Chhatrapati Shivaji Terminus, Mumbai

Stephen Goodwin Howard
MA Dissertation
University of York
Department of History
June 2012
Abstract

Chhatrapati Shivaji Terminus, Mumbai (CST), formerly Victoria Terminus (VT), Bombay, is a colonial railway station built in late nineteenth century India at the height of imperialism. It is a rich and highly elaborate structure, in an Italian Gothic style, amongst the foremost of an ensemble of remarkable Gothic buildings constructed in Bombay between 1860 and 1900. In this dissertation we examine the claims of authors and historians that it was the most important building of the entire British Empire. We analyse its architecture and political representation, asking why a railway station should enjoy such a central place in empire.

The late nineteenth century saw Bombay grow into India’s principal port and mercantile city. Critical factors were stability and confidence following assumption of direct rule in 1857, opening of the Suez Canal in 1869 and railway development. Trade, finance and cotton fuelled the city’s spectacular growth, building on the skills of established merchants and mass immigration from surrounding areas. CST, built 1878-88, was the principal terminus of the Great Indian Peninsular Railway (GIPR), with trunk lines to Calcutta, Madras and Delhi.

Our architectural analysis places CST in the context of Victorian Gothic development and theory, much influenced by Ruskin, of debates over use of indigenous styles for colonial buildings. We have sought cultural meaning through setting CST in a wider colonial discourse, appropriate to the time, where buildings were part of a wider system of political representation. CST was built at a critical juncture of empire, an apogee of imperialism, a summit of High Victorian architecture and this allied with the trans-formative role of railways in India gave it special meaning. We believe that pre-eminence depends on meaning as well as architecture; there are other buildings, in Bombay and elsewhere in India, of comparable or greater aesthetic quality.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Illustrations, list of</td>
<td>6</td>
</tr>
<tr>
<td>Preface</td>
<td>9</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>10</td>
</tr>
<tr>
<td>Author’s Declaration</td>
<td>10</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>11</td>
</tr>
<tr>
<td>1.1 Critical Themes</td>
<td>13</td>
</tr>
<tr>
<td>1.2 Approach &amp; Methodology</td>
<td>18</td>
</tr>
<tr>
<td>1.3 Sources</td>
<td>19</td>
</tr>
<tr>
<td>2. Historical Context</td>
<td>25</td>
</tr>
<tr>
<td>2.1 Government and Politics</td>
<td>25</td>
</tr>
<tr>
<td>2.2 Trade and Economics</td>
<td>27</td>
</tr>
<tr>
<td>2.3 Culture and Society</td>
<td>34</td>
</tr>
<tr>
<td>2.4 Summary</td>
<td>37</td>
</tr>
<tr>
<td>3. Architecture, Artwork and Aesthetics</td>
<td>39</td>
</tr>
<tr>
<td>3.1 Aesthetics, Gothic Theory and Criticism</td>
<td>39</td>
</tr>
<tr>
<td>3.2 Indian Styles in Colonial Buildings</td>
<td>44</td>
</tr>
<tr>
<td>3.3 The Architecture of Bombay</td>
<td>53</td>
</tr>
<tr>
<td>3.4 Chhatrapati Shivaji Terminus</td>
<td>59</td>
</tr>
<tr>
<td>3.5 Summary</td>
<td>84</td>
</tr>
<tr>
<td>4. Power, Politics and Meaning</td>
<td>87</td>
</tr>
<tr>
<td>4.1 Colonial Discourse and Orientalism</td>
<td>87</td>
</tr>
<tr>
<td>4.2 Investigative Modalities</td>
<td>89</td>
</tr>
<tr>
<td>4.3 Colonial Discourse and Indian Railways</td>
<td>98</td>
</tr>
<tr>
<td>4.4 Meaning and Semiotics</td>
<td>105</td>
</tr>
<tr>
<td>4.5 Summary</td>
<td>119</td>
</tr>
<tr>
<td>5. Conclusions</td>
<td>121</td>
</tr>
<tr>
<td>Definitions</td>
<td>128</td>
</tr>
<tr>
<td>Glossary</td>
<td>130</td>
</tr>
<tr>
<td>Bibliography</td>
<td>132</td>
</tr>
<tr>
<td>Index</td>
<td>140</td>
</tr>
</tbody>
</table>
ILLUSTRATIONS

Frontispiece: *The British Raj Great Indian Peninsular Terminus*, 1878, Axel Haig

Fig. 1 Chhatrapati Shivaji Terminus, Mumbai 11

Fig. 2 CST, Passenger Station with head building on right, above it the Goods Station and storage tracks on left. 23

Fig. 3 Bombay City and inner suburbs 30

Fig. 4 Sir Jamshedji Jijibhai, leading merchant, in traditional Parsi dress 36

Fig. 5 G E Street, Law Courts, London 42

Fig. 6 Alfred Waterhouse, Manchester Town Hall 42

Fig. 7 Sculpted wheel, Sutya temple, Konarak, Orissa 47

Fig. 8 Madurai, temple 47

Fig. 9 Sir Bartle Frere 54

Fig. 10 Bombay, Road Layout 55

Fig. 11 Bombay University with Rajabai Tower 56

Fig. 12 Convocation Hall, University 57

Fig. 13 Library with Venetian arcade and stairway, University 57

Fig. 14 Bombay Municipal Corporation (BMC) building 60

Fig. 15 GIPR, Armourial Crest 61

Fig. 16 GIPR, Bhor Ghat 62

Fig. 17 GIPR Post Card of VT 65

Fig. 18 Axel Haig, Engraving of VT 66

Fig. 19 Venice, Ducal Palace 67

Fig. 20 St Pancras Station, London 69

Fig. 21 St Pancras Station, London 69

Fig. 22 CST, Dome with Sculpture, *Progress* 71

Fig. 23 CST, Decorative Roundel 73

Fig. 24 Foreign Office, London: Durbar Court 73

Fig. 25 CST, Tympanum with serpentine design 74

Fig. 26 CST, Tympanum with serpentine design 74

Fig. 27 CST, Spandrel Sculptures 75

Fig. 28 CST, Frieze Sculptures 75

Fig. 29 CST, Booking Office and Waiting Hall 77

Fig. 30 CST, Plan of Ground Floor, Concourse and Garden 78
Fig. 31 CST, principal staircase 79
Fig. 32 St Pancras, principal staircase of hotel 79
Fig. 33 CST, head of stairwell and base of drum with glass 80
Fig. 34 CST, a busy scene in train shed 83
Fig. 35 St Pancras, Train Shed 83
Fig. 36 GIPR Post Card, advertising Poona Race Specials 95
Fig. 37 GIPR Post Card, advertising Poona Express Mail trains 95
Fig. 38 Bombay, Topographical Map 101
Fig. 39 Bombay, Railway Map 101
Fig. 40 Railway workshop, Jamalpur, EIR 102
Fig. 41 Lahore Station, 1859-60 104
Fig. 42 Axel Haig, Victoria Terminus 108
Fig. 43 W P Frith, The Railway Station, 1860 109
Fig. 44 Mumbai, Commuting today 117
PREFACE

In this dissertation I have sought to bring together a life long interest in Victorian and colonial architecture with railways, with which I have been associated for much of my working life. I was also inspired by visits to Bombay more than ten years ago; unfortunately I have not been able to visit the city again while undertaking this dissertation and so have not had access to local archives and records. Colonial administrators and architects used style, form and ornamentation to express power in architecture but I believe railways, particularly in India, invested stations, such as CST, with special meaning. In this dissertation I have analysed the relationship between architectural form, the complexities and contradictions of colonial and Indian cultures and the unique place of railways in making modern India.

I have used the Indian name, Chhatrapati Shivaji Terminus, Mumbai, generally shortened to CST, for the city’s principal railway station and subject of this dissertation. I have used the old, and better known British name, Victoria Terminus or VT, only in direct references to nineteenth century events. At the price of some inconsistency I have generally described the city as Bombay, as it was known in the colonial period, using Mumbai only in direct references to recent events.
ACKNOWLEDGEMENTS

I would like to express my thanks to Professor Colin Divall at the University of York for his patience and guidance, as my supervisor, during the writing of this dissertation. I am also indebted to the staff of many libraries for their help and guidance. These have included the University of York, SOAS and Central Library at University of London, British Library, NRM, RGS, RIBA, V & A Archives.

AUTHOR’S DECLARATION

The dissertation has been my work entirely. I have made references, where appropriate, to primary and secondary sources of information. Analyses of buildings are based on photographs in various publications, allied with my own knowledge of architecture, such as it is and impressions.

I have visited Bombay and seen the buildings discussed but more than ten years ago and not while writing this dissertation. I have retained strong impressions.
Chhatrapati Shivaji Terminus, Mumbai

1. Introduction

Colonial buildings in India were statements of power and control expressed through their architecture and decoration. Chhatrapati Shivaji Terminus, Mumbai (CST), formerly Victoria Terminus (VT), Bombay was such a building. Early railway stations in India were strictly functional and austere, few more so than Lahore, built more like a fort than a station to house troops only years after the events of 1857. Built only 30 years later CST, Fig. 1, was a jewel, more elaborate even than London’s St Pancras, designed to dazzle and impress. Indians built it, though, supervised its construction and undertook much of its decorative sculpture. Sixteen carvings in shallow relief on the western façade depict Indians, each in a different headgear, representing the diversity of Bombay’s inhabitants that it served.

Fig. 1 Chhatrapati Shivaji Terminus, Mumbai (CST), http://www.2asa-unesco.blogspot.com [accessed May 7 2012]

Greatly admired at the time of building CST was celebrated in a 1996 publication, A City Icon, published by the Central Railway, successor to the GIPR, to celebrate its centenary. Unequivocally it states that ‘An icon of colonial power has now been transformed into a place that is associated with the comings and goings of ordinary

---

1 R Mehrotra and S Dwivedi, A City Icon, Victoria Terminus Bombay 1887 now Chhatrapati Shivaji Terminus 1996, (Bombay: Eminence Designs, 2006)
life’. Modern Bombay, often described as the powerhouse of modern India, could not function without the massive flow of commuters passing daily through CST, mingling with ‘tiffin’ carriers delivering lunch packs for office workers and the city’s poor, rolling up their bedding each morning after sleeping on the floor of the cavernous station.

Absorbed into the cultural life of the city of which it has always been a part, and fully naturalised, visitors still ponder over its massive presence, great dome, open loggias, gargoyles and stained glass. It has been described as an oriental St Pancras and as the central building of the entire British Empire and is now designated as a World Heritage Site by UNESCO. Christopher London in Bombay Gothic calls it the pre-eminent railway station of the Orient. Yet despite more than a passing similarity in appearance, both were grander and more impressive than railway functional requirements demanded. There were critical political and cultural differences in the conditions that gave rise to the two termini.

This dissertation seeks to validate the assertion of Jan Morris and other critics that CST was the central and most important building of the British Empire. The historian of Indian railways, Ian Kerr, believes that ‘Railway stations were built to signify. But they signified what?’ He says ‘In short CST was built to represent a set of attitudes, beliefs and relationships: an attitude of British superiority increasingly measured by machines; beliefs in the progressive and civilising power of the railways; relationships anchored in the fact of colonial rule to which compliance was fostered by grand buildings like CST’. This study seeks to show in more detail how and why this assertion of imperial power was embodied in the form and decoration of CST.

An obvious comparison is with the civic buildings that were the focus of great attention in England’s fast growing industrial cities; the pre-eminent were more likely to be town halls, law courts or art galleries, rather than railway stations. In

---

2 Jack Simmons, St Pancras Station (London: George Allen & Unwin, 1968), 142
3 Jan Morris, Stones of Empire (Oxford: Oxford University Press, 1983), 133
4 In 2004 CST was listed as a World Heritage Site by the World Heritage Committee, UNESCO and is the only such building that still has an active administrative and operational function.
5 Christopher London, Bombay Gothic (Bombay: India Book House, 2002), 79
Manchester and Leeds the most dominant buildings were the town halls, in Liverpool St George’s Hall and in Birmingham the City Hall and Art Gallery. In London St Pancras Station, raised high above Euston Road, dominated its immediate surroundings but was remote from the seats of power in Whitehall, the City and West End. In India the railway station was arguably more central to the assertion of power through buildings. We analyse those factors that might in particular have made CST different. These include the unique political, strategic and economic role of railways in late nineteenth century India, particularly in the context of empire and Bombay’s emergence as a dominant gateway and port city.

