse, 'Missionary science', in Hugh Richard Slotten, Ronald L. Numbers and David N. Livingstone (eds.), *Cambridge History of Science*, vol. 8, Cambridge: Cambridge University Press, 2020, pp. 90–107; David Maxwell and Patrick Harries (eds.), *The Spiritual in the Secular: Missionaries and Knowledge about Africa*, Grand Rapids, MI: William Eerdmans Publishing Company, 2012.

[13] For some exceptions that focus on colonial Africa see Kathleen Vongsathorn, '"First and foremost the evangelist"? Mission and government priorities for the treatment of leprosy in Uganda, 1927–1948', *Journal of East African Studies* (2012) 6(3), pp. 544–60; John Manton, 'Administering leprosy control in Ogoja Province, Nigeria, 1950–1967: case study in government–mission relations', in David Hardiman (ed.), *Healing Bodies, Saving Souls: Medical Missions in Asia and Africa*, Amsterdam: Rodopi, 2006, pp. 307–33.

[14] These excellent works have studied the interface either between leprosy and the imperial state or between leprosy and Christian missions, but not the sustained interactions between the three: Jane Buckingham, *Leprosy in Colonial South India: Medicine and Confinement*, Basingstoke: Palgrave Macmillan, 2002; Rod Edmond, *Leprosy and Empire: A Medical Cultural History*, Cambridge: Cambridge University Press, 2006; Michael Worboys, 'The colonial world as mission and mandate: leprosy and empire, 1900–1940', *Osiris* (2000) 15, pp. 207–18; Sanjiv Kakar, 'Leprosy in British India 1860–1940: colonial politics and missionary medicine', *Medical History* (1996) 40, pp. 215–30.

[15] Etherington, op. cit. (11), pp. 275–7.

[16] Joan Cooling, *Dichpalli Today*, London: Cargate Press, 1963, p. 46.

[17] David Livingstone and Charles Withers (eds.), *Geographies of Nineteenth-Century Science*, Chicago: University of Chicago Press, 2011; Simon Schaffer, Lissa Roberts, Kapil Raj and James Delbourgo (eds.), *The Brokered World: Go-Betweens and Global Intelligence, 1770–1820*, Sagamore Beach, MA: Science History, 2009, pp. xiv, xxv.

We are aware of Michel Foucault's path-breaking formulation of the medieval European leprosarium as an 'exclusionary' and 'disciplinary' model of power.[18] Various studies since have argued that leper asylums across the colonial world, whether run by the imperial state or by the missionaries, were actually disciplinary institutions which, through their network of surveillance, exercised control and order among defiant leper bodies.[19] Hardly any study, however, has linked this history of disciplinary power exercised in leper asylums with the history of scientific experiments carried out in these institutions. The second section of this article shows how these two historical processes were in dialogue with each other. It demonstrates that, as sites that secured the segregation, religious conversion and disciplining of leper bodies, these asylums became convenient venues for colonial biomedical experiments and drug trials. This section examines some of the most visible ways in which leper asylums became hubs of scientific research: captive, converted, vulnerable, diseased and disenfranchised bodies were accessed as experimental subjects with relative ease, and intellectual networks between British state officials and missionaries provided official legitimacy to these studies.

Finally, how did colonized Indians respond to the medico-evangelical state and the nexus between practices of care, segregation, conversion and experimentation that it occasioned? Colonized people were not a homogeneous group, and their responses varied. The third and fourth sections of this article therefore analyses a fuller range of responses of colonized people to British colonial leper asylums than has been previously attempted.[20] How did elite, upper-caste, able-bodied Indian responses, for example, differ from those of the Indian lepers themselves? The third section focuses on Hindu upper-caste elites to reveal that this group extended robust and unequivocal support to colonial biomedical and Christian missionary notions of the segregation of lepers because such an idea resonated with their own faith in the entangled ideals of purity, pollution and untouchability.

The final section of this article grapples with the methodological challenge of tracking the responses of Indian lepers themselves who were inmates in these asylums. These challenges arise for three predominant reasons. First, the Indian lepers, who were inmates of these asylums, were usually drawn from the most diseased, vulnerable and marginalized sections of colonized society; lacked literacy; and did not leave behind written records of their experiences. Second, this archival silence was amplified by the tendency of officials within the missionary establishment to speak on behalf of the lepers. In correspondences between missionaries, medics and colonial officials, or in memoirs authored by personnel who staffed colonial missionary asylums, Indian lepers were presented as grateful beneficiaries who felt privileged despite being caught up in an institutional life structured by

[18] Michel Foucault, *History of Madness* (tr. Jonathan Murphy and Jean Khalfa), London: Routledge, 2006, pp. 3–6.

[19] For imperial state-run asylums see Stephen Snelders, *Leprosy and Colonialism: Suriname under Dutch Rule*, Manchester: Manchester University Press, 2017; Simonne Horowitz, 'Leprosy in South Africa: a case study of Westfort Leper Institution, 1898–1948', *African Studies* (2011) 65(2), pp. 271–95; Angela Leung, *Leprosy in China: A History*, New York: Columbia University Press, 2009; Susan Burns, *Kingdom of the Sick: History of Leprosy and Japan*, Honolulu: University of Hawaii Press, 2019. For mission-run asylums see Shobana Shankar, 'Medical missionaries and modernizing emirs in colonial Hausaland: leprosy control and native authority in the 1930s', *Journal of African History* (2007) 48, pp. 45–68; Jo Robertson, 'Leprosy asylum in India: 1886–1947', *Journal of the History of Medicine and Allied Sciences* (2009) 64(4), pp. 474–517.

[20] For studies on asylums acting as spaces of resistance see Loh Kah Seng, 'Our lives are bad but our luck is good: social history of leprosy in Singapore', *Social History of Medicine* (2008) 21(2), pp. 291–309. For a recent account of how leper colonies continue to be spaces of contestation in independent India see Dipika Jain and Kavya Kartik, 'Narrative of feminist resistance: exploring regulations of leprosy in postcolonial India', *Australian Feminist Law Journal* (2021) 47(1), pp. 123–42.

Christianity and segregation. Third, even on the rarest of rare cases when memoirs were attributed to lepers, the missionary establishment almost inevitably published them. These leper narratives, too, once edited and published by missionary authorities, communicated the image of Indian lepers who wilfully immersed themselves within the life of asylums. For these reasons, accessing the autonomous voice of the lepers that escaped censorship and scrutiny from their immediate caretakers is almost impossible.

Yet a slightly different picture emerges when missionary publications, as well as correspondences between missionaries, medics and bureaucrats, are read against the grain. Dotted throughout the pages of these written sources are examples of how missionaries felt the need to design everyday routines in the asylums in a way that drew upon local South Asian cultural, linguistic and religious traditions. These efforts of the missionaries to persuade and appeal to Indian lepers indicate that these inmates were capable of refusing to submit unquestioningly to everyday Anglo-Saxon or Western European Christian rituals, which would have appeared to them distant, imposing and esoteric. It is possible to speculate that the foregrounding of local Indian cultural traditions in the everyday rituals of these asylums owed as much to the ability of the lepers to make their preferences felt as it did to any syncretism strategized by the missionary management. This article ends by highlighting that the agency of lepers could be witnessed even more explicitly in missionary efforts to tackle inmates who became defiant. Such defiance could be seen in everyday forms of insubordination, when lepers refused to participate in scientific experiments or when some of them escaped the asylums altogether. Other forms of defiance were more formal and structured, and anchored in alliances that the inmates could develop with anti-colonial Indian nationalist parties.

