

*Crafting Colonial Anxieties: Silk and the Salvation Army in British India, circa 1900–1920**

JAGJEET LALLY

Department of History, University College London, United Kingdom
Email: jagjeet.lally@ucl.ac.uk

Abstract

In the early twentieth century, the Salvation Army in British India transformed its public profile and standing, shifting from being an organization seen by the state as a threat to social order, to being partner to the state in the delivery of social welfare programmes. At the same time, the Army also shaped discussion and anxieties about the precarious position of India's economy and sought to intervene on behalf of the state—or to present itself as doing so—in the rescue of India's traditional industries. The Army was an important actor in debates about the future of traditional industries such as silkworm rearing and silk weaving, and was able to mobilize public opinion to press provincial governments for resources with which to try to resuscitate and rejuvenate India's silk industry. Although the Army's sericulture initiatives failed to thwart the decline of India's silk industry, they generated significant momentum, publicity, and public attention, to some extent transforming the Army's standing in British India and beyond.

Introduction

In 1900, an article appeared in the August edition of the Salvation Army's monthly magazine, *India's Cry*, entitled 'The Hindu Village Artisan. How to Revive His Crafts', reprinted from the *Bombay Guardian*, a Christian missionary periodical.¹ The author of the article

* This article was written while I was, all too briefly, the Moses and Mary Finley Research Fellow, a privilege for which I wish to thank the Master and Fellows of Darwin College, Cambridge. I also wish to thank Stephen Cummins, Sujit Sivasundaram, and the editors and reviewers of this journal for reading the entire draft and offering useful suggestions and corrections.

¹ Anon. (1900). The Hindu Village Artisan. How to Revive His Crafts, *India's Cry*, 5:8, pp. 12–13.

related the proposal of Mr S. J. Tellery, the owner of an Indian curio firm. Tellery believed that the Government of India ought to intervene in the preservation and improvement of craft manufactures, the most threatened of which was silk weaving. In the years that followed, the Salvation Army energetically took up Tellery's proposals where the government would not (or could not), paying particular attention to establishing or extending silk production (sericulture) as well as silk weaving. By 1916, the Army was at the command of 28 sericulture and silk settlements across British India and Ceylon, which were to serve as nuclei for the spread of these industries further afield. Almost one-fifth were in Punjab, including the largest single site at Changa Manga and the flagship institution at Simla, all the more significant as the province had previously been home to silk weaving but not silk yarn production.² By 1920, most of the enterprises were abandoned, having failed either to profitably produce silk or to encourage peasants to enter the silk industry, let alone have an impact upon silk weaving. But the Army's reputation was not tarnished as a result of these failures for, in fact, its activities had garnered significant positive publicity and public attention, as decried by those who recognized all the faults in the Army's interventions. This article examines the Salvation Army's involvement in the silk industry in British India, *circa* 1900–1920, in the course adding to our knowledge of this increasingly influential organization, to the material dimensions of the work of missionary organizations in early twentieth-century colonial India, and to debates about India's traditional industries that raged through to the post-colonial period.

Because of constant cash shortages, on the one hand, and *laissez-faire* economic ideology, on the other, British India was a 'private enterprise economy' where the private sector made most decisions about the allocation of resources, sometimes receiving state support through subsidies and small grants or other forms of preferential treatment.³ The imperial arena, therefore, offered opportunities to organizations and individuals to build private fortunes, social and political capital, respectability, and public influence by pioneering developments that the government was unable or unwilling to undertake. The story of the rise of the Salvation Army in Britain

² Booth-Tucker, F. de L. (1916?). *Silk in India, Being the Annual Report on the Silk Centres of the Salvation Army in India and Ceylon, 1915–1916*, Liddell's Press, Simla, p. 4.

³ Tomlinson, B. R. (2005). *The New Cambridge History of India. III. 3. The Economy of Modern India, 1860–1970*, Cambridge University Press, New Delhi, p. 95.

and British India, scholars have recently sought to show, was rooted in the ability of its leadership to take advantage of these opportunities. In the first few decades after its establishment, first as the East London Christian Mission in 1865, renamed the Salvation Army in 1878, the Army and its founder, William Booth, were regarded as radical and troublesome. In the face of resistance to proselytization and conversion from the working classes in London, Booth turned to the advocacy of social reform as the key to the spiritual reform of the most hardened ‘heathens’. Although theology remained important to the identity and ideology of the Army, the significance of the balance of focus on material rather than spiritual concerns is indicated by the accusation that Booth was more a businessman than a clergyman, motivated above all by profit.⁴

Harald Fischer-Tiné argues that the diffusion of this social reformism from the metropole to colonial India was central to the changing circumstances and rising reputation of the Army.⁵ Of crucial importance to this story is Frederick Booth-Tucker, son-in-law of the Army’s founder.⁶ Unlike most missionaries, Frederick Booth-Tucker was born into the privileged world of the Indian Civil Service in 1853 and educated in England until the age of 20, thereafter joining the Indian Civil Service and working as an assistant magistrate in Punjab from 1874. Booth-Tucker joined the Salvation Army during leave spent in London in 1881, resigning his Indian Civil Service post to work in the Army’s legal department, before returning to India to pioneer the Army’s efforts there in 1882, making use of his high-profile connections to the colonial state, especially in North India. Under Booth-Tucker, Meena Radhakrishna argues, the Army played a central role in reconceptualizing criminality and reformulating policy in British India.⁷ For Booth, criminality was curable through the provision of profitable employment, and the ‘criminocurological’

⁴ Radhakrishna, M. (2001). *Dishonoured by History. ‘Criminal Tribes’ and British Colonial Policy*, Orient Longman, New Delhi, p. 16.

⁵ Fischer-Tiné, H. (2011). ‘Reclaiming Savages in “Darkest England” and “Darkest India”’: The Salvation Army as Transnational Agent of the Civilising Mission’, in Watt, C. A. and Mann, M. *Civilising Missions in Colonial and Postcolonial South Asia. From Improvement to Development*, Anthem Press, London, pp. 125–64.

⁶ There are numerous autobiographical and biographical sketches and accounts of the life of Booth-Tucker. See, for example, Booth-Tucker, F. (1923). *Forty Years with the Salvation Army in India*, Salvationist Publishing and Supplies, London; Barnett, A. H. (1937). The Salvation Army in India, *Journal of the Royal Society of Arts*, 85, pp. 202–3.

⁷ Radhakrishna, *Dishonoured by History*.

approach was central to his social reformism. For Booth-Tucker, ‘criminocurology’ had particular purchase in India where nomadic groups had lost their livelihoods as a consequence of colonial policies towards unsettled ways of life, making it imperative that they be given employment to counteract their turning to a life of crime as a means of survival.⁸ Booth-Tucker was, of course, building on the work of other missionary societies who, in the wake of the Indian Rebellion of 1857, had offered work and protection to converts who otherwise would be cast out of their communities.⁹ But Booth-Tucker’s advocacy of the ideology of criminocurology went further in that it contributed to the shift in focus from the genetic to the social causes of hereditary criminality, and, consequently, eased the growing administrative problem of the so-called criminal tribes by positing that their behaviour was remediable and reversible.¹⁰ With the backing of the government of the United Provinces, the Army opened their first ‘settlement’ for the Dom tribe in Gorakpur in 1908, to whom they offered gainful employment in craft industries such as weaving, carpet making, and garment stitching.¹¹ The Government of India’s Criminal Tribes Act of 1911 enshrined this approach to the causes and cure of criminality—a considerable change from earlier and more unfavourable attitudes towards the usefulness of agricultural and industrial settlements.¹² With the Army’s ability and aptitude

⁸ See, for the impact of colonial land policy: Bayly, C. A. (1990). *The New Cambridge History of India. II. I. Indian Society and the Making of the British Empire*, Cambridge University Press, Cambridge, pp. 143–44.

⁹ Webster, J. C. B. (2007). *A Social History of Christianity: Northwest India Since 1800*, Oxford University Press, New Delhi, pp. 122–23.

¹⁰ Booth-Tucker, F. (1891). *Darkest India . . . A Supplement to General Booth’s ‘In Darkest England, and the Way Out’*, Bombay Gazette Steam Printing Works, Bombay.

¹¹ Barnett, The Salvation Army in India, p. 204. Such crafts, alongside paper and rope making, had long been taught according to ‘improved’ methods in Punjab jails to convicted criminals as disciplinary and purposeful employment. See Baden Powell, B. H. (1868). *Hand-book of the Economic Products of the Punjab, with a Combined Index and Glossary of Technical Vernacular Words. Vol. I. Economic Raw Produce*, Thomason Civil Engineering College, Roorkee, *passim*. The mobilization of criminal tribes’ labour on the settlements was, then, perhaps an extension of this project, suggesting that criminals—convicted or otherwise, in the case of the Doms—were not differentiated in regards to the utility of the labour, and instead mobilized (albeit in vain) in attempts to preserve and, later, revivify Indian crafts.

¹² Because the Criminal Tribes Act of 1871 was in force in Punjab, the Punjab Government—as well as the Indian Police Commission—was instrumental in shaping the 1911 Act, and it is thus that Booth-Tucker was able to exert his influence as a former Punjab administrator on the content of the Act and its implementation. See Radhakrishna, *Dishonoured by History*, pp. 6–7, 27–39, 71–5, 98–9; Major, A. J. (1999).

for the task demonstrated in Gorakpur, provincial governments gave preference to the Salvation Army over other missionary organizations in running settlements for the groups they classified as criminal tribes.¹³

As Rachel Tolen highlighted in a seminal article in 1991, the Salvation Army sought to ‘discipline’ the body of the *individual* colonial subject through its work with the criminal tribes on the settlements and the use of their labour.¹⁴ Yet, by broadening the focus from work with the criminal tribes to interventions in crafts, it is evident that the Army was involved in transforming the individual as well as the *collective*—that is, Indian society—as part of the same project writ large; there was, in other words, a larger dimension to the work that the Army undertook on the settlements. As scholarly work on the Army in British India has hitherto focussed on its ideology and its work with the criminal tribes, the aims and outcomes of its initiatives to transform the Indian economy have hardly received any mention at all. Although this article focusses foremost on the history of the Army’s interventions in sericulture and the silk industry as an important instance of its wider programme of action, it highlights the connection and complementarity of these two transformations: the work with the criminal tribes and with traditional crafts, disciplining the labour of the individual and reorienting the economy to health, the ‘private’ reality of profit-oriented work on the settlements and in the schools, and the public presentation of Salvationist success for the greater good.

The significance of these interventions is readily apparent in light of the increasingly fervent discussions in the 1900s and 1910s about the state of India’s economy. These decades formed a crucial moment in the development of the Indian economy, marked by the departure from the state’s so-called *laissez-fairism* (or, rather, its

State and Criminal Tribes in Colonial Punjab: Surveillance, Control and Reclamation of the ‘Dangerous Classes’, *Modern Asian Studies*, 33:3, especially pp. 675–88.

¹³ The American Baptist Mission, for example, also formerly worked with criminals, and vied to operate settlements after 1911. However, the Army was often preferred for the task. In Punjab, it was foremost among those organizations administrating the settlements, followed by the Arya Samaj, Chief Khalsa Diwan, and the Anjuman-i-Islamia. See Radhakrishna, *Dishonoured by History*, pp. 15, 104; Major, Criminal Tribes in Colonial Punjab, p. 678. The shortage of labour acted as an incentive to classify as ‘criminals by birth’ individuals or groups only occasionally involved in criminal activity or of the menial castes: Major, Criminal Tribes in Colonial Punjab.

¹⁴ Tolen, R.J. (1991). Colonizing and Transforming the Criminal Tribesman: The Salvation Army in British India, *American Ethnologist*, 18:1, pp. 106–25.

limited interventionism), towards a new stance that morphed out of the attempts of individuals, organizations, provincial governments, and bureaucrats to encourage industrial growth. An important factor was the political pressure brought to bear on the state on the point of its lack of encouragement to industry by the mounting force of Indian nationalist and wider public opinion, especially after the 1905 Partition of Bengal, which gave further momentum to the Swadeshi movement and attempts to improve the status of India's traditional industries. At the official level, these developments culminated in the formation and report of the Indian Industrial Commission in the later 1910s, and what Clive Dewey has called the Government of India's 'New Industrial Policy'.¹⁵ It was within this context of ideological change, and the pursuit of economic change, that the Army's interventions and the assistance it wrought from the government ought to be situated. It is, furthermore, as a contribution to the currents of these debates and discussions that the Army's interventions should be appreciated, although it is impossible in this article to draw a direct link between the work of the Salvationists and any particular programmatic details proposed by government.