1.1 Critical Themes

This section introduces and discusses the principal themes of this dissertation. In the first place we seek to validate the assertion that CST was the most important building of empire and ask if so, why? Critical themes are the quality of its architecture, its projection of colonial values and power and Indian-ness, together with its meaning to colonists, travellers and Indians, strongly influenced by its representation of railways as a dominant achievement of empire and subsequently in creating Indian identity.

We situate CST in late nineteenth century colonial India when Bombay was the principal commercial city, a position reinforced by the growth of the railways; a period of much confidence and the zenith of empire. *The Oxford History of the British Empire* describes the transition from East India Company rule, following the revolution in 1857, to direct rule under the Crown and subsequent events. The third volume, *The Nineteenth Century* describes a growing confidence and security and the growth in trade that accompanied them⁷. *The Age of Capital 1848-75* by Eric Hobsbawm charts the growth in British trade with India and his *Industry and Empire* describes how Britain ensured its own advantage, in restricting industrial development in India, so protecting markets for capital goods and textiles⁸. *Imperial Designs and

---

Indian Realities: The Planning of Bombay City, 1845 by Marian Dossal\(^9\) and Urban Leadership in Western India: Politics and Communities in Bombay City, 1840-85 by Christine Dobbin\(^10\) describe and discuss commercial and social policies and cultural issues related to Bombay’s rapid development from the mid-century. As will become apparent in Chapter 2 these works provide an essential background against which to discuss CST, emphasising the social diversity, commercial dynamism and massive urban transformation that characterised late nineteenth century Bombay.

Muthusius’ The High Victorian Movement in Architecture1850-1870\(^11\) and Hitchcock’s Architecture: Nineteenth and Twentieth Centuries\(^12\) enable us to set Bombay’s Gothic buildings within a framework of High Victorian Architecture in Britain and more generally. As we move from the general to the specific we find much on the architecture of colonial India. Scholarly and well-illustrated works include Architecture in Victorian and Edwardian India edited by Christopher London, Norma Evenson’s The Indian Metropolis, A View Towards the West\(^13\) and Christopher London’s Bombay Gothic\(^14\). Bombay Gothic provides the fullest history and descriptions of colonial buildings. CST, and its architect Frederick William Stevens, who we meet in Chapter 3, are much praised.

In 2006 the Central Railway, successor to the GIPR, published A City Icon: Victoria Terminus Bombay 1887 now Chhatrapati Shivaji Terminus Mumbai 1996 in celebration of the station’s centenary\(^15\). It describes the construction process, sourced from local records, and includes many good illustrations of architecture and ornamentation. But this dissertation, while drawing on this work, seeks to question rather than to celebrate. We do not dissent from the view that CST is a fine building, put forward here and elsewhere, but believe that the paramount importance of this or any other building can only be determined after analysis of architecture and cultural

\(^9\) M Dossal, Imperial Designs and Indian Realities, The Planning of Bombay City 1845-75 (Bombay: Oxford University Press, 1991)
\(^10\) C Dobbin, Urban Leadership in Western India, Politics and Communities in Bombay City, 1840-85 (Oxford: Oxford University Press, 1972)
\(^12\) H-R Hitchcock, Architecture: Nineteenth and Twentieth Centuries, (London: Penguin Books, 1958)
\(^13\) N Evenson, The Indian Metropolis, A View Towards the West (New Haven: Yale University Press, 1989)
\(^14\) London, Bombay Gothic
\(^15\) Mehrotra and Dwivedi, A City Icon
meaning in the context of colonial architecture more generally and the culture of late-nineteenth colonialism.

Critical to our analyses of CST’s architectural content and quality are relationships with indigenous architecture. Bombay remained stubbornly Gothic, for much of the nineteenth century, while Indian and hybrid styles flourished in Madras and other cities. We probe this complex and highly political question by drawing on Michell’s *Hindu Art and Architecture*\(^\text{16}\) and Partha Mitter’s *Indian Art*\(^\text{17}\). *Paradigms of Indian Architecture: Space and Time in Representation and Design*, edited by Giles Tillotson, explores ways in which Indian architecture may be conceptualised\(^\text{18}\). Metcalfe’s *An Imperial Vision* and related articles are primarily concerned with architecture as a means of representing colonial power but have particular regard to the role of indigenous and hybrid styles\(^\text{19}\). He examines relationships between culture and power, as expressed in architecture during the period of European colonialism, and analyses the distinctive architectural forms that sought to portray the ideals of imperialism\(^\text{20}\). He argues that architecture did not by itself express the culture of colonialism but was embedded in a larger system of colonial control that utilised knowledge to acquire and maintain power. We also draw also on primary sources for colonial attitudes to native styles.

CST was highly decorated by ornamental sculpture and elaborate design of friezes, capitals and other features, a repository in some respects of Indian-ness. British attitudes to Indian design and sculpture, the structure of art education undertaken in Bombay and art schools in other Indian cities and part played by Indian craftsmen and their European teachers are an integral part of our analysis. The high regard European scholars had for Indian design, ambivalent view of Indian sculpture and contradictory elements in colonial art education are important in understanding CST’s decoration and Indian-ness. These questions are discussed, in relation to India as a whole, in


\(^{17}\) Partha Mitter, *Indian Art*, (Oxford: Oxford University Press, 2001)

\(^{18}\) G H R Tillotson, (ed.), *Paradigms of Indian Architecture, Space and Time in Representation and Design*, (Richmond: Curzon, 1998)

\(^{19}\) T R Metcalfe, *An Imperial Vision* (London: Faber & Faber, 1989)

\(^{20}\) Metcalfe, *An Imperial Vision*, xi
Much Maligned Monsters: History of European Reactions to Indian Art\textsuperscript{21} and Art and Nationalism in Colonial India, 1850-1922\textsuperscript{22} both by Partha Mitter and India by Design: Colonial History and Cultural Display\textsuperscript{23} by Saloni Mathur.

To fully understand CST, though, we must look beyond architecture and set it in a colonial discourse. A starting point for exploring how the material forms of colonial architecture relate to culture more widely is Edward Said’s Orientalism, published in 1978\textsuperscript{24}. He says ‘Orientalism can be discussed and analysed as the corporate institution for dealing with the Orient’, further arguing that ‘without examining Orientalism as a discourse one cannot possibly understand the enormously systematic discipline by which European culture was able to manage – and even produce – the Orient politically, sociologically …’\textsuperscript{25}. But Said can only be a starting point; we seek more historical specificity, by relating colonial discourse to late nineteenth century India and then to Bombay.

In Colonialism and its Forms of Knowledge; The British in India Bernard Cohn ‘explores how things are fabricated and how they are transformed into objects that have value and meaning’ going on to say that ‘It was the British who, in the nineteenth century, defined in an authoritative and effective fashion how the value and meaning of the objects produced or found in India were determined’\textsuperscript{26}. Cultures of Empire: A reader, edited by Catherine Hall elaborates on these arguments investigating, in a series of essays, how a complex colonial discourses was constructed\textsuperscript{27}.

Covering a later historical period and focused on French colonialism Gwendolyn Wright’s The Politics of Design in French Colonial Urbanism provides a succinct

\textsuperscript{22} Partha Mitter, Art and Nationalism in Colonial India, 1850-1922 (Cambridge: Cambridge University Press, 1994)
\textsuperscript{23} Saloni Mathur, India by Design: Colonial History and Cultural Display (Berkeley: California University Press, 2007)
\textsuperscript{25} Said, Orientalism, 3
\textsuperscript{26} B S Cohn, Colonialism and Its Forms of Knowledge, The British in India (Princeton: Princeton University Press, 1996), 76
\textsuperscript{27} C Hall (ed.), Cultures of Empire, A Reader (Manchester: Manchester University Press, 2007)
analysis of relationships between policies, representation and meaning\textsuperscript{28}. She asks ‘does a specific colonial intent generate particular urbanistic policies and stylistic preferences that advance political goals? Conversely can the evolution of certain styles, policies or programs be seen as the product of a given political context…?’\textsuperscript{29} Her approach and case studies are informative; interestingly she concludes that while these policies produced good architecture and design through incorporation and understanding of indigenous art and customs they did not succeed in abating a rising growth in nationalism.

Railways are critical in understanding CST. Ian Kerr has been instrumental in recent years, along with others, in promoting a wider and more scholarly understanding of railways in India. These scholars have approached railways in the context of their relationships with India and Indians, with emphasis on economic, cultural and social aspects of development. Kerr has written widely himself and edited \textit{Railways in Modern India: Themes in Indian History}\textsuperscript{30} and \textit{27 Down: New Departures in Indian Railway Studies}\textsuperscript{31}. Manu Goswani discusses the claims made for Indian railways and how nationalists appropriated them in their cause in \textit{Producing India: From Colonial Economy to National Space}\textsuperscript{32}. We draw on themes and approaches used by these scholars in understanding CST as a colonial railway artefact that was an ingredient in Bombay’s rise to fortune and an imperial symbol of power.

In \textit{The Railroad Station}\textsuperscript{33} Meeks provides a theoretical basis for evaluation and classification of station architecture; his approach brings together the theory of the picturesque and the visual system of analysis developed by the art historian Wolfflin. Richards and MacKenzie in \textit{The Railway Station, a Social History}\textsuperscript{34}, while aware of the architectural merits of stations, set them in a wider cultural milieu. They seek to

\begin{itemize}
  \item Wright, \textit{The Politics of Design in French Colonial Urbanism}, 8
  \item I J Kerr, (ed.), \textit{Railways in Modern India: Themes in Indian History} (New Delhi: Oxford University Press, 2001)
  \item C Meeks, \textit{The Railroad Station} (New Haven: Yale University Press, 1956)
  \item J Richards and J MacKenzie, \textit{The Railway Station, a Social History} (Oxford: Oxford University Press, 1986)
\end{itemize}
broaden our understanding of stations, saying ‘It was the appearance of the railway station in the non-European world which staked its claim to be not only the distinctive architectural form of the late nineteenth and early twentieth centuries, but also the first which was genuinely world-wide’\textsuperscript{35}. We question and explore further this bold statement.

\textit{1.2 Approach \& Methodology}

There are three further substantive chapters: historical context; architecture, artwork and aesthetics; power, politics and meaning.

\textit{Historical Context}

This chapter outlines the crucial period leading up to the planning and construction of CST. Bombay experienced its second period of rapid growth in the nineteenth century; the first had been a century earlier. Critical events were the abolition of the East India Company’s monopoly of trade in 1813, allowing British and other merchants to set up in the city; defeat of the Marathas in 1819 and the increased security that provided; the confidence that followed the British Crown’s assumption of power in 1857; and railways provided transport across India. The opening of the Suez Canal, in 1869, facilitated trade, bringing wealth to merchants and fuelling population growth as workers flocked in from its hinterland. This dissertation discusses how these factors interacted with local factors of geography, topography and culture to significantly influence the material form of CST.

\textit{Architecture, Artwork and Aesthetics}

An important element in the claim that CST was the most important building of empire is the enduring quality of its art and architecture. FW Stevens, its architect, was strongly influenced by a nineteenth century colonial aesthetic as well as contemporary architectural theory and practice in England. There the theorists Pugin and Ruskin sought to articulate the attributes and meaning of a new Gothic style

\textsuperscript{35} Richards and MacKenzie, \textit{The Railway Station}, 65
drawing on a rich medieval past, but innovative, modern and relevant in an age of massive commercial development\textsuperscript{36}. Bombay held aloof from Indian styles for much of the nineteenth century preferring Gothic; only slowly did styles become more overtly Indian. For colonial architects the use of Indian styles, their synthesis and incorporation in colonial buildings, raised practical, moral and cultural issues that we discuss\textsuperscript{37}. Our analysis seeks primarily to determine the critical aesthetic characteristics of CST that made it such a seminal and enduring edifice. We consider these attributes in conjunction with contemporary Indian aesthetics and look at CST in terms of station design.

\textit{Power, Politics and Meaning}

We seek to analyse the embodied meanings in CST by setting it in a colonial discourse. Architecture was part of a wider system of colonial representation, which found particular expression in Bombay in late-nineteenth century India. This chapter offers an analysis, which seeks to achieve the spatial and historical specificity required by Foucault. CST was built at the zenith of colonialism and birth of an Indian Empire that dazzled and impressed. Railways invested CST with power and meaning, distinguishing it from other equally fine public buildings in the city. They transformed India, economically, socially, culturally and spatially and underwrote the growth of Bombay, to premier port and commercial centre and affected the lives of countless millions of Indians. Stations were the public face of railways and the stage on which scenes of everyday life were played out, where diverse groups met and coalesced. We use semiotics to further our analyses seeking dynamic signs that posit meaning to contemporary and modern viewers, European and Indian.