Imperial state–mission collaboration and segregation of the colonized poor

Leprosy, or Hansen's disease, had the most contested disease aetiology for much of the nineteenth century, as experts debated whether the disease was caused by heredity or contagion/bacteria, or indeed other factors, including climate, diet or sexual promiscuity.[21] Hansen's 1873 discovery of *Microbacterium leprae* tilted the discourse heavily in favour of contagion and the related policy of preventive confinement, although debate continued as Hansen was unable to establish precisely how contagion occurred from a leper to a healthy person. Caught up in this growing global discourse on the communicability of the disease, the British government in India passed the Leper Act of 1898 that recommended the compulsory segregation of all 'pauper' – that is, 'vagrant' – lepers and also the control of lepers following 'certain specified callings' that involved 'food, drink or drug intended for human consumption'.[22] While the social groups that were targeted for compulsory segregation were not wholly specified, the Act hinted at lepers from lower-class backgrounds, such as servants, midwives, confectioners and so on.

By targeting 'vagrancy' as a marker of disease control, the colonial state assumed at once a classist, casteist and racist narrative in their response to the disease.[23] In the areas notified under the Act, any police officer could arrest without warrant 'any person who appears to him to be a pauper leper'.[24] Other Indian lepers were expected to opt for voluntary segregation at their will. The singling out of pauper lepers under the Act was fuelled by British apathy towards the diseased poor in India, which was reflected in many contemporary bureaucratic writings of the time. Surgeon Major MacLaren, founder of Dehra Dun leprosy

[21] Buckingham, op. cit. (14), pp. 8–12.
[22] Lepers Act, Act No. 111 of 1898.V/8/62, India Office Records (hereafter IOR), British Library, London.
[23] Jain and Kartik, op. cit. (20), pp. 123–4.
[24] Lepers Act, op. cit. (22), Section 6.

asylum, for example, lamented in 1891 that the government needed to address the fact that Indian streets were often 'lined with rows of poor lepers, exhibiting their disgusting sores … and deformed bodies to the public gaze'.[25]

As soon as the Act was passed, there was mounting governmental concern over its execution, especially relating to the inadequate state infrastructure and resources. Implementation of the Act was the responsibility of the local administration of each province. While willing to adopt the Act in principle, several provincial governments complained of inadequate public-health infrastructure. The Punjab administration reported that 'the want of asylum accommodation at present stands in the way of any extensive application of the Act'.[26] The reports indicated that consequently, in Punjab, there was already a slow takeover of government asylums by missionary bodies, including the asylums at Sabathu, Ambala and Tarn Taran.[27] Likewise, government proceedings from 1908 show that the United Provinces government formally transferred the government asylum at Naini to the ML.[28] Others, such as the Bengal government, reported that the Act had been applied to the entire province and that the ML-run asylum at Purulia was among the chief asylums that 'have been declared to be leper asylums for the purposes of the Act'.[29]

As early as 1904, the secretary to the government of India conducted an inquiry where a number of provincial governments (including Bombay, Madras, United Provinces, Punjab, Central Provinces, Assam, Coorg and others) were instructed to furnish information relating to the number of leper asylums in their province, the number of inmates in each asylum, the number of asylums that were maintained by Christian missionary bodies, and which of them had been established since 1897.[30] Governmental reliance on missionary societies for the running of leprosy asylums is already apparent from this 1904 government inquiry. Provincial governments further encouraged mission bodies to build leprosy asylums which they could support with necessary grants-in-aid.[31]

The ML was founded in 1874 by the Irish Presbyterian Wellesley Bailey as an interdenominational organization. By 1883 it claimed to work with at least thirty different Protestant societies across India.[32] By 1910, British India had seventy-three leper asylums in nine provinces administering 7,311 lepers, of which the majority were run under the aegis of the ML with financial support from the imperial government.[33] Ideologically, the ML was unambiguous in promoting Christianity and evangelization as its chief goal. Repeatedly, ML missionaries were reminded that even the best-regulated asylum could be a failure, if 'in our zeal to alleviate the bodily sufferings of the inmates, we fall short of bringing them

[25] H.H. Hayes, *My Leper Friends: An Account of Personal Work among Lepers and of Their Daily Life in India*, London: Thacker, 1891, pp. 121–2.

[26] Proceeding 356, A.B. Kettlewell, judicial and general secretary, Punjab government, to secretary to the Govt of India, Proceedings of Home Department, Medical Branch, May 1904, IOR/P/6811, pp. 545–622.

[27] Letter 934, Col. J. McConaughey, inspector general of civil hospitals, Punjab, to A.B. Kettlewell, judicial and general secretary, Punjab government, Proceedings of Home Department, Medical Branch, May 1904, IOR/P/6811, pp. 545–622.

[28] Home Department Proceedings for March 1908, Matters of Routine, Papers not printed, Part B, Proceeding 15, IOR/P/7884.

[29] L.P. Shirres, secretary, government of Bengal to the secretary to the Govt of India, Municipal Department, Medical 1822, Proceedings of Home Department, Medical Branch, May 1904, IOR/P/6811, pp. 545–622.

[30] Proceeding 17, Telegram 208-215, secretary to the Govt of India, Proceedings of the Home Department, Medical Branch, May 1904, IOR/P/6811, pp. 545–622.

[31] Proceeding 974, Colonel J. McConaughey, inspector general civil hospitals, Punjab, to Kettlewell, judicial and general secretary to Punjab government, Proceedings of Home Department, Medical Branch, May 1904, IOR/P/6811, pp. 545–622.

[32] John Jackson, *Lepers: Thirty-Six Years Work among Them Being the History of Mission to Lepers in India and the East, 1874–1910*, London: Marshall Bros, 1910, p. 97.