In turn, the focus on the Army's work in the raw silk and silk textile industries is useful for at least two reasons. In the first place, it was the most publicized, promoted, and discussed of the Army's economic interventions in the 1910s, both in the Army's own publications and also in official literature at the provincial and national levels of the colonial state, much more so than the Army's interventions in cotton weaving or tobacco cultivation and processing, for example. In rhetorical terms, if not in reality, the silk enterprises provided some coherence to the range of its activities, insofar, for example, as they connected the social enterprise of the rehabilitation of criminal tribes (in spite of the silk centres employing a relatively small proportion of the available criminal tribe labour) with the economic endeavour of rescuing and regenerating craft industries, especially in the eyes of the rank-and-file of the mission membership. At the same time, it made the Army's work with the criminal tribes more palatable than did the true fact of the settlements providing labour for increasingly over-stretched provincial governments, especially during the war years. Whereas instruction in sericulture or silk weaving was easily portrayed

¹⁵ Dewey, C. (1979). 'The Government of India's "New Industrial Policy" 1900–1925: Formulation and Failure', in Dewey, C. and Chaudhuri, K. N. *Economy and Society: Essays in Indian Economic and Social History*, Oxford University Press, Delhi.

as beneficial to the criminal tribes while at the same time creating a spillover to the rest of society and the economy, the bulk of the criminal tribes' labour came to be employed in felling timber for fuel sold at a profit accruing to the Army in addition to the payment received for operating the settlements, thereby only adding to the charge that the Army was more a business than a mission. In short, studying the silk enterprises is central to a fuller understanding of the Army than can be gleaned from the published works on matters of ideology authored by Booth-Tucker that form the basis of much scholarship on the Salvation Army. At the same time, it is a lens through which to examine the way in which the Army sought to present itself to the public in the early twentieth century.

Second, the Army's ideology clearly connected spiritual and material concerns, arguably advantaging the latter, to the extent that the material dimensions of its work on the subcontinent assume some importance in understanding the profile of its activities as a whole. As seen from the synopsis of Tellery's proposals (reprinted by the Salvationists from another, rival, missionary periodical) and from the Army's competition with other missions (who were already rehabilitating criminals in settlements towards the end of the nineteenth century and who also sought to operate settlements on behalf of the government after 1911), the Salvation Army was operating in what is commonly called the 'competitive mission field'. The Salvation Army is under-researched relative to other missionary organizations such as the Baptist Mission Society, Church Mission Society, and London Missionary Society, which dominate the study of missionary organizations in British India.¹⁶ Furthermore, many of the material dimensions of this inter-denominational competition have been little studied: alongside the establishment of settlements, schools, and hospitals, mission organizations also intervened in Indian artisan or craft industries such as weaving. The Army, for its part, also sought to compete with other organizations in this field of activity, and projected itself as a national champion of craft regeneration. Indeed, the Army became an important actor in debates about the future of India's traditional industries, a subject long of interest to historians of Indian nationalists and the nationalist movement. More

¹⁶ See, for a representative recent survey of missionary activity in colonial India, Cox, J. (2002). *Imperial Fault Lines. Christianity and Colonial Power in India, 1818–1940*, Stanford University Press, Stanford. See also, Bellenoit, H. J. A. (2007). *Missionary Education and Empire in Late Colonial India, 1860–1920*, Pickering and Chatto, London.

recently, Abigail McGowan has studied what came to be constituted as India's traditional or craft industries, and the range of attitudes towards the development of craft production.¹⁷ In studying the Army's interventions in sericulture and the silk industry, this article highlights how mission organizations occupied a place within the trajectory of craft regeneration in the early twentieth century, widening the range of actors beyond those Indian thinkers or nationalists and British or British Indian officials that dominate the discussion in McGowan's groundbreaking work. At the same time, however, an appreciation of context and competition—of the concern about the state of crafts around the turn of the century, and the activities of other missions in the field of craft regeneration—helps counter the tendency of viewing Booth-Tucker as the intellectual source and sole driving force of the Army's operations in India before *circa* 1920, as if other actors and agencies were absent from his thinking.

Within scholarship on the Army, Tolen, Fischer-Tiné, and Radhakrishna's are in fact among the few academic works devoted to the study of the organization outside Britain, Europe, and America, in spite of the fact that the Army's missions were—and still are—truly transnational. Yet, none of these scholars have focussed on the Army's interest in traditional industry and crafts.¹⁸ To understand the Army's intervention in the silk industry, it is necessary to return to Tellery's proposal of 1900, and the anxieties about Indian society and economy and India's significance in the world, of which it was a manifestation. At the heart of these anxieties was an increasing suspicion of industrialization influenced by Ruskin, Morris, and the Arts and Crafts Movement of the late nineteenth century, on the one hand, and a belief in fundamental civilizational difference separating Britain and India, as famously articulated by the legal scholar Henry Maine in 1875, on the other. Following their common civilizational origins, Maine argued, Britain had progressed, whereas India had stayed true to her past. Increasingly, agriculturalists and craftsmen came to represent an 'authentic' India—an India, it was believed, that ought to be conserved but which could benefit from better techniques and technologies from Britain. Of India's traditional industries, both sericulture and silk weaving were widely recognized

¹⁷ McGowan, A. (2009). *Crafting the Nation in Colonial India*, Palgrave Macmillan, Basingstoke.

¹⁸ See, for a review of works on the Salvation Army in other parts of the non-European world: Fischer-Tiné, 'Reclaiming Savages', p. 153, n. 7.

in the 1870s and 1880s as being in relative and absolute decline—a decline that provincial and national governments largely failed to thwart.

The Army's primary focus on the production of raw silk and silk textiles was by no means an exclusive focus, for the Army was also involved in the development of 'improved' looms and delivering instruction in 'improved' weaving techniques to Indians, for example. India's cotton textile industry was, after all, at the epicentre of concerns about deindustrialization and attendant efforts to preserve, improve, revivify, and extend India's traditional industries. Yet, the Army's decision to focus on—or, at least, most heavily publicize its programme of action in—silk can be best understood as the confluence of a range of factors that incentivized intervention in silk over cotton textiles. With the nationwide interest in cotton textiles and efforts to shore up the handloom industry, it is unsurprising that the Army was 'pushed' elsewhere in its search for a scheme that could bring it publicity and profit. The fact that a range of missionary organizations were involved in efforts to improve cotton textile technology and cotton cloth weaving prior to the Army's interest in crafts, and had already achieved some success in their efforts, only underscored the difficulty facing the Army were it to focus on cotton. Given the competitiveness of the missionary field, and the need to stand out from other organizations, it is unsurprising that the Army chose to focus instead on silk.

However, there were also positive factors that 'pulled' the Army towards silk. In the first place, raw silk was potentially more profitable than cotton, especially once woven into cloth. For the Army, who won contracts for the administration of criminal tribes' labour on large settlements, silk manufacture offered a much more profitable way of making these allocations of labour and land remunerative than cotton cultivation. Second, there was a double crisis in the silk industry, and a double opportunity for the Army, were it to take an 'integrated' approach to solving the problems of the input and output side of the silk textile industry. India was famed for its raw silk and its silk cloth production, but both were in decline by the twentieth century, the former due to disease and international competition, and the latter due to the loss of skills and the influx of cheap foreign silks. Whereas the production of raw cotton was not a hindrance to the handloom industry, the dramatic decline of raw silk production was seen as an impediment to the production of import-competing cloth. Although the Army was motivated at first by the task of regenerating the craft

of Indian silk weaving, it thus came to combine this with the prior task of improving and extending Indian sericulture, thereby tackling two of India's beleaguered traditional industries at once. For the Salvation Army, therefore, the tasks of agricultural improvement logically went hand-in-hand with craft regeneration and offered the opportunity to make much more of an impact—if successful—than intervention in cotton weaving. If the task of regenerating Indian silk weaving actually came to occupy proportionally less of the Army's time and efforts in the 1910s, however, it is because it was predicated on the prior task of improving and extending sericulture, which was nowhere achieved with adequate success.

The first and second sections of this article highlight how contemporary anxieties offered opportunities to the Army to position itself as an actor committed to putting Indian traditional industries—specifically sericulture and silk weaving—on a steadier footing. Of importance to the credibility of the Army in this regard was their takeover of the successful Tata Silk Farm in Bangalore, and the mobilization of the Army's networks outside the British Empire that allowed Booth-Tucker to tour the silk industries of the then global leaders, China and Japan. Following the promulgation of the 1911 Act and the Army's operation of settlements for the criminal tribes across India, a small proportion of the settlements' populations were set to the task of sericulture and silk weaving as part of their 'reformation'. The attention this receives in the surviving sources far outweighs the actual quantitative significance of these enterprises relative to other activities with which the criminal tribes were employed. This, in turn, is indicative of the importance of the silk project to the Army's publicity and public image. The third and fourth sections examine the Army's most ambitious interventions in Changa Manga and Simla, highlighting how the Army's involvement in the silk industry was predicated and presented as connecting the concerns of preserving 'authentic' peasant production, reversing the decline of the formerly lucrative silk industry, and providing profitable employment to the criminal tribes and vocational education to their progeny. In so doing, the Army presented itself as shouldering the concerns of the imperial rulers, and as the saviour of Indian society and economy, at least in its own publicity, but nevertheless becoming an important, if overlooked, actor in the discussion and action surrounding industry and the economy in British India. Although the Army's enterprises ended in failure within a few years, forcing provincial governments to withdraw their funding of the Army's sericultural operations, this was

not before it had inveigled the government and the public as to its authority and gained greater publicity for its activities.

The crisis of sericulture in late colonial India

A series of monographs on Indian sericulture were commissioned in response to the mounting crisis in the late nineteenth century, as a once-lucrative industry languished as a result of competition from China and Japan.¹⁹ The Government of India was acutely aware of the deterioration of silk production and the decline of exports, and, in 1885, appointed Thomas Wardle to the task of reinstating Bengal as the epicentre of global silk production. Wardle's knowledge of Indian silk yarns stemmed from his textile business in the north of England.²⁰ In the course of his investigations, Wardle recommended that an Indian sericulturalist be sent to study in Europe, returning to India with knowledge that could then be taught to silk manufacturers. This was in keeping with the state's attitudes towards industrial intervention: after the East India Company's silk monopoly was opened to private entrepreneurs in 1835, the Government of India 'saw its own role as restricted to demonstration, encouragement and experimentation'.²¹ A Bengali named Nitya Gopal Mukherji was thus duly despatched to Europe, studying in Padua, in Montpellier, and in Paris under Pasteur, the doyen of microbiology and bacteriology, whose study of silkworm disease saved sericulture in France and Italy.²² Until 1915, Mukherji remained—as the 'silk expert'—at the head of small-scale efforts to investigate and save Indian sericulture, their lack of success the result of the shortage of funds, personnel, and planning.²³

¹⁹ Roy, T. (1999). *Traditional Industry in the Economy of Colonial India*, Cambridge University Press, Cambridge, p. 87. See, for monographs prepared for the Punjab government, Hailey, W. M. (1899). *Monograph on the Silk Industry of the Punjab, 1899*, Civil and Military Gazette Press, Lahore; Cookson, H. C. (1887?). *Monograph on the Silk Industry of the Punjab, 1886–87*, Punjab Government Press, Lahore. See, for the 'facts' concerning output decline and the turn from raw silk to waste silk exports, van Schendel, W. (1995). *Reviving a Rural Industry. Silk Producers and Officials in India and Bangladesh 1880s to 1980s*, University Press Limited, Dhaka, p. 49.

²⁰ For a history of Thomas Wardle, see King, B. M. (2005). *Silk and Empire*, Manchester University Press, Manchester, especially chapter 5.

²¹ van Schendel, *Reviving a Rural Industry*, p. 47.

²² King, *Silk and Empire*, p. 73.

²³ Anon. (1908). *Annual Report of the Imperial Department of Agriculture for the Years 1905–06 and 1906–07*, Superintendent Government Printing, Calcutta, p. 23. The

Although the Imperial Department of Agriculture appointed Harold Maxwell-Lefroy as the second entomologist to the Government of India in 1903, his duties did not initially extend to sericulture, which remained Mukherji's domain, indicative of the state's half-hearted intervention in saving the silk industry.²⁴ Maxwell-Lefroy's work was conducted at Pusa in Bihar, a site intimately connected with the history of science in British India. It was first established in 1796 as a stud farm for the breeding of cavalry horses, thereafter repurposed as an experimental farm in 1874, and latterly redeveloped as the Agricultural Research Institute in 1905, renamed the Imperial Institute of Agricultural Research in 1911.²⁵ At the Institute, Maxwell-Lefroy's main duties included the investigation of insect pests and their eradication, which fitted him well for his future as the founder of Rentokil, the extermination company, for which he is most famous and remembered today. Only in 1915 was Lefroy specially seconded for one year to the position of imperial silk specialist, in which capacity he toured the subcontinent, the result of which was the three-volume *Report* written with E. C. Anson in 1917, the most comprehensive compilation of information and policy prescriptions on the subject to date.²⁶ In the meantime, a number of individuals, institutions, and initiatives were working to revive sericulture in Bengal and Bihar under the auspices of the provincial governments and private bodies. Aside from the growth of global competition, the decline of the silk industry was thought to be the result of the 'deterioration' of silk worms due to disease, as well as technological backwardness in yarn-production relative to Europe and East Asia, where state support had succeeded in helping sericulturalists claw back some of the market share from Bengal.²⁷

folly of the Government of India and the Bengal government sericulture department's approach to 'reviving' Bengal's silk industry is examined in Van Schendel, *Reviving a Rural Industry*, pp. 47–70.

²⁴ Anon. (1906). *Annual Report of the Imperial Department of Agriculture for the Year 1904–05*, Government Central Press, Calcutta, p. 13.

