

Imperial Hygiene and Popular Culture in the Colonial Hill Stations in the Indian Himalaya

Queeny Pradhan*

Introduction

The nineteenth century European colonialism introduced wide-ranging changes in social, cultural, economic and political spheres in Asia and elsewhere.¹ Recent researches show that the hills occupied a critical position under the British Empire and their concerns on sanitation reveal the anxieties of the Empire in their Himalayan outposts. The present article primarily focuses on the introduction of western medicine and public health policies in the region of Himalaya, in particular, Indian hill stations of Simla and Darjeeling.

The article has two sections: the first section studies the introduction of the western notions of medicine, health and hygiene in the two hill stations. The second section explores the tension between western medical practices and traditional belief systems in the hills.

Hills as the Natural Hygeia Stations

These hill regions were appropriated as the places of natural health, where the Europeans would find everlasting happiness and good health. It is suggested in the naming of a few sites in the hills as 'Elysium' and constant reference to these spaces as the abodes of 'goddess Hygeia' where only the blessed few were to be allowed. The British continuously linked the Greco-Roman past to its imperial tradition.

These references provide an insight into the minds of the colonists, who seem to be clear that these mountain stations would be for a select few English or European community who would have the rights of passage to these places. For the subject population these 'hill stations', that is the prime sites of the stations, such as the 'Mall', the European residences, the official residences and offices,

were out of bounds, except for menial work. A strict policy of segregation and of inclusion and exclusion was followed to provide an entry to these health stations.

The white settlers in India found the mountains to be perfect for carving out ideal spaces where the privileged ruling elite would find haven in recreating their 'home' environs in an alien habitat. Multiple imaginations, aspirations and dreams jostled for space in these hill stations creating heterotopias or the 'power of juxtaposing in a single real space diverse spaces and locations that are incompatible with each other.'² The arrested trajectory of the various members of the privileged class only enhanced a sense of security in the closed environs of the mountains, embedded with artificially created physical structures like the Mall, the gardens, the walks, the 'Swiss style cottages', grand public monuments, theatres, the band-stand, clubs, and so on. Indian hill stations were appropriated through an emotional language of involvement, emerging as spaces of many-sided Utopias, fantasies and myths from Europe and England in particular: an Arcadia, an Eden or an Elysium; an economic *entrepot*, a commercial and frontier outpost or a buffer; a Hygeia station or a station of health, an asylum or a refuge, an oasis amidst the parched heat and dust of the Indian plains, rife with malignant diseases; or a romantic sojourn in the panoramic and pristine landscapes, where nature's bounties abounded in full glory with an appeal of the picturesque, the sublime and the mystical omniscience. The settler colonists lapped up these utopias with a certain degree of fetish and frenzy to mark them out from the plains, in particular, the *tarai*, a malarial outpost at the foothills of the mountains – the places of dystopia. O'Malley writing on Darjeeling divided the region into two distinct tracts: the *tarai* and the hills. He describes *tarai* 'as an unhealthy marshy tract, formerly covered by dense malarious jungle'. The hills, by contrast, had beautiful scenery and the air was dry and bracing. The climate was very similar to England with two 'delightful' periods of spring and

* Queeny Pradhan, Professor of History, Guru Gobind Singh Indraprastha University, New Delhi.

autumn. The European and English settlers never weary of pointing out these polarities between the plains and the hills, between the healthy and the unhealthy spaces. These may seem like simple binaries in the manner in which they were played out in the imperial records of the times, but a complicated factor emerges in the last few decades of the nineteenth century, when there seems to be a breakdown of such binaries.

It is interesting to see how the English and European travellers of the nineteenth century responded to the Indian mountains. Mountains evoked a sense of delight, primarily due to its temperate climate. There are odes to the glory of these mountainous sites. I quote:

Darjeeling, health-restoring clime !
Arcadian, Himalayan Queen!
Refreshing breezes round thee chime,
Jocundity rules thy demesne.
Elysium cure for toil-worn brain,
Emollient balm for wearied soul,
Locality where all may gain
Immunity from dull control.
Nirvana's peace these hills bestow
Give rest, like calm, Celestial Snow !³

The regenerative potential of the mountains underlined the limitations of the plains. J. D. Herbert emphasises both the prejudices about the climate of the orient and the images of indolence:

It is not so much the mere temperature of a mountain station (though that is a great point), that renders it [Darjeeling] so delightful a retreat to the debilitated Europeans, who for twenty years or more have suffered under the fervours of an Indian sun. There is a lightness and buoyancy in the air or rather in our spirits, in mountain regions, that to him, who has doled away years in apathetic indolence, inevitably induced by the climate of the plains, and particularly of Calcutta, feels like taking a new lease of life, or rather like passing into the new and superior state of existence. Instead of that listlessness in which we of the city of palaces pass our lives, apparently insensible even to extraordinary stimuli, the dweller in the mountains feels an energy and vigour, a power of exertion and a freshness of feeling, which is not found in the plains.⁴

In 1828, Captain Lloyd and J. W. Grant found the climate around Darjeeling ideal for a hill station. In the 1830s, Lord William Bentinck, the Governor General in Council, assigned Colonel Lloyd the task of negotiating with the Rajah of Sikkim. In exchange, the *Rajah* was offered either land or money.⁵ The process of the possession of Simla was initiated during the Gorkha war in 1815-1816.⁶ Simla was projected as a detached frontier of the British empire in North India, an untouched heaven isolated from the plains, in which the nineteenth-century notions of the picturesque and the romantic found complete expression:

'Here in the hills where the Gods of Nature still reign and are worshipped, the Pipes of Pan are heard calling as of old, played by herdsman or peasant.'⁷ Jacquemont's representation, ninety years earlier, also underlined this vision: 'The Officer (Captain Kennedy) charged with political services of this extremity of the empire which was acquired only fifteen years ago, bethought himself, nine years since, of leaving his palace in plains during the heat of terrible summer, camping under the shade of cedars.'⁸

Health and Sanitation

From the late nineteenth century, medical science and sanitation took great strides. The interest in hygiene and sanitation and the newfound concern with public health in the metropolis found its way into the colonial policies in the hills. The emergence of such anxieties was closely related to developments in the colony. The nature of the colonial economy and the ecological changes brought about under colonialism had far-reaching effects on public health. Improvements in communications, such as the expansion of irrigation canals and the construction of railway embankments had created favourable habitat for malaria-carrying mosquitoes in India.⁹

Ideological and hegemonic considerations played a role too, in inflating preoccupation with health. Beneath the garb of medical objectivity and talk of sanitary sciences, by the late nineteenth century, the Europeans considered themselves morally and socially superior to the subject populace. Christian missionaries, in particular, embodied the social and cultural prejudices of the age, while Darwin's theory of the survival of the fittest gave further credence to the idea of the 'innate' superiority of the 'white man'.¹⁰ This aspect was linked to that of the white man's burden to civilise the rest.

Technological and scientific advancement of the Occident, with its increasing scientific understanding of the causes of the disease, bred contempt among the colonial authorities for what they perceived to be fatalism, superstition and barbarity of the indigenous populace. This prejudice is eloquently articulated in a reference in the district gazetteer about the important supplementary role of the Church of the Scottish Mission in Darjeeling in the spread of western medical aid, thereby furthering the civilizing mission of a white man and a Christian. The following statement underlines the prevailing notion of the colonial evangelists: 'This mission works among the Nepalese, both of Darjeeling district and Nepal, whose only idea of curing the body is by having the evil spirit to which illness is attributed, exorcised by a Nepali *Jhampri* or sorcerer.'¹¹

There was systematic marginalisation of the traditional knowledge by the claims of superior knowledge and the power of the colonial machinery, which became the disseminator of western medical knowledge while checking the traditional healing practices. The European observers in the hills described charms, magic, incantation, sacrifice to Kali and other goddesses of malignant diseases as means of curing the sick among the indigenes. C. A. Bayly has pointed out that the Europeans 'discarded' much of religious remedies as part of the 'popular lore'. In the indigenous medical system, whether Islamic, Brahmanic or popular, 'Religious practices and bodily regimen were of as much importance as the remedies themselves.'¹² The imperial practice of abstracting and marginalising the supposedly perceived non-medical methods shows a lack of proper understanding of the indigenous medical systems. The demonic figures and chants were represented as part of the superstition and the religious belief of the Lepchas and other people residing in that area.¹³

The chants and incantations were considered to be 'bereft of medical knowledge'¹⁴. This reflected more accurately European perceptions of what constituted 'medicine'. The local population was not educated about the efficacy of the western medical system. Instead, there were forceful impositions leading to mistrust.

