

# Nineteenth Century Indian Leper Censuses and the Doctors<sup>1</sup>

Shubhada Pandya<sup>2</sup>

## ABSTRACT

This study describes the circumstances under which enumerations of “lepers” were conducted in India in the late 19th century, and the ideological biases of the respective investigators and the meanings that they read into the statistics. This report focuses on the Bombay Presidency leprosy returns of 1867, examined in 1871 by Henry Vandyke Carter, and the decennial nation-wide population census of 1871–1872, 1881, and 1891, in which the leprosy-affected, among other infirm persons, were also enumerated. The evidence examined includes the investigators’ reports and other published and unpublished contemporaneous documents. These censuses were undertaken at a time when the etiology of leprosy was a major controversy, but the evidence here indicates that the efforts to clarify the etiology and estimate the virulence of the disease in India by means of statistics were animated by the desire to justify and embellish pre-conceptions. Despite the claim that they were necessary for leprosy control, the censuses, for various reasons, were not utilized towards that end in India.

## RÉSUMÉ

Cette étude décrit les circonstances selon lesquelles le dénombrement des « lépreux » furent menées en Inde à la fin du dix-neuvième siècle, les biais idéologiques des investigateurs respectifs et les interprétations qu’ils tirèrent des statistiques. Ce travail s’est focalisé sur le rapport officiel de lèpre de 1867 sous la Présidence de Bombay, examiné en 1871 par Henry Vandyke Carter, et les recensements nationaux de 1871–1872, de 1881 et de 1891, au sein desquels les personnes souffrant de lèpres, parmi d’autres populations infirmes, furent dénombrées. Les faits examinés ont inclus les rapports des investigateurs ainsi que les autres documents contemporains publiés ou non. Ces recensements ont été entrepris à une époque où l’étiologie de la lèpre était encore hautement controversée; cependant les données examinées ici indiquent que les efforts pour clarifier la cause et estimer la virulence de la maladie en Inde au moyen de statistiques, étaient motivés par le désir de justifier et embellir des idées reçues. En dépit de l’assertion que les recensements étaient nécessaires pour pouvoir mieux contrôler la lèpre, ils ne furent pas, pour de nombreuses raisons, utilisés dans ce but en Inde.

## RESUMEN

Este estudio describe las circunstancias en las cuales se contabilizaron los pacientes con lepra en la India a finales del siglo 19, los factores ideológicos de las respectivas investigaciones y el impacto que estos datos tuvieron en las estadísticas de la enfermedad. El reporte se enfoca a los registros de la lepra en 1867 que fueron examinados en 1871 por Henry Vandyke Carter, y en los censos decenales de la población nacional de 1871–1872, 1881, y 1891, en los cuales se enumeraron las personas afectadas de lepra, y otros enfermos. Las evidencias examinadas incluyen los reportes de los investigadores y otros documentos contemporáneos publicados y no publicados. Estos censos se hicieron en un tiempo en que la etiología de la lepra era controversial y las evidencias aquí presentadas indican que los manejos estadísticos para clarificar la etiología y estimar la virulencia de la enfermedad en la India estuvieron animados por el deseo de justificar y embellecer ideas preconcebidas. No obstante la justificación de que eran necesarios para el control de la lepra, los censos, por varias razones, no fueron utilizados con ese fin en la India.

<sup>1</sup>Received for publication on 12 October 2003. Accepted for publication on 30 June 2004.

<sup>2</sup>S. Pandya, MBBS, Ph.D.

Reprint requests to: Flat No: 11, “Shanti Kuteer,” Netaji Subhash Road, Mumbai 400 020, India. Email: shunil@vsnl.com

[Note: The use of “leper” in this paper is solely on account of the historical context; there is no intention to disparage the person with leprosy].