[33] Frank Oldrieve, *India's Lepers: How to Rid India of Leprosy*, London, Marshall, 1924, pp. 52–3.

to a saving knowledge of Jesus'.[34] The ML wholeheartedly supported the British imperial policy of segregation as it seemingly resonated with their Christian understanding of the disease. They held that segregation was the most appropriate measure, as the Bible illustrated that 'segregation of lepers was rigorously applied in case of the Jews'.[35] The ML thus enthusiastically volunteered to assist the government in the implementation even before the Act had passed.[36]

The mission's eagerness to assist imperial endeavours around leprosy, coupled with the government's own findings through inquiries conducted in 1904 that provincial resources to implement the Leper Act were inadequate, led them to work quite closely from the first decade of the twentieth century. Lord Dufferin, the viceroy of India, endorsed the work of the ML, and Lady Dufferin became an official patroness of the organization.[37] By 1910, mission publications had confirmed 'the growing cooperation between the various governing bodies of India and the Mission to Lepers ... for the healing of India's open sore'.[38]

A four-day conference organized by the ML at Calcutta in 1920 on the Leper Problem in India formalized this collaboration between the government and missionaries. The conference provided a platform for governmental officials and missionaries to discuss the Act and to regularize the ways of working together. Convened by the ML, the conference brought together government and ML delegates, including mission asylum superintendents from across India. It registered wide representation of the government of India as well as various provincial governments.[39] Because of the wide-scale participation, the conference was upheld as a 'historical occasion ... of national importance'.[40]

The precise nature of mission–government alliance was discussed at length at the conference.[41] It was acknowledged that while the ML relied on government funds, the government needed the missionary expertise and infrastructure for the implementation of the Act.[42] The mission was, however, emphatic in proclaiming that their collaboration with the government was conditional on the promise of absolute non-interference in religious matters. They proclaimed unequivocally that 'if government interfered with our Christian teaching in asylums, we were prepared to forego our government grant'.[43]

It was agreed that the central government would provide a maintenance fund or a grant-in-aid to the ML across all Indian provinces, although the government–mission relationship varied from province to province. Rev Frank Oldrieve, ML's secretary for India, gratefully acknowledged that the provincial governments funded a substantial part of missionary work on leprosy in their jurisdiction, while delegating the duties of day-to-day management of leper homes to missionaries.[44] The 1920 meeting charted a province-by-province breakdown of the maintenance grants provided by the provincial governments which revealed that the Punjab government made the maximum contribution (seven to eleven rupees per asylum inmate per month), and the Central Provinces government the minimum (three rupees per inmate per month).[45] UP, Bombay, Bengal

[34] Report of a Conference of Leper Asylum Superintendents and Others on the Leper Problem in India, Held in the Town Hall in Calcutta under the Auspices of Mission to Lepers, Cuttack: Orissa Mission Press, 1920, pp. 132–3.
[35] Oldrieve, op. cit. (33), p. 104.
[36] Oldrieve, op. cit. (33), pp. 104–10.
[37] Jackson, op. cit. (32), p. 35. Also see the last page of the volume.
[38] Jackson, op. cit. (32), p. 47.
[39] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 11–12.
[40] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 2–3, and foreword.
[41] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 71–83.
[42] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 71–3.
[43] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 73, 85, 132.
[44] Oldrieve, op. cit. (33), p. 48.
[45] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 47–50.

and Madras governments additionally provided a special compassionate grant to the tune of 41,750 rupees.[46] Some others agreed to contribute a definite proportion of the cost of all new mission buildings. Individual asylum records illustrate the range of financial arrangements struck between the ML and the different provincial governments where individual asylums were located. The history of the Almora asylum in the United Provinces, run locally by the London Missionary Society, shows that while the institution was built on land provided by the government, it was administered jointly by a government grant and a private endowment, along with substantial help of the ML.[47]

Sacred experiments by imperial scientists and missionaries

The ongoing alliance between the state and missionary organizations created a situation in which public-health delivery became officially tied to practices of evangelism. Much of the government–mission collaboration happened around the building and running of ML asylums, which meant that lepers were exposed to an intense Christianizing routine. Under the leadership of the ML, churches became a central aspect of asylum architecture. Churches were described 'as the centre of its life', where the inmates were summoned for prayer every day.[48] Asylum churches frequently doubled as schools and prayer rooms, or as dispensaries where some of the treatment was meted out.[49] Accounts of Neyoor hospital in Madras, run jointly by the LMS and the ML, categorically identified the 'little House of Prayer' ... located in the centre of the compound as the 'real centre of our work'.[50] The everyday religious regimen of healing could be characterized as 'asylum Christianity' that set missionary leprosy asylums apart from other Western institutions such as the government-run hospitals or dispensaries.

Exchanges between the British colonial state, the world of science and Christian missionaries were most explicit with relation to the search for a pertinent remedy for leprosy. Imperial scientists struggled to find a cure for leprosy, which proved elusive until the 1940s, when Dapsone and sulphone drugs were identified as a viable cure. Since the early nineteenth century, imperial medical authorities had been experimenting with a range of substances, including gurjon oil, cashew oil and carbon fumigation, in the hope of extracting a cure.[51] In this context, the chaulmoogra oil experiments of Leonard Rogers were particularly significant. Lieutenant Colonel Sir Leonard Rogers of the Indian Medical Service was arguably the best-known leprologist in British India. It is relatively unknown that Rogers himself had aspired to be a Christian missionary earlier in his life.[52] It is therefore hardly surprising that, as a senior member of the Indian Medical Service, Rogers closely collaborated with the ML, especially missionary–evangelist Ernest Muir, in pursuing his chaulmoogra oil experiments. Missionary-run asylums provided scientists like Rogers the space, subject and collaborators to conduct painful medical experiments on often unwilling leper subjects.

Chaulmoogra oil was acknowledged by British physicians to be an age-old remedy for leprosy long used by the local people of India, which worked more as a palliative than as

[46] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 72, 83.

[47] M. Budden, *The Story of the Almora Mission*, Cambridge, 1922, p. 1.

[48] A.S. Jones, *Lotus Pool: Story of a Leper Ashram in Bengal*, London: Mission to Lepers, 1944, pp. 16–17.

[49] Jackson, op. cit. (32), pp. 20–1.

[50] T.H. Somervell, *Knife and Life in India: Story of a Surgical Missionary at Neyoor, Tavancore*, London: Livingstone Press, 1955 (first published 1940), p. 203.

[51] Buckingham, op. cit. (14), pp. 142–4.

[52] R. Mooreshead, *The Way of a Doctor: Study in Medical Missions*, London: Carey, 1926, foreword by Rogers at pp. vii–x.

a cure. It was obtained from the ripe fruit of the *Taraktogenos kurzii* tree grown in Assam valley and the Chittagong hill tracts.[53] Eventually it was found that fruits of various species of *Hydnocarpus* trees, such as *Hydnocarpus wightina* found in south India, Ceylon, Burma and the Philippines, also produced the same oil.[54] Oral administration of the oil, generally practised in India, was known to be extremely painful and difficult to digest. Rogers had been experimenting with different types of fatty-acid extracts in different doses on the Indian lepers. Yet the chaulmoogra treatment continued to be unbearably painful. It was reported in 1922 that chaulmoogra oil 'took too long: sometimes six months went by before any improvement would be observed', and there were frequent relapses.[55]

After his retirement from the Indian Medical Service in the early 1920s, Rogers was keen to continue his chaulmoogra oil research initiated at the Calcutta School of Tropical Medicine. He hand-picked his collaborator, Scottish-born, Edinburgh-trained Ernest Muir, who had served as an ML medical missionary in Bengal since 1908. Muir had been in charge of the ML asylum at Kalna in Bengal, and, along with his practical knowledge of leprosy, was widely known to be 'actuated and animated by his deep Christian convictions'.[56] The more practical reason behind the partnership was perhaps that Muir had already given Rogers access to the patients at some of the mission asylums through the 1910s in order to carry out drug testing. To ensure Muir's smooth entry into the official Calcutta-based research, Rogers sent repeated letters to the director general of the Indian Medical Service requesting funds to create a post for 'a whole-time worker on the leprosy problem'.[57] Eventually, a government fund was approved, and with Rogers's help, Muir made a transition from being medical missionary to government scientist, serving as the special investigator of leprosy at the Calcutta School of Tropical Medicine.