\textbf{1.3 Sources}

As already noted, F W Stevens was central to CST’s conception. But relatively little is known about him, beyond an outline of his career\textsuperscript{38}. However, his attributes are well represented in his surviving buildings; these are critical primary evidence. Victorian

\textsuperscript{36} Muthusius, \textit{The High Victorian Movement in Architecture}, 1-54
\textsuperscript{37} Metcalfe, \textit{An Imperial Vision}, 55-104
\textsuperscript{38} \textit{RIBA Journal}, No 7 (1900), 374 and \textit{The Building News}, no 59 (1890), 700
architectural practice and the discourses associated with shaping a colonial aesthetic are well documented by contemporary sources. A critical issue was the need to determine an appropriate architecture for the various types of buildings then being built. Scholars and architects sought to understand, illustrate and classify indigenous buildings. James Ferguson’s detailed research, classification and illustrations are still seen as providing the start of a debate on the application of Indian styles to contemporary buildings. His *History of Architecture* and *History of Indian and Eastern Architecture* \(^{39}\) published in 1867 and 1876 respectively provide a wide and detailed canvas of Indian buildings throughout the country. The detailed views of Ferguson and architects practising in India on use of indigenous styles are readily available from contemporary accounts of lectures and articles in *The Builder, The Building News, RIBA Journal* and other periodicals. Additionally speeches and articles are available from influential government officials, including Sir Bartle Frere, Governor of Bombay, 1862-5 and generally credited with instigating a reordering of city space and construction of the grand public buildings on the site of the fort.

Our subsequent analysis is further informed by the work of Pugin and Ruskin. Pugin’s *Contrasts* was first published in 1836 and in it he provided a historical-theological basis for Gothic in ecclesiastical buildings, then extending it to country houses and places of education \(^{40}\). Ruskin promoted a visual awareness of the characteristics in architecture necessary for aesthetic and visual content and provided a theoretical basis and justification for Victorian Gothic in his writings and speeches; *The Seven Lamps of Architecture* \(^{41}\) and *Stones of Venice* \(^{42}\) were published and republished from the eighteen fifties to the eighties. He advocated European Gothic styles and strongly influenced Gilbert Scott, converting him to Gothic, together with Street, Burges and other significant Gothic architects. CST, we shall argue, illustrates the extent of Steven’s debt to Ruskin and Scott. Scott’s University buildings, 1869-74

\(^{39}\) James Ferguson, *History of Architecture*, (London, 1867) and *History of Indian and Eastern Architecture* (London, 1876)

\(^{40}\) AW N Pugin, *Contrasts* and *The True Principles of Pointed or Christian Architecture* (Reading, 2003 – reprint of 1841 editions)

\(^{41}\) J Ruskin, *The Seven Lamps of Architecture*

\(^{42}\) J Ruskin, *Stones of Venice* (2 vols), London: George Allen, 1897 republication
and St Pancras, and his *Remarks on Secular and Domestic Architecture, Present and Future*, 1857, probably strongly influenced Stevens.

CST was described, at the time of its completion, in the *Builder* and *Building News* along with other broadly contemporary buildings; these are valuable sources and generate a picture of Bombay in the 1870s and 1880s. The development of railways in Bombay receives early and continuing attention in the Indian press; articles emphasise the critical role railway in the growth of trade and industry in the city. Construction progress, site clearance, estimates and outturn prices are described in Administrative Reports, 1882-3 & 1883-4 and Minutes of General Purposes Committees, 1878 onwards. Government, railway and municipal documents provide a wealth of statistics and some maps and plans. But those available in Britain, including PWD records, are not sufficiently detailed in respect of the building of CST to identify the many Indians involved in construction and ornamentation. Horace Bell, *Railway Policy in India* provides insights into contemporary railway practice and policy.

Travel guides: Murray, *Handbook for Travellers*, Gazetteer of Bombay City and Island and Macleans Guide to Bombay provide qualitative descriptions of buildings, landscapes and tourist routes and data for officials, European and Indian residents and travellers. Other important contemporary works include *Cities of India*, 1903 by GW Forrest and *Art Manufactures of India*, 1888 by TN Mukharji; while the former supplements information and guides the latter helps set CST’s sculpture in the wider context of art education, materials and place of European and Indian styles. *India in 1880* by Sir Richard Temple, a former Bombay governor, discusses aesthetics in relation to architecture and approaches to railway development, providing useful insights into contemporary attitudes and policies.

---

44 *Times of India, Friends of India, Daily News & Illustrated London News*
45 British Library, London, GIPR Annual Reports, V/24/3533 & GIPR committees, 1881-89. L/AG/46/12/34
46 These have included British Library, London, L/PWD/2/120, Register III GIPR, 3/26 & 3/231 letters from India and 5/21 miscellaneous railway papers
48 S M Edwardes, *Gazetteer of Bombay City and Island* (3 Vols, Bombay: Bombay Times, 1909)
49 Macleans Guide to Bombay (Bombay, 1888)
50 G W Forrest, *Cities of India* (London, 1903)
51 T N Mukharji, *Art Manufactures of India* (Calcutta: GOI, 1888)
52 R Temple, *India in 1880* (London: Murray, 1880)
A recurring issue through our examination of primary literature has been how to access the views of Indians on railways and contemporary events and the important part they played in constructing CST. English language literature of the colonial period unsurprisingly places most emphasis on the achievements and views of Europeans. Those Indians who contributed to western journals and gazetteers were generally the most westernised and in nineteenth century Bombay many genuinely believed in western values and concepts of progress; others sought to ingratiate their masters. There was, though, a growing and vocal Hindu literati, some of whom wrote substantial accounts of their travels, mostly in Hindi or Bengali; these provide insightful if selective evidence of how the railways were perceived at the time and are accessible through translation from *The Nationalisation of Hindu Traditions: Bharatendu Harischandra and Nineteenth-Century Banaras* by Vasudra Dalmia and research of Harriet Bury and As explained in the Preface I have not been able to visit Bombay and access local archives, most particularly Maharashtra State Archives, PWD volumes, in which more information on the part played by Indians in construction might reasonably have been expected to be available. Accounts of nineteenth century journeys by Hindu literati are generally available only in Hindi or Bengali.

In the coming chapter we explore the historical context in which CST was built.

---


55 Bury, 1 footnote acknowledging help with translations of contemporary accounts
Fig. 2 CST, Passenger Station with head building on right, above it the Goods Station and storage tracks on left, [http://www.googleearthimages.blogspot.com](http://www.googleearthimages.blogspot.com) [accessed May 7 2012]
2. Historical Context

In this chapter we discuss the growing stability of colonial India and wealth of Bombay in the late nineteenth century. We consider the conjunction of the reordering of the city, railway development and the flowering of imperialism in the guise of an Indian Empire. Reproduced in guides and on postcards CST became a metaphor for Bombay as a gateway to an exotic India.

2.1 Government and Politics

The East India Company was established as a trading company in 1600 under Royal Charter and in 1757 it assumed the role of a quasi-Government, set out in the Regulating Act, 1773, appointing its own Governors and employing its own troops. Attempts at modernisation had had only limited impact and the high level of military spending restricted expenditure available for improvement. But much was to change under Lord Dalhousie, Governor-General, 1848-56; he promoted western education leading to new colleges and universities, extension of the rule of law and technological innovation. Steamships reduced journey time to Britain, telegraph improved communication, railways opened up India’s vast hinterland and factories developed in towns, particularly port cities like Bombay. This enabled primary products to be exported to Europe directly or first processed. He is, though, also seen as stoking up Indian resistance leading to the Rebellion aggravated by the tensions in a colonial policy ‘that was caught between inventing an Oriental society and abolishing it’.

After the Rebellion in 1857, the country was brought directly under British rule and further reforms quickly followed. The Government of India Act, 1858 established a Secretary of State and a quasi-independent Council for India. An early accomplishment was reform of the army, reducing its size overall and providing modest opportunities for promotion of Indians. The British needed loyal Indians in all aspects of empire. These included feudal princes and rajahs, who ruled native states, allied with and ‘protected’ by the colonial government, a literate cadre of western

---

56 Washbrook, India 1818-60, 418-9
educated officials to fill middle and junior government posts and soldiers, increasingly raised from the martial races, Rajputs and Sikhs predominately.

The Indian Civil Service (ICS) was strengthened attracting graduates and good quality applicants able to administer reforms in taxes and revenue collection and improvements to agriculture through irrigation and scientific method. The period was one of growing confidence, encapsulated in Victoria being proclaimed Empress of India in 1876. British colonies were no longer threatened by overseas powers and internal opposition was muted if growing. But there were policy contradictions with some officials favouring modernisation while others sought Oriental despotism in which otherness, based on cultural difference, provided an essential buttress for the colonial order.\(^{57}\)

Sir Bartle Frere, Governor of Bombay 1862-7, was a paramount influence in the transformation of Bombay and in 1842, as private secretary to the Governor, he proclaimed his vision, entitled *Urbs Prima in Indis*, for the city. For the Afghan Memorial Church, 1843, intended to commemorate victims of the Afghan war, he sought drawings from prominent Gothic architects in England.\(^{58}\) So Gothic was born in the city and was to become a symbol of a modern mercantile city. When Frere was appointed governor in 1862 he recognised that the first need was for space. Demolition of the fort and walls and extensive land reclamation were the means by which this was achieved, in part funded by the sale of the plots released or created. This practical and symbolic step signalled transition from military stronghold to commercial centre.\(^{59}\)

Politics was a dominant ingredient in the city as increasing wealth and education, municipal reorganisation and improvement, and cultural diversity progressively created an Indian awareness of an identity and past apart from the colonial state. Some similar tensions had existed in British cities at the time, fuelled by poverty and industrialisation, but the situation in Bombay was unusually complex given the nature of colonial government and the almost unique diversity of its people. Relations with

\(^{57}\) Washbrook, *India 1818-60*, 395-421  
\(^{59}\) Dossal, *Imperial Designs and Indian Realities*, 192-220
the growing intelligentsia were sometimes uneasy also and within its ranks lay seeds of future dissent; the Indian National Congress, though, was not formed until 1885\textsuperscript{60}.

Societies that were essentially political were formed; the Bombay Association, in 1852, and Bombay Branch of the East India Association subsequently, both provided important forums for debate and discussion of political and social reform. They included Shetia groups and intelligentsia, between which tensions ebbed and flowed, and sought to engage constructively with the Presidency Government, to which they pledged loyalty, stretched at times. Shetia concerns were mostly to do with taxation, justice, municipal reform and public works. The intelligentsia, generally graduates of Elphinstone College and the University, had priorities, more relevant to their own interests and more overtly nationalistic, including the need to make education more Indian and less western and to improve access for Indians to the higher ranks of the civil service\textsuperscript{61}.

\textbf{2.2 Trade and Economics}

In the nineteenth century the steady rise of Britain’s economy resulted from increasing foreign trade, in which manufactured goods and services were exported, to colonies and principally India, in return for primary products and raw materials. Britain increased its trade with the rest of the world by a factor of five between 1840 and 1870. India also controlled trade with the Far East and particularly China through its export surplus. Technology improved manufacturing processes and transport significantly, with the increasing size and speed of steamships and development of railways. Control of shipping, investment in overseas railways, insurance, banking and brokerage further increased British economic dominance. The British Parliament had progressively sought to weaken the East India Company’s monopoly of trade through Charter Acts, 1813, 1833 and 1853\textsuperscript{62}. Bombay with its fine natural harbour and location on the west coast increasingly eclipsed Calcutta, still the capital, as the

\textsuperscript{60}Moore, ‘Imperial India 1858-1914’, 422-446
\textsuperscript{61}Dobbin, \textit{Urban Leadership in Western India}, 78-97
\textsuperscript{62}Hobsbawm, \textit{Industry and Empire}, 134-48
pre-eminent commercial city; Madras, the other Presidency city, developed less quickly, lacking a good port and disadvantaged by an east coast location\textsuperscript{63}.

Cotton was hugely important in Britain’s trade with India and in Bombay’s growth and prosperity. Britain had originally suppressed the local textile industry, as a competitive threat to Lancashire. It bought much of its raw cotton from north America but during the civil war, 1861-5 there it turned increasingly to India, generating a trade and financial boom followed by bust in Bombay, where banks collapsed, as cotton exports declined sharply with the end of the war. In the period 1870-80 raw cotton exports almost halved, as compared with 1860-70, whereas import of British textiles remained largely unchanged\textsuperscript{64}. The number of cotton mills in Bombay increased from 10 in 1872 to 31 in 1881, as the city begun to process cotton itself, becoming major employers of labour; availability of cheap labour, finance and proximity to cotton growing areas, following railway development, made this rapid growth possible. Banks, of which there were four in the city by 1850, and the growing cotton industry with its mills attracted local investment and with acceptance of the joint-stock principle shares were traded widely\textsuperscript{65}.