²⁵ *Ibid.*, pp. 41–42, 47. William Moorcroft, veterinarian and explorer, was the most famous of the figures in the early history of the Pusa stud; see Alder, G. (1985). *Beyond Bokhara: The Life of William Moorcroft. Asian Explorer and Pioneer Veterinary Surgeon, 1767–1825*, Century, London.

²⁶ Maxwell-Lefroy, H. and Anson, E. C. (1917). *Report on an Inquiry into the Silk Industry in India*, Government Press, Calcutta.

²⁷ Anon. (1917). *Report on the Progress of Agriculture in India for 1915–16*, Superintendent Government Printing, Calcutta, p. 54. Also see King, *Silk and Empire*, pp. 69–73.

Both pébrine and flacherie resulted from the silkworms' ingestion of infected leaves, with mother moths passing on pébrine to the eggs, afflicting even those offspring fed with healthy leaves. To save sericulture from crisis, it was necessary, first, to microscopically examine eggs using the Pasteur method and supply silkworm rearers with disease-free seed and, second, to improve the quality and quantity of silk produced through the cross-breeding of silkworm species.²⁸ Until 1923, when the experiments were finally abandoned, entomologists in Pusa and the Sericultural Research Station in Berhampur, Bengal, attempted to hybridize Indian multivoltine silkworms, which hatched several times a year but produced an inferior sort of silk, with Italian, French, Chinese, and Japanese univoltine silkworms, which hatched only once a year but produced the most valuable sort of silk.²⁹ Although these efforts ended in defeat, the distribution of disease-free seed, disinfectants, and microscopes, the employment of foreign experts, the establishment of model rearing sheds, and the education of sericulturalists through the provision of scholarships, for example, were together marginally more successful initiatives instituted at the expense of the Bengal Silk Committee (established in 1898) and the Bengal and Assam governments.³⁰

Because the threat of foreign competition was only one of the problems facing the Indian silk industry, proposed solutions ranged wider than the emulation of Chinese and Japanese silk production. Although large filatures were established in East Asia, the rearing of silkworms was ideal as a small-scale industry, which protected to some extent against the rapid spread of disease. In India, Kashmir served as

²⁸ Anon., *Report on the Progress of Agriculture 1915–16*, p. 54.

²⁹ *Ibid.*, pp. 54–55; Anon. (1924). *Review of Agricultural Operations in India 1922–23*, Superintendent Government Printing, Calcutta, p. 64. Remarkably, the history of hybridization extends back to experiments in Rajshahi in 1854; see van Schendel, *Reviving a Rural Industry*, p. 42.

³⁰ Anon., *Annual Report 1905–06 and 1906–07*, p. 23; Anon. (1909). *Report on the Progress of Agriculture in India for 1907–09*, Superintendent Government Printing, Calcutta, p. 45. F. D. Lafont, the French expert employed in Bengal in 1911, returned to Europe within the year and was replaced by another Frenchman experienced in sericulture in Madagascar in 1912; see Anon. (1913). *A Report on the Progress of Agriculture in India for 1911–12*, Superintendent Government Printing, Calcutta, p. 48; Anon. (1914). *Report on the Progress of Agriculture in India for 1912–13*, Superintendent Government Printing, Calcutta, p. 48. Elsewhere, in the princely state of Mysore, for example, Italian experts were employed to educate students and staff in the use of new techniques and technologies, much as the Company had done in the eighteenth and early nineteenth centuries. See Anon. (1915). *Report on the Progress of Agriculture in India for 1913–14*, Superintendent Government Printing, Calcutta, p. 68.

a model. In 1869, Maharaja Ranbir Singh (r.1857–1885) inaugurated the first experiment in the expansion and modernization of Kashmir's silk industry. The growth of the industry from one oriented towards silk supply for the domestic manufacture of shawls and embroidery to one oriented towards export is evident from the increase in the trade of raw silk to neighbouring Punjab.³¹ From Punjab, some silk was shipped abroad, all the more significant at a time when the global market share and scale of Indian silk exports as a whole was shrinking.³² Because the silkworms were reared in warehouses, they were much more susceptible to disease epidemics, which eventually devastated the enterprise in 1878, causing its abandonment in 1881.³³

In the 1890s, Maharajah Pratab Singh (r.1885–1925) and Thomas Wardle—with the support of the Government of India—resumed the modernization of Kashmir's silk industry, this time with a greater degree of decentralization in silkworm rearing (for example, as a cottage industry), as well as government-centralized control and supervision of all stages of production, from mulberry cultivation, seed distribution, cocoon purchase and processing, to silk sales.³⁴ The results were impressive: manufacturers in England considered Kashmir raw silks far superior to those of Bengal, notwithstanding some defects, and the scale of exports increased considerably.³⁵ In 1905, for example, Kashmir's silk industry employed almost 70,000 people and produced profits of £28,139, or 58.5 per cent on capital investment.³⁶ Ultimately, the running costs were so great that the enterprise continued to make a net loss through the early decades of the twentieth century, making it impossible to sell the silk industry to private entrepreneurs.³⁷ But the transformation of Kashmir's silk industry was seen as a blueprint for sericulture in British India.

³¹ See, for exports into Punjab as an index of the increasing scale of Kashmiri output, Lally, J. (2013). 'Indo-Central Asian Trade, c.1600–1900', unpublished PhD thesis, University of Cambridge, pp. 266–67.

³² Federico, G. (2009). *An Economic History of the Silk Industry, 1830–1930*, Cambridge University Press, Cambridge, pp. 197–200.

³³ *Ibid.*, p. 179.

³⁴ *Ibid.*, p. 179; King, *Silk and Empire*, pp. 74–80.

³⁵ Rawlley, R. C. (1919). *The Silk Industry and Trade. A Study in the Economic Organization of the Export Trade of Kashmir and Indian Silks, with Special Reference to Their Utilization in the British and French Markets*, P. S. King & Son, London, especially pp. 27–28.

³⁶ Anon., *Annual Report 1905–06 and 1906–07*, p. 23.

³⁷ Federico, *An Economic History of the Silk Industry*, p. 179.

If sericulture was suitable as a cottage industry, cottage industry was ideal as a form of productive organization that mediated between new and old, accommodating technological and technical developments while also preserving pre-industrial or ‘traditional’ lifestyles and landscapes. In the metropole, men such as John Ruskin and William Morris lamented the loss of the countryside and historic monuments and buildings, and the loss of creativity that came with the division of labour and industrial capitalism. The aesthetic critique of industrialization famously flowered in the Arts and Crafts Movement. In India, its influence was profound, although the public interest in traditional industry, cottage industry, and crafts was not merely derivative of metropolitan agendas.³⁸ Rather, ‘crafts came to stand not just as a set of products or a type of production but as a larger snapshot of Indian society itself, representing its visual culture, social organization, intellectual traditions, and engagement with the larger world’.³⁹ Specifically, India and Indian traditional agrarian and craft industries were considered ‘different’ from those of Britain and the West, a difference of development in time more than place.⁴⁰ In spite of their common ‘civilizational’ origins, Britain had marched into progress and prosperity, whereas India remained backward and barbaric, as argued by Henry Maine.⁴¹

The imperial rulers thought it their duty, therefore, to act ‘at once [as] agents of “progress”, charged with setting India on the road to modernity, and at the same time as custodians of an enduring India formed forever in antiquity.’⁴² If India’s fabled, self-supporting ‘village republics’ were worth preserving, it was because agriculture, craft manufacture, and the supposedly stable and unchanging unit

³⁸ Ideas about India and Indian crafts, however, were of importance to the development of the Arts and Crafts Movement, suggesting a global dimension to the movement, and a two-way flow of ideas and ideals. Indian silk, and its manufacture, more specifically, served as inspiration for English industrialists and craftsmen facing competition from the French silk textiles industry. See, for recent studies, Mathur, S. (2007). *India by Design. Colonial History and Cultural Display*, University of California Press, Berkeley; King, *Silk and Empire*. See also, McGowan, *Crafting the Nation*, especially p. 41.

³⁹ McGowan, *Crafting the Nation*, p. 5.

⁴⁰ *Ibid.*, especially chapter 2.

⁴¹ See, for a recent study of Henry’s Maine’s intellectual thought and its relation to imperial ideology, Mantena, K. (2010). *Alibis of Empire. Henry Maine and the Ends of Liberal Imperialism*, Princeton University Press, Princeton.

⁴² Metcalf, T. R. (2010). *The New Cambridge History of India. III.4. Ideologies of the Raj*, Cambridge University Press, New Delhi, p. 66.

that was the village came to be seen as ‘authentic’.⁴³ In fulfilment of Britain’s duty to her poor relation, however, the benefits of progress could be brought to the ‘village republics’ in the form of improved tools, techniques, and technologies. But the paternalist-preservationist path to progress was only one approach. Although they accepted the existence of difference, some Indian nationalists denied its inevitability. In the crisis of Indian traditional industries, they saw a critique of colonial rule. In place of preservation, they saw an opportunity for modernization, focussing on labour and technology, on industrial discipline and efficiency.⁴⁴

Occupying a space between these two positions, however, were a number of individuals, including, most famously, Tagore and M. K. Gandhi, as well as a number of organizations, such as the Salvation Army, who viewed the Indian handloom sector as too important to be replaced wholesale with large-scale modern mills, and instead saw modernization as taking place through small-scale craft industry.⁴⁵ In India, Booth-Tucker and his fellow Salvationists adopted Indian dress—turbans, *lungis* (waistcloths), *kurtas* (tunics), and *saris*—and Indian names in order ‘to be Indians to the Indians’ and teach the life of Christ in a vernacular rather than an English style, an act as much to do with the maintenance of civilizational difference as reaching out to the Indian populace.⁴⁶ Booth-Tucker himself was known as Fakir Singh—and his third wife, Mary Reid, as Dutini—and wore Indian dress whenever photographed for the Army’s periodical, the *Indian Cry*.⁴⁷ That Booth-Tucker’s assessment of the Army’s work on the subcontinent was concerned not with ‘introducing a “back to the land” movement’ so much as ‘a “stick to the land” policy’ is indicative of the vision of ‘village communities’ as authentic, and of the proximity to the traditionalists and those nationalists who also sought to rescue and revive the Indian artisanal sector in place

⁴³ *Ibid.*, pp. 26, 69–72.

⁴⁴ McGowan, *Crafting the Nation*, especially pp. 101, 151–53.

⁴⁵ In writing about ‘technological Utopias’, David Arnold has highlighted some of the range of positions on India’s future. See Arnold, D. (2013). *Everyday Technology. Machines and the Making of India’s Modernity*, Chicago University Press, Chicago, pp. 16–22.

⁴⁶ Barnett, *The Salvation Army in India*, pp. 202–3. See, on the point of maintaining difference: Fischer-Tiné, ‘Reclaiming Savages’, pp. 138–39.

⁴⁷ Note: *India’s Cry* [henceforth *IC*] was later renamed *The War Cry* [henceforth: *TWC(I)*], in line with the title of the English magazine.

of promoting factory production.⁴⁸ The championing of traditional industry by the Army became the embodiment of efforts to address the economic crisis in colonial India, a crisis that extended beyond craft manufacture. In particular, the Army turned their attention not merely to the craft of cloth weaving, but to the whole business of silk, from mulberry cultivation to the subcontinent's shrinking sericulture industry to silk weaving, an effort that occupied the energies of the Salvationists throughout the first quarter of the twentieth century.

Silk, sericulture, and the Salvation Army

In 1900, eight years before the start of the work with criminal tribes, and around a decade before the start of their engagement with sericulture and the silk industry, Tellery's 'The Hindu Village Artisan. How to Revive His Crafts' was reprinted in the Army's Indian periodical. Whatever his humanitarian interest, Tellery is likely to have had a vested interest in the condition of craft producers, his occupation having once been profitable as a result of the expansion of the curio trade thanks to the Arts and Crafts Movement and the popularization of the Orient in fashionable London stores such as Liberty, but fast becoming redundant as consumer tastes turned towards continental modernism.⁴⁹

Tellery had 'carefully studied' Indian village crafts and had 'come forward with a proposal full of promise for speedy and large results'. In essence, Tellery asserted that Indian handicrafts were in decline as a consequence of Indian artisans' technological backwardness, their exposure to foreign competition, and an absence of the sort of public and private intervention that supported handicraft production in continental Europe. He produced a list of 16 crafts that could be 'revived', at the top of which was silk weaving, followed by cotton weaving, carpet making, and various stone, wood, ivory, metal, and lap-

⁴⁸ Booth-Tucker, F. (1915). The Fruitfulness of Salvation Army Work in India, *All The World* [henceforth: *ALW*], 36:10, p. 520.