"How many 'lepers' will a kingdom tolerate?"<sup>(19)</sup>

An interesting aspect of the leprosy censuses conducted in nineteenth century colonial India is the medical connection. The present paper examines this subject, describing the circumstances under which the enumerations were conducted and focussing on two instances when census statistics were scrutinized and variously utilized by British physicians of the period. The first instance relates to the Bombay Presidency leprosy returns of 1867, which were examined in 1871 by Henry Vandyke Carter of the Bombay Medical Service. The second instance deals with the decennial nation-wide ("Imperial") population censuses of 1871/72, 1881, and 1891, in which the leprosy-affected, among other infirm persons, were also enumerated. The general censuses deeply interested the Leprosy Commission which visited India from 1890 to 1891. An important objective of the present paper is to demonstrate the close correlation between the ideological biases of the respective investigators and the meanings that they read in the statistics. The information sources are the investigators' reports and other unpublished and published nineteenth century material. Background reading of two recent histories of leprosy in the Indian colonial context (by Jane Buckingham and Sanjiv Kakar, respectively) suggested that the proposed approach to the subject has not been considered before<sup>(9, 18)</sup>. Buckingham, while devoting considerable attention to Carter, does not cite his census analysis of 1871 (referred to above). Kakar, like Buckingham, elaborates on the medico-political milieu in which the visit of the Leprosy Commission took place, and recounts the chief features and long-term consequences of its conclusions and recommendations, but does not deal with its members' ideological biases.

The two examinations of census statistics were undertaken at a time when the etiology of leprosy was a major bone of contention between investigators in Europe, the dominant ideologies in the debates being hereditarianism, sanitarianism and contagionism<sup>(22)</sup>. Hereditarianism gained respectability as a result of the pioneering 1847 treatise of the Norwegians Danielssen and Boeck who were impressed by the high frequency of familial leprosy in their study

subjects<sup>(15)</sup>. The European debates and disagreements echoed in India.

It has been held that the periodic classification and enumeration of the indigenous population was a strategy by which Britain's "Empire of Information" in India sought to "know," hence better control, its subjects<sup>(8, 13)</sup>. "Knowledge is power" was a phrase familiar to Victorian Era imperialists. In England in the 1860s in the medical discourse on leprosy in the colonies, "knowledge" about leprosy numbers was equated with "humanity" and as an imperial duty towards the subject population<sup>(5)</sup>. In 1856, Charles Morehead, principal of the Grant Medical College, Bombay, in his much praised *Clinical Researches on Disease in India* had to be content with opening the section on leprosy with the general statement that, "leprosy is common enough in India"<sup>(21)</sup>. By the end of the century, the situation had changed; authors were able to endow their works with some precision by citing the results of several Indian leper censuses<sup>(16)</sup>. Leprosy statistics were seen as a guide to the "truth" about Indian leprosy.

**The Bombay Presidency "Leper" Census of 1867 and H. V. Carter.** The need for precise information on leprosy in the Presidency was voiced in early 1866 by A. K. Nairne, Assistant Collector of the coastal district of Ratnagiri, pointing out to his superior officer the pitiful condition of the numerous lepers in the streets of the main town. From an informal census conducted by him in fifteen of the larger towns and villages in the district, Nairne said he estimated that there were at least 200 sufferers, 50% of them in such an advanced stage, that he could "scarcely describe the loathsomeness of the appearance of the unfortunate creatures"<sup>(3)</sup>. As a result of the suggestion, a more extensive census was launched by the Presidency Sanitary Commissioner in 1867. The itemized information sent in by village police from almost all districts of the British governed regions of the Presidency, related to residence, sex, age, and caste of each "leper." In deference to the hereditary theory of causation, the returns contained a special entry on whether or not there was a similarly afflicted relative (blood, conjugal, or other) in each case. The object of the exercise, it was said, was to "collect definite data upon which to base measures, if these could be



FIG. 1. Henry Vandyke Carter (1831–1897).

carried out, for the relief of the leprous, and possibly in due course, the protection of the community against the spread of the disease”<sup>(3)</sup>. Information on 8,220 lepers became available as a result, but lay unutilized in government files for some years until Carter (1831–1897) (Fig. 1) volunteered to collate and analyze it. At the time, he was chief medical officer (“civil surgeon”) in the district of Satara on the Deccan plateau. Unlike his peers in the Service, Carter was not attracted to private practice, hence his remark that he had time enough on his hands to undertake the task. Published in 1871, his

report took up over 170 pages in the *Transactions of the Medical and Physical Society of Bombay*<sup>(12)</sup>. The analysis was undertaken during the peak of his confidence in the hereditary theory of causation, in which of course he was not alone.