Even before Muir succeeded Rogers, their private correspondence between 1916 and 1919 reveals an ongoing exchange of ideas and materials concerning the ideal chaulmoogra preparation for lepers. From his metropolitan location and laboratory access at Calcutta, Rogers would send instructions regarding the doses to be tried on patients at distant suburban asylums. Muir worked on the ground mainly from asylums at Kalna and Mayurbhanj in 1918 and 1919 to coordinate the drug trials, which they both referred to as 'experiments'. But ideas did not always travel unidirectionally. Often Muir would request a supply of substances from Rogers based on his own experiences of what worked better on Indian patients, thus actively contributing to the experiment on the ground.

Muir regularly sent back reports on specific patients, such as Babu Bharat Chandra Dutta at Sarpada asylum at Mayurbhanja, whose progress was being keenly monitored.[58] To help patients persevere with the nauseating effects of chaulmoogra oil, Rogers had been trying out preparations with different extracts of the oil, and around 1912 he considered the substance gynocardate acid to be more effective through oral administration.[59] Discarding Rogers's instructions to use gynocardate acid, Muir insisted in a 1918 letter that his own idea of using sodium morrhuate (an extract of cod liver oil) was causing less pain in many

[53] Ernst Muir, *Handbook on Leprosy: Its Diagnosis, Treatment and Prevention*, Cuttack: R.J. Grundy, 1921, pp. 39–40; Oldrieve, op. cit. (33), pp. 77–8.

[54] Oldrieve, op. cit. (33), p. 81; Muir, op. cit. (53), pp. 39–40.

[55] Address by Victor Heiser at the annual meeting of Mission to Lepers, American Mission to Lepers, *USA News* (9 January 1922) 7, PP/ROG/C.13/3, Rogers Papers, Series I, Wellcome Library, London. All citations relating to both the Rogers Papers and Rogers–Muir correspondence are from the Wellcome Library, London.

[56] 'Obituary notices E Muir', *British Medical Journal* (1974) 4(5941), p. 413.

[57] Correspondence between Rogers and Muir, Letter 17, dated 29 May 1919. Also see letter 20, dated 1 September 1919, PP/ROG/C/13/2, Series II.

[58] Letter from Muir to Rogers dated 27 February 1918, PP/ROG/C/13/2, Series II.

[59] Reported in Dermott Monahan, *The Story of Dichpalli: Towards Conquest of Leprosy*, London: Cargate Press, 1948, p. 42.

cases and working better in the climatic conditions of Kalna or Mayurbhanj.[60] In subsequent letters, Rogers and Muir continued to discuss the appropriate doses of sodium morrhuate on patients. The exchange of drugs and ideas continued across the seas when Rogers moved back to England and Muir assumed his role at Calcutta. Correspondence from 1923 shows that after administrating the specified dosage of chaulmoogra oil to the leper inmates Muir collected their blood serum, and sent them in bottles from Calcutta to Rogers to analyse in England.[61] It is worth noting that Rogers's Indian assistants and collaborators, such as Chunilal Bose and Sudhamoy Ghosh, were only ever mentioned in his writing in passing.[62]

By 1920, chaulmoogra experiments led by Rogers and Muir had turned into an extensive pan-India drug trial officially jointly undertaken by the government and missions. ML secretary Frank Oldrieve announced that the drug trials were to be carried out in mission asylums across India.[63] These experiments came to be funded by the government and Oldrieve congratulated the government of India 'for having found the money for all the trials'.[64] At the Calcutta conference in 1920, Ernest Muir presented the initial results of the ongoing chaulmoogra trials at thirteen chosen asylums.[65] Rogers and Muir confirmed in 1920 that although experiments with chaulmoogra/*Hydnocarpus* oils had yielded very encouraging results, no standardized dose for cure had yet been discovered.[66]

Despite initial enthusiasm for these experiments among asylum management, the feedback from most missionary asylums turned lukewarm in course of the late 1920s. The central issue with the chaulmoogra (and any other oil) treatment was the immense pain they caused. Most patients refused to be subjects of these painful experimental drug trials. The superintendents' reports from various asylums even at the 1920 conference highlighted this point. Whilst superintendents of asylums in Dhamtari (Central Provinces) and Ambala (Punjab) reported mixed results and slow improvements in some cases, the Bankura (Bengal) asylum reported a decline in the number of patients as a result of the painful chaulmoogra injections.[67] Rev. Cannon of Purulia reported regular patient flight in the middle of treatment.[68] Frank Oldrieve reported that the news of painful treatment spread amongst patients so that sometimes entire asylums 'refused to have any of the new treatment'.[69]

In the 1920s, Leonard Rogers's chaulmoogra oil treatments were anticipated to be a breakthrough in leprosy cure. From 1921 onwards several asylums, such as the ML-aided and Methodist-run Dichapalli asylum in Hyderabad, had voluntarily adopted the new chaulmoogra oil treatment as it had generated much hope.[70] It was assumed that from being mere 'segregation camps', the leprosy asylums could finally be transformed into 'curative centers'.[71] Yet, by the mid-1930s, it was widely agreed that the chaulmoogra treatment had failed to yield the desired level of results. In 1934, Wellesley Bailey discussed the 'repeated

[60] Correspondence between Rogers and Muir, Letter 5, dated 22 July 1918, PP/ROG/C/13/2, Series II.
[61] Correspondence between Rogers and Muir, Letter 24, dated 3 January 1923, PP/ROG/C/13/2, Series II.
[62] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 23–4.
[63] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 30–1.
[64] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 54–5.
[65] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 30–2.
[66] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 30–2.
[67] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), pp. 55–7.
[68] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), p. 56.
[69] Oldrieve, op. cit. (33), p. 84.
[70] Cooling, op. cit. (16), pp. 24–6.
[71] Cooling, op. cit. (16), p. 46.

disappointments' of the 1920s.[72] In 1938, Muir confessed that a specific cure for leprosy still proved elusive to the scientific community.[73]

Indians for segregation and asylum Christianity

The ability to experiment on and Christianize lepers in the missionary asylums was premised on the imperial policy of segregation of lepers, whether through the coerced segregation of pauper lepers or the voluntary segregation of relatively economically solvent lepers. Both the imperial state and the ML claimed that they were successful in securing the support of various sections of South Asians in favour of this policy of segregation.