⁴⁹ McGowan, *Crafting the Nation*, p. 125; Mathur, *India by Design*, Chapter 1; King, *Silk and Empire*, pp. 144–47. As Abigail McGowan has shown, the display of Indian crafts in London was 'less to celebrate local skills than to identify opportunities for future development—possibly by Indian artisans, but more likely by British merchants and industrialists . . . to situate Indian crafts within a competitive imperial economy' within which figures such as Tellery were also located. See McGowan, *Crafting the Nation*, p. 41.

idary crafts.⁵⁰ He also outlined a proposal whereby the ‘Government should open factories in various centres, supply raw material to village craftsmen, purchase the produce, and act as traders, and to some extent as instructors and producers, at least of samples’.⁵¹ Typical of the traditionalist critic of industrialization, Tellery’s insights were utterly unrepresentative of the sort of content that usually appeared in the periodical, namely notices of official tours and personal rites of passage, digests of progress in conversions and missionary work, and submissions of songs for performance by the Army’s bands.

In fact, Tellery’s proposal served as a sort of programme for the Salvation Army, who sought to take the place allocated to ‘government’ in the revival of Indian crafts. A poem printed in *India’s Cry* in 1906, ‘The Two Weavers’, took the form of a dialogue between two Indian carpet-makers, colloquially named John and Dick, the latter weary of his work, which is insufficiently remunerative to provide for his family and sick children.⁵² The literal message of the poem concerned perseverance, that reward would follow from such honourable employment. The moral message of the poem was also clear: the artisan’s work was virtuous, for it was a microcosmic reminder and a manifestation of the mysteries of the macrocosm, the threads coming together on the loom to form a beauteous pattern analogous to God’s workings in the universe.⁵³ The Army was not unusual among Protestant mission organizations in emphasizing the moral importance of work and discipline, as opposed to idleness. Following the mid nineteenth-century rebellions against colonial rule, including the Indian Rebellion of 1857, many missionary organizations ‘started to doubt the efficacy of evangelising’ non-Christian, non-white subjects, turning instead to “good works” directed towards specific communities or problems’.⁵⁴ Thus, the Army was also not unique among missions in colonial India in seeking to intervene in the craft sector, with the American Presbyterian Mission offering technical training in weaving in Punjab, for example. Rather, they differed on the point of the comprehensiveness of the Army’s interventions (knitting together

⁵⁰ Anon., *The Hindu Village Artisan*, p. 12.

⁵¹ *Ibid.*, p. 13.

⁵² Note: although the Salvationists adopted Indian names for themselves while working on the subcontinent, the choice of John and Dick as the names for the Indian weavers in this poem is probably partly on artistic grounds, so as not to interfere with metre and rhyme.

⁵³ Anon. (1906). *The Two Weavers*, *IC*, 12:7, p. 11.

⁵⁴ Johnston, *Missionary Writing and Empire*, p. 18.

the two traditional industries of sericulture and silk weaving, thus encompassing everything from silkworm rearing to cloth manufacture, from improving mulberry cultivation to improving machinery for weaving), the rapid pace of the developments and the spread of these activities to the Army's centres of missionary work across the subcontinent, and the amount of state support and public attention that these enterprises garnered.⁵⁵ Indeed, the Army's materialist ideology and its interest in the economy meant that the poem's literal and allegorical messages were equally important.⁵⁶ Writing in *The War Cry* about the nature and necessity of the Army's work in India, Booth-Tucker went further, nesting spiritual concerns within the wider social and economic intervention that emerged as the task of the Salvationists, namely the preservation of traditional industries that Indians—epitomized by Dick—seemed to be giving up.⁵⁷

The loom as an apparatus was crucial to the Army's revival of mixed silk-cotton and cotton weaving.⁵⁸ In 1904, the S. A. Loom Factory was established at Ludhiana in Punjab, where existing handlooms and warping machines were adapted to allow the manufacture of the sorts and sizes of cloth thought to be in demand but impossible to manufacture on traditional apparatus.⁵⁹ The back cover of the February 1910 issue of *India's Cry* featured an early advertisement for the 'Salvation Army Swadeshi Automatic Patent Direct Action Hand Loom', listing the awards and prizes in place of the improvements it offered on existing machines.⁶⁰ Of course, the name of the apparatus was a nod to the Swadeshi movement that had emerged in Bengal in 1905, which saw the boycott of British or Western goods. Throughout the 1900s and 1910s, a series of models were introduced—such as the

⁵⁵ Cox, *Imperial Fault Lines*, p. 163.

⁵⁶ For a study of the London Missionary Society in the eighteenth- and early nineteenth-century Pacific, for example, see Sujit Sivasundaram, S. (2011). *Nature and the Godly Empire. Science and Evangelical Mission in the Pacific, 1795–1850*, Cambridge University Press, Cambridge, especially pp. 81–82.

⁵⁷ An extended examination of the Army's necessary intervention in the subcontinent's agricultural and industrial sectors appeared in the first 'industrial' special issue of *TWC(I)*: Singh, F. (1911). Industrial India, *TWC(I)*, 17:6, pp. 1–3.

⁵⁸ For the role of Staff Captain Maxwell in learning from Gujarati weavers and developing the Army's warping machine, see Berry, E. A. (2008). 'From Criminals to Caretakers: The Salvation Army in India, 1882–1914', unpublished PhD thesis, Northeastern University, pp. 243–44.

⁵⁹ Das, P. (1910). Loom Notes, *IC*, 16:3, p. 7. The date for the establishment of the loom factory is taken from Anon. (1924). The Army Handloom, *The War Cry* [London edition], 2516, p. 3.

⁶⁰ See, for example: (1910). *IC*, 16:2, back cover; (1910). *IC*, 16:7, back cover.

'Coronation Loom', the 'model de luxe' of 1911.⁶¹ With the increase in demand for weaving apparatus, production and distribution was established at Byculla, Bombay, in addition to the loom factory in Ludhiana, to fulfil orders that came from 'China, Africa, Australia, Singapore, Aden, India, Burma, Ceylon' by 1921.⁶² This aspect of the Army's work was, much like its intervention in crafts at large, neither unique nor original: D. C. Churchill, of the American Marathi Mission, innovated an improved loom that outcompeted the Army's loom to win first prize in the 1908 Madras competition. Churchill was an MIT graduate, and his scientific background probably explains his success over the Salvationists, whose deficit in expertise was a chronic feature running throughout their interventions, as this article highlights.⁶³

Alongside the 'improvement' of traditional technologies, the Salvation Army opened the Sir Louis Dane Weaving School in the Ludhiana Fort, named after the then Lieutenant Governor of Punjab. The Army received rent-free use of the fort, and an annual subsidy of over Rs. 40,000 for the first three years, among other advantages not mentioned in its periodicals.⁶⁴ At the school, the Salvation Army continued their work with orphaned children and criminal tribes, offering education and employment in textile manufacture.⁶⁵ Additionally, the school offered missionaries 'realising the advantage of understanding looms and weaving themselves . . . a month's course of practical instruction . . . [so they] can get a good practical knowledge of how to run a "Weavery"'.⁶⁶ The establishment of the model weavery in 1911, however, was also sanctioned by the Punjab government at an additional annual expense of Rs. 20,000 for the first two years for the employment of a weaving assistant, a mechanic, five weavers, and, from 1912, a supervisor, a weaving master, a dyeing assistant, and an embroidery mistress.⁶⁷ Aside from experimenting with techniques and

⁶¹ Anon. (1911). Loom Notes. Latest 'Coronation' News, *IC*, 17:9, p. 13.

⁶² Anon. (1921). S. A. Auto Hand-Looms Booming, *TWC(I)*, 27:3, p. 8.

⁶³ Haynes, D. E. (2012). *Small Town Capitalism in Western India. Artisans, Merchants and the Making of the Informal Economy, 1870–1960*, Cambridge University Press, Cambridge, pp. 207–8. As Haynes notes, Churchill was also unsuccessful in his efforts, indicative of the inherent flaws in the sorts of approach to craft regeneration taken by the missionaries which are analysed towards the end of this article.

⁶⁴ Badenoch, A. C. (1917). *Punjab Industries, 1911–1917*, Superintendent Government Printing, Lahore, pp. 3–4.

⁶⁵ See, for the first article on the Sir Louis Dane Weaving School, Anon. (1910). Inside the Fort at Ludhiana, *TWC(I)*, 16:8, pp. 3–4.

⁶⁶ Anon., Loom Notes. Latest 'Coronation' News, p. 13.

⁶⁷ Badenoch, *Punjab Industries*, pp. 2–3.

technologies, and diffusing these through instruction to weavers and missionaries, the weavery and the school also served as a showroom and salesroom, and fulfilled orders received from across North India—although what proportion of these purchases was made by Salvationists rather than the public at large is impossible to say.⁶⁸

In turning to sericulture, the Salvation Army at once addressed the issue of the artisan's supply of raw material and the troubles of a traditional cottage industry itself in need of revival. Sericulture was believed to be better suited to India than Europe or East Asia—the global leaders in silk production—and was thought to offer 'congenial and profitable employment' to the *ryot* (peasant).⁶⁹ Public interest in the silk industry in the early decades of the twentieth century was considerable, the Imperial Department of Agriculture noting the increasing number of 'correspondents' who took an interest in sericulture and asked for advice, disease-free eggs, spinning machines, and so forth.⁷⁰ But Booth-Tucker retained a close personal connection to the colonial state and was more than a mere correspondent with the entomologists and experts at Bihar and Bengal. For the Salvation Army's work with the criminal tribes in the United Provinces, Booth-Tucker was invested with the Kaiser-i-Hind by Governor General Hardinge in 1913.⁷¹ Following their work in the United Provinces, the weaving school in Ludhiana was opened—according to *The War Cry*—at the behest of the lieutenant governor himself. And the Salvation Army were invited—alongside 'leaders of industry and government'—to the Industrial Commission's first conference 'regarding the future of Punjab industry' in 1911.⁷² Whatever the reality of their relationship with the upper echelons of the Punjab government and the Government of India, Booth-Tucker and his Salvationists certainly took pains to present a relationship of closeness as means of further cultivating connections.

Certainly, the Army's periodicals and pamphlets painted the organization and its enterprises as shouldering the concerns of the colonial state, and nowhere was this more apparent than in its

⁶⁸ *Ibid.*, pp. 3–4; Anon., *Inside the Fort at Ludhiana*, pp. 3–4.

⁶⁹ Anon. (1913). [no title], *TWC(I)*, 19:6, p. 8; Anon. (1913). *The Salvation Army Sale and Exhibition at Simla*, *TWC(I)*, 19:6, p. 9.

⁷⁰ See, for example, Anon. (1911). *Report on the Progress of Agriculture in India for 1910–11*, Superintendent Government Printing, Calcutta, p. 14.

⁷¹ Radhakrishna, *Dishonoured by History*, p. 16.

⁷² Anon., *Inside the Fort at Ludhiana*, p. 3; Anon. (1911). *War Whispers from the Indian and Ceylon Battlefield*, *TWC(I)*, 17:4, p. 6.

intervention in sericulture and the silk industry. In 1916, a pamphlet was published containing the insights gathered by Booth-Tucker and Mary Reid during their trip to Canton, Shanghai, Peking (Beijing), Mukden (Shenyang), Tokyo, Kyoto, Chosen (Japanese Korea), and Saigon (Ho Chi Minh).⁷³ On the one hand, the material on univoltine and multivoltine worms was of relevance to the sort of laboratory-based experiments that engaged the scientists in Pusa and Berhampur, rather than the staff at the Army's sericulture centres.⁷⁴ Additionally, the conclusion contained suggestions—including the organization of a conference with speakers from silk-utilizing firms in Europe and silk-producing institutions in Asia, and the establishment of a Department of Silk with a director of sericulture in India—that were outside the scope of the Army's work, and were directed towards the Government of India.⁷⁵ On the other hand, much of the material related to the hands-on task of (re)establishing sericulture across India, a task with which the Salvation Army—not the Imperial Department of Agriculture—was more actively engaged.

In fact, the publication of the pamphlet inadvertently made a mockery of the state's intervention in sericulture, for while these two Salvationists travelled to the epicentres of silk production—outside the British Empire, into a truly transnational or global sphere—Mukherji and Maxwell-Lefroy's investigations were restricted to the ailing silk centres of India.⁷⁶ Booth-Tucker's advice was imprinted with the bias towards cottage industry rather than the large filatures and the large weaveries recently established in China and Japan, and towards the use of traditional looms, while at the same time attempting to ascertain means of improving the technologies, techniques, and methods of education employed at the Salvation Army's silk centres.⁷⁷ In this respect, the information in the pamphlet

⁷³ Booth-Tucker, F. and Reid, M. (1916). *Silk and Silk Worms in the Far East. Being Information Gathered during a Recent Visit to China, Japan, Korea, Manchuria, and French Indo-China*, The Times Press, Bombay.

⁷⁴ The Army's interest in this issue, however, was already established in 1911, as evidenced by an earlier pamphlet written by Booth-Tucker; see, for an announcement of the pamphlet's publication, and a summary of its contents, Anon. (1911). *Sericulture in India and Ceylon*, *TWC(I)*, 17:9, p. 13.

⁷⁵ Booth-Tucker and Reid, *Silk and Silk Worms in the Far East*, especially p. 36.

⁷⁶ Anon., *Annual 1905–06 and 1906–07*, p. 23; Anon., *Report 1915–16*, p. 56.