Although it could not pretend to have perfect accuracy, Carter thought that the data was reliable enough to warrant “laborious scrutiny.” He found it noteworthy that, although the disease was present throughout the Presidency and affected all communities, the prevalence rates varied widely, not only between regions but within sub-regions



FIG. 2. Carter's Leprosy Map of Bombay Presidency showing regions of high prevalence (Original is in color).

as well. It averaged 1 per 1000, ranging from 1 per 2500 to 1 per 428, the so-called "Maratha country" in the south Konkan and the adjoining Deccan regions showing the highest intensity, and Sind in the north the lowest. Within districts too, disease foci were found in hamlets with but a few hundred inhabitants<sup>(12)</sup> (Fig. 2). Examining the bearing on aetiology, Carter swiftly discounted external factors such as local geography, topography, or climate as relevant. Inter-current diseases such as malaria, cholera, and syphilis also appeared not to be implicated. Neither was poverty, and Carter

took pains to point out that want and deprivation were *consequences* rather than *precedents* of leprosy. Significantly, he saw no lepra-genic potential in the "habits" of the people, which were "very regular;" Indians bathed once a day; and "personal cleanliness is not neglected"<sup>(12)</sup>. Such statements were a direct refutation of sanitarianism. Carter passed over the possibility of "contagion" as an alternative explanation for the presence of disease foci, with the brief comment that it required "further study." He gave a similarly succinct response to the hypothesis offered earlier by a Calcutta physician that

leprosy was contagious through the “casual inoculation of leprosy matter”<sup>(20)</sup>. That possibility, Carter declared, was un-provable except by an impossible experiment<sup>(12)</sup>.

Carter’s rejection of sanitarian views in etiology did not amount to complete abolition for the “natives.” He was convinced that “the cause [of leprosy] must be searched for in the people themselves”<sup>(12)</sup>. The pathologizing of the Indian body followed the logic of the hereditary doctrine to which he had unreservedly subscribed from as early as 1863: “Leprosy in all its varieties is decidedly hereditary”<sup>(10,11)</sup>. The entries in the returns relating to the presence or absence of leper relatives were thus of the greatest importance, and several pages were devoted to cross-tabulations of “heritage” against the other variables. Momentarily disconcerted that only about one-fifth of the lepers (1564 out of 8220) had acknowledged a “hereditary taint” in a blood relation (most often in the male direct line), Carter hastened to claim that this was an underestimate, his conviction being that the “role of hereditary [influences] . . . must be supreme”<sup>(11)</sup>. He likened the putative hereditary leprosy “taint” to a “force of many degrees” with a single direction, namely from parent to child<sup>(11)</sup>. His speculations were undoubtedly aided by the fact that no definition existed about what constituted a “hereditary disease,” the term being applicable to *any* disease which was present in more than one generation of a family<sup>(17)</sup>. Sheltering under the vast umbrella of “hereditary transmission” was unproblematic for Carter; “it is only when any peculiarities . . . are in appearance *not* derived by inheritance, that an explanation of their origin is really difficult,” he proclaimed (*italics in original*)<sup>(12)</sup>. Manifest influences were known to act on inheritance. Carter conceptualized the “leprosy taint” as subjected over generations to endless modifications by external adverse or favorable influences, opposed or reinforced parental qualities, which deferred or accelerated the development of the disease in the offspring<sup>(12)</sup>. He claimed that the phenomenon of atavism (reversion to the characters of an ancestor), explained why a grandparent or great-grandparent alone was sometimes named by a leper as having been afflicted. The hereditary influences on the “taint” being numberless,

the non-inheritance of leprosy, though it was much more frequently asserted than the converse, [as] . . . likely to be apparent rather than real, that this disease commonly arises spontaneously—i.e., independently of parental influence—[is an] . . . assumption fitted more to confuse than to make clear<sup>(12)</sup>.