Main principles of the imperial medical discourse were applied to local inhabitants and 'native' settlements

between 1880 and 1930, as it was gradually realised that the security of the military and civil personnel could only be ensured by the energetic state intervention, even in the 'black' areas. Recourse to state power to enforce sanitary and health measures led to the most comprehensive legislative enactment in the colonies. The British authorities in the hill stations reflected the concern with the public health in setting up of a spate of municipal committees, improvement committees, sanitary committees, and so on. Surveillance and curbs were imposed on Indian practices. Western medicine was supplied at reduced rates to the native dispensaries to popularise its usage among the Indians: 'The Governor General is pleased to authorise the issue of European medicine to the Branch dispensary...on a much moderate scale as may be found necessary.'¹⁵

The general attitude of the nineteenth and twentieth centuries' colonial authorities was one of an increasing suspicion and fear of catching indigenous diseases like cholera, plague and malaria. Racial segregation and location of the European residential areas away from 'native' bazaars, townships, slums and coolie lines became 'a general rubric of the sanitary administration set up by the imperial government for all [its] tropical colonies.'¹⁶ A number of medico-topographical surveys, for instance, the account of the medical topography of Western Rajputana States written by Lieutenant Colonel Adams attempted to master the knowledge of that area in a medical context. In its sections on flora; Lieutenant Colonel Adams listed the supposed medical benefits in the hope of finding 'novel remedies'.¹⁷ As we shall see the 1875 cholera epidemic at Simla made it imperative for the imperial medical men to break the mould of complacency and look for remedies in the indigenous medicine systems and seek the cooperation of the indigenes.¹⁸

The ideas of race and class marked the discourse of health. A party of sepoys under Dr. Chapman suffered from dysenteric attacks and intermittent fever in 1836. Dr. Chapman held their cultural habits responsible for these diseases:

The Sepoys certainly appeared obnoxious to disease, but taking into consideration that these men (all Hindoos) were suddenly deprived of their usual diet, and by necessity compelled to use one of a less nutritious nature, the impossibility of varying it, their custom of cooking only once a day, their penurious habits allowing them a bare sufficiency of food, owing to the high price of their provisions, the very imperfect shelter afforded them in common with all the party, during the coldest weather, and the discontent they all manifested, sufficient cause will appear for their having been the greatest, and latterly the only sufferers.¹⁹

The habits of the Indians came under attack for their un-acclimatisation to the hill climes: 'Natives of the low



Source: H.H. Risley, *The Gazetteer of Sikkim*, 1894.

country, and especially Bengalees, are far from enjoying the climate as Europeans do, being liable to sharp attacks of fever and ague, from which the poorly clad natives are not exempt. It is, however, difficult to estimate the effects of exposure upon the Bengalees, who sleep on the bare and often damp ground, and adhere, with characteristic prejudice, to the attire of a torrid climate, and to a vegetarian diet, under skies to which these are least of all adapted.²⁰In comparison to the Bengalees, Hooker describes pork to be 'a staple dish' of the Lepchas, along with the dish of elephants 'and all kinds of animal food.'²¹

Some medical experts speaking in defence of 'health resorts' also used the racial-cultural explanation. The discourse is both about the difference between 'them' and 'us' as much as about the distinct demarcation between the temperate and the tropics. Diseases were identified along racial lines. The Lepchas were found to be free from the diseases like goitre that afflicted the Bhootees and the Bhotanese as the Lepchas used the shoulder strap and not the head in carrying loads. The use of head strap induced the 'congestion of the laryngeal vessels.'²²Elephantiasis, ophthalmic and leprosy, 'the scourges of the hot climates are rarely known.'²³The European complaint of the liver and bowel diseases was unknown among the hill people.²⁴ The 'natives' coming from the plains were found to be susceptible to fever, dysentery, rheumatism and smallpox. The Europeans identified the diseases that afflicted them frequently as anasarca, bronchitis, cyanche tonsils, diarrhea, hepatitis, paralysis and syphilis.²⁵For the Europeans, Darjeeling was 'good for rheumatic affection' but not for pulmonary complaints.²⁶