Despite or because of this growth poor housing and chronic health problems existed in the city, exacerbated by high temperatures and periods of intensive rainfall\textsuperscript{66}. Professional in health and other fields used a growing range, and quality, of statistics on water quality, disease, life expectancy and other measures to support and design new processes and infrastructure. The creative tension between measures designed to control and those to improve, were at the heart of Bombay’s development. Delays and argument over improvement of water supply illustrate the tensions between municipal professionals and reformers. Identified as a growing problem in 1828, it was not until 1864 that plans for the Vihar Water Works, able to supply 20 gallons of water per person per day, the standard in British cities at the time, were fully realised. While British engineers were seeking high standards, comparable to those in Britain, it was,

\textsuperscript{63} Evenson, \textit{The Indian Metropolis}, 1-46
\textsuperscript{64} Dossall, \textit{Imperial Designs and Indian Realities}, 78-79
\textsuperscript{65} Dobbin, \textit{Urban Leadership in Western India}, 155
\textsuperscript{66} Dossall, \textit{Imperial Designs and Indian Realities}, 1-8
perhaps, inevitable that Indians saw it as another attempt to extend Government control over everyday life\textsuperscript{67} and increase taxation\textsuperscript{68}.

Municipal affairs had, from as early as 1793, been a responsibility of Justices of the Peace, appointed by the Bombay Government; few were fitted for this responsibility, many did not attend meetings and of the Indians a number spoke little English. While the Municipal Act of 1865 provided for a strong professionally organised body to undertake improvements it did not improve accountability or introduce representation for ratepayers. This had to wait until the 1872 Act, under which half the members of the Corporation were to be elected by ratepayers. This modest step forward enfranchised less than 1\% of the city’s population giving disproportionate power to Europeans and Parsis; educated and professional classes were under represented. Levels of taxation, their allocation between interest groups and classes and the high spending of the first Commissioner Arthur Crawford were perennial issues of contention\textsuperscript{69}.

Bombay’s long and narrow site lacked space for growth and development. Land reclamation, now seen as an essential ingredient in the creation of modern Bombay, was much disputed at the time. However, it received impetus with the launch of the Mody Bay scheme in 1857, immediately delayed by the Rebellion and then pushed forward by Frere, in the face of opposition from GOI, concerned over financing and risks of the falling land prices it would create. Frere believed that private funding and construction was preferable to that of the state; however, funding came eventually from both sources, including sale of land and buildings in the fort area, sale of new plots and investment by local capitalists that included many Indians. Some 250 acres of the eastern foreshore was eventually reclaimed, of which 100 acres were to be passed to the Bombay Government, for the railway terminus of the GIPR\textsuperscript{70}. Fig. 3 shows areas reclaimed and railway termini.

\textsuperscript{67} Dossall, \textit{Imperial Designs and Indian Realities}, 95-124
\textsuperscript{68} Dossall, \textit{Imperial Designs and Indian Realities}, 1-11
\textsuperscript{69} Dobbin, \textit{Urban Leadership in Western India}, 131-72
\textsuperscript{70} Dossall, \textit{Imperial Designs and Indian Realities}, 150-64
Other important schemes were at Apollo Bay and Back Bay, entailing reclamation of the western foreshore by private ventures. The Back Bay project provided for reclamation of a massive 1,500 acres, of which 120 acres would be for railway development. This would allow the Bombay Baroda and Central India Railway (BBCI) to run along the foreshore over reclaimed land; an inland route would have involved much demolition of property. A further 180 acres was to be provided for roads and other municipal uses. However, when the American civil war ended in 1865 only 24 acres had been reclaimed; economic recession soon followed, as Britain substituted American for Indian cotton imports. While this financial turbulence bore out some of the concerns of GOI, and the risks entailed in the capital ventures, these substantial reclamation projects were to prove critical in underwriting the future prosperity of the city.\(^\text{71}\).

Railways enjoyed wide support within ruling elites in Britain and India. Sir Charles Wood, Secretary of State for India, 1853-66 had supported Dalhousie’s original railway proposals\(^\text{72}\) and subsequently supported a guarantee system, arguing that GOI surpluses should be used for railway construction. Their initial purpose was to give Britain easy access to cheap raw materials and ready markets for British goods\(^\text{73}\), and

\(^{71}\) Dossall, *Imperial Designs and Indian Realities*, 150-64
\(^{72}\) British Library, London, correspondence, Wood to Dalhousie, 22 January 1853
to ensure greater political and military control. Officials also believed railway building would provide a class of Indian skilled labour, employment of which was, as in the military, desirable for political and economic reasons. India’s railway development was massive yet it was not sufficient to fully modernise the economy or achieve industrialisation; as late as 1947 only 1% of the population was engaged in factory-based industry. The railway system lacked density, which by 1937, was still only a third of the United States and a tenth of that of Germany.

The guarantee system provided a minimum of 5% return, later reduced to 4%, on railway investment, giving exceptionally good returns for ‘surplus’ British capital, with £150 million being invested between 1857 and 1869, and little recourse to public funds. But in the longer term subsidies proved a serious drain on the public purse and by 1869 had reached £15 million, and encouraged extravagance. Stations were erected in a grand style, luxury coaches provided for the upper classes and construction costs generally greatly exceeded those in Europe and America despite low costs of labour. Only the East Indian Railway (EIR), between Calcutta and Delhi, built relatively cheaply in the largely flat Ganges valley, earned a commercial return from the outset. Poor alignment of routes, avoiding some important centres and placing of stations away from heavily populated areas, for strategic reasons, reduced commercial returns and industrial linkages. Arguably the system resulted in an overall drain of funds from India. After 1879 GOI assumed responsibility for repairs and investment in the railway system and the early days of extravagance quickly gave way to under-investment, under-capitalisation and chronic congestion.

The absence of structural change in the country is attributed to the lack of linkages resulting from these failures in railway planning and management. GOI did little to stimulate industry and it seems likely that it did not want indigenous industries to compete with those in Britain. India was to remain a source of raw materials and market for British goods; for example, between 1865 and 1941 only 700 railway

---

74 Moore, ‘Imperial India 1858-1914’, 422-46
75 Thorner, ‘The Pattern of Railway Development in India’, 90-96
76 Thorner, ‘The Pattern of Railway Development in India’, 83
77 Thorner, ‘The Pattern of Railway Development in India’, 83-87
79 Thorner, ‘The Pattern of Railway Development in India’, 90
locomotives were constructed in India, while 12,000 were exported from Britain, despite the ability of well equipped railway workshops there, employing 110,000 workers by 1938, capable of undertaking construction. High freight rates also discouraged industry and made Indian products uncompetitive with those of other countries. Agriculture was an exception but although farmers and merchants benefited it provided few external linkages that might have increased industrialisation. Overall it is calculated that the railways in 1900 had brought savings of 9% of national income to the economy.

Indian trains were slow by European standards but like their stations were well provided with amenities and comforts for higher-class passengers. In 1898 the fastest express between Bombay and Madras left at 9.30 pm and arrived at 5.45 am on day three, covering just under 800 miles in approximately thirty-three hours with the same number of stops. The Bombay-Calcutta Mail was accelerated from 52-57 hours to 40 hours in 1897, following increased competition from Karachi, where despite the greater distance a 58-hour journey was planned. Writers comment on the lethargy and conservatism of railway companies and general unwillingness to make changes. Stations are described as substantial buildings, frequently in granite, with the facilities of a hotel at modest cost. Ice was generally available to cool passengers and would last 48 hours in a compartment when kept away from direct sunlight. Brahmins might include their food and water in brass vessels to ensure no contamination from lower castes, from whom they were not segregated in trains as such; the GIPR employed high-caste water carriers at the principal stations to provide for the needs of Brahmins. Delays were frequently occasioned by extended stops for medical examination designed to restrict the spread of plague. Railways thus facilitated control, if benign in purpose, but were seen by some as encouraging spread of diseases between areas previously remote from each other.

80 Hurd, ‘Railways’, 158-72
81 Hurd, ‘Railways’, 151
82 D T Timms, ‘The New Overland Express’, *Railway Magazine*, no 5 (1899), 513-20
83 J T Lawrence, ‘Railways in South India’, *Railway Magazine*, no 2 (1898), 307-15
84 J T Lawrence, ‘The Railway System of Northern India’, *Railway Magazine*, no 3 (1898), 446
85 Lawrence, ‘Railways in South India’, 307-15
In 1926 there were weekly sailings between London and Bombay, amounting to about five per week overall when taken together with those to other British and European ports; there were a similar number of sailings eastward to South East Asia, China, Japan and Australia. Both GIPR and BBCI laid on long distance trains to depart within 7 hours of the signal being received for the mail steamer; passengers were required to make reservations with the purser before leaving Aden. Some twelve pages of the Thomas Cook guide outlined rail-based tours of India from Bombay to places of tourist interest: Assam, Darjeeling, Agra and Jaipur, for example, and specialist tours to sites of art and archaeological interest: Ajanta, Ellora and Elephanta caves. A highlight was a comprehensive tour of three and a half months reaching as far as Rangoon with departures from VT, where the refreshment and waiting rooms were specially commended, at 9 pm, arriving after 19 hours at Indore, or from the BBCI station at 8.45pm overnight to Baroda; the overall price was R1030 with first class travel, by comparison a Bombay to Agra first-class fare was R82. Railway time was standardised throughout India and was 9 minutes ahead of Bombay time. Indian servants might be hired from Cook’s office, close to VT in Hornby Road, and might accompany travellers at specially reduced fares.

Allied with railway development came port development similarly critical in establishing Bombay as the prime commercial and port city in the sub-continent. However, despite much discussion in the fifty years before the Rebellion little improvement had occurred. Indeed development lagged that of the railways but as with the railways, reclamation eventually provided the space needed for modern docks. The Bombay Port Trust was not formed until 1873, nearly thirty years after formation of the GIPR, and wet docks followed 1880-93. CST was constructed close to the main wet docks at very much the same time and similarly on land reclaimed at Mody Bay.

Bombay’s monumental public buildings, constructed between 1867 and 1890, provided the new buildings types needed for a growing city and were a visible symbol of this growing prosperity. Education requirements, civil and city administration had grown significantly following municipal improvement and related legislation. In

---

87 Evenson, The Indian Metropolis, 40
88 Dossall, Imperial Designs and Indian Realities, 164-72
Manchester and Leeds, for example, municipal improvement and public building
came somewhat earlier than in Bombay but aspirations and tensions were not un-
similar. Manchester Town Hall, designed by Waterhouse, was not completed until
1877; it was a huge Gothic pile very comparable to Bombay City Hall opened in
1893. In the port city of Liverpool the fine Lime Street station, also by Waterhouse,
and the third on the site was built 1867-78 whereas CST was built 1878-88 and was
similarly not the city’s first terminus; in both cases larger and grander stations were
built to accommodate increased passenger numbers and reflect growing city prestige.
Both were suitably Gothic.\textsuperscript{89}

\textbf{2.3 Culture and Society}

Bombay was a thriving centre of commerce before British rule and more diverse than
other Indian cities as a result of its coastal location and trading activities. If Liverpool
was more cosmopolitan than inland cities, Bombay was more than doubly so.
Inhabitants divided into closely defined groups based on place of origin, religion and
occupation, in consequence of which there were many disparate groups amongst
Hindus and Muslims; Hindus further divided by caste and Muslims between Sunni
and Shia. Bombay merchant princes were exceptionally wealthy, even by the 1830s,
and Parsis owned half of Bombay Island. Further divisions arose through education,
frequently determined by occupation, caste or family. While Shetias and Shets availed
themselves of western education at Elphinstone College few went to university
whereas those with degrees generally went into government service, principally into
teaching, and later into the burgeoning professions. The sophistication and diversity
of Bombay’s Indian population provides an essential backcloth to empire in all its
various forms.\textsuperscript{90}

The original settlement had grown up in the ‘fort’, a walled area around the castle, but
then grew rapidly within the confines of the narrow site until reclamation provided
periodic relief. As in other colonial cities in India British and Indians lived separately,
the Indians initially in the fort area in high-density narrow streets while the British
developed low-density residential areas. 37% of the population lived on 3% of the

\textsuperscript{90} Dobbin, \textit{Urban Leadership in Western India}, 1-52
In Indian districts people lived alongside commercial activities that included warehousing, import-export and artisan crafts. Most Indians required all their activities to be within walking distance, lacking the transport that allowed Europeans to segregate activities through zoning. The politics of space and the lack of it critically influenced development in Bombay. The relationship between value, space and community was critical in shaping policies and ensuring tensions. Values and value were part of cognitive, linguistic and moral codes that shaped a culture of dominance and dependence.