In the early twentieth century, many Indian commentators themselves argued that the imperial policy of segregation was in agreement with established Hindu traditions that were endorsed by the upper castes. Columnist and pro-segregationist T.S. Krishnamurthi wrote a series of columns in support of segregation in the *Hindu* newspaper that were republished in 1919 as the tract *Leprosy in India*. Krishnamurthi confirmed that the government Act reconfirmed the Hindu custom of considering destitute lepers 'as outcastes'.[74] Earlier in 1889, in *Leprosy in Ancient India*, Pandit N. Bashya Charya of Madras proclaimed that the imperial and biomedical idea of segregation perfectly echoed traditional Hindu views on leprosy.[75] He argued that ancient medical texts, such as the *Caraka Samhita*, instructed healthy people to not even catch the breath of a leper, touch them or eat or share a seat with any leper.[76] The suggestion that lepers should be banished and that their touch was to be avoided resonated with caste-based prejudices and upper-caste Hindu notions of untouchability.[77] This is further underscored by the fact that these authors themselves were invariably upper-caste Hindus, and lepers were often described in their writing as 'outcastes'.[78]

Similar elitist bias was articulated by a range of elite, upper-caste Indians, whom the imperial state consulted in the late 1890s when the imperial segregation policy was being debated in medical-official circles. The colonial state compiled these responses to claim that there was considerable support among upper-class Indians for the draft bill that eventually became the Lepers Act 1898 and for the policy of segregating lower-class 'vagrant' lepers. These respondents seem to have supported the idea of segregation even while recommending some modifications to ensure the efficient working of the Act.[79] Despite cautioning the government that the Act should not turn into 'an engine of oppression', Surendranath Mukherjee of Uttarpara People's Association wholeheartedly supported the

[72] Wellesley Bailey, *Sixty Years of Service 1874–1934 on Behalf of Lepers and Their Children*, London: Mission to Lepers, 1934, pp. 27–8.

[73] Ernst Muir, *Leprosy: Diagnosis, Treatment and Prevention*, 6th edn, Delhi: Indian Council of the British Empire Leprosy Relief Association, 1938, p. 151.

[74] T.S. Krishnamurthy, *Leprosy in India*, Madras: T.S. Krishnamurthi, 1919, p. 4.

[75] N. Bhashya Charya, *Leprosy in Ancient India* (reprinted with additions from *The Theosophist*), Madras: Adyar, 1889, pp. 2–5.

[76] Bhashya Charya, op. cit. (75).

[77] The literature on caste, untouchability and Hinduism is massive. For a discussion on the equation between the lowest castes/dalits and the Hindu tradition of avoidance of touch see Aniket Jawaare, *Practicing Caste: On Touching and Not Touching*, Fordham: Fordham University Press, 2019. For a discussion specifically on treating lepers as outcastes in ancient Hindu texts see Jane Buckingham, 'The "morbid mark": the place of leprosy sufferer in nineteenth century Hindu law', *South Asia: Journal of South Asian Studies* (1997) 20(1), pp. 57–80.

[78] Krishnamurthi, op. cit. (74), p. 4, mentions that Hindu destitute lepers were traditionally treated as 'outcaste'.

[79] Letter 246M, Cuttack, 28 October 1896, from R.C. Dutta, officiating commisisoner of Orissa, to secretary to government of India, Municipal Government of India, Legislative Department, Papers relating to the Bill to Provide Segregation of Pauper Lepers and Control of Lepers following Certain Callings, IOR/L/PJ/6/452, File 1403, 29 June 1897, IOR.

compulsory isolation of all pauper lepers.[80] Both Petambar Chatterjee, secretary of the Konnagar Ratepayer's Association, and R.C. Dutt, the officiating commissioner of Orissa Division, recommended that, along with pauper lepers, lepers pursuing 'certain callings', such as wet nurses, midwives, milkmaids, confectioners or prostitutes, should also be subjected to compulsory segregation.[81] This compilation of upper-caste Indian responses reveals that the colonial policy of segregating lepers enjoyed the enthusiastic support of certain elite sections within South Asian society who simultaneously feared lepers, loathed the poor and condoned untouchability.

Meanwhile, through the early twentieth century, ML personnel indicated that they were successful in attracting Indian lepers to their asylums. ML personnel claimed that South Asian lepers were drawn to the asylums because these institutions provided an inclusive environment in which Christian and Hindu, Western and Indian, sensibilities could mesh. To attract South Asian lepers, asylums in effect practised a form of vernacular Christianity where Christian ideas and customs were couched in Hindu cultural aesthetics. An account of the Neyoor asylum detailed the chapel as one 'built to suit the climate and express the spirit of India', and a worship hall built 'in the Dravidian temple style'.[82] At Neyoor and at Dichpalli asylum in the 1930s, hundreds of patients sat cross-legged in thatched-roofed church and sang beautiful Tamil or Telegu hymns.[83] LMS missionary T.H. Somervell reported Christmas celebrations at Neyoor, where biblical episodes were enacted 'with modern touches and Indian detail'.[84] Christmas and New Year celebration at the Gobra asylum in Calcutta in the early 1920s included Bengali *bhajans*.[85] *Sankirtan* – carnivalesque Hindu processions accompanied by music and dance— organized on the occasion of Christmas and Easter were highlighted as the best example of intercultural synthesis that defined asylum Christianity.[86] Literally meaning 'collective devotional singing', *sankirtan* is an age-old Hindu religious practice developed as part of India's Bhakti devotional tradition. Accounts of Raniganj asylum described early morning *sankirtan* processions making their way 'across rice fields from village to village, singing as they go'.[87]

By highlighting the intermingling of Christian rituals with local cultural practices, religious performances and languages in these institutions, ML personnel claimed that South Asian lepers actively and voluntarily participated in the life of asylums rather than being coerced into segregation. In his account, Wellesley Bailey quoted verbatim testimonies of lepers expressing gratitude towards the ML, their testimonies being translated into English from vernacular languages such as Tamil.[88] Missionary accounts named prominent Indian converts to Christianity, and upheld them as model asylum inmates. John Jackson narrated the life of the first leper inmate of the Purulia leper asylum, who became a devout Christian and took the name Christaram.[89] The name Christaram – a combination of Christ and the Hindu deity Rama – itself hinted at a culture of vernacularized Christianity.

[80] Op. cit. (79), letter 386Ml, Uttarpara, 10 September 1896, Babu Surendranath Mukherjee, Uttarpara People's Association, to secretary, Government of Bengal Municipal Department, IOR.

[81] Op. cit. (79), letter no. 246M, dated Cuttack, 28 October 1896, from R.C. Dutta, and letter no. 216, dated Konnagar, 31 October 1896, from Babu Petambar Chatterjee, Konnagar Ratepayer's Association, to the secretary to the Government of Bengal, Municipal Department, IOR.

[82] Somervell, op. cit. (50), p. 203.

[83] Somervell, op. cit. (50), p. 157; Monahan, op. cit. (59), pp. 48–9.

[84] Somervell, op. cit. (50), p. 159.

[85] P. Sen, *Premanand: God of the Poor (Autobiography of Rev P Sen)*, Delhi: S.P.C.K, 1956, p. 102.

[86] Jones, op. cit. (48), pp. 22–3.

[87] Jones, op. cit. (48), pp. 23–4.

[88] Bailey, op. cit. (72), pp. 37–8.