So-called “spontaneous” disease (familial leprosy denied, comprising 80% of those enumerated), was, according to Carter, an instance of atavism. He clinched his case by arguing that the “spontaneous” and “transmitted” forms of leprosy resembled each other so well as to be identical; since one was transmitted by inheritance, “it must necessarily follow that there is a similar originating cause for the other”<sup>(12)</sup>. The “lepers” who denied a family history were simply not telling the truth—an understandable lapse, in view of “a natural objection to acknowledge the presence of a loathsome family taint”<sup>(12)</sup>.

The most notable feature of Carter’s analysis was not his “proof” of hereditary transmission, but his stepping out beyond biology into ethno-sociology. He discovered the fount of Indian leprosy in a subject “full of instruction to the antiquary and the ethnologist,” namely the country’s caste system. Caste, the Hindu system of social stratification, was a mine little worked in the cause of medicine, but which promised to be a resource for a detailed analysis of many curious anomalies in the “opinions and conditions of the native races,” he maintained<sup>(12)</sup>. He made much of the fact that caste distinctions, foreign and artificial, though they appeared to Westerners, were tenaciously adhered to by Indians, even by those lowest in the hierarchy. He recounted the racial ancestry of the indigenous people on the basis of conventional Orientalist wisdom, which claimed the bulk of Hindus in Western India were descendants of Caucasian conquerors, with a “leavening” by Aryans, who had spread over the country after subjugating the aboriginal tribes. Some descendants of Oceanic and Mongol stock, which entered the country earlier through the Eastern Himalayas, were represented in Western India by the higher caste Marathas, and a large complement of lower castes like the Mahars with those in a “runder state” like the aboriginal Warlis and Katkaris of Thane district. Prevalence rates of leprosy were high

in these groups, Carter reminded readers. But since the descendants of the Caucasian invaders were also not free from leprosy, Carter declared that the disease reached India in various ways (such as the Mahomedan invasions), and at various historical times resulting in a "tainting" of the whole population and pockets of high prevalence. Carter blamed caste mores for rendering the disease endemic with no tendency to subside. The customs he seized on as the vehicle for hereditary transmission were endogamy and exclusivity, the supposed linchpins of the caste system. There were some castes, he alleged, in which marriages were preferentially contracted between families who had intermarried for several previous generations. Incest was abhorred; yet in circumstances when the prescribed lineage distance could not be adhered to, closer intermarriages were practiced. The marriage rules of the "ruder" groups such as Mahars and tribal people of the Deccan and Konkan were still more lax, accounting for their proneness to the affliction.

It was accepted practice and expedient for the colonial British to view Indians through the prism of caste, lacking individuality or agency. Carter sought to invest his theorizations with added weight by recruiting John Wilson, a prominent Scottish missionary and educationist in Bombay, and the future author of a work titled *Indian Castes*, to revise and annotate the list of "Leper Castes" in the "Report" (12). The Indian "leper" thereby became comprehensible to Westerners by his fixed place in the caste map. In the Carterian scenario the Indian body, burdened with the leprous seed from prehistory, shackled by caste, endogamous to the point of incest, could never free itself of the taint; Indian leprosy was a paradigm of ethno-sociological determinism.

**The "Imperial" Decennial Censuses and the Leprosy Commission in India (1890 to 1891).** The enumeration of infirm persons such as the blind, deaf-mutes and insane as part of the decennial population censuses undertaken from 1871 to 1872 in colonial India, was modelled on the practice in Europe (including Britain) and the Americas (7). The inclusion of lepers among "infirm" persons was unprecedented, a probable result of the ubiquity of the disease and colonial officials' expectation that leprosy

was well recognized even by unprofessional Indian enumerators and the unlettered public. But as early as the 1860s, W.W. Hende, Civil Surgeon at Nagpur in Central India had warned logical-minded British statisticians that leper enumeration in India was fraught with imprecision:

This not an imaginary idea . . . when it became known that the inquiry was to be instituted, nearly 200 lepers at once left the city, in consequence of a malicious report having been spread that . . . the Government wished to catch all "leper's and ship them off . . . (Report on Leposy of the Royal College of Physicians, p. 86).