Gujeratis, Marathas and Konkanis dominated the city in the early nineteenth century, each with their own language and customs and within each group caste, trade and religion provided a further differentiation and identity, distinct from the main group; also important were Parsis and Jews. Marathas were the original inhabitants of Bombay Island but Gujeratis were the largest group by the early nineteenth century and were predominantly commercial in character. Population overall increased from 236,000 in 1836 to 354,000 in 1857 but by 1864 it had reached 816,562. 71% were Hindus, including 30,000 Brahmins, and 18% were Muslim with the remaining 11% comprising minority religions and foreigners; statistics showed that only 29% of the population had been born in the city illustrating its growth and vitality. The censuses in 1881 revealed that 50% of the population spoke Marathi, 20% Gujerati and 11% Urdu.

Parsis were disproportionately influential, successful in business, charitable, some enjoying close relationships with the colonial authorities, which they generally supported but not uncritically. Sir Jamshedji Jijibhai, Fig. 4, became a baronet, made huge profits in the China trade and in cotton and is believed to have spent £350,000 in public benefaction including Rs 100,000 for establishment of an art school, the JJ School of Art. He sought to revive India’s ancient crafts, threatened by the products of the west, through teaching of painting and other crafts. Other important Parsis included Sir Dinsha Petit, banker and mill owner, and Jamshedji Tata, educated at
Elphinstone College and a cotton merchant, `the politician Dadabhai Naoroji, founder of the Bombay Association and Bombay Branch of the East India Association and later prime minister of Baroda and Sir Pherozeshah Mehta, a barrister and Chairman of Bombay Corporation 1884-5. Influential Hindus included Saraswat and Chitpavan Brahmins, active in education, law and medicine principally and merchants like Jagannath Shankarshet, banker and politician\textsuperscript{96}.

![Sir Jamshedji Jijibhai](http://www.sirjjarchitecture.org)

Fig. 4 Sir Jamshedji Jijibhai, 1783-1859, leading merchant, in traditional Parsi dress, http://www.sirjjarchitecture.org [accessed May 23 2012]

Education at Elphinstone College and subsequently at Bombay University, were strongly based on a European classical past. This had a number of results; some of the merchant groups and intelligentsia adopted European manners and customs while others were critical of enforced westernisation and sought to explore India’s past and seek change. Political awakening was closely associated with this search for an Indian past and identity, distinct from the colonial state. Political associations sought more to influence than to oppose and while groups jostled for power and influence few cared much for needs of the urban or rural poor\textsuperscript{97}.

\textsuperscript{96} Dobbin, \textit{Urban Leadership in Western India}, 30-31 & 272-74
\textsuperscript{97} Dobbin, \textit{Urban Leadership in Western India}, 78-97
The professions received much encouragement from the colonial authorities, with the increasing needs of government paramount; in the period 1870-82 almost half the graduates of Bombay University, some 291, studied medicine, law or engineering. The Poona College of Engineering was established in 1854 and affiliated to the University in 1866, its purpose being to supply qualified engineers to the Public Works Department (PWD). Many of the early graduates were Brahmins, less inclined to follow trade than other groups. Interestingly of those engineering graduates, who could be traced, 89 out of 109 in the 1870-82 period, 46 received employment with GOI, 34 in the PWD; a further 28 were employed in the PWD of native states. Generally PWD posts were relatively poorly paid. In railways we find many British engineers, some from the military, in contrast with the law, for example, where Indians predominated, serving in the High Court and other important judiciary positions.\footnote{Dobbin, \textit{Urban Leadership in Western India}, 46-50 & 170-71}

\section*{2.4 Summary}

While the industry and creativity of Bombay’s people, including those who flocked to the city from outside, were its seed-corn the British put in place the administrative and legal framework, and technology, that facilitated the city’s enormous growth and wealth. Self interest, and in some cases genuine respect, ensured that the various groups coexisted peacefully and productively with their colonial masters. Differences borne of ethnicity, caste and class, religion and of the colonial system were necessarily greater than those in British cities but many of the sources of conflict were similar. We have sought in this brief discussion of historical context to understand how Bombay’s wealth, diversity and colonial experience shaped the city and to explain similarities and differences between development in Bombay and British cities.
3. Architecture, Artwork and Aesthetics

Underpinning the claim that CST was the most important building of empire, and its continuing appeal in India, is the enduring quality of its art and architecture. In this chapter we investigate nineteenth century architectural theory and aesthetics, describe Bombay’s architectural development and CST itself and discuss attitudes to Indian styles, their synthesis and incorporation in colonial buildings and the practical, moral and cultural issues that this raised. Our analysis will seek primarily to address the following questions. What were the critical aesthetic characteristics of CST that made it such a seminal and enduring edifice? What was particularly Indian about it and how did these attributes accord with contemporary Indian aesthetics? How did the decoration relate to the structure and how might it have been understood?

3.1 Aesthetics, Gothic Theory and Criticism

Victorian Gothic

Victorian Gothic developed from a largely church style in the early nineteenth century to embrace public buildings by the mid century. Theorists, including Pugin and Ruskin, sought to articulate the attributes and meaning of this new Gothic, drawing on a rich medieval past, but innovative, modern and relevant in an age of massive commercial development. Romanticism, eclecticism and the picturesque were important influences in a discourse that sought relationships between content, form and decoration in commercial buildings. Gothic became the architecture of democracy, continuity and learning, as seen in the Houses of Parliament, 1833 and college buildings in Oxford and Cambridge, and in Bombay of empire.99

Augustus Welby Pugin, of French origin, worked as an architect in England, notably at the rebuilt Houses of Parliament; his influential views were principally expressed in Contrasts published in 1836-1841 and True Principles, 1841. Pugin, despite a preference for a glorious past over an industrialised present, was surprisingly modern in saying ‘that the greatest test of Architectural beauty is the fitness of the design to

99 Muthusius, The High Victorian Movement in Architecture, 1-54
the purpose for which it is intended, and that the style of a building should so
correspond with its use that the spectator may at once perceive the purpose for which
it was erected’. He argued also that without vastness of dimensions it is impossible
to produce a grand and imposing effect in architecture adding that ‘One of the great
arts of architecture is to render a building more vast and lofty in appearance than it is
in reality’. He saw the size of the human figure as a critical measure in determining
scale and proportions and believed even the smallest detail should have meaning.
Despite a strongly expressed preference for Gothic, on theological as well as practical
grounds, Pugin also admired Pagan works that reflected climate, customs and religion
citing motifs, in Egyptian Temples, that expressed the emblems and philosophy of
that nation. Enthusiasm for the middle ages had been aroused and encouraged by
Romanticism through the works of novelists, poets and Pre-Raphaelite artists.

Ruskin provided a theoretical basis for the nineteenth century Gothic revival and
defined appropriate styles and motifs for commercial buildings. He greatly influenced
the leading architects of the day, carrying on a lively and sometimes acrimonious
correspondence with many; these included men like George Gilbert Scott and
Burges, who were to influence colonial architects in India. Ruskin was not a trained
architect; a gifted amateur artist he drew on a love of history and literature and an
innate understanding of nature and landscape. For him a building was an act of
expression, not a lifeless artefact, and he placed emphasis on texture and colour as a
practising artist might. He developed romantic theory and the concept of the
sympathetic imagination, readily absorbing the concepts of the sublime and
picturesque from the writings of Gilpin, Uvedale Price, the Lakeland poets and from
his own wandering and sketching in the Lakes; he believed buildings should be
sensitive to their surroundings. His analyses of existing buildings and love of nature
led him to reject classicism with its fixed rules and proportions in favour of a more
organic Gothic that was capable of reflecting human emotion. A number of great

100 Pugin, Contrasts (Reading, 2003 – reprint of 1841 editions), 1-3
editions), 63
102 Pugin, The True Principles of Pointed, 1
103 A W Pugin, lecture, St Marie’s, Oscott, 1841, 63-5
104 M W Brooks, John Ruskin and Victorian Architecture (New Brunswick: Rutgers University Press,
1987), xiii-xv, Unrau, Looking at architecture with Ruskin, 7 & British Architect, 16 October 1874
105 Brooks, John Ruskin and Victorian Architecture, 1-17
neo-classical buildings had only recently been completed in London when Ruskin published his *Seven Lamps of Architecture*, 1849 and *Stones of Venice*, 1851, demonstrating the seismic shift in taste that he helped to achieve.

Attempts to reconcile a Gothic style with progress, and so justify its use in modern buildings, had become urgent by the mid-century. Critics argued that beauty alone did not justify a style that was in essence medieval and so inappropriate for a modern age. The best modern architects, such as Scott, Burges and Street, favoured a modern Gothic drawing on continental European styles for inspiration and rejected copying in favour of innovation. In this they were following Ruskin, who had expressed a preference for Pisan Romanesque, Tuscan and Venetian Gothic in its purest form and England’s Decorated style. Scott had met Ruskin in 1846 and visited Venice after reading *The Seven Lamps* and *The Stones of Venice*; he had previously visited Belgium and France in 1844-7, admiring particularly the cloth halls of Flanders and northern French cathedrals. Scott liked the urbanity, colour and richness of materials in Venetian Gothic but saw structural integrity as paramount and a need to absorb Venetian elements with caution and sympathy. An admirer also of the English Decorated style he would fashion a style appropriate to his age. He synthesised his views on elements and motifs in *Remarks on Secular and Domestic Architecture, Present and Future*.  

Similarly G E Street, architect of the Law Courts, 1874-82, Fig. 5, in the Strand, favoured a more restrained French rather than Italian Gothic. Alfred Waterhouse had attracted Ruskin’s praise with his Manchester Assize Courts, 1859 and Town Hall, 1868-77, Fig. 6, and while admiring the attributes of Italian styles he was concerned that too much colour would outshine the architecture; his Manchester buildings are striking but restrained in their use of polychrome. He sought to emphasise, as Street had, the shared medieval roots of Gothic and English law and Manchester’s sharing of the tradition of Europe’s merchant cities, so strongly evoked in the cloth and guild halls of northern Europe. Waterhouse shared with Scott and Street a willingness to plunder European styles for what was fitting in the great public and commercial

---

106 Scott, *Remarks on Secular and Domestic Architecture*, 190-97
buildings of merchant cities\textsuperscript{107}. Ruskin shared Street and Waterhouse’s concern to avoid brazen polychrome and attacked vulgar excesses in architecture, as seen in strident commercial buildings then emerging, believing that taste was a matter of morality rather than of fashion. He was not alone; William Morris, despite or because of a sincere belief in medieval values, and Philip Webb saw much in the Gothic Revival that was vulgar and overblown.

Fig. 5 G E Street, Law Courts, London http://www.victorianweb.org, http://www. [accessed May 7 2012]

Fig. 6 Alfred Waterhouse, Manchester Town Hall http://www.oldukphotos.com, [accessed May 7 2012]

\textsuperscript{107} Brooks, \textit{John Ruskin and Victorian Architecture}, 156-65
Ruskin’s concept of visual content provides a theoretical basis for viewing architecture. Massiveness was a quality he praised ‘Mass of everything, of bulk, of light or darkness of colour….solid stone, broad sunshine, starless shade’ attaching much importance to shadow moving across a building. He believed ‘a building should convey a sense of the quantity and weight of its materials. Its wall should be thick and its doors and windows recessed so that this thickness will be dramatised’. In summoning the sublime he was equating the mass of a building with that of a mountain; what mattered was not size itself but the psychological perception of size. English building’s frequent want of shadow he believed resulted from an absence of deep recesses and bold projections. Ruskin preferred bold surface decoration, geometrical plate tracery, to linear Gothic and deplored a plain wall.

His belief that without decoration a building was not architecture, has attracted much debate, but at the time most Victorian architects saw ornament as essential. He praised use of precious materials, urged the need to concentrate ornament rather than to spread it thinly throughout a structure and demanded readability. That is to say an ornament must be capable of being seen and understood, by viewers, from various viewpoints, from a distance and close up. He favoured use of natural coloured stone in the framing of windows, arches and in arcades but also in providing horizontal bands to strengthen or decorate brick surfaces. Whereas Cole, Owen Jones, and those associated with the South Kensington Museum, looked to art history in arguing that colour should define and express structure Ruskin looked to nature saying ‘never paint a column in vertical lines, but cross it’.