The Municipal Regulations

The hill stations, as recreated spaces for tightly knit and stratified ruling elite, required regulation and surveillance to maintain such an 'ideal' space where Europeans could flourish. From the middle of the nineteenth century, the Municipality played an important role in establishing the politico-moral hegemony of the British rule in the hills. Municipal governance involved control and order, both for the rulers and the ruled. It emerged most clearly in the manner in which the municipal authorities regulated the local bazaars and the inhabitants residing in them. The municipal regulations reflect the oriental discourse at the core of the policies pursued by the colonisers. We find a consciousness of the 'other' continually surfacing in the colonial texts at various levels. There was a traditional European association of blackness with filth and dirt since the medieval times.²⁷By the same logic, open spaces, with plenty of air and sunlight and lush vegetation in the hill - was invested with the connotation of health, wholesomeness and security.

The municipal authorities and the officials invariably pointed the accusing finger at the Indian settlements in the hill stations. Cunningham, the Sanitary Commissioner of India, blamed the haphazardly planned indigenous bazaars and the residential pockets of the indigenous population for spreading unhealthiness in the hill stations. In Mount Abu the British authorities complained about the 'native' habits: 'The night soil, in order to save trouble, is not un-frequently thrown into gullies and behind the rocks, and natives instead of resorting to latrines are inclined to relieve nature amongst the rocks and bushes under cover of broken ground. It is found impossible at present to keep up a staff of watchmen sufficient to prevent the committing of such nuisances.'²⁸The prejudice was in keeping with the late nineteenth century notion about the indigenes as unhygienic, unkempt, dirty, used to living in cramped and over-crowded surroundings unmindful of the filth and stench, with no air and proper ventilation, in dark and dank houses that were perceived by British medical opinion to be an important source for the outbreak of epidemics like plague and cholera. The sanitary authorities constantly instructed the residents to construct buildings with spatial arrangements to 'ensure free circulation of air, or with respect to their ventilation or drainage.'²⁹In the hills, the bazaar was just below the Mall and the residential settlements of the Europeans. Any outbreak of epidemic was bound to catch the Europeans in its grip, as the European enclave was not very far due to the constriction of land in the hills.

Apart from the indigenes from the plains, there was a constant attack on the Indian bazaars cum settlements in the hills. The description of the native quarters of the Chandmari bazaar in Darjeeling, occupying 44 acres of space, is as follows:

Squalid looking huts with mat roofs, low, unsightly, and in most cases, overcrowded. Some are in a fair state of repair, others are very dilapidated, and few possess walls strong enough to bear iron or even single roofing. These dwellings in present conditions are unhealthy for the inhabitants and give the native town a discreditable appearance.³⁰

The absence of the drainage in Chandmari was a source of the threat. There was a concern with the proximity of the 'native' merchant dwellings, shopkeepers and poor Europeans to the marketplaces. The local municipal authorities reasoned that any spread of epidemic would quickly engulf the whole population as the butcher shop (from where the servants of the Europeans bought meat) and the Kutchery had above them the government post-office and the telegraph office. In the level above them were the European and the 'native' dwelling houses and shops; and at the top were the houses of the wealthier European residents, in the form of covenanted service

officers and the army top brass. An epidemic in Chandmari might easily spread through the station, and also in the interest of Darjeeling as a sanatorium, the healthiness of the 'native' quarter was an object of vital importance. The construction of a new European hospital just above Chandmari would also be susceptible to infection. Many of the houses were irregularly constructed. Mat roofs and walls of dwellings were extremely prone to catch fire quickly. Both conservancy and sanitation required quick attention in Darjeeling as 'a work of public utility.'³¹

Cunningham strongly condemned the main bazaar of Simla in 1865. Later, the mushrooming of the small 'native' bazaars around its vicinity, such as Sanjauli, Kasumpti, Boileaugunj, Bara Simla Bazaar, Chota Simla Bazaar, Lakkar Bazaar, became a cause of grave concern to the well being of Simla station in the eyes of the local municipality. Although the municipal committee geared up to thwart any outbreak of an epidemic, it found to its alarm that immediately on their boundary: 'there exists in the Sanjauli bazaar a most fearfully suitable *nidus* for development of this and they greatly fear that unless stringent measures be taken to enforce sanitation there and clean the place of the great number of people now living there, huddled together in a most dangerous manner.'³²In the Sanjauli bazaar, British authorities identified the labourers' habits as a matter of concern. A British official reveals his class snobbery and a bias against manual labourers, whose drinking of polluted water, due to water scarcity, was explained in following terms: 'Dirty and ignorant, they are the very class in which any epidemic would be likely first to develop itself and to inflict the severest injury.'³³The labourers lived in the already crowded Sanjauli area, where the residential and the working space commingled. British officials found the area littered with filth and sweepings. In some places, the inspection team was disgusted by the habits of the people, who used the top of their dwellings for nature's purpose. The miasma from the place was felt to be the hotbed of the disease.