And indeed, every census report in India admitted to serious errors of omission and commission in the enumeration of lepers. In 1871 and 1872 in Bombay, for example, bureaucrats bungled their instructions to the enumerators, with the result that persons with "white" (leucoderma) as well as "true leprosy" were entered simply as "lepers." In 1882, Jervaise Baines, the Presidency Census Commissioner, cautioned against unquestioning acceptance of the data because, of "all the particulars returned at the enumeration, there are none . . . even the ages . . . so incomplete and vague as those regarding infirmities" (7). Besides continuing to confuse leucoderma and "true leprosy," Baines complained that the enumerators were unable even to recognize "true" leprosy until it was at an advanced stage. Another source of error, underreporting, was found to be "lepers'" families fears that the enumerator would abuse the information. Statistics about female lepers were suspected to be particularly suspect, attributable to a special reluctance on the part of families to divulge the correct information, with the result that only about 30 women lepers were recorded for every 100 male, quite disproportionate to the sex ratio in the general population (2). Reporting on the 1891 leper census operations Baines, (by then promoted as Imperial Census Commissioner), attempted answers to two questions, namely "How many lepers?" and "Is their number increasing?" concluding that it was:

impossible to say for certain whether this disease is, in the whole, stationary or not . . . It does not seem advisable to enter into further analysis here in the case

of a disease of which little is known and regarding which the returns are possibly inaccurate<sup>(6)</sup>.

Father Damien died in 1889 of leprosy contracted in Hawaii. At one stroke, *Indian* leprosy acquired a fearful relevance and immediacy for lay and medical ultracontagionists and alarmists in Britain. Archdeacon Henry Wright warned that the rampage of Indian leprosy went unheeded by England at her own peril. In a booklet emotively titled, *Leprosy an Imperial Danger*, Wright sketched a doomsday scenario:

The Indian lascar . . . finds his way to the seaport or larger city slum . . . and the boarding house dens with their insanitary promiscuity. The process once fairly set going and the necessary time allowed, should we be surprised to find leprous centers of contagion forming themselves once more within our limits? . . . One more loud and warning cry, England! Beware!<sup>(26)</sup>.

Other panic-mongers claimed that the “real” number of lepers in India was far higher than suggested by official figures, and was growing. The Cassandras were in august company. The medical, political, and ecclesiastical elites of England meeting under royal patronage to set up the Father Damien Memorial National Leprosy Fund in 1889 were reported to have heard with a “thrill of horror and incredulity,” the Prince of Wales’ disclosure in the *Times of India* that a “leper” was employed in the London meat market (8 July 1889). No less than Queen Victoria’s physician was to declare in the *Times of India* that not only had leprosy increased in recent years, but new “centers” were springing up, that before England and the “civilized world” there loomed a great threat (5 February 1890).

In late 1890, a three-member Commission (aided by two officers of the Indian Medical Service who joined them in India) was despatched to India by the National Leprosy Fund, with a mandate to investigate the disease including its cause, and to recommend measures for its control and containment<sup>(1)</sup>. The composition of the Commission was significant; (i) Alfredo Antunes Kanthack (1863–1898) (Fig. 3), laboratory scientist, was the nominee of the Royal College of Surgeons of England. Af-