⁷⁷ Booth-Tucker shared the Government of India's interest in Kashmir, visiting the state 'in the interests of sericulture' in 1916. See, for example, Das, D. (1916). The Commissioners Visit the Punjab, *TWC(I)*, 22:11, p. 7. The experience at the Tata Silk Farm highlighted how important technical learning from the Chinese and Japanese

crystallized the spirit of the Salvationist interest in sericulture, which was always conceived as a crucial part of an 'integrated' response to the crisis in silk weaving and, in turn, part of a response to the wider crisis in the subcontinent's traditional industries. Indeed, the energy with which the Salvationists set about the sericulture experiments of the 1900s and 1910s is testament to the centrality of these experiments to their work as a whole—to the work with the criminal tribes, to the revival of cottage industry, and to the revival of India's premier position as a silk producer.

The Army first engaged in sericultural activities in Bangalore.⁷⁸ Around the turn of the century, Jamsetji Tata—the Indian Parsi industrialist, entrepreneur, and philanthropist—founded the Tata Silk Farm for the purpose of reviving the silk industry, with the support of an annual subsidy from the Mysore government. A Japanese silk expert was employed to instruct the staff in the latest techniques in silkworm rearing and silk reeling and to manage the farm, with his success even encouraging the Government of India's sanctioning of the establishment of silk experiments at Pusa.⁷⁹ In 1910, management of the farm was officially transferred to the Salvation Army, who continued to receive subsidy payments from the provincial government. In fact, Tata and Booth-Tucker were old friends, and the industrial dynast's support stretched far further than involving the Army in its sericulture centre.⁸⁰ Under its management, nevertheless, work at the farm was extended to include mulberry cultivation, thread production, cloth weaving, cocoon supply to outlying villages, and sales. These activities were undertaken with some success; the specimens of the Farm's manufactures—from worms to woven goods—were awarded gold medals at exhibition in 1911, for example, all of which was open to visitors to the farm.⁸¹

was for the successful competition of Indian sericulture. See also Anon. (1913). *The Silk Industry*, *TWC(I)*, 19:10, p. 13.

⁷⁸ See, for a summary history of the Tata Silk Farm, Das, S. and Soranapo. (1920). *Silk Farm and Boarding School*, *ALW*, 41:6, pp. 277–78.

⁷⁹ Anon., *Annual Report 1904–05*, pp. 28–29.

⁸⁰ Fischer-Tiné, 'Reclaiming Savages', p. 146.

⁸¹ For notice of the award of gold medals for the Tata Silk Farm's manufactures, see Anon. (1911). [no title], *TWC(I)*, 17:3, p. 4; Anon. (1911). [no title], *TWC(I)*, 17:11, p. 6. The Tata Silk Farm was not the only institution open to visitors. The weaving school in Ludhiana periodically opened its doors, receiving 3,000 visitors during the Dussera festival in 1911, for example. See Anon. (1911). *S. A. Weavery, Ludhiana. The Fort Besieged*, *TWC(I)*, 17:11, p. i. Such occasions were undoubtedly important for the purposes of publicity and legitimizing the Army's work.

Unable to meet the demand for postcards, the manager of the Tata Silk Farm in Bangalore published a pamphlet in 1918 containing 21 photographs of men and women at work, analysis of which highlights how labour was organized by the Salvationists.⁸² Tolen has highlighted the general ways in which the Army sought to ‘inculcate [*sic*] a disciplined habitus in criminal tribespeople’, including the strict observance of routine, of scheduled time, and time-keeping, which encompassed inducting the criminal tribespeople ‘into the processes of commodity production and the conventions of selling one’s bodily activity as labor for a wage . . . in factories, workshops, and industrial schools’.⁸³ Tolen also noted that the ‘missionary activities of the Salvation Army were linked to the spatiotemporal extension of the British Empire’. Yet, there were specific ways in which this disciplining took place which were linked more closely to the needs and ideals of British India than Britain—of the colony rather than the metropole. Indeed, the photographs and accompanying captions of work at the Tata Silk Farm in Bangalore are valuable precisely because they offer some indication of the ways in which the work of the men and women at the Salvation Army’s schools, settlements, and farms was gendered and classed. The photographs show women involved in ‘throwing and preparing silk for the men’, ‘Hemstitching silk handkerchiefs, &c.’, and ‘Packing parcels for England and other places’.⁸⁴ A woman’s work was in the home and was domestic in character—at least for the ‘would-be good’, would-be bourgeois women from the criminal tribes at the farm.⁸⁵ In contrast, the boys and men undertook all the manual and outdoor work.⁸⁶ The Army’s attitudes towards gender and race, therefore, were complex and contradictory, at once opening opportunities for those who achieved salvation, while

⁸² Whether this more successfully met the demand for images than individual postcards remains a mystery; see Jackson, E. (1918). *The Salvation Army Views of the Tata Silk Farm, Bangalore*, no publisher, Bangalore.

⁸³ Tolen, *Colonizing and Transforming the Criminal Tribesman*, pp. 117–18.

⁸⁴ Jackson, *Views of the Tata Silk Farm*, pp. 12, 18–19.

⁸⁵ In fact, although women were to be ‘tutored in wifely and matronly qualities’ rather than put to wage work, women formed a desirable part of the labour force on the Army’s settlements and farms. See Radhakrishna, *Dishonoured by History*, p. 165.

⁸⁶ For a similarly gendered division of labour at the Salvation Army’s girls’ and boys’ schools in Lahore, see Anon. (1913). *What’s What in the Industries, TWC(I)*, 19:6, inside front cover. Of course, girls and women were sometimes involved in silk reeling and weaving, but the fact of their exclusion from outdoor and manual work remains; see Singh, F. and Dutini. (1913). *War Whispers from the Indian and Ceylon Battlefield, TWC(I)*, 19:5, pp. 5–6.

simultaneously sharpening differences and distinctions among men and women, whites and non-whites. In this respect, the Army is an under-researched architect of the ‘tensions of empire’.⁸⁷ In turn, these attitudes ossified the gendering of labour and technology manifest in the development programmes in post-independence India, indicative of the wider impact of the missionary–colonial state relationship.⁸⁸

The Tata Silk Farm served as a model for the organization of sericultural labour, and as a model of vertically integrated cottage industry, encompassing everything from mulberry cultivation to cloth weaving—models which were rapidly replicated across India and Ceylon.⁸⁹ These efforts came to be especially concentrated in Punjab—partly because of the greater competitiveness of the missionary field and ‘rival’ attempts to revive sericulture in Bengal, but also because of the greater potential for success with sericulture in an area free from both disease and pre-existing industry, and because of Booth-Tucker’s denser network of official contacts in Punjab.

Silk and salvation in the forests of Punjab

Of several legends concerning the name of the Changa Manga Forest, one remains particularly popular. The forest, 40 miles south of Lahore, was at some time the refuge of Changa and Manga—brothers by birth, and outlaws by occupation—who plundered passing traders and secreted their treasure in the forest.⁹⁰ Around half a century after the colonial conquest of Punjab, the forest was again home to ‘criminals’ who harvested its treasure, the abundance of timber. Spanning almost

⁸⁷ Cooper, F. and Stoler, A. L. (1997). *Tensions of Empire: Colonial Cultures in a Bourgeois World*, University of California Press, London.

⁸⁸ Arnold, *Everyday Technology*, p. 80.

⁸⁹ The Salvation Army’s silk settlement in Peradeniya near Kandy in Ceylon followed from earlier experiments in sericulture which were frustrated as a result of opposition from Buddhists who ‘would not sanction a practice which involved the destruction of the worm, although they themselves gave the greatest encouragement to it by the use of silk’—Simmonds, P. L. (1869). On Silk Cultivation and Supply in India, *Journal of the Society of Arts*, 27, p. 362. See, for Buddhist resistance to British rule more generally from the late eighteenth through to the nineteenth century, Wilson, J. (2013). ‘Britain, Kandy and Rebellion in Sri Lanka, 1798–1848’, unpublished MPhil dissertation, University of Cambridge; Frost, M. (2002). Wider Opportunities: Religious Revival, Nationalist Awakening and the Global Dimension in Colombo, 1870–1920, *Modern Asian Studies*, 36:4, pp. 937–67.

⁹⁰ Anon. (1916). A Forest Romance, *TWC(I)*, 22:6, p. 17; Barnett, The Salvation Army in India, p. 205.

10,000 acres in the 1910s, much of the Changa Manga Forest was mulberry that naturally filled the empty expanses that stood several decades earlier, when the Punjab Forest Department first outlined their working plan for the forest.⁹¹ Mulberry was thought to out-compete *sisu*, or Indian rosewood. As *sisu* was believed to be a superior source of timber and firewood, and more remunerative as a cash crop, the early plans for the forest outlined the felling of mulberry in areas suitable for *sisu*.⁹² In fact, *sisu* was prone to a root parasite that did not affect mulberry, and grew more slowly, so the mulberry yields were greater than those of *sisu*.⁹³

Establishing a settlement for criminal tribes at Changa Manga was the idea of Louis Dane, lieutenant governor of Punjab, who believed that the expenditure on clearing the forest of virulent tree species such as mulberry could be better utilized if it provided employment to criminals, thereby simultaneously clearing one of the physical and 'moral jungles' of the province.⁹⁴ In fact, the Criminal Tribes Act of 1911 sanctioned the use of 'criminal' labour to plug private entrepreneurs' labour shortages, a strategy widely adopted across the subcontinent, with the demand for timber during the war years prompting a considerable increase in the number of people registered as criminal tribes in Punjab as a whole as well as an increase in the importance of the Changa Manga settlement in particular.⁹⁵ As the village of Changa Manga was constituted of only 30 houses, the scarcity of local labour meant that an entirely seasonal and casual arrangement was not workable, while tree felling alone was not worthwhile for the 300–400 men that the scheme envisaged.⁹⁶ The abundance of mulberry also suggested the fruitfulness of sericulture, again not only for the single purpose of 'finding further employment for these tribes', but also as means of 'popularising the cult of the

⁹¹ See, for a summary of the first and subsequent plans for the forest up to 1917, Parker, R. N. (1917). *Working Plan for the Changa Manga Plantation*, Superintendent Government Printing, Lahore, p. 1.

⁹² Parker, *Working Plan*, pp. 1–2. The difference in the price of *sisu* and mulberry wood was small, however; see Anon. (1916). *Lahore District, with Maps. 1916*, Superintendent Government Printing, Lahore, p. 152.

⁹³ Parker, *Working Plan*, pp. 3–5.

⁹⁴ Anon. (1912). Interesting Enterprise, *TWC(I)*, 18:7, p. 10.

⁹⁵ In fact, the Act was central to the colonial state's raising of revenue from the land; see Radhakrishna, *Dishonoured by History*, especially pp. 105–12.

⁹⁶ Anon. (1912). The Sansia Colony at Changa Manga, *TWC(I)*, 18:7, p. 11; Akbar, and Bibi, F. (1913). Changa Manga, *TWC(I)*, 19:1, p. 14.

silkworm throughout the province'.⁹⁷ Such beliefs were typical of those frequently espoused by the colonial state: the utility of criminal labour—whether on the settlements or in jails—was seen to lie in its idleness, for this idle labour could be mobilized to manufacture traditional craft items in need of preservation and improvement, revivification and (re)introduction into the local economy through a demonstration and diffusion effect.⁹⁸

The settlement, or silk camp, at Changa Manga was first mentioned in *The War Cry* in 1911, following the inauguration of the revised Criminal Tribes Act, and at the same time as the establishment of a settlement for criminals at Danipur, itself later a site for silkworm rearing and silk weaving, albeit briefly.⁹⁹ With its fabled connection to the thieves Changa and Manga, the literature produced by the Salvationists presented this as a site for the transformation of history, to turn former vice into future virtue through the salvation of the criminals and the forest.¹⁰⁰ But the forest at Changa Manga offered much more as a site for the salvation of sericulture and the silk industry in South Asia. The Army's publications position the Changa Manga initiative as following from their work with the criminal tribes in Gorakpur from 1908, their interest in sericulture as manifested in their takeover of the Tata Silk Farm in Bangalore in 1910, and the colonial state's spirit of promoting private enterprise.

In fact, the sericulturally oriented settlement for criminal tribes followed from interest within the Punjab Agriculture Department for the establishment of a silk industry prior to the Army's involvement anywhere on the subcontinent with either silk or criminals.¹⁰¹ Although the Agriculture Department recognized the deleterious influence of the hot winds on the worms, they singled out Changa Manga as one of three sites across Punjab where mulberry flourished

⁹⁷ Anon., Interesting Enterprise.

⁹⁸ For discussion of the use of jail labour to introduce and spread carpet weaving as a traditional craft in Western India, see McGowan, A. (2013). Convict Carpets: Jails and the Revival of Historic Carpet Design in Colonial India, *The Journal of Asian Studies*, 72:2, pp. 391–416.

⁹⁹ Anon., War Whispers, p. 6. At Danipur, the rearing of silkworms, and the reeling and weaving of silk was established between 1913 and 1915; see Anon. (1913), 'Bring out the Prisoners from Prison.' A Peep at Danapur Settlement, *TWC(I)*, 19:6, p. 1; Anon. (1915). Industries, *TWC(I)*, 21:6, inside front cover.

¹⁰⁰ Barnett, The Salvation Army in India, p. 205.