The Indigenous Response

A study of the epidemics significantly brings into focus the tensions that emerge between the imperial authorities and the indigenous population. It also reveals the anxieties of the Empire and the contradictions in their medical discourse. The Simla Epidemic of 1875 highlighted the 'structures' and the 'mentality' or the 'consciousness of a society' as I. J. Catanach argues. He feels that:

Epidemics have a dramatic quality to them. An epidemic, by definition, has to spread, often to spread rapidly, over a comparatively wide area. Communication, a 'connexion' is involved. People frequently try to flee from an epidemic;

movement is involved again. An epidemic strikes with little or no warning. For this reason it always gives rise to fears, which are transmitted from one locality to another: again the element of 'connexion' is apparent. And fears generated by an epidemic often lead to a search for culprits, human and suprahuman...³⁴

This fear proved correct, as we shall see below. Some issues come to the fore while going through the official records and other documents of the colonial government regarding the 1875 cholera epidemic in Simla. The cholera epidemic began in June 1875 in Simla, lasting for about 46 days (from 26th June to 11th August).³⁵

A close study brings in focus various medical and imperial concerns. Nowhere in the official records is any mention made of how the indigenous populace treated and tackled the disease, except for a stray reference that the indigenous inhabitants were used to mild choleric infection and that diarrhoea seemed to be endemic. It shows British concern with the epidemic rather than endemic diseases and the stress on curative over preventive measures for diseases. The British vulnerability to the tropical illness was a source of concern, especially in the context of the claimed racial superiority of the British over the indigenous populace, typecast as inferior, indolent, and unhygienic. Western knowledge about the tropical disease was still uncertain and cholera seemed like a 'new disease'.³⁶Many international conferences on cholera disease were held, at times on the initiative of the imperial authorities. The British cholera commission (*Commission Pléniers*), held in Constantinople in 1866, seriously discussed the probable invasion of the British Isles by cholera through the ports or the Europeans going back to England from the tropics. The concern with public health assumed a new dimension with the enlargement of colonial interests leading to the contact of Europeans with different and unknown habitats of the tropical colonies spread over Africa and Asia. The *Commission Pléniers* of 1866 concluded: 'With due precaution as to the ventilation, scrupulous cleanliness and attention to the disposed clothes and other effects, and of discharge of the sick, the patient can be handled without undue risk to those employed and that, therefore, nursing in cholera is less dangerous than some other diseases.'³⁷The Commission strongly recommended quarantines and *cordons sanitaires*.

David Arnold is perhaps correct in inferring that the tenacity with which the Indian-British Doctors and the Sanitary Commissioner clung to the contrary opinions from those prevailing in Europe about disease emanation, had more to do with an underlying belief that India was 'distinct epidemiologically'.³⁸The blame was put on the superhuman agency in the form of the idiosyncrasy in the climate and the geography of India.

Apart from the 'superhuman' agency, the indigenous

populace came under the microscopic scrutiny of the imperial eyes. Despite doubts over the contagiousness of the disease, English authorities followed strict segregation. The quarantine and the door-to-door checks for the patients by the police search parties were carried out in the bazaars and the indigenous settlements. Intrusive and oppressive state interference led to resistance on the part of the indigenes. Either the inhabitants fled, or as the Deputy Commissioner McMahon reported, the people hid the premonitory symptoms of cholera to avoid hospitals. The quarantine or the isolation in the temporary cholera hospitals, Major Adley observed, was looked upon with suspicion and "met with stubborn resistance". Rumours aggravated the tension between the people and the authorities. A cry was raised throughout the district that these arrangements had been made 'with the objective of supplying the government with Mummy Oil (*moomai ka tel*).'³⁹