ter qualifying in 1888, he proceeded to the F.R.C.S. a year later; prior to his appointment on the Commission he had spent a year acquiring research experience in Berlin under the pathologist Rudolf Virchow and the bacteriologist Robert Koch. (ii) George Alfred Buckmaster (1859–1937) (Fig. 4) was nominated by the Executive Committee of the National Leprosy Fund. He obtained an M.D. from Oxford in 1887, and worked in physiology laboratories in Germany. He was at the Department of Physiology and Anatomy at St. George’s Hospital in London when called to join the Commission. (iii) Beaven Neave Rake (1858–1894) (No photograph available), the most influential member of the team was the nominee of London’s Royal College of Physicians. He earned M.D. from London University in 1882, and thereafter spent time in Vienna and Berlin. In 1887, he joined the Colonial Medical Service as Medical Officer in charge of the Leper Hospital in Trinidad. Rake had written frequently on the disease including its spread, the bacillus, and human and animal inoculation experiments, and was thus the only Commissioner who could claim practical experience in leprosy. The Royal College of Physicians certainly had a vested interest in Rake’s nomination. That august institution was the bastion of opposition to the contagionist doctrine, its credentials in this regard having been established in 1867 in its famous *Report on Leprosy*, and re-iterated in 1874 and 1887<sup>(4, 14, 15)</sup>. Rake had expressed scepticism about the contagious (i.e., by contact) spread of leprosy. As early as 1875, the “British Guiana Leprosy Commission” of thirteen members agreed unanimously that leprosy was contagious. Rake said he was unconvinced. A crucial human inoculation experiment was conducted in November, 1885, when George Arning a German physician working in Hawaii inoculated a convicted murderer, Keanu, apparently in good health, with leprosy bacilli. In due course, it was reported that leprosy had developed in him<sup>(25)</sup>. Much importance was attached to this development by contagionists as it seemed that the disease was accounted for by the inoculation. It became subsequently known that Keanu had several leprosy-affected relatives. With contagionists in full cry it required strong convictions



FIG. 3. Alfredo Antunes Kanthack (1863–1898) member of the Indian Leprosy Commission (1890–1891)

to question majority opinion on the Damien and Keanu cases. The battle was joined. Rake maintained that both cases having arisen in a leprosy-endemic area (Hawaii), were of no value as evidence of disease transfer by contact. He argued that the infection might have entered Damien's body by other routes:

The well-known case of Father Damien had been very generally accepted as tending to prove contagion. To my mind, this

is very far from conclusive . . . He may . . . have absorbed the specific virus (generally believed to be the *bacillus lepræ*) in many other ways, e.g., in food, water, air, etc. (23).

The Leprosy Commissioners toured the entire country from November 1890 to March, 1891, examining and questioning almost two thousand "leprosy sufferers." On completing their investigations in early 1891, they deliberately withheld their final





FIG. 4. George Alfred Buckmaster (1859–1937) member of the Indian Leprosy Commission (1890–1891).

report to await the result of the census of 1891. Their anti-contagionist sympathies made them acutely aware of the importance of countering alarmist outcries on the “Imperial danger” issue, and the case would be decided on the basis of census figures. In order to disarm potential critics they acknowledged at the outset in their *Report* that the trustworthiness of the statistics might be questioned, but insisted that there was merit in the figures. In the first two censuses, (of 1871/72 and 1881) “the diagnosis was greatly at fault,” but with time “the di-

agnostic powers of the people [to distinguish between true leprosy and leucoderma] improved,” and such errors were minimal in the census of 1891 (<sup>1</sup>). The figures were valuable, possessing, if not an *absolute*, at least a *relative* value, which was greatly enhanced in succeeding censuses. For example, certain regions of the country had consistently returned the highest prevalence rates in each census. The strategy adopted was to deal in prevalence rates rather than actual “leper” numbers. In the interest of uniformity they confined their

THE TABLE. *Compiled from Table I (p. 48) and Table I-b (p. 56) in the Commission's Report. In 1891, the population of the districts in which leprosy sufferers were enumerated exceeds that of "British India."*

Total population at each census on which the leper ratios have been calculated	No. of Lepers	Ratio per 10,000
1st Census (1867-1872): 182,000,000 (population of "British India": 184,056,627)	100,000	5.0
2nd Census (1881): 101,000,000 (population of "British India": 196,895,542)	15,000	6.0
3rd Census (1891): 210,000,000 (population of "British India": 208,242,300)	105,000	5.0