Ruskin progressively moved away in later life from a preoccupation with style and visual content to a concern with the nature of work. He sought to answer eternal questions that had been addressed, from the ancient Greek times to William Morris, including the degree of freedom to be given carvers, while still arguing that architects set strict limits. He believed that ‘free’ sculptors with their minor imperfections displayed the quality of life and subtle variation as compared with the monotony of machine-made works. His praise of naturalism in depicting natural forms was strongly

---

108 Brooks, *John Ruskin and Victorian Architecture*, 75-96
opposed by the South Kensington group, who argued that ornament should be conventionalised; Ruskin did though concede that on occasions some abstraction might be needed but not to the extent of extinguishing grace and vitality. Street, like Ruskin, admired and applauded naturalism but stopped short of full endorsement, deploring excessive naturalism. He favoured the conventionalised idealisation of nature rather than conventionalising of nature itself\textsuperscript{109}.

We now look at Indian architectural styles. While Victorian Gothic was hugely important in Bombay, Indian styles in hybrid forms were widely used in colonial buildings elsewhere in India and became more influential in Bombay after CST in the eighteen-nineties. Centuries of conflict and evolution had led to a synthesis of styles as conquerors and conquered appropriate features of the other in ensuring alternating domination and acceptance. Syncretism had long existed in religion and philosophy and unsurprisingly it found architectural form and expression first in religious and later in secular buildings.

\textbf{3.2 Indian Styles in Colonial Buildings}

\textit{Indian Architecture}

What is or was Indian architecture? We define it, as that undertaken in the subcontinent before British colonial rule and by Indians during British rule, either in areas not then colonised or independently of colonial influences. Architecture undertaken by colonial architects in Indian styles is discussed later in this chapter. Indian architecture is usually classified according to the religious group undertaking it: Buddhist, Hindu, Jain and Islamic, although we use these terms they are not mutually exclusive or discrete, as a mingling of styles occurred as a result of conquest and other factors. British knowledge of Indian styles arose through research and travel. Ferguson had greatly increased awareness of the different Indian styles through his detailed research, classification of monuments and publications, particularly in his \textit{History of Indian and Eastern Architecture}. Photographs were widely available, after 1850, and locally based architects were increasingly able to travel, as the railway

\textsuperscript{109} Brooks, \textit{John Ruskin and Victorian Architecture}, 75-96
system grew across the sub-continent from the eighteen fifties onwards. Chronologically the various styles occurred in the order described but apart from a mingling of styles there were regional influences determined by local religious affiliations and politics, so that there was no uniform style for the subcontinent at any one time, any more than there was in Europe.

Buddhist art was naturalistic, narrative, charged with symbolism and spatial; it comprised cave complexes, with galleries of rock cut sculpture and temples. Temple complexes, greatly admired by Ferguson, included three principal architectural elements carefully arranged in communal space with a strong feeling of symmetry. These were the stupa, vihara and caitya; a stupa, a domelike structure on a shallow drum only, was generally placed at or near the centre of a complex. It was usually heavily sculptured, that at Sanchi had four sandstone gateways and a narrative frieze around the drum and was charged with cosmological symbolism; narrative sculpture and painting, janatas, consisted of stories of the life of the Buddha in animal and human forms and paradigms of a pilgrim's journey to an enlightenment. Monasticism was a critical ingredient, shared with Christianity, but structures and layout were different. A vihara of one or two storeys provided simple cells for monks and priests arranged around a central meeting hall. The caitya was used for congregational worship, with a replica stupa at the end of the prayer hall, and was richly decorated. Unsurprisingly, Buddhism and its architecture found favour with Ferguson and western scholars; the naturalistic beauty was much admired and its association with Hellenistic influence, arising in the foot steps of Alexander, uncovered at Gandhara, in present day Pakistan, in 1830 along with structures that employed classical features like the orders.

Western scholars and officials found by contrast Hinduism and its architecture strange and sometimes repugnant. The multiplicity of Hindu gods, a rigid caste system and practices considered barbaric offended and contradicted western liberal ideas. Syncretism in Hindu art was both religious and artistic; Brahminism progressively assimilated other gods and practices including features of Buddhist worship into a broad and far from uniform pantheon. A central image in a temple, that might be

---

110 Mitter, Indian Art, 13-32
either abstract or ugly, revealing the otherness of a divinity, was strange to the western mind. The ideology of progress was foreign to the Hindu, together with an indifference to history, time and chronology\textsuperscript{111}. We see this in ornament, so beloved of the Hindu, be it floral, foliate or geometric and in their approach to narrative art, giving emphasis to the story-teller, protagonists and the way events unfold in time and space, as in Fig. 7. The sequential mode, with framing, is readily understood but other modes are more ambiguous, for example, continuous narrative, with an absence of framing, where one scene runs into another, with an absence of temporal sequence and mono-scenic narratives, where a dominant scene evokes a whole story. Narrative art is to be found throughout temple complexes decorating friezes, columns, pillars and other facets\textsuperscript{112}.

The temple as a place of worship was of prime importance in Hindu architecture, and literally a dwelling place of deities it organised space differently from Buddhist structures, to reflect personal rather than communal worship and a strict ritualism; they comprised a series of structures largely symmetrical and square in overall layout. Ferguson distinguished between northern and southern Hindu architecture judging the latter inferior, the work of non-Aryan Dravidians, a people of lower intellect. While Dravidian temples gave the greatest emphasis to large gateway towers \textit{gopuras}, as in Fig. 8, leading to a sanctuary and pillared hall in the north a tall central tower, a \textit{shikra} usually curvilinear in form, was built above the sanctuary. Ferguson had universal rules of architecture, which were offended by an architectural complex that placed the tallest buildings on its extremities rather than in the centre. He, and Lord Napier, Governor of Madras and an enthusiast for Indian styles, considered south Indian temples a jumble of elements at best judged picturesque\textsuperscript{113}. However, subsequent reappraisal in the early twentieth century judged the Hindu temple differently, as representing the cosmos with a symbolic significance beyond place for sheltering images of a deity and constructions devised by Ferguson and others\textsuperscript{114}.

\textsuperscript{111}Mitter, \textit{Indian Art}, 33-37
\textsuperscript{113}Mitter, \textit{Indian Art}, 57-63
\textsuperscript{114}Metcalfe, \textit{An Imperial Vision}, 51, outlining work of E B Havell and A K Coomaraswamy
The first Islamic architecture in India, described as Indo-Afghan, had absorbed Greek philosophy, Roman architecture and the Persian concept of empire. Buildings included citadels, symbols of power, mosques with their minarets also expressing
dominance and tombs; important motifs were the arch, vault and dome. The dome, with origins stretching back to the Parthenon, was not an Islamic invention but they took it as their own, blending, adapting and perfecting. Decoration was generally abstract and geometric, figurative art being considered contrary to the Koran. Examples included perforated screens or jalis, both admired for their beauty and practicality, allowing ventilation into buildings. Islamic art and architecture reached its zenith under the Moghuls; conquerors like the British after them, they used architecture to make a political statement and display imperial power using rich polychrome materials. Their achievements include urban planning and a synthesis of styles used politically to underline power but also more practically to draw on the skills of Indian workmen. Europeans found Islamic architecture and theology more appealing than that of Hindus, with its monotheism and a sharing of a pre-Christian past. Many Indians readily embraced a creed that preached egalitarianism and an escape from a caste-ridden society.

British Attitudes to Indian Art and Architecture

Western scholars studied Indian religions and ancient monuments, classifying what they saw and found; inevitably qualitative judgements were conditioned by European views, attitudes and prejudices. Ferguson and Alexander Cunningham admired Indian architecture for its innate qualities, and the depth of their scholarship still informs discussion today, but they and other scholars subscribed to a theory of decline and linked architectural form with ethnicity in ways now thought culturally unacceptable. They believed that early Buddhist monuments, dating from second century, BC, were a high point from which decline followed accompanied by a loss of moral compass, as Hinduism progressively eclipsed Buddhism. A brief recovery occurred, they believed, in the Gandharan period, in which Greek influences had been introduced, many scholars using classical art as a benchmark of quality to measure others against.

Ferguson set the tone for a debate on architectural form appropriate to India that was to continue up to the construction of CST and beyond. T Roger Smith, Professor of Architecture at University College, London speaking at the India Committee of the

115 Mitter, Indian Art, 85-168
Society of Arts in 1873 in a long speech, with Ferguson in the chair, set out arguments for and against use of native styles in colonial buildings. He examined how empires had brought their own styles with them, like the Romans to northern Europe, sometimes modifying them to meet local conditions, and practical issues like climate. While admiring picturesque and other qualities of Indian buildings, he believed an empire should wear its own clothes. Two of the leading architects in India at the time, R Fellowes Chisholm and William Emerson largely opposed the views of Smith and argued for both Indian and hybrid styles on aesthetic and practical grounds. The well-documented views of these and other protagonists in this lively debate inform our understanding of relationships between the various European and Indian styles in the creation of a colonial aesthetic.

There was no uniform official view on how to appropriate Indian architecture for colonial buildings, although attempts were made to fashion one. Some saw the merits of using indigenous styles as turning principally on climate, the skills and attributes of local workmen and availability of materials and cost. They were aware of the high rainfall concentrated in a few months, high temperatures with little cloud cover outside the wet season and the need for ventilation, making use of a western breeze, coming directly of the sea, in Bombay. Verandas, double corridors and central courtyards restricted direct sunlight without reducing ventilation. Thick walls were seen as a further means of restricting heat transfer and overcoming tendencies of local workmen to skimp, using rough stone and debris in wall cavities unless well supervised. Some architects like Emerson criticised their oriental lethargy, while others praised their qualities for dedicated application; however most agreed that Indian workmen were well practised in building in Indian styles and local materials and this was an important factor in choice of styles.

Muslim styles found much favour with Europeans for their dignity, elegance and picturesque qualities. They admired the arch and dome, inherited from ancient Rome.

---

117 Emerson, ‘A Description of some buildings recently erected in India’, 149-60
and perfected by Christians, before being taken up by the Moghuls, together with the graceful decoration, beautiful materials and proportion. Pathan architecture, practised in Delhi, found much favour because it reflected martial qualities, in contrast to Hindu art that spoke of degeneracy and domination by others. Fusion or assimilation progressively informed discussion of indigenous styles and become a central aspect of colonial architecture in India. This might take the form of a predominantly Indic style or a European one with an oriental feeling, a description given by some art historians to CST. The dome acquired a symbolic importance; little used in Britain its beauty in India won universal appeal. The domed tomb of Sultan Mohamed at Bijapur constructed in the seventeenth century enclosed the largest area of any dome and was to inspire many colonial architects.

The two architects most associated with native styles in the eighteen sixties and seventies were Chisholm and Emerson, who had been a pupil of Burges. Chisholm believed, as Scott and Ruskin had, in developing a new nineteenth century Gothic, that architects should not copy but innovate drawing on the best features of all indigenous styles. He studied ancient buildings and then sought ‘to master that spirit which produced such works, select, reject and modify the forms to suit the altered conditions’. Did innovation mean selecting and adapting indigenous styles, mixing or a plundering of motifs? A mingling of styles was not new and had occurred over the centuries as one warring group overcame another or one religion displaced another. The Moghuls had employed Hindu workmen and increasingly absorbed Hindu motifs into their monuments, while Hindu rulers like the Rajputs, when they owed allegiance to the Moghuls, had absorbed their features into their palaces. Chisholm and Emerson were to work predominantly in native styles with some mingling, judging native palaces, religious buildings and colleges most suitable for Indian or hybrid styles. Assimilation and syncretism a hallmark of their work was readily understood and admired by Indians and Europeans; that Bombay stood apart for most of the century was a political rather than aesthetic choice.

---

118 Chisholm, ‘New College for the Gaekwar of Baroda’, 141-46
119 Emerson, ‘A Description of some buildings recently erected in India’, 149-60
120 Chisholm, ‘A New College for the Gaekwar of Baroda’, 141
121 Mitter, Indian Art, 143-56
Sir George Birdwood was not alone in praising the quality of Indian design while deploiring Indian sculpture on both aesthetic and moral grounds. A dichotomy between fine and industrial arts that had long existed in Britain and Western Europe privileged the first over the latter in an aesthetic and social hierarchy. Fine arts were appreciated for their adherence to the Renaissance principles of naturalism and illusionism, whereas these qualities were not sought in industrial art or design. Fine art was also considered a suitable pass-time for gentlemen while the latter was the province of artisans. These distinctions were at the root of contradictions in art education policy in Britain and India throughout the latter half of the nineteenth-century. In Britain William Morris and in India E B Havell were to argue for a unified approach to aesthetic appreciation and art education.