The tensions also surfaced between the local chiefs and the imperial authorities. The *Rana* of Kothi, under whose jurisdiction the Sanjauli bazaar came, was severely indicted by the imperial authorities, to prevent overcrowded dwellings to be used as human habitation; to establish urinals and latrines in convenient places; to prevent stabling of animals in human dwellings; to ensure better supervision over the sweepers; to set apart a place for the deposit of surface sweeping and litter and see to it that the water supply was not contaminated by the 'natives'. The Lieutenant Commissioner arrogantly suggests issuing a strong warning to the *Rana* of Kothi that 'if he desires to save Kasauli from permanent annexation, he must forthwith carry out' the rules sanctioned.⁴⁰

Dr. Adley's theory that the disease spread from the bazaar was unfounded. The bazaar was certainly filthy, and the disease hovered in its vicinity, and it would have been very reassuring to find that the disease could be traced distinctly to its bad sanitary arrangements. But the very reverse was the case. Indeed the most extraordinary feature in the whole outbreak was the comparative immunity of the bazaar. The population there could not be less than 10, 000, yet among them, only 89 cases occurred, while there were 217 cases in other areas.

How were the authorities going to explain the breakout of the epidemic in a popular health resort that was supposedly a haven from the malignant diseases of the plains? In the light of the previous discussion about the natural advantages of the hill stations, its bracing climate and the refreshingly pure air, the spread of the epidemic in the hills seemed inconsistent. It was not easy for the municipal and the central authorities to conveniently blame the climate, which they had themselves represented positively. Imperial writers like Buck came up with an ingenious explanation suggesting

that the atmospheric changes in the plains rose up and combined with the miasma and effusion of the bazaar, in particular: 'At this time (May to July), Westerly winds blow from the deserts of the plains, filling the air with fine particles of dust and raising clouds of triturated filth from the bazaars underlying the Mall.'⁴¹

But it is likely that the epidemic originated as the adverse repercussion of the development in the hill regions from the early nineteenth century and more so from the time they became summer capitals. Development affected flora and fauna of the hills. It led to the disappearance of forests of timber in Darjeeling and Simla to provide for the massive influx of population and cater to the needs of the imperial summer capitals. This impaired the ecological balance.

Conclusion

Arnold links the issue of medicine, disease and public sanitation in the late nineteenth century to the interests of burgeoning imperialism.⁴² Developments in the field of medicine led to an increasing gulf between the indigenous practices and the new imperial knowledge about the aetiology of disease. Medicine served other purposes for the empire. Medicine, Arnold argued, became an important tool in the armoury of imperialism to legitimize themselves as paternal and benevolent rulers.⁴³

By the late nineteenth century, the imperial penetration reached new heights and efforts for consolidation of the empire marked its every move. Violation of the private space of the indigenes with regular impunity by the police and the municipal search parties; the forceful segregation of the choleric and other patients suffering from contagious diseases in separate hospitals, completely disregarded the sensibilities of the subject populace. The cultural and social contrast between the colonised and the rationale of the late nineteenth-century colonial medical science was stark. For instance, Indians tended to their sick in the home, while European practice advocated their removal to the sanitised and isolated hospitals, far removed from the presence of the family.

The underlying social tensions and conflict between the state and its subject emerge during an epidemic, like the one at Simla in 1875. The Indians met the state's highhandedness in its policy of curtailment of the disease with suspicion and resistance to western medication. The imperial health and sanitary system pushed the local populace in a position of invisibility, and it is at such crisis points that the simmering undercurrents surface. One sees a clash between the modern and pre-modern healing and medical practices, but instead of persuasion and rational education, force and power were used to undermine the indigenous belief system.