"Remarks: Only those districts and areas have been included which were enumerated in all censuses. To facilitate calculation round numbers have been used, and the ratios are approximate only. It has been assumed that the number of lepers in the Central Provinces has remained stationary."

calculations to the districts in "British India," which had been enumerated in all three decennial censuses (The Table). However, an anomaly is immediately noticeable in the figures presented by them: in the 1891 census the total population of the enumerated districts exceeds the total population of "British India." This demonstrates not only the unreliable statistics but the anti-contagionist Commissioners' eagerness to utilize them in order to "prove" that:

The evidence of the censuses excludes the idea of an increase of leprosy, and points rather to a gradual *decrease* at the present time . . . Anyway an "Imperial Danger" leprosy has not become as yet, for the previous increase is more than counterbalanced by the present decrease (<sup>1</sup>).

There is good reason to see Rake's hand in the pointed contesting of Archdeacon Wright's "Imperial Danger." Some months earlier in the "Annual Report of the Trinidad 'leper' Asylum," the leprologist had pointed out another India-related exaggeration in the cleric's work, namely that people of Indian origin in Trinidad were "readily attacked" by leprosy (<sup>24</sup>). Discounting alarms that the un-confined and un-segregated Indian "leper" was a threat to Britain and its imperial interests in India was consistent with Rake's scepticism regarding the special vulnerability of Indians to the disease. The down-playing of the "Imperial danger" also provided a foretaste of the tenor of the Commission's final con-

clusion on contagion (contact) in leprosy transmission.

### CONCLUSION

This paper has highlighted the crucial role that the ideological biases of the respective investigators played in their studies of the censuses. The efforts to clarify the etiology and estimate the virulence of the disease in India by means of statistics were animated by the desire to justify and embellish pre-conceptions. The two analyses were conducted two decades apart in differing prevailing climates of opinion regarding etiology and mode of transmission. In a demonstration of medical imperialism in 1862 the *British Medical Journal* opined that the Orient was infested by leprosy, "to a greater or less extent, . . . in proportion to the physical and moral degradation of [the] people" (6 December 1862). The hereditarian Carter's formulation of Indian leprosy as being grounded firmly in Indian ethno-sociology was at one with the Journal's allegation. The visit of the Leprosy Commission on the other hand took place in the post-Damien period when hereditarianism had lost ground and imperialist sentiment was framed in contagionist terms. It is notable that the long-discovered leprosy bacillus had hardly any place in ultra-contagionist polemics of 1889 and 1890, and a European priest's leprosy provided the fuel and the fodder. The Leprosy Commission's scepticism about contagion (contact), its anxiety to refute at the outset of its Report, allegations of "imperial danger," though counter

to the dominant wisdom, was predicated on the avowed anti-contagionism of its influential member.

Turning to the censuses themselves, one might ask why the colonial authorities, knowing full well that the enumerations were unreliable even on basic information, persisted in their self appointed task of counting "lepers," decade after decade. (Indeed the practice was discontinued only in 1931). Possibly it was the bureaucratic momentum that propelled the enterprise through seven all-India exercises, possibly it was the belief that faulty statistics were better than no statistics at all. Despite the claim that they were necessary for leprosy control, the censuses, for various reasons (the Leprosy Commission's views among them), were never utilized towards that end in India.

**Acknowledgment.** This is an expanded version of a paper read at the Annual Conference of the European Association of the History of Medicine and Health held in Oslo September 2003. I thank the Global Project on the History of Leprosy for making it possible for me to attend.