¹⁰¹ Anon. (1907). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th September 1907*, Civil and Military Gazette Press, Lahore.

on a significant scale.¹⁰² In 1909, preliminary experiments produced promising results, the quality, quantity, and yield of the silk produced at Changa Manga exceeding that produced in the submontane and canal colony tracts; this success was attributed to the abundance of food and the care of the sericulturalists.¹⁰³ These results presumably provided the momentum for the Army's involvement from 1911.

Management of the forest work and the silk camp at Changa Manga was the occupation of an English couple, renamed Akbar and Fazal Bibi, who organized the seasonal supply of criminal labour on contract.¹⁰⁴ In the cool months, from October to March, the criminals were employed in the task of timber felling, with 200 men cutting 750,000 cubic feet of timber in 1912–1913. The number of men involved in tree felling and timber transport increased to 500 by 1916.¹⁰⁵ Although some firewood was purchased by the people of Changa Manga, most firewood and timber was transported by bullock cart for sale at the depot alongside the Changa Manga railway station, from whence the bulk was taken to Lahore and Amritsar.¹⁰⁶ Additionally, the tasks of road improvement, road clearing, silt clearing, and irrigation provided employment for around 100 men.¹⁰⁷

At the heart of the Changa Manga settlement was the *serai*, or rest-house, the spiritual and sericultural centre of the operation, where the Army's otherwise separate concerns for moral and material uplift were brought together. The Salvationists proselytized at the *serai* and in the village, screening films on the life of Christ, arranging afternoon meetings and sermons on Sundays, and distributing tracts from the Gospel translated into Urdu and Gurmukhi (Punjabi), for example, while also operating a dispensary, zenana visits, and a small school for boys.¹⁰⁸ And there, in the warm and dry months from February to April, Akbar, Fazal Bibi, and the criminals constructed bamboo and dried-grass sheds where 100 ounces of French silkworm eggs were

¹⁰² Anon. (1908). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th September 1908*, Civil and Military Gazette Press, Lahore, p. 10.

¹⁰³ Anon. (1909). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th September 1909*, Civil and Military Gazette Press, Lahore, p. 7.

¹⁰⁴ Anon., *Lahore District, with Maps. 1916*, p. 154.

¹⁰⁵ Akbar, (1913). At Changa Manga, *TWC(I)*, 19:6, p. 14; Anon., *Lahore District, with Maps. 1916*, p. 154.

¹⁰⁶ Parker, *Working Plan*, pp. 10–11.

¹⁰⁷ Anon., *Lahore District, with Maps. 1916*, p. 154.

¹⁰⁸ Akbar and Bibi, Changa Manga, p. 14; Akbar, At Changa Manga, p. 14; Singh, F. (1916). War Whispers, *TWC(I)*, 22:4, p. 9; Akbar (1917). The Commissioners at Changa Manga. Leaves from the Mulberry Forest, *TWC(I)*, 23:5, p. 4.

hatched. The labours of the sericulturists were then occupied ‘till midnight feeding the Silkworms, every room available ... filled to overflowing with the worms’.¹⁰⁹

For their efforts with the ‘crims’ to succeed, however, the Salvationists realized the necessity of extending employment opportunities beyond the winter and spring seasons. The Salvationists thought of Changa Manga as an ‘artificial forest’ of mulberry—artificial insofar as the tree was treated as a crop, its cultivation carefully managed for the provision of fuel and fruit, as well as fodder for the silkworms.¹¹⁰ Jam making also occupied the labours of the Salvationists and the workers in the forest, to utilize the otherwise wasted fruits of the mulberry.¹¹¹ But this activity is absent from progress reports published in *The War Cry*. In fact, in Army writing about Changa Manga, if not in reality, sericulture came to define the entire enterprise, rather than being portrayed as a convenient complement to tree felling. A poem printed in *The War Cry* in June 1916, entitled ‘Changa Manga’, is exemplary of the way in which the periodical’s contributors and editors presented the enterprise. Charlie Green, the poet—presumably a Salvationist visiting the Silk Camp while on leave (‘furlough’)—wrote of silkworm rearing in the forest (‘For nestling in among the trees/An unexpected sight one sees’), and the efforts of the sericulturists, ending with the reward of a cocoon harvest for the Army (‘But we are very glad to tell/Cocoons we soon shall have to sell/Silk, yes, Army manufacture/Soon will be a source of rapture’). The forestry work, however, was not mentioned at all.¹¹² Of course, this omission was in keeping with the momentum behind their efforts on the subcontinent at this time, to the extent that sericulture and silk weaving institutions were the most numerous of the many memorials proposed following the death of William Booth, the founder of the Salvation Army, in 1912.¹¹³

But the forest at Changa Manga was not only the largest of these experiments in sericulture; it was also intended as the nucleus of the Army’s efforts to spread sericulture as a cottage industry in Punjab. Booth-Tucker, after all, was a proponent of a ‘stick to the land’ policy for the peasantry and saw India’s villages and the British Indian

¹⁰⁹ Akbar, At Changa Manga, p. 14; Barnett, *The Salvation Army in India*, p. 205.

¹¹⁰ Singh, F. and Dutini, (1913). [no title], *TWC(I)*, 19:6, p. 6.

¹¹¹ Anon., *Lahore District, with Maps. 1916*, p. 154.

¹¹² Green, C. (1916). Changa Manga, *TWC(I)*, 22:6, p. 8.

¹¹³ Anon. (1912). Proposed Memorials to General Booth, *TWC(I)*, 18:12, p. 11.

state's settlements for the criminal tribes along the same lines, to the extent of blurring the two together: as places where silkworms would be reared, silk yarn manufactured, and silk textiles woven, with surpluses of yarn and cloth presumably to be sold in export markets.¹¹⁴ Official interest in sericulture in Punjab is traceable to the 1840s, prior to the conclusion of the wars of conquest, from which time the earliest evidence relating to the extent of sericulture is to be found. On the whole, Punjabi weavers imported almost all of their yarns from Afghanistan and Central Asia, substituting these supplies with Chinese and Japanese yarns over the course of the century. In Kashmir and the submontane tracts of Punjab, however, peasants produced small amounts of silk for local consumption, which formed the basis for the aforementioned massive state interventions in Kashmir, as well as sporadic but ongoing optimism about (and attempts to initiate) productive expansion in Punjab, of which the Army's interest was the final and costliest flourish.¹¹⁵ The Salvationists' task, therefore, was to expand and improve silk production in the submontane districts, while also introducing sericulture further afield in the province.

Yet, rather than the Army's work with the peasantry depending on the diffusion of expertise from Changa Manga, the work with villagers came to constitute an increasingly autonomous counterpart to the work with the criminal tribes, in part because of the limited successes achieved at Changa Manga (discussed below), and in part because of the distinctive problems to be surmounted in the districts. Because sericulture was labour- rather than land-intensive, it generally tended to attract those who were poorer, landless, and seasonally employed. This was especially true of peasants in the submontane tracts in Punjab, who welcomed sericulture as a well-remunerated, year-round cottage industry.¹¹⁶ However, this sort of sericulturalist relied on communal local sources of leaves for the worms. Thus, the expansion

¹¹⁴ Booth-Tucker, F. (1915). The Fruitfulness of Salvation Army Work in India, *ALW*, 36:10, pp. 517–21.

¹¹⁵ Lally, J. (2015). Trial, Error and Economic Development in Colonial Punjab: The Agri-Horticultural Society, the State and Sericulture Experiments, c. 1840–70, *The Indian Economic and Social History Review*, 52:1, pp. 1–27.

¹¹⁶ Anon. (1918). *Report on the Progress of Agriculture in India for 1916–17*, Superintendent Government Printing, Calcutta, pp. 81–82; Anon. (1919). *Report on the Progress of Agriculture in India for 1917–18*, Superintendent Government Printing, Calcutta, p. 96. In contrast, Punjabi zamindars thought the task unworthwhile and suited to menials. See Anon. (1911). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1911*, Civil and Military Gazette Press, Lahore, p. 4.

of sericulture as a cottage industry among peasants necessitated the expansion of mulberry plantations proximate to the silkworm rearers.

In 1910, therefore, the Salvationists organized 'Arbour Day' to coincide with the annual Empire Day celebrations on 24 May, the birthday of Queen Victoria.¹¹⁷ 'The utilisation of such an event for a practical purpose,' wrote Booth-Tucker in *The War Cry* in March 1910, 'is in accordance with the principles and spirit of the Salvation Army.'¹¹⁸ Trees stopped soil erosion; trees provided shade, timber, fuel, and fruit; trees provided for prosperity. Of all trees, the mulberry was singled out as especially valuable in each regard, with an entire section outlining the profits made from silkworm rearing.¹¹⁹ The April and May issues of *The War Cry* provided further information, most importantly planting advice and guidance on where to procure free seed, seedlings, and cuttings, most of which was oriented towards mulberry, with only a short section on 'Other Trees' in the latter issue, for example.¹²⁰ Although the 'Arbour Day' was advertised with the most fanfare in its inaugural year, the subsequent silence is not evidence of a subsidence in these efforts, for Arbour Day and tree planting persisted through the 1910s.¹²¹

In spite of these energetic campaigns, tree planting probably altered the silkworm rearers' access to fresh leaf only minimally. In fact, up until the 1920s, Punjabi sericulturalists remained reliant on what were still small supplies of free mulberry leaf. If sericulture was to expand, more mulberry cultivation was needed, which was dependent on sufficient profit margins to the private planter, for neither the local landowners or district boards were likely to enter the market. If the rearers were forced to pay the market price for leaf, their profit margins might be reduced so far as to disincentivize sericulture altogether. The Punjab Department of Agriculture deemed it doubtful, therefore, that sericulture could

¹¹⁷ Empire Day was the forerunner of Commonwealth Day, and Arbour Day was arguably the forerunner of 'Van Mahotsav', the annual tree-planting festival first celebrated in 1950 in independent India.

¹¹⁸ Singh, F. [Booth-Tucker, F.] (1910). Empire Day. Arbour Day. May 24th 1910, A Great Treeplanting Campaign, *TWC(I)*, 16:3, p. 1.

¹¹⁹ *Ibid.*, pp. 1–2. The following year, the advantages of mulberry were advanced alongside those of eucalyptus. See Singh, F. (1912). Arbour Day Catechism, *TWC(I)*, 18:5, p. 10.

¹²⁰ Singh, F. (1910). Empire Day—Arbour Day, *TWC(I)*, 16:4, pp. 4–5; Singh, F. (1910). Arbour Day Tinklings and Thinkings, *TWC(I)*, 16:5, pp. 9–10.

¹²¹ See, for example, Anon. (1916). [no title], *TWC(I)*, 22:6, pp. 1–2.

continue as a cottage industry.¹²² But they persevered, rather slowly and sluggishly, to try to increase access to sufficient supplies of leaf, following the lead of the Salvation Army. In the closing years of the 1910s, the Agricultural Department tried to establish mulberry plantations in the principal silk-producing districts, extending the efforts of the Irrigation Department at the start of the decade in planting mulberry along canal banks in Ambala, Gurdaspur, and Ludhiana.¹²³ And, in 1921–1922, 3,000 mulberry saplings were planted on the waste banks of the Upper Bari Doab Canal.¹²⁴

Alongside the supply of fresh food for worms, the success of sericulture as a cottage industry depended on the supply of disease-free eggs. The Punjab government decided that French (rather than Bengali) seed would be supplied to rearers gratis, as long as they returned the cocoons to the government, who would sell the silk and pay the rearers out of the profits realized.¹²⁵ The volume of free seed disbursed through the Department of Agriculture increased from 575 ounces in 1916, to 700 ounces in 1917, 872 ounces in 1919, 1,000 ounces in 1920, 2,162 ounces in 1921, and 2,825 ounces in 1922, and serves as a sort of index for the expansion of silk yarn production.¹²⁶ Unsurprisingly, given their involvement in the spread of sericulture as a cottage industry, some seed was also annually supplied by the Salvation Army, although they, too, initially made use of the free seed supplied through the Department of Agriculture. In 1916–1917, for example, the only year for which any statistics relating to their distribution of seed are available, the Army supplied 463 ounces of seed, equivalent to two-thirds of what was supplied by the Punjab government.¹²⁷ The seed was supplied to schools in the submontane

¹²² Anon., *Report, 1917–18*, p. 96.

¹²³ Coventry, B. (1911). *Report on the Progress of Agriculture in India for 1909–10*, Superintendent Government Printing, Calcutta, p. 82; Anon., *Report, 1916–17*, pp. 81–82; Anon. (1921). *Review of Agricultural Operations in India 1919–20*, Superintendent Government Printing, Calcutta, p. 52.

¹²⁴ Anon. (1922). *Review of Agricultural Operations in India 1920–21*, Superintendent Government Printing, Calcutta, p. 37.

¹²⁵ Anon., *Report, 1908*, p. 10.

¹²⁶ Anon., *Report, 1916–17*, pp. 81–82; Anon., *Review, 1919–20*, p. 52; Anon., *Review, 1920–21*, p. 37; Anon. (1923). *Review of Agricultural Operations in India 1921–22*, Superintendent Government Printing, Calcutta, p. 63.