[89] Jackson, op. cit. (32), pp. 60–3.

These missionary accounts claimed that the single most important factor that made Christianity and Christian healing attractive to Indian lepers was the oppressive Hindu caste system. Mission literature dwelt at length on the evils of the Hindu caste system in general and the harsh implications of the caste system especially for lower-caste, poor lepers who were rendered outcastes. In his history of the ML first published in 1910, missionary John Jackson argued that the traditional hierarchies of caste did not always work in the case of leprosy because, though it was unusual, on rare occasions even Brahmins suffered the same way as the lower castes because of leprosy.[90] Missionary E.W.S. Packard narrated the case of Liladhar, a Brahmin who was denounced as 'outcaste' once his identity as a leper was established.[91] Packard pointed out that Brahmin Liladhar received treatment at the missionary asylum in Kalimpong, where he was baptized in 1932.[92] Eventually Liladhar went on to become a hospital chaplain, and in turn inspired several Indian lepers to convert to Christianity.[93] By showcasing the life story of Liladhar, Packard praised asylums for accepting South Asian lepers who had been abandoned by their own communities, as well as for creating opportunities for their social mobility. Describing the disease as a great 'leveller of caste', Jackson claimed that the asylums operated by the ML served as a refuge for lepers of 'various castes and creeds'.[94]

Therefore both the colonial state and the missionaries claimed that South Asians were averse neither to the imperial policy of segregating lepers, nor to the Christian asylums. It is undeniable that many upper-caste Indians argued that the policy of segregating lepers was compatible with traditional Hindu views on leprosy. The colonial state carefully curated these upper-caste South Asian opinions that suggested that Indians found the policy of segregation agreeable. The Christian missionaries, in turn, appealed to the potential inmates by upholding the view that the asylums were egalitarian spaces free of caste-based hierarchies, where Christianity was indigenized and vernacularized and Indian lepers felt at home.

When was resistance possible?

Despite missionary texts claiming that asylums did not promote social hierarchies, the Christian institutions were not entirely free of the shadows of the caste system. Commensality based on caste, a central feature of the caste-oriented division of society, was often retained in these asylums. The memoir of missionary Henry Bleby, in charge of the Raniganj leper asylum, mentioned that administrators had to 'consider the question of caste' especially for non-Christian inmates.[95] At the 1920 conference, Rev. Oldrieve reported that, in Madras, the ML was under an agreement with the Madras government to 'employ a caste cook for caste lepers'.[96] Missionaries routinely recalled and identified inmates, even those who had converted to Christianity, by their erstwhile caste status. Brahmin lepers were almost invariably described in missionary texts as Brahmins.[97] As noted already, E.W.S. Packard wrote about the life of Liladhar, a Brahmin leper, who went on to become the

[90] Jackson, op. cit. (32), p. 15.

[91] *The Story of Liladhar* (compiled by E.W.S. Packard), Ilfracombe: Arthur Stockwell Ltd, 1964, pp. 18–19. The text mentions that for Liladhar, a Brahmin leper in 1930s, detection of leprosy was equivalent to falling to the status of an outcaste.

[92] *The Story of Liladhar*, op. cit. (91), pp. 8–9.

[93] *The Story of Liladhar*, op. cit. (91), pp. 51–3.

[94] Jackson, op. cit. (32), p. 20.

[95] Henry Bleby, *Fourth Generation: Modern Sequel to a Missionary Father's Tale*, London: The Epworth Press, 1935, pp. 94–5.

[96] Report of a Conference of Leper Asylum Superintendents and Others, op. cit. (34), p. 83.

[97] Jackson, op. cit. (32), pp. 68–9.

chaplain at the Kalimpong leper asylum.[98] In each of these cases, missionary commentators highlighted the upper-caste backgrounds of these South Asian converts to Christianity. Traces of the survival of caste-based identities in leper asylums are likewise evident in missionary narratives that recounted that two 'Brahmin lepers', Achyutanandan and Venkota Rao, led the leper strike of Ramachandrapuram asylum in the Madras Presidency in 1938.

The 1938 leper strike in Ramachandrapuram thus questions the impression, carefully consolidated through missionary accounts, that South Asian lepers necessarily appreciated living in Christian asylums. Even prior to the 1930s, the process of conversion was not always smooth. When read against the grain, the missionary portrayal of Christian asylums as places of harmony and refuge is interrupted by occasional references to episodes of conflict in the villages and localities around asylums, as the local people protested the escalating instances of Christian conversion within asylums. Local residents in Almora in north India, for example, opposed the establishment of missionary schools and leper asylums and there were instances of riots in reaction to increased baptisms, where rioters 'tore up all the Bibles'.[99]

Sanjiv Kakar has noted that, through the early twentieth century, patients sometimes escaped leprosy asylums because inmates who were married couples were forcibly isolated in separate wards.[100] Compared to these earlier instances of 'muted resistance by patients' in the form of patient flight, the late 1930s witnessed, according to Kakar, a 'more visible and organised display of protest' in the form of hunger strikes or semi-riots against the missionaries in the leprosy asylums.[101] Kakar explains these relatively organized protests against Christian asylums in the late 1930s primarily in terms of the advances in medical knowledge pertaining to leprosy.[102] He has argued that with the promise of some curative medicine being generated in the 1920s, there were extensive calls for the relaxation of rules pertaining to segregation.

However, it needs highlighting that events at Ramachandrapuram also hinted at the gradual waning of the government–mission alliance that had characterized the previous three decades and that they, along with medical advances, were symptomatic of larger political transitions. Following the Government of India Act of 1935, provincial elections were held for the first time in 1937, which enabled the premier Indian nationalist party, the Congress, to set up local governments in several provinces, including in the Madras Presidency. Missionaries were convinced that the leper protestors at Ramachandrapuram were being actively supported by the local Congress administration, which nurtured covert anti-missionary sentiments.[103]

Studies from different British Indian provinces, including Bengal and United Provinces, have shown that soon after the institution of a nationalist Indian government in 1937, public-health initiatives in these provinces underwent a change.[104] Alongside strengthening the reach of Western biomedicine, they began to officially promote what was described as 'indigenous medicine'. Simultaneously, missionary writings from the late 1930s illustrate heightened anxiety about receding governmental patronage from these nationalist

[98] *The Story of Liladhar*, op. cit. (91), pp. 8–9, 51–3.

[99] Budden, op. cit. (47), pp. 8–11.

[100] Sanjiv Kakar, 'Medical developments and patient unrest in leprosy asylum, 1860- 1940,' *Social Scientist* (1996) 24(4–6), pp. 62–81, 63, 68–71.

[101] Kakar, op. cit. (100), p. 71.

[102] Kakar, op. cit. (100), p. 71–3.

[103] Letter from general secretary (ML) to Joshee, 23 August 1939, TLM.