## REFERENCES

1. ANONYMOUS. *Leprosy in India: Report of the Leprosy Commission in India 1890-91*. Calcutta: Superintendent of Government Printing, 1892. p. ix.
2. ANONYMOUS. *Leprosy in India*. Summary of Reports Furnished by the Government of British India to His Hawaiian Majesty's Government, as to the Prevalence of Leprosy in India; and the Measures Adopted for the Social and Medical Treatment of Persons Afflicted with the Disease. Honolulu, HI, 1886. p. 15.
3. ANONYMOUS. Maharashtra State Archives (Mumbai). General Department Files. Vol. I. 1867. p. 363.
4. ANONYMOUS. Recent official correspondence relating to leprosy. *Brit. For. Med. Chirurg. Rev.* **8** (1874) 205-206.
5. ANONYMOUS. Review of "Report on Leprosy by the Royal College of Physicians, prepared for Her Majesty's Secretary of State for the Colonies. London, 1867. *Brit. For. Med. Chirurg. Rev.* **39** (1869) 375.
6. BAINES, J. A. *Census of India 1891. General Report*. London: Eyre and Spottiswoode, 1893. p. 227.
7. BAINES, J. A. *Imperial Census of 1881. Operations and Results in the Presidency of Bombay including Sind*, Vol. 1. Bombay: Government Central Press, 1882. p. 96.
8. BAYLY, C. A. *Empire and Information: Intelligence Gathering and Social Communication in India, 1780-1870*. Cambridge: Cambridge University Press, 1996. p. 365.
9. BUCKINGHAM, J. *Leprosy in Colonial South India: Medicine and Confinement*, London: Palgrave, 2002.
10. CARTER, H. V. On Leprosy, as seen in India: with remarks on the eruption and anaesthesia. *Brit. For. Med. Chirurg. Rev.* **31** (1863) 183-199.
11. CARTER, H. V. On the symptoms and morbid anatomy of leprosy: with remarks. *Trans. Med. Phys. Soc. Bombay* **8**(new series) (1863) 1-104.
12. CARTER, H. V. Report on the prevalence and characters of leprosy in the Bombay Presidency, India, based on the official returns of 1867. *Trans. Med. Phys. Soc. Bombay* **11**(new series) (1871) 74-248.
13. COHN, B. The census, social structure and objectification in South Asia. In: *An Anthropologist among the Historians and Other Essays*. Delhi: Oxford University Press, 1987.
14. Colonial Secretary to Governors of Crown Colonies dated 21 June 1899, on the views of the Royal College of Physicians of London. National Archives of South Africa. Pretoria, P.S. 33/8.
15. DANIELSSEN, D. C., and BOECK, C. W. *Traite de la Lepre*. Paris: Balliere, 1848. (French translation of the Norwegian edition of 1847).
16. DAVIDSON, A. *Geographical Pathology: an Enquiry into the Geographical Distribution of Infective and Climatic Diseases*. London: Young J. Pentland, 1893. pp. 462-465.
17. FORBES, J. *The Cyclopaedia of Practical Medicine*, Vol. 2. London: Sherwood, Gilbert, and Piper, 1833.
18. KAKAR, S. Leprosy in British India, 1860-1940: colonial politics and missionary medicine. *Med. Hist.* **40** (1996) 215-230.
19. KALISCH, P. A. Tracadie and Penikese Leprosaria: a comparative analysis of societal response to leprosy in New Brunswick, 1844-1880, and Massachusetts, 1904-1911. *Bull. Hist. Med.* **47** (1973) 480.
20. MACNAMARA, N. C. Leprosy (Review). *Brit. For. Med. Rev.* **79** (1867) 141-142.
21. MOREHEAD, C. *Clinical Researches on Disease in India*, Vol. 2. London: Longman, Brown, Green, and Longmans, 1856. p. 665.
22. PANDYA, S. S. Anticontagionism in leprosy 1844-1897. *Int. J. Lepr. Other Mycobact. Dis.* **66** (1998) 374-384.
23. RAKE, B. Correspondence. *J. Lepr. Invest. Committee* **1** (1890) 48.
24. RAKE, B. Report of the Trinidad "leper" asylum. (Abstract) in *J. Lepr. Invest. Committee* **2** (1891) 136-138.
25. ST. MOURITZ, A. A. Human inoculation experiments in Hawaii including notes on those of Arning and of Fitch. *Int. J. Lepr.* **19** (1951) 203-215.
26. WRIGHT, H. P. *Leprosy an Imperial Danger*. London: J & A Churchill, 1889. Preface.