Many scholars in Britain experienced Indian design for the first time through exhibits at exhibitions, initially at the Great Exhibition, 1851 and were impressed by its originality and colouring. In contrast British design was held to have declined markedly with the industrialisation of art and manufacture. Leading protagonists of Indian design included Henry Cole, Owen Jones, author of the influential *Grammar of Ornament*, in which he analysed the attributes that gave Indian design its unique quality and the designer William Morris. Sir Henry Cole, a leading figure in the School of Industrial Design at South Kensington and responsible for improving industrial art in Britain, admired Indian design for its flatness, creativity and abstract qualities.

The cult of the craftsman in India was an enduring and contradictory theme in debates on aesthetic and moral aspects of indigenous art and a central element in *swadeshi* art and nationalistic discourse. Indian design was seen as a product of an idealised and unchanging Indian village that was original because it was primitive and uncorrupted. This colonial stereotyping was essentially Orientalist, paternalistic and reinforced the view of a backward, ‘other’ people; objects came to symbolise an entire

---

122. Saloni, *India by Design: Colonial History and Cultural Display*, 31-33
126. Mitter, *Art and Nationalism in Colonial India*, 33
127. *swadeshi* art was nationalist art
social system. Such representation beyond an assumed superiority ignored a decline of craftsmanship that was occurring in India as a result of colonial policies of encouraging western art and taste, declining patronage from princes and rulers who increasingly sought western rather than traditional decoration and the growth of industrial manufacture, as in Britain. Art schools in India were set up with the contradictory task of maintaining Indian craftsmanship and ‘improving’ it.

The establishment of the JJ School of Art in Bombay, 1856 arose indirectly from the interest shown in Indian wares at the Great Exhibition and a desire to ‘improve’ the industrial arts in India and was accompanied by the establishment of art schools in other major cities in India; art schools in Britain had been established a little earlier. Contradictions arose from the outset over the syllabus and the class of students to be encouraged. The syllabus was closely based on that at South Kensington and an insistence on scientific drawing, naturalism and perspective ran counter to Indian decorative traditions. Students in Bombay came largely from upper and middle class families, some with a preference for painting and the fine arts, rather than the artisans who the authorities had sought to attract.

In 1865 John Griffiths and Lockwood Kipling arrived in Bombay from South Kensington to teach painting and sculpture respectively. Both men greatly appreciated Indian art in the round, Griffiths encouraging the copying of great Indian monuments like Ajanta. Interestingly the Bombay School report, 1869-70 urged the Principal to take Ferguson’s advice on exploring local antiquities with students, ‘so they could draw on a more congenial store of knowledge and purer natural taste, than as now they do by ornaments for Gothic architecture of new Bombay’. However, British disparagement of Indian sculpture was deep rooted; Birdwood and others deplored form that was devoid of Classical precepts and rooted in Hindu mysticism and mythology. Griffiths and Kipling, despite these contradictions in policy and

129 Saloni, India by Design: Colonial History and Cultural Display, 5-6
130 Mitter, Art and Nationalism in Colonial India, 29-54
131 Mitter, Art and Nationalism in Colonial India, 38-40, paradoxically Jamshedji Jijibhai preferred western art himself and did not share the preference of Cole and others for traditional Indian design
132 Mitter, Art and Nationalism in Colonial India, 34-36
133 Mitter, Art and Nationalism in Colonial India, 38
134 Mitter, Art and Nationalism in Colonial India, 50-51
135 Birdwood, George, The Industrial Arts of India (London, 1880)
136 Mitter, Art and Nationalism in Colonial India, 51-52 & 103-4
practice, continued to admire Indian art and identify with their students, as evidenced by the remarkable achievements of students in the decoration of CST and other buildings.

3.3 The Architecture of Bombay

City Development

Sir Bartle Frere, Fig.9, in seeking to modernise and transform the city, as governor, 1862-67, through removal of the fort and ramparts was freeing space for a spectacular ensemble of public buildings\textsuperscript{137}. A Ramparts Removal Committee, charged with providing guidelines for development and construction, included James Trubshawe, architectural secretary to the government, and T R Smith, who had argued for European styles, was also responsible for defining appropriate styles of architecture\textsuperscript{138}. Financing was achieved through imperial grants, city taxes and profits from reclamation schemes. The Afghan Memorial Church, 1847-58 had been the first Gothic building in the city and the start of George Gilbert Scott’s influence. Scott’s design was judged too expensive and elaborate and the final design was by Conybeare in an Early English Gothic style. This involvement of British architects was to continue with Scott’s designs for the university and Burges’ for the JJ School of Art, 1866; the last says the art historian Joseph Crook was ‘greatly influential on architectural designs in Victorian Bombay’. The style was 13\textsuperscript{th} century French Gothic but with a dome surmounting a central tower and Mughul jalis to increase ventilation\textsuperscript{139}.

\textsuperscript{137} London, *Bombay Gothic*, 1-19
\textsuperscript{138} Smith was a lecturer at RIBA and professor of architecture at University College, London. He was in Bombay, 1864-5 and designed the European General Hospital with Mathew Digby Wyatt and Owen Jones. He sought to popularise Victorian Gothic with local architects
\textsuperscript{139} London, *Bombay Gothic*, 16-24
Fig. 9 Sir Bartle Frere http://www.friends.stjames.btinternet.com, [accessed May 7 2012]

The principal public buildings were arranged along the elliptical axis of the old fort walls facing generally west towards the maidans, still largely grassed and undeveloped, and the sea, allowing ventilation from sea breezes. In this area was the General Post Office and High Court along with commercial buildings and banks. Another important group of buildings lay further north with CST the closest to the old walls; these included the JJ School of Art, Elphinstone High School, Crawford Market and the Bombay Municipal Corporation (BMC) opposite CST. Most of these buildings were on or close to DN Road, which after following the old walls as far as CST turned north to the Crawford Market. Across the maidan were the BBCI offices, designed by Stevens, close to Churchgate station. The broad city layout is shown in Fig.10

140 London, Bombay Gothic, 25-30
The City’s Gothic Buildings

Bombay’s principal Gothic buildings were constructed from 1866 to a little beyond 1900; this mirrored the period in Britain when many High Victorian public buildings were built. Bombay Gothic was a far from uniform style, combining Victorian and continental European features and motifs, designed to accommodate the vagaries of climate, draw on local skills, availability of local materials and reflect the aspirations and complexities of a colonial mercantile city. In India public architects were employed by PWD\(^{141}\), an organisation criticised at the time for its lack of creativity\(^{142}\).

\(^{141}\) In India most public buildings were designed by PWD architects and engineers rather than by private or municipal architects and engineers as in Britain

\(^{142}\) Evenson, *The Indian Metropolis*, 48, 87-89
but Bombay’s buildings were as successful individually and collectively as those in Liverpool or Manchester.

The Secretariat, 1867-74, the first significant Gothic building, faced west like CST, with arcades of polychromatic stonework stretching its full-length and open to the sea breezes. On four floors the long building, designed by General Henry St Clair Wilkins, had a central tower some 170 feet in height rising above a large cantilevered staircase. The university buildings, 1868-80, Convocation Hall, Figs. 12, Library, Fig. 13, and Rajabai Tower, Fig. 11, face Back Bay and are on the axis of the old walls, a dominant situation. They are described as the most scholarly and most artistically successful example of Gothic Revival architecture in Bombay. Financed by prominent Parsi and Jain philanthropists initial designs were provided by Scott, with symbolic references to the trans-formative roles of universities and to ancient examples in Europe. They are partly in a thirteenth century French style with Venetian arcading, of great delicacy, on the upper floor of Library is closely modelled on the Ducal Palace, Venice. Like CST there are references to India, with sculptures of nature, exotic birds and animals along with sculptures of the ‘castes’ of western India.

Fig. 11 Bombay University with Rajabai Tower [http://www.skycrapercity.com](http://www.skycrapercity.com), [accessed May 21 2012]

---

144 Butler, ‘George Gilbert Scott and the University of Bombay’, 10-13
The Rajabai tower, 280 feet in height, adjoins the two-storey library and has pointed arch openings in its base, providing a porte-cochere for the library. It is of seven storeys and is crowned by a spire above a clock; the design said to be based on an unbuilt design for a campanile in Florence by Giotto with its slender appearance is more French Gothic than Italian with tall narrow two-light windows. Below the spire is an
octagonal lantern with unusually tall windows; the overall composition has features in common with the great dome of CST. The library’s delicate appearance is increased by ‘the juxtaposition and interplay of surfaces’. The base of the tower is in rough brilliantly coloured Kurla while the library façade is smoothly cut Porbandar stone. This façade comprises arcades on two floors providing deep verandas behind a screen and balustrade; Venetian in appearance it has been compared with the arcades in the 14-15th century Palazzo Ducale in Venice. At either end are spiral staircases topped by conical roofs. The reading room has a 32 feet high ceiling and is lit by large stone windows with bar tracery in an Early English style.

The Convocation Hall is rectangular with an apse at one end and porte-cochere at the other, and designed to seat a thousand people; it uses Gothic forms and similar materials to the tower and library. There are pinnacles above slender paired openings at its four corners and a rose window is placed above the porte-cochere immediately above a blind arcade giving an ecclesiastical appearance. These buildings are likely to have influenced Stevens significantly, introducing him to Scott’s work some years before he visited England and displaying form and decorative sculpture in French and Italian styles. Capitals, canopies, decorative sculpture and the friezes will have impressed along with constructional polychromy, screens and balustrades in the arcades. They are also important for the sculptural work undertaken by Indians and generosity of the Indian benefactors imbued with a desire to assist in transforming the city and improving opportunities for Indians.

Many of the features and motifs that we find in CST were to be found in the major public buildings that preceded it. Most were symmetrical in layout and large, with gabled facades, resembling a pediment, central towers or cupolas placed above a central staircase, usually cantilevered from the walls. Elevated figurative sculptures adorned the principal elevations, for example Justice and Mercy at the High Court. Arcades of various designs, well detailed and mostly Italian, were provided to increase ventilation, with friezes, string courses and balustrades emphasising horizontality; variation was provided by changing arch design, materials and the line of buildings through recession and projection. Free use of polychrome materials in arches and stone facings was more Pisan and Florentine than Venetian in appearance. Delicate tracery was provided in abundance, for example, above the High Court
library balcony and in the university buildings. Statues abounded, of colonial figures, benefactors with many from art and literature; Homer and Shakespeare adorn capitals in the university library, free standing statues of prominent figures, elaborate gargoyles, with free use of crocketing and corbelled heads represent the tribes of India\textsuperscript{146}.

An important feature of decoration generally was the extensive use made of local sculptors. Art education began in 1857 at the Elphinsone Institution, until construction of the JJ School, for which Burges had submitted his brilliant Indo-Saracenic design. Sir Jamsetjee Jeejeebhoy, renowned for his public benefaction, had given R100,00 to found a school, that would restore, reform and maintain the ancient crafts of India, teaching drawing, painting, design, ornamental pottery, metal and wood carving. The organising committee for the school included Conybeare and the sculptor John Lockwood Kipling and was drawn from the organisers of the impressive Indian Pavilion at the London 1851 exhibition. Indian craftsmen worked on the sculpture of the Secretariat and university buildings under Ramchander Muccond, a brilliant sculptor who carved the capitals at Elphinstone College, and Kipling, who undertook the sculptural relief at the Crawford Market and plaques depicting Indian river goddesses and native birds for a fountain in the market courtyard\textsuperscript{147}.

\textbf{3.4 Chhatrapati Shivaji Terminus (CST)}

\textit{Architect}

George Frederick Stevens was born on 11\textsuperscript{th} May 1847 in Bath and in 1862 was articled to Charles Davis, Superintendent of Works to the Corporation of Bath, for five years. In 1867 he passed a competitive examination at the India Office and was appointed Assistant Engineer in the Public Works Department at Bombay under General Fuller, the Government Architect. He received a number of promotions and became Government Examiner to the JJ School of Art, of which John Griffiths was principal, in 1876; he designed buildings for the Bombay Exhibition, with Griffiths with whom he would continue to collaborate, in 1869 and 1886. He received a

\textsuperscript{146} London, \textit{Bombay Gothic}, 35-58
\textsuperscript{147} London, \textit{Bombay Gothic}, 35-58
number of Gold and Silver medals from the Sassoon Mechanics’ Institute for his exhibition and other work\textsuperscript{148}.