[104] The Congress formed government in eight out of the eleven provinces that participated in the provincial election of 1937. See Shinjini Das, *Vernacular Medicine in Colonial India: Family, Market and Homoeopathy*, Cambridge: Cambridge University Press, 2019, pp. 200–45; Rachel Berger, *Ayurveda Made Modern: Political Histories of Indigenous Medicine in Northern India, 1900–1955*, Basingstoke: Palgrave Macmillan, 2013.

provincial governments. An account of Dichpalli asylum in Hyderabad in the early 1940s despaired that 'political upheavals have not left Dichpalli completely untouched ... in the present situation every Christian hospital in India has to face the possibility of a reduction or even withdrawal of governmental support'.[105] The Ramachandrapuram protest fits within this narrative of shifting political regimes. Indeed, it may be argued that the Ramachandrapuram incident of 1938 constitutes one of the early flashpoints in the ensuing dissolution of the medical–evangelical state of the early twentieth century. Since the election of the Congress to power in Madras, government financial assistance to the Ramachandrapuram asylum, much like elsewhere, began to dry up. In October 1938, Superintendent Joshee regretted in a letter to the general secretary, W. Anderson, that the 'the Congress government is trying to lessen the grants ... they are after the institutions such as the Sanatoriums and Asylums', and that the asylum church was an 'eyesore for them'.[106]

The missionaries suspected that the Congress support for the rebellion operated at multiple levels. It was alleged that, prior to the outbreak, 'Brahmin patients' who led the protest had sent a telegraph to the Congress minister Rajan requesting him to visit the Ramachandrapuram asylum.[107] The local district collector, a major district-level official in the colonial bureaucracy, was also seen to be stoking the leper rebellion. In March 1939, the collector led an official inquiry into the ongoing protest and produced an anti-mission report. He concluded that the 'ringleaders had been unduly victimised by the asylum management'.[108] As the patient agitation continued, the missionaries were increasingly convinced that the two 'ringleaders' and the thirty leper strikers were 'supported by Congress people outside'.[109] When the dismissed patients refused to leave the asylum premises and built a shed outside the gate, the mission administration feared that the patients were expecting the 'Chief Minister or Gandhi to come and put them in very soon'.[110] Following the protests in late 1938, the missionaries agreed that the main challenge for them was to 'conserve the distinctly Christian character of the asylum' that was under threat in the altered political situation in India.[111]

At the eye of the storm was the issue of the government grant. After the official inquiry, the collector, clearly taking an anti-mission stand, recommended that unless the protestors were readmitted, the local government grant would not be extended to the asylum.[112] The mission steadfastly refused to comply with any conditions set by the Congress.[113] As a result, the Congress government declined to offer any further financial support to the asylum in the form of the annual grant-in-aid. Through 1939, ML internal correspondence discussed the possibility of closing down the asylum, even if temporarily. Instead, the operations of the asylum were drastically scaled down to ensure that the ML was able to self-fund its operations entirely.[114] Correspondence from 1940 confirms that the decision

[105] Monahan, op. cit. (59), pp. 114–15.
[106] Letter from D.L. Joshee to W.H.P. Anderson, dated 23 October 1938, TLM.
[107] Letter from D.L. Joshee to W.H.P. Anderson, op. cit. (106).
[108] Letter from D.L. Joshee to W.H.P. Anderson, 3 April 1939, TLM.
[109] Letter from general secretary (Mission to Lepers) to Sir John Whitty, 11 April 1939, TLM.
[110] Letter from Joshee to Anderson, 3 April 1939, TLM.
[111] Letter from Rev. Timpany to W.H.P. Anderson, 10 March 1939, TLM.
[112] Letter from Rev. Timpany to W.H.P. Anderson, 1 April 1939, TLM; letter from Rev. Timpany to A. Donald Miller, 28 March 1939, TLM.
[113] Letter from general secretary to Rev. McLaurin, 4 January 1940, TLM.
[114] Rev. Timpany to W.H.P. Anderson, dated 1 April 1939, TLM; letter from Rev. Timpany to A. Donald Miller, dated 28 March 1939, TLM.

to forgo government grants was still adhered to, to ensure missionary autonomy in running the asylum, and to ensure that the ML remained 'unfettered in our religious program there'.[115]

The missionary suspicion of Indian nationalist party Congress's anti-Christian bias could well have been partially true. As already mentioned, after 1937, along with strengthening biomedical infrastructure, Congress governments in various provinces had begun promoting what were described as non-allopathic 'indigenous' medicine. Simultaneously, despite the proclaimed secular credentials of the Congress (as opposed to the declared right-wing Hindu religious–nationalist groups such as the Arya Samaj or the RSS), sections within the Congress party had begun harbouring clear anti-missionary sentiment during the time. Gandhi himself had reservations against missionary conversion efforts, especially among lower-caste people. His views on the issue are compiled in *Christian Missions and Their Place in India*, a collection of essays by Gandhi in *Young India* and *Harijan* in the 1920s and 1930s.[116] Gandhi was particularly worried that missionary work among the lower castes, and their potential conversion to Christianity, would undermine the unity and mobilization amongst the depressed castes in the nationalist movement.[117] Many others within the Congress shared Gandhi's views.[118]

After the formal end of the British Raj in India in 1947, India was declared a secular, plural, inclusive nation. However, there were ongoing debates about the status of Christian missions in independent India. As Judith Brown has shown, these were reflected in the report of the government's Christian Mission Enquiry Committee (also called the Niyogi committee) in the early 1950s.[119] The Niyogi committee adopted a stance against the Christian missions, recommending that missionaries whose primary aim was proselytization should withdraw from India.[120] To curtail foreign presence, in 1954 the newly independent government of India ruled that new foreign missions were to secure permission before initiating any activities within India.[121]

It can be argued further that the post-independence Congress government's views on leprosy were shaped more by eugenic concerns of population control than by the welfare of lepers.[122] Thus, when leprosy policies for independent India came up for discussion in the parliament, an even harsher policy of sterilization received priority over the colonial policy of segregation. In 1953, Congress MPs, propelled by eugenic considerations of nurturing a national population that was healthy and productive, unsuccessfully pushed for compulsory sterilization of lepers.[123] Given this longer trajectory, the Congress's alleged support for the 1938 leper strike at Ramachandrapuram should be interpreted more as a stance against Christian missions than as empathy for the cause of the lepers.

[115] Letter from general secretary to Rev. J.B. McLaurin, 4 January 1940, TLM; letter from J.B. McLaurin to Mr Anderson, 24 January 1940, TLM.

[116] M.K. Gandhi, *Christian Missions: Their Place in India*, Ahmedabad: Navajivan Press, 1941.

[117] Gunnel Cedelorf, 'Anticipating independent India: the idea of a Lutheran Christian nation and Indian nationalism', in Richard Fox Young (ed.), *India and the Indianness of Christianity: In Honor of Robert Frykenberg*, Grand Rapids, MI: Eerdmans, 2009, pp. 196–216.

[118] Cedelorf, op. cit. (117), pp. 196–216.

[119] Judith Brown, 'Indian Christians and Nehru's nation-state', in Fox Young, op. cit. (117), pp. 217–34.

[120] Brown, op. cit. (119); also see Chad Bauman, *Christian Identity and Dalit Religion in Hindu India, 1868–1947*, Grand Rapids, MI: Eerdmans Publishing, 2008, pp. 232–7.