¹²⁷ Anon., *Report, 1916–17*, pp. 81–82.

districts with mulberry trees in their vicinity, alongside leaflets and lesson cards.¹²⁸

Accompanying the increase in the amount of seed distributed to rearers, was the increase in the number of districts and the number of people involved in sericulture, indicative of the spread of silkworm rearing as a cottage industry.¹²⁹ The lack of expertise and education in sericulture, however, was responsible for reducing the average yield of yarn from the seed supplied to the peasants, not to mention anything of its quality.¹³⁰ The Department of Agriculture was aware of the inadequate methods of silkworm rearing prior to the commencement of its preliminary experiments in 1909, proposing that Kashmiri sericulturalists be employed for the instruction of Punjabi rearers.¹³¹ For their part, the Department of Agriculture instituted demonstrations across the province and issued a bulletin on silkworm rearing in 1910–1911, and, around the middle of the decade, they introduced education in sericulture in a few village schools, increasing to 46 schools by 1920–1921, and 124 by 1921–1922.¹³²

If these efforts were few and far between, it is because of the shortage of expert staff in the province. Punjab's Department of Agriculture and its agricultural college in Lyallpur, in the Chenab-Ravi doab, developed from the experimental farm established in the city in 1901, and were primarily preoccupied with the more effective use of canal colony lands.¹³³ Unpopular with the agriculturalists of the canal colonies, these institutions were neither concerned with,

¹²⁸ Badenoch, *Punjab Industries*, pp. 11–12. Booth-Tucker had also convinced the Punjab Department of Agriculture of the merits of this proposal, and they, too, distributed seed to boys' primary schools. See Anon. (1913). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1913*, Civil and Military Gazette Press, Lahore, p. 7.

¹²⁹ Anon., *Review*, 1919–20, p. 52; Anon. *Review*, 1921–22, p. 63.

¹³⁰ Anon., *Review*, 1920–21, p. 37.

¹³¹ Anon., *Report*, 1908, p. 10.

¹³² Coventry, *Report*, 1909–10, p. 82; Anon., *Report*, 1910–11, p. 62; Anon. (1916). *Report on the Progress of Agriculture in India for 1914–15*, Superintendent Government Printing, Calcutta, p. 50; Anon., *Review*, 1920–21, p. 37. Note: The shake-up of the department came in 1898, when it was realized that the provincial government's provision of agricultural education and information and its promotion of scientific enquiry were limited. See Anon. (1899). *Report on the Operations of the Department of Land Records and Agriculture, Punjab, For the Year Ending 30th September 1898*, Civil and Military Gazette Press, Lahore. The establishment of the Lyallpur experimental farm, mentioned above, was an outcome of this transformation.

¹³³ Anon., *Annual Report*, 1904–05, p. 36; Anon., *Annual Report*, 1905–06 and 1906–07, pp. 29–30.

nor capable of instructing, those interested in sericulture.¹³⁴ In the absence of a full-time entomologist and a sufficient staff for the task of extending experiments in sericulture, the Pusa-trained assistant entomologist appointed in 1912—Lala Madan Mohan Lal—worked instead with an economic botanist, and paid little attention to ‘the preliminary work of investigation on which all advance depends’.¹³⁵ Only at the end of the decade did a full-time expert entomologist, Afzal Hussain, join the staff of the Department of Agriculture.¹³⁶

In contrast, the Salvationists threw themselves into the task of spreading sericulture, even though they were equally short on expertise. At the Army’s subcontinental headquarters in Simla in 1913, the Educational Department inaugurated a ‘reading circle’ for the circulation of materials on ‘Agriculture, Sericulture, Mercantile or Weaving &c. &c., so that in addition to being supplied with good spiritual magazine reading, will there be a supply of reading which will help keep our comrades up to date with the Industrial side of their work’.¹³⁷ Among the pamphlets on sericulture were those mentioned above, authored by Booth-Tucker, as well as pamphlets reporting on the operations of the Tata Silk Farm in Bangalore.¹³⁸ Yet, as far as the education of silkworm rearers was concerned—through lectures and demonstrations, and teaching and hands-on opportunities at the silk camp—Changa Manga scarcely played a role at all, with the

¹³⁴ Anon., *Report, 1910–11*, p. 23.

¹³⁵ Anon., *Report, 1911–12*, p. 21; Anon., *Report, 1912–13*, p. 22. Before this time, Lala Vishwa Nath Sahai was employed as the agricultural assistant, in which capacity he undertook some entomological research, sending samples each month to Maxwell-Lefroy, with whom he met for a fortnight of training each year; see Anon. (1905). *Report of the Department of Land Records and Agriculture, Punjab. For the Year Ending 30th September 1904*, Civil and Military Gazette Press, Lahore, p. 7; Anon. (1906). *Report of the Department of Land Records and Agriculture, Punjab. For the Year Ending 30th September 1905*, Civil and Military Gazette Press, Lahore, p. 12. The assistant’s work, however, was entirely preoccupied with insect pests.

¹³⁶ Anon. (1920). *Report on the Progress of Agriculture in India for 1918–19*, Superintendent Government Printing, Calcutta, p. 77; Anon. (1921). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1920. Part I*, Government Printing, Lahore.

¹³⁷ Anon. (1913). Notes from the Educational Department Simla, *TWC(I)*, 19:1, p. 17.

¹³⁸ Such a pamphlet was written in 1913 by E. Jackson, manager of the farm in Bangalore. For the announcement of its publication, see Anon. (1913). Sericulture [extract from the *Bombay Guardian*, 9 May 1913], *TWC(I)*, 19:6, p. 15.

students starting at the silk camp in 1915 forming the first and final intake.¹³⁹

The Army retreats

If the Salvation Army's work at Changa Manga was remembered and remarked upon in publications in the decades that followed, it was as the Army's most ambitious experiment in sericulture on the subcontinent, rather than as a failure.¹⁴⁰ To incentivize the improvement of its sericultural and silk enterprises, the Army introduced a competition for the best silk-producing and silk-weaving centre in 1915, typical of the exhibitions and prize competitions instituted by the colonial state for the same purposes.¹⁴¹ The champion was the first institution to receive the Salvation Army flag for excellence three times in a six-month period, receiving Rs. 500 in prize money in addition to the Rs. 100 on receipt of the flag. The criteria for the award of the 'Champion Silkery' were output (in weight), efficiency (in terms of maximum profit and average yield per basin, and minimum waste), and quality. On the basis of performance the previous year, the Tata Silk Farm was named the first Champion Silkery, Ludhiana in second place (for its silk reeling only), and Changa Manga in fourth (for its silkworm rearing and silk reeling)—this was in spite of the judges announcing that 'those will do best who push both branches', that is, silkworm rearing and silk reeling.¹⁴² The result, therefore, was an indictment of the investment in sericulture at Changa Manga.¹⁴³

In fact, the experiment ended as shortly as six years after its commencement.¹⁴⁴ The promising results of the preliminary experiments in 1909 were probably a fluke, for a forest in central Punjab was an altogether unsuitable location for the rearing of silkworms. But Fazal

¹³⁹ Curiously, the intake of students is not mentioned in *TWC(I)* or other Army publications; instead, see Anon. (1916). *Bulletin of the Imperial Institute*, Vol. 14, John Murray, London, p. 477.

¹⁴⁰ See, for example, Barnett, *The Salvation Army in India*, p. 205.

¹⁴¹ Prakash, G. (1999). *Another Reason. Science and the Imagination of Modern India*, Princeton University Press, Princeton.

¹⁴² Anon. (1915). Weaving and Silk Competitions, *TWC(I)*, 21:1, pp. 11–12.

¹⁴³ In fact, the Army struggled to adjudicate a winner from the entries received in 1915; see Anon. (1915). Weaving and Silk Competitions, *TWC(I)*, 21:4, p. 13.

¹⁴⁴ Termination of the silk experiment in the forest was announced—almost in code—as the 'return' of Akbar and Fazal Bibi to Lahore after six years. See Singh, D. (1919). A Sunday in Lahore, *TWC(I)*, 25:5, p. 3.

Bibi and Akbar were also at fault. In 1911, none of their 25 ounces of free seed were hatched, the eggs being either drowned or diseased.¹⁴⁵ In spite of successfully hatching all 25 ounces of seed in 1912, the yield was a meagre 600 *seers* of undried cocoons, although from the 12 ounces hatched in 1913, the sericulturalists produced a slightly improved three *maunds* of dry cocoons.¹⁴⁶ Booth-Tucker attributed the 'failure to obtain better results' to 'irregular and prolonged hatching' and 'over-crowding in the last stage'—the latter due to centralization, highlighting how little the managers knew of silk manufacture.¹⁴⁷ In 1914, the final year for which silk statistics for Changa Manga are available, the sericulturalists produced two *maunds* of dry cocoons from eight ounces of silk, attributing this to the sudden onset of the hot weather—the curse on any operation in this part of the province.¹⁴⁸

With the main concern of the Forest Department being to render remunerative the expenditure on maintaining the forest as a source of fuel and timber, it was decided that the felling or clearing of mulberry was unnecessary under the new plans of 1917, and the cultivation and cutting of mulberry as a crop continued with the use of criminal labour until the 1911 Criminal Tribes Act was repealed in 1949.¹⁴⁹ The only other mention, therefore, of the work at Changa Manga in *The War Cry*—in 1919 and 1921—concerned the construction of dwellings in the forest for the settlement of the criminals, and their apparent contentment with their work.¹⁵⁰ Other sources reveal that the Army 'abandoned the system of wholesale rearing at their Changa Manga settlement and now get the neighbouring villages to hatch some seed'.¹⁵¹ The silk camp—as the nucleus for the spread of sericulture in Punjab—was no more.

The abandonment of sericulture at Changa Manga was not the result of the Salvation Army's dwindling interest in the silk industry.

¹⁴⁵ Anon., *Report, 1911*, p. 4. Note: Ghulam Sadiq raised 379 ounces of seed that year.

¹⁴⁶ Anon. (1912). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1912*, Civil and Military Gazette Press, Lahore, p. 7; Anon., *Report, 1913*, pp. 6–7. The *maund* was equivalent to approximately 82 lbs, and the *seer*—which was one-fortieth of a *maund*—was equivalent to approximately 2 lbs.

¹⁴⁷ Anon., *Report, 1913*, pp. 6–7.

¹⁴⁸ Anon. (1914). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1914*, Civil and Military Gazette Press, Lahore, p. 5.

¹⁴⁹ Parker, *Working Plan*, especially p. 12.

¹⁵⁰ Singh, R. (1919). Settlement Siftings, *TWC(I)*, 25:6, p. 7; Anon. (1921). Changa Manga Settlement, *TWC(I)*, 27:12, p. 2.

¹⁵¹ Anon., *Report, 1916–17*, p. 82.

In September 1915, scarcely a few months before the end of the experiment in the forest, the Salvation Army inaugurated the Michael O'Dwyer Silk Farm and Institute in Simla, named after Louis Dane's successor to the lieutenant governorship of Punjab.¹⁵² Just as the site of the silk camp in Changa Manga was imbued with significance, so, too, were the premises in Simla, which was formerly a brewery, a site of considerable significance to the Army with its origins in the temperance movement. Jackson arrived from Bangalore and—along with the Army's 'silk expert', Choudhury—set about furnishing the buildings with all the requisite apparatus, from microscopes to looms.¹⁵³ Within a year, 25 students were in attendance at the silk school, a library and sericulture museum were opened, weekly lectures were offered, and, outside, mulberry bushes were being raised for the silkworms.¹⁵⁴ In short, the Army's initiative in Simla became everything that had a few years earlier been envisaged for the forest at Changa Manga.

But the expense of the experiment at Changa Manga was, at the very least, only a fraction of that of the Ludhiana and Simla enterprises; Akbar and Fazal Bibi made the most of the forest mulberry, constructed sheds for the silkworms cheaply, and had no expenditure on staff. Whatever the purported success of the school and weavery at Ludhiana, the Punjab government was forced to pull their funding of the scheme in 1915. The Salvationists 'failed to get into touch with the Punjabi weaver', ignoring the types of thread count with which he worked, and, in doing so, sidelining his knowledge of the market for their own imperfect information, while also advancing the use of their own looms at the expense of other, more suitable apparatus, not to mention mechanized, steam-powered looms.¹⁵⁵ While early reports on the Salvationists' work at Simla were favourable, this, too, was blighted by the aloofness of the staff from the condition of the peasants in the province, the enterprise failing to

¹⁵² It seems the Army opened the school before receiving sanction from the Punjab government. See Anon. (1915). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1915*, Civil and Military Gazette Press, Lahore, p. 3.

¹⁵³ Dutini, (1915). The O'Dwyer Silk Farm and Institute, Simla, *TWC(I)*, 21:11, p. 10.

¹⁵⁴ Anon. (1916). The O'Dwyer Silk Farm and Institute, *TWC(I)*, 22:6, p. 3; Anon., *Report, 1916-17*, p. 82.