NOTES

1. An earlier version of this essay was presented in the 'Himalayan Studies Conference V', held at Boulder, Colorado, USA, from September 1-4, 2017 under the panel *Himalayan Histories*.
2. Michel Foucault, 'Heterotopias', Michel Foucault, *From Other Spaces*, 1967, Michel Foucault, Dits et écrits 1984, Des espaces autres (conference at Cercle d'études architecturales, March 14, 1967), *Architecture, Mouvement, Continuité*, No. 5, Oct.1984, 46-9; http://ghiraldelli.pro.br/wp-content/uploads/michelfoucaultheterot_carmela.pdf, 7.
3. J.A. Keble, *Darjeeling Ditties and Other Poems: A Souvenir*, Calcutta: The Calcutta General Printing Press Co., 1912, 8.
4. J.D. Herbert, 'Particulars of a visit to the Siccim Hills, with Some Accounts of Darjeeling, a Place Proposed as the Site of Sanatorium or Station of Health', *Gleanings in Science*, II (16), Apr.1830, 89-125.
5. *Ibid.*, 1830, 89.
6. 'Proposed rules for the administration of affairs at Simla, assessment of houses and lands', Revenue Department, Consultation A, Nos.69/71, September 1831; *Gazetteer of Punjab, Haryana and Himachal Pradesh*, Vol. I, New Delhi: Atlantic Publishers, 1991 (Reprint), 340.
7. N. M. T., 'Forest of enchantment', *The Daily Chronicle*, 6. 6. 1927.
8. Victor Jacquemont, *Letters From India Describing a Journey in the British Dominions of India, Tibet, , Lahore, and Cashmere, During the Years, 1828, 1829, 1830and 1831*, Vol. I, London, 6.
9. David Arnold, 'Introduction: Disease, Medicine and Empire', in *Imperial Medicine and Indigenous Societies*, Manchester: Manchester University Press, 1988, 6.
10. Mark Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine 1859-1914*, Cambridge: Cambridge University Press, 1994, 92.
11. L.S.S. O'Malley, *Bengal District Gazetteers: Darjeeling*, Calcutta:The Bengal Secretariat Book Depot, 1907, 60.
12. C. A. Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780-1870*, Cambridge: Cambridge University Press, 1999, 272.
13. H.H. Risley, *The Gazetteer of Sikkim*, 1894, An illustration of *Tamdin Charm*.
14. C. A. Bayly, *Empire and Information*, 275.
15. 'Native Dispensary at Mount Aboo', Foreign Department, General-B, Nos.90-91, December 1867 from Foreign Department, Fort William to Inspector General of Hospital, Indian Medical Service, No.207, 16th December 1867.
16. David Arnold, 'Introduction: Disease, Medicine and Empire', 8.
17. C.A. Bayly, *Empire and Information*, 272.
18. Mark Harrison, *Public Health in British India*, 108.
19. H.V. Bayley, *Dorje-ling*, Calcutta: Bengal Military Orphan Press, 1838, 33.
20. J.D. Hooker, *The Himalayan Journal*, Volume I, London, April 1848, 120.
21. *Ibid.* 132.
22. *Ibid.* 134-35.
23. *Ibid.* 134.
24. *Ibid.* p.135.
25. Anonymous, 'Darjeeling', *Calcutta Review*, Vol. XXVIII, 196-226, Jan-Jun 1857, 219.
26. *Ibid.*
27. Ania Loomba, *Colonialism/Post Colonialism*, London and New York: Routledge, 1998, 71.
28. 'Proposed grant of Rs.2500/- for sanitary purposes at Abu', Foreign Department (General-A), Nos. 103-105, K.W., January 1871, Letter No.1689G, 26th Nov. 1870.
29. Home(Public), Nos.125-126, Part B, 15th Dec. 1865.
30. 'Loan of Rs.10, 000 to Darjeeling Municipality for sanitary improvement of town of Darjeeling', Home(Municipalities), Nos.8-10, June, 1882.
31. *Ibid.*
32. 'Insanitary conditions of Sanjauli bazaar at Simla', Home(Municipalities), Nos.18-22, May, 1884.
33. *Ibid.*
34. I. J. Catanach, 'Plague and the Indian villages, 1896-1914', Peter Robb ed., *Rural India Land, Power and Society Under British Rules*, London:Curzon Press, 1983, 216.
35. Home(Medical), Nos. 57-69, Part A, January, 1876.
36. Mark Harrison, *Public Health in British India*, 99.
37. Home(Public), Nos.165-166, Part B, August, 1866.
38. David Arnold, 'Cholera and Colonialism in British India', 144-45.
39. Home(Medical), Nos. 57-69, Part A, January, 1876.
40. 'Insanitary conditions of Sanjauli bazaar at Simla', in Home(Municipalities), Nos.18-22, April, 1882.
41. Edward J. Buck, *Simla Past and Present*, Simla:Thacker, Spink, and Co., 1925, 20.
42. David Arnold, 'Introduction: Disease, Medicine and Empire', 6, 8.
43. David Arnold, 'Introduction: Disease, Medicine and Empire', 16.