[121] Brown, op. cit. (119), pp. 231–3.

[122] See Jane Buckingham, 'Patient welfare vs health of the nation: governmentality and sterilization of leprosy sufferers in early post-colonial India', *Social History of Medicine* (2006) 19(3), pp. 483–99. Also see Sarah Hodges, 'Indian eugenics in an age of reform', in Hodges (ed.), *Reproductive Health in India: History, Politics, Controversies*, Delhi: Orient Longman, 2006, pp. 135–64.

[123] Buckingham, op. cit. (122), pp. 493–5.

Conclusion

Despite an uneasy relationship with the postcolonial Indian state, missionary leprosy work did not terminate immediately after Indian independence in 1947. That said, new Indian government regulations of 1954 put several restrictions on the activities of foreign missions.[124] The ML continued for some years as a private charitable Christian organization, bereft of any contact with the state. By the 1980s, with the advent of multiple-drug therapy, institution-based rehabilitation of lepers in asylums became redundant.

By focusing on British Indian leper asylums in the first half of the twentieth century, this article has added new archival findings and fresh interpretations of the relationship between science/medicine and religion in colonized societies. Extant scholarship on colonial science and medicine, for example on South Asia, would have us believe that medicine and religion routinely overlapped only in the so-called popular or subaltern domains, and that colonial state medicine mostly adopted a strict antithetical position on the question of religion. Two major strands of this scholarship – one on the state control of epidemics in popular pilgrimage sites, and the other on popular faith-healing practices concerning temples, shrines or dargahs – have convincingly established this impression.[125] Yet British Indian leper asylums tell a different story. We have seen in this article how Christianity and medicine remained firmly intertwined within the realm of the twentieth-century imperial state and its public-health policies. This article has explored how early twentieth-century fields of tropical medicine and bacteriology were not radically dismissive of Christian missionaries, or of their ideas of sin and morality, but remained thoroughly in conversation with them. This resonates also with the larger European metropolitan debate concerning the relationship between science and religion since the advent of Darwin. It is fairly established that the conventional thesis of 'secularization' and post-Darwinian 'schism' between science and religion does not hold up to closer scrutiny. While a rich body of scholarship has been analysing and nuancing this complex relationship between science and religion, they have frequently been examined from a history-of-ideas perspective, predominantly focusing on debates between prominent European intellectuals.[126] This study of South Asian leper asylums, in contrast, has provided a view from the ground up of the ways in which the British Empire consciously built up a 'medical–evangelical' state, through everyday alliances with Christian missionaries. The systematic collaboration between the imperial state and evangelical Protestant groups was not accidental or informal, but fundamentally embedded in the public-health administration of British Raj through the early years of the twentieth century until decolonization.

This article has reinforced the historiography that aims to decentre Eurocentric actors in the scholarship on colonial science and medicine.[127] Clearly, alliances between European medics, state officials and missionaries shaped the medico-evangelical state in British India. However, it drew profound sustenance from South Asian indigenous traditions.

[124] Brown, op. cit. (119), p. 232.

[125] See Michael Low, 'Empire and the Hajj: pilgrims, plague and pan-Islam under British surveillance', *International Journal of Middle East Studies* (2008) 40(2), pp. 269–90; Kama Maclean, 'Making the colonial state work for you: the modern beginnings of the ancient Kumbh Mela in Allahabad', *Journal of Asian Studies* (2003) 62(3), pp. 873–905. Also see Fabrizio Ferrari (ed.), *Health and Religious Rituals in South Asia*, London: Routledge, 2011.

[126] Lightman, op. cit. (9), pp. 343–66; Marius Turda, 'Scientific Calvinism: eugenics as a secular religion', *Journal of Religious History, Literature and Culture* (2018) 4(2), pp. 1–16.

[127] Projit Mukharji, *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*, London, Anthem Press, 2011; Marwa Elshakry, *Reading Darwin in Arabic, 1860–1950*, Chicago: University of Chicago Press, 2013.

For example, at the heart of scientific experiments conducted in the asylums were the trials with chaulmoogra oil, which were inspired by subcontinental indigenous therapeutic traditions. Elite able-bodied Indians offered emphatic legitimacy and ideological support to British medical, missionary and administrative notions of segregation as it resonated with their upper-caste traditional faith in the practices of untouchability and alienation. Moreover, South Asian caste-based traditions also shaped hierarchies among lepers within the asylums. Even as missions promised freedom from caste oppression, Brahmin lepers often ended up enjoying greater privilege and visibility within these asylums and in mission literature. This article has added to this literature that emphasizes the significance of non-European voices in colonial science and medicine by foregrounding the methodological challenge of retrieving the perspectives of colonized and captive patients such as the lepers who resided as inmates in these asylums. Here, three conclusions emerge. First, access to the immediate and uncontaminated voice of leper inmates is difficult. Their perspectives are silenced, tampered with or censored in accounts that missionaries authored, edited or published. Second, read against the grain and between the lines, it is possible to speculate that leper inmates were not altogether bereft of agency. As we have seen, everyday routine in the leper asylums was not entirely characterized by the blind imposition of distant religious codes of conduct associated with Western Europe. Rather, such routine vastly echoed local Indian cultural and linguistic traditions to the extent that the form of religion practised in the asylum can be termed 'vernacular Christianity'. I have argued that both the strategic syncretism of the missionary establishment designed to appeal to Indian lepers, and the ability of the lepers to make their preferences known, shaped this form of Christianity in the asylums. Finally, even more explicit forms of leper agency, we have seen, were revealed in individual, sporadic and everyday forms of dissent, as well as in collective, sustained and more organized forms of protest.

Given this attention to leper protests, this article has added nuance to existing scholarship on when and why the significance of Christian missionary scientific activism began to wane. Some works on African missions have argued that such significance continued into the 1940s and 1950s.[128] More recent work, however, has argued compellingly that the 1930s was a crucial turning point, after which missionary science began losing its credibility and slowly fell into disuse.[129] It has been argued that along with the advance of secularization, the professionalization of the sciences had led to an irresolvable rift between science and religion by the 1930s, so that missionary involvement in scientific endeavours was increasingly held in suspicion.[130] The case of South Asian leper asylums suggests that a complementary and perhaps more robust explanation that is rooted in political history is in order. It was not just a straightforward story of how secular scientists triumphed over their erstwhile allies in the religious sector and became autonomous. The irreversible entrenchment of anti-colonial nationalism and a gradual process of political decolonization since the late 1930s also had a significant impact in rendering missionaries politically suspect and controversial. Indian lepers had been sporadically opposing the asylum drug trials through the 1920s. But the success of the lepers at the protests in Ramachandrapuram in 1938 revealed the great extent to which the lepers' outright opposition to Christian rituals and management of asylums struck a chord with the reigning anti-missionary stance of mainstream Indian nationalism of the times.

[128] Manton, op. cit. (13), pp. 307–33.
[129] Stenhouse, op. cit. (12), pp. 105–7.
[130] Stenhouse, op. cit. (12), pp. 105–7.

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