¹⁵⁵ *Ibid.*, pp. 3-4. For the difficulties facing Punjabi industrialists in establishing modern mills, see Latifi, A. (1911). *The Industrial Punjab: A Survey of Facts, Conditions and Possibilities*, Longmans, Green & Co., Bombay, pp. 26-27; Badenoch, *Punjab Industries*, pp. 6-8.

establish sericulture in Punjab. The report of the Punjab Department of Agriculture for 1918–1919 noted an ambiguous silence surrounding the Army's sericultural enterprises, stating that the poorly performing 'Simla Silk School has seemingly closed down', easing the decision to cut its Rs. 2,000 subsidy.¹⁵⁶

As only the biggest and best success stories made it from the Indian to the English *War Cry* or into publications such as *All the World*, it is telling that a silence surrounds the institutions in Simla and Ludhiana in the 1920s, in marked contrast to the continued coverage of the Tata Silk Farm in Bangalore.¹⁵⁷ But the tone of the periodical was markedly more 'serious' in the 1920s, with much more space devoted to techniques of achieving success in conversion and proselytization, shifting the balance of focus from material to moral uplift. This change of direction is attributable to the termination of Frederick Booth-Tucker's commandership following a bout of ill health and the 'retreat' from India in 1919, ahead of his retirement in 1924. With its funding cut and the departure of sericulture's great supporter in the organization, the Army's involvement in the silk industry came to an abrupt end in Punjab, and elsewhere, in 1919.¹⁵⁸

Conclusions

The Army's work—which was intimately interconnected with the nationwide debates and discussions about the economy after the turn of the century that culminated in the programme outlined by the Indian Industrial Commission—did not flounder for the same reason as the state's New Industrial Policy. Insofar as the New Industrial Policy was a failure, it was because it did not envisage the extent of the coordination and resources requisite for success, and because the Montague-Chelmsford Reforms of 1919 shifted political powers—including powers regarding intervention in industrial matters—from the centre to the provinces, weakening the ability of the government to make the sort of interventions imagined

¹⁵⁶ Anon. (1919). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1919. Part I.*, Government Printing, Lahore, p. 6.

¹⁵⁷ See, for example, Das and Soranapoo, *Silk Farm and Boarding School*; Anon. (1922). *Souls and Silk*, *TWC(I)*, 28:5, p. 1; Anon. (1922). [no title], *TWC(I)*, 28:7, p. 2.

¹⁵⁸ This is certainly the view taken by the Punjab Department of Agriculture. See Anon., *Report, 1920*, p. 11.

by the Industrial Commission.¹⁵⁹ Nor was the Army's work a casualty of the particular pressures of the war years. Although the Army's silk enterprises floundered during the war years, it was not in consequence of the state withdrawing funds which were now required for the war effort or for more serious sorts of enterprise (rather than failed start-ups). In Punjab, at least, the state continued to fund the Army until 1917 and continued sericulture work long after the withdrawal of the Army from that field of activity, including mulberry planting, silkworm rearing, and practical demonstrations to schoolchildren. Under the auspices of the Punjab Department of Agriculture and a few private individuals, furthermore, silk seed distribution continued through the 1920s, always showing 'signs of promise', but never becoming more than a 'cottage industry' as opposed to an 'art or manufacture', even in suitable districts such as Sialkot.¹⁶⁰ And if the Army redeployed more and more of the criminal tribes' labour at Changa Manga to the felling of timber for fuel urgently needed during the war years, it was not because it was forced to do so by the state, but because it was more profitable as an activity in light of the absolute failure of the sericulture enterprise.

Indeed, the termination of the Salvation Army's efforts was welcome news to Maxwell-Lefroy. Having failed to personally press the point to the Punjab Department of Agriculture in 1916—whose belief in the profit and practicability of establishing a silk industry was too strong to change course—the imperial entomologist used the report of 1917 to launch a unambiguous attack on the Salvation Army, damning their recklessness in encouraging the establishment of sericulture at any cost.¹⁶¹ Maxwell-Lefroy foretold the failure of the Changa Manga silk settlement and the Simla silk school, although he could not have anticipated that both would be wound up so soon. The faults of the former scheme ought to have been evident from the outset—the distance from a pool of entrepreneurial peasants interested in sericulture and the unsuitable climate on the plains.¹⁶² In the latter, however, were crystallized the errors that flawed entirely the Army's

¹⁵⁹ Dewey, 'New Industrial Policy', p. 234 and *passim*.

¹⁶⁰ Anon. (1921). *Sialkot District, with Maps. 1920*, Superintendent Government Printing, Lahore, p. 128.

¹⁶¹ Maxwell-Lefroy and Anson, *Report*, Vol. I, p. 106. For the Punjab Department of Agriculture's response to Maxwell-Lefroy's gentler and earlier exhortations, see Anon. (1916). *Report of the Department of Agriculture, Punjab. For the Year Ending 30th June 1916*, Civil and Military Gazette Press, Lahore, p. 3.

¹⁶² Maxwell-Lefroy and Anson, *Report*, Vol. I, pp. 57–58, 106.

intervention in the silk industry.¹⁶³ Indian sericulture succeeded where it was profitable, often as a result of some agency purchasing cocoons or yarn at above-market prices, as in Kashmir.¹⁶⁴ Indian peasants, far from lacking entrepreneurial spirit, were acting rationally in exiting the silk industry. Instructing the criminal tribes in silk production and silk weaving was pointless, because the business of silk was unprofitable outside the confines of the settlements.¹⁶⁵ Instructing pupils in primary schools, moreover, was tantamount to ‘treating what should be a serious livelihood as a joke’, akin to trying ‘to foster agriculture by giving children toy ploughs and little toy fields of plasticine’.¹⁶⁶ The fact that the curriculum at the Simla silk school, and the quality of instruction there and at other institutions, was so poor was merely an unhappy fact for all those involved. Unless the state stepped in as a purchaser of silk, which was impossible in terms of cost (and ideology), the prospect of employment in the silk industry would be next to none. But the extent of unprofitability on the one hand, and the strength of foreign competition on the other, signalled to the imperial entomologist that the government was unwise to fund such an ‘unsound industry’.¹⁶⁷

In concluding his critique, Maxwell-Lefroy stressed that the Army’s ‘public influence’ and ‘demanding public money’ were what prompted the analysis of their policies. ‘If they neither attempt to influence the public nor ask for grants it is immaterial ... what they do,’ he wrote, ‘but genuine efforts to develop sericulture are very seriously prejudiced by the ill-advised advocacy of the Salvation Army.’¹⁶⁸ Of course, the Army was not the only organization and Booth-Tucker was not the only individual pressing the state for financial support with agricultural and industrial schemes. D. C. Churchill, as noted above, received support from the Bombay government for his (ultimately unsuccessful) work with improved cotton looms, and the Punjab government had been pushed into supporting sericulture initiatives by the Agri-Horticultural Society as early as the 1850s, and—despite the Society’s failure to profitably produce silk—continued to support similar projects, including the Salvation Army’s work in the 1910s.¹⁶⁹

¹⁶³ *Ibid.*, pp. 106–7.

¹⁶⁴ *Ibid.*, p. 109.

¹⁶⁵ *Ibid.*, p. 105.

¹⁶⁶ *Ibid.*, pp. 55–56.

¹⁶⁷ *Ibid.*, pp. 108–9.

¹⁶⁸ *Ibid.*, p. 108.

¹⁶⁹ Lally, Trial, Error and Economic Development in Colonial Punjab, *passim*.

Across the subcontinent, provincial governments became increasingly willing by the turn of the century to make what were rather small outlays to the proponents of such schemes, desperate as they were to thwart, and even reverse, the decline of India's traditional industries or, at the very least, to be seen to be doing something in response to political pressure within India.

Yet, the Salvation Army's initiatives were unusual in terms of their extensiveness across the subcontinent (rather than being restricted to one region), as well as in their coordination and comprehensiveness (in addressing all aspects of silk, from silkworm rearing to silk weaving). Within this context, it is unsurprising that Maxwell-Lefroy's fervent critique singled out the Army's work, since it came together in a way that made it much more visible than the myriad interventions undertaken by dispersed individuals and organizations across India. In turn, this was the product of the Army's—and Booth-Tucker's—close relationship to the colonial state. Maxwell-Lefroy was thus striking at Booth-Tucker's somewhat singular ability, over 30 years, to cajole colonial officials into new policy positions, both with respect to the redefinition of criminality and the 'criminal tribes' (as Radhakrishna has argued), and to solving the problems of criminality and traditional industry (through their demands for public money and rent-free premises, as at Ludhiana and Simla, as well as their invitation to take charge of the criminal tribes in various regions and their invitation to industrial conferences in Punjab, for example). To do so, Booth-Tucker found it expedient to tap into existing anxieties at the national level about Indian society and economy, personal connections at the provincial level of government, existing interest in sericulture among the public and the provincial and national governments, and the well-entrenched ideology of promoting private enterprise (bolstered by the pressures and turning tide of agitation for industrial development in the 1900s and 1910s), using print, public performance, and personal intervention. In spite of the fair but fierce attack on Booth-Tucker and the Salvation Army's intervention in sericulture, and Booth-Tucker's subsequent departure from India, his legacy lived on, at least in Punjab, where sericulture in primary schools, seed distribution, and mulberry planting in the plains and other regions continued after 1917.

The Salvation Army in British India is studied for its 'criminocurological' approach, for its relationship to the state—at the provincial and national levels—in discussing and defining criminality and subsequently delivering 'rehabilitation' to the criminal tribes on its settlements, and for the way in which it disciplined these criminal

tribespeople into 'ideal' colonial subjects. In contrast, its interventions in crafts and craft regeneration are scarcely studied at all, in part, perhaps, because these aspects of the Army's work were more marginal in terms of their outcome or impact on Indian society and economy. Yet, as this article has highlighted, these two interventions were complementary. The origins of the Army's involvement in the settlements and in the silk industry are both to be found around the turn of the century, in the competitive missionary field and in a set of debates about the problems facing Indian society and economy. Just as missionary organizations were already involved in the running of the settlements, so, too, did some missions involve themselves in providing technical education in craft manufacture or in the improvement of craft apparatus. Just as the Army sought to participate in the process of defining criminality that culminated in the 1911 Act, so, too, did it seek to tap into and shape anxieties and debates about the future of India's traditional industries. While historians of the Army have focussed on the innovativeness of its ideology and the importance of Booth-Tucker's leadership in British India, attention to the wider context of the Army's work shows that their agenda was shaped by the activities of other organizations. Aside from their similar origins, these two interventions were also linked in terms of the outcomes that the Army had hoped to achieve, albeit on different scales and with different degrees of success. If life on the settlements was structured to discipline the criminal tribespeople into the sorts of subjects that could ensure the stability of the colonial state and society, the regeneration and revivification of the agricultural and craft sectors was arguably intended to ensure the health and stability of the colonial economy. While historians of the colonial state (and its allies)—influenced by the work of Bourdieu and Foucault, and by the ideas of habitus, governmentality, and disciplinarity, for example—have focussed on the transformation of individuals and the production of 'ideal' colonial subjects, these could be better linked to studies of the transformation of Indian society and economy as a whole. The Army is fascinating, therefore, precisely because its work in the 1910s shows the link between transformation at the micro level of the individual (for example, through its work with the criminal tribes on the settlements), on the one hand, and the discussions and debates about transformations at the macro level of Indian society and the economy (for example, through its agricultural improvement and craft rejuvenation schemes), on the other, bridging these separate sets of scholarship on cultural, social, and economic change under colonialism.

The Army's intervention in traditional industries, of course, unfolded somewhat more slowly than its work with the criminal tribes, was perhaps only possible after the Army had gained greater esteem in the eyes of provincial and national governments (for their settlement work) from whom they sought funds for their silk experiments, and was, of course, ultimately unsuccessful. Yet, the intervention in the silk industry is a useful lens through which to develop a more detailed understanding of the Salvation Army's work on the subcontinent. In the first place, studying the Army's publications—in conjunction with the official reports and papers produced by various government departments—reveals a great deal about the attention and influence that the short-lived silk enterprises garnered, as lamented by Maxwell-Lefroy. These sources show, furthermore, how the Army foregrounded the relatively inconsequential and seasonal sericultural work above the other forms of labour that the tribespeople provided (such as woodcutting for fuel at Changa Manga, which became increasingly crucial to the settlement's activities during the war years). They also reveal the Army sought to present the silk enterprises as an integrated or collective solution to the crisis of crafts, the crisis of Indian sericulture, and the crisis embodied by the criminal tribes problem, and how the Army sought, therefore, to present itself as a leader working in those fields of activity where the state could not intervene (as was made amply clear by the publication of the pamphlet of 1916 following the tour in the Far East). Second, this article has highlighted that Booth-Tucker was the driving force behind the Army's involvement in debates and action around the issue of the future of India's traditional industry, but that his thinking was shaped to a considerable degree by circumstances external to the mission. From the inspiration for the Army's involvement in craft regeneration, its industrial schools and technical training, and its settlements in the work of other missionary organizations, to taking the lead for Arbour Day from an existing precedent or following in the footsteps of other agencies who first attempted silkworm rearing in Punjab and procured silk seed to that end, the Salvation Army's silk enterprises were hastily cobbled together from such disparate influences into a seemingly coherent programme. The Army became, for better or worse, one of many influential voices in the early twentieth century on the future of India's traditional industries, but this was often because it was able to seize inspiration and opportunities and shout louder than its closest competitors.