Stevens services were requested by the GIPR in 1877 as engineer for construction and design of a railway station at Bori Bunder, subsequently to become VT and then CST but he fell ill in 1878 and spent most of the year in Britain, being formally appointed only on 1 October 1879. The design was exhibited at the Royal Academy in 1881 along with Axel Haig’s brilliant watercolour\textsuperscript{149}. On completion he was made a Fellow of Bombay University as a mark of appreciation. In 1879 during construction he had resigned from the PWD in order to work directly for the GIPR and subsequently set up his own practice in 1888. In 1884 he had been made a Government member of the Municipal Corporation and in 1887 a member of the Commission for the further extension of Bombay. He was awarded the Order of Companion of the Indian Empire (CIE). He designed, apart from CST, the Royal Alfred Sailors’ Home, BBCI railway offices at Church Gate, the BMC building, Fig. 14, opposite CST and Chartered Bank offices in Bombay and buildings in other Indian cities. These buildings are briefly described and discussed in the description of CST. Stevens died in 1900 and was buried at Sewri cemetery\textsuperscript{150}.

Fig. 14 Bombay Municipal Corporation (BMC) building

\begin{center}
http://www.skycrapercity.com, [accessed May 7 2012]
\end{center}

\textsuperscript{148} Obituaries, \textit{RIBA Journal}, No 7 (1900), \textit{Times of India}, 10 May 1900 and \textit{Building News}, 700

\textsuperscript{149} London, \textit{Bombay Gothic}, 85-87, Haig had worked as a draughtsman for Burges

\textsuperscript{150} Obituaries, \textit{RIBA Journal, Times of India}, and \textit{Building News}
Great Indian Peninsular Railway

The GIPR was one of India’s foremost railways, largely of broad gauge, joining up the three great presidency cities of Calcutta, Madras and Bombay, with the latter at its apex, with CST, its company head office and principal workshops. Almost forty years before the completion of CST, Lord Dalhousie, Governor-General 1848-56, had issued his famous minute that was the catalyst that launched India’s huge and transformative railway system. He was to say ‘Great tracts of territory are teeming with produce, which we cannot transport…’¹⁵¹ but also he had emphasised how much public order would be improved if troops could be readily and hastily moved across the country, prescient in view of the impending Bengal Rebellion, better known as the Indian Mutiny, 1857.

The GIPR had been established in England in 1845, with Robert Stephenson as consulting engineer; the BBCI had soon followed. The Bombay Committee of the GIPR included prominent merchants, amongst them were leading Parsis including Jamsheedji Jijibhai and the influential Hindu leader, Jagannath Shankarshet; their portrait sculptures appear in roundels on CST¹⁵². The first trains ran as far as Thana in November 1851, with the official opening on 16 April 1853. Two days later Sir Jamsetjee Jeejeebhoy hired a special train for his family, emphasising the

¹⁵¹ Mehrotra and Dwivedi, A City Icon, 34
¹⁵² Dossall, Imperial Designs and Indian Realities, 175-86
commitment of Indians to the enterprise. Almost ten years later, in 1862, the opening of routes over the Ghats, see Fig. 16, was completed, providing access to the Deccan plateau. By 1879 mileage had reached 1,287 and overall capital expenditure for the year was £23.3m (R22,81,2731)\textsuperscript{153}. There were four passenger classes in 1882; first and second accounted for only 11\% of passenger revenue\textsuperscript{154} falling to 10\% in 1894 while 3\textsuperscript{rd} class was the backbone of the system\textsuperscript{155}. Fares per mile were: first class, 18 pies second, 9 pies and fourth 2.5 pies\textsuperscript{156}. Bell says GOI sought high fares to maximise revenue and so reduce payments under the guarantee arrangement. The average speed of passenger trains was only 23 mph as late as 1917. The GIPR was one of the last major railways to pass into full state ownership on 1\textsuperscript{st} July 1900 but the old company continued to work the line for a further 25 years\textsuperscript{157}.

Fig. 16 GIPR, Bhor Ghat [http://www.indianetzone.com], [accessed May 7 2012]

\textsuperscript{154} British Library, London, GIPR records, minute books, 1878-80, L/AG/46/12/34
\textsuperscript{155} Horace Bell, Railway Policy in India (London: Rivington Percival, 1895), 190-204
\textsuperscript{156} Bell, Railway Policy in India, 190-204
\textsuperscript{157} Sharma, S N, History of the Great Indian Peninsular Railway, 1870-1900 (Bombay: Central Railway, 1990), 350-51
Location, Form and Massing

The location of CST was determined by the availability of a large site in a prominent central location. Railways were not barred from the city centre, as in London and other cities. The first railway had used a modest station at Bori Bunder, close to the fort, and initially ran as far as the foot of the Ghats at Thana. The Mody Bay reclamation in 1857 had provided some 250 acres of reclaimed land, of which 100 acres had been passed to the GIPR. This enabled relocation of access tracks, subsequent port development and much enlarged the area around Bori Bunder. Exchanges of land were undertaken between GIPR, which gave up land at Wadi Bunder where it had previously a goods station, the municipality and Bombay Government. CST enjoyed a dominant situation at the junction of Hornby and Cruikshank Roads, opposite City Hall and was directly connected to Apollo Bunder, site of the present Gate of India, a triumphal arch designed by Lutyens and completed in 1926, so providing a symbolic and ceremonial route for an arriving visitor or dignitary. Visitors arriving in Bombay in the nineteenth century arrived at Apollo Bunder on a tender, ocean liners being moored in the bay.

The CST head building is a dense, elaborate and much ornamented structure, its footprint being 370 by 230 feet. Pugin had argued that vastness of dimensions was necessary to produce a grand and imposing effect, saying that ‘One of the great arts of architecture is to render a building more vast and lofty in appearance than it is in reality’. Ruskin had also praised massiveness, ‘Mass of everything, of bulk, of light or darkness of colour…..solid stone, broad sunshine, starless shade’ attaching much importance to shadow moving across a building. He believed ‘a building should convey a sense of the quantity and weight of its materials. Its wall should be thick and its doors and windows recessed so that this thickness will be dramatised’. Here he was summoning the sublime and equating the mass of a building with that of a mountain; what mattered was not size itself but the psychological perception of size.

---

158 Mehrotra and Dwivedi, City Icon, 112-22
159 Officially called Wellington Pier
160 Murray, Handbook for Travellers
161 Pugin, True Principles, 63
162 Brooks, John Ruskin and Victorian Architecture, 75-96
CST was three storeys high throughout, exceeded only by towers, gables, spires and domes; other Gothic buildings were taller and significantly longer. The High Court, 1871-8 had no less than six floors, was 562 feet long with an overall height of 174 feet; it had a solid square gabled central tower.\textsuperscript{163} CST is symmetrical, with identical wings around a small central garden in contrast to St Pancras Station and the High Court in London, which are strongly asymmetric. St Pancras sweeps across and around an elevated site resembling a medieval Flemish cloth hall. CST, and its neighbour the BMC building, are more closely integrated into the streetscape than St Pancras or many other Bombay buildings, placing increased emphasis on the need for open arcades, rather than glazed windows on outer facades, to achieve adequate ventilation.

Indians, apart from those accustomed to western architecture, may have found CST intimidating, impressive, perhaps, but certainly strange, inhabiting a world apart. Buddhist and Hindu buildings were generally of a religious nature, relatively small and dispersed, sometimes symbolically arranged. Layout was intricate, based on established spatial relationships and buildings of varying heights occupied an open site. Hindu gate towers, \textit{gopuras} were tall certainly but relatively slender, and being placed on the edges of temple compounds, did not provide the concentrated massing of the city’s new buildings, anymore than the curvilinear towers placed above central sanctuaries in northern India did. Muslim architecture, more closely resembling European architecture, placed greater emphasis on massing but applications were limited because few commercial buildings were undertaken in that style, until the arrival of Europeans who adapted and transformed it. Citadels, though, were tall for practical reasons and demanded respect; the \textit{caravanserai}, although found mostly in Muslim lands outside India, was large but generally low in profile.

\textsuperscript{163} London, \textit{Bombay Gothic}, 52-54
Exterior

The main office and station block comprised three sides of a rectangle; on the fourth was a courtyard with small garden, behind which was the main façade. Platforms and facilities for third and fourth-class passengers were situated alongside Hornby Road. The principal facades faced west and south; the north side faced the platforms and the east side abutted other railway building and was and is largely unseen by passengers or passers by. On the west two wings ran either side of the courtyard garden with similar facades facing Hornby Road, each resembling a cathedral transept façade with gable, elevated rose window, five portals in the form of a port-cochere, flanked by low towers with spires and spire-lets. The central and principal façade was also gabled, resembling a classical pediment, surmounted by a large octagonal dome; on the south side there was a long façade alongside Cruikshank Road. While spires and spire-lets soared skyward, emphasising the vertical, the long verandas that stretched right round the building, from the northwest wing to south façade, provided a strong horizontal focus, as the eyes move across and around the building. Was this a richly textured Baronial Castle from fairyland or a sublime yet animated tapestry replete in its mastery?

Commentary based on photographs in A City Icon, Bombay Gothic, other publications and sources
There are and were six principal designs of arcade, arranged on three levels, separating the various towers and buttresses and constituting a critical element in façade composition and design. There are common features to all, arches, capitals supported by shafts, friezes, rich decoration of spandrels and tympanums and balustrades at the foot of each arcade and at the base of the roof gable. The upper storey arcades use a relatively narrow round arch with capitals supported by a single shaft above a balustrade; tympanums have patterned decoration. On the middle or second floor a two-centred pointed arch with ogee-shaped hood moulds, and of significantly greater dimensions, is provided similarly supported by a capital and single shaft; these arches are generally about twice the width of the round arches above. The lower floor uses arches of broadly similar appearance and size but without the ogee framing. The arrangement of arcades on the two wing facades and the central section of the main south façade comprise two further designs.\textsuperscript{165}

Delicate designs of arcade with bar tracery are used for the two upper floors of the central projection; the upper is a narrower version of that used elsewhere on the upper

\textsuperscript{165} Commentary based on photographs in A City Icon, Bombay Gothic, other publications and sources
floor but with polychrome arch decoration. The first floor of the central arcade is in plain stone with delicate bar tracery, so admired by Ruskin, reticulated with quatrefoil openings and is the most strictly Venetian motif to be found throughout the structure with similarities to the Ducal, Fig. 19, and other 14th century Venetian palaces and to the university library. The relatively narrow side recesses have a single arched opening on either side like one bay of an arcade. Side openings are cusped on the upper floor and two-centred arches with polychrome stone surrounds are used elsewhere. The central projecting façade is slightly narrower than the wing facades, with outer turrets and finials rather than towers. It is similarly gabled but with a clock, more than 10 feet in diameter, rather than a rose window; on the upper floor two small gables are placed either side of a central sculpture with canopy each above two lights. On the central floor three round-headed arched windows each with two lights provide sculptural decoration in broadly semi-circular tympanums. The porte-cochere does not project out further with gabled front, as in the wings, but provides three restrained openings. Decorative roundels occupy the spandrels on ground and first floors and that of arcades in the web that reaches to the round corner towers 166.

![Image](http://www.gothereguide.com)

Fig. 19 Venice, Ducal Palace [http://www.gothereguide.com](http://www.gothereguide.com), [accessed May 7 2012]

CST’s facades are sufficiently varied in arcade design, fenestration and decoration to avoid monotony, with recessing and projection used to break up large surfaces, the more necessary in a symmetrical building. Arcade design is Italian, with free use of polychrome materials, but not particularly Venetian, with little of the dense tracery to be found at the Ducal and other palaces. Ruskin admired variation in arcades as much

---

166 Commentary based on photographs in *A City Icon, Bombay Gothic*, other publications and sources
as in ornament, his analyses revealing that dimensions of arcades in the Ducal Palace, and in successful church facades varied sufficiently in dimensions, for the eye to detect subtle differences between and within arcades. I am not aware that comparable analysis has been carried out at CST but its appearance suggests that the variation, Ruskin so admired, is absent but compensated by imaginative design and motif variation of a complex but uniform nature.

The dome is octagonal with eight prominent dovetailed ribs and projecting crockets, of 40 feet span, and strongly buttressed. The interior is entirely open exposing the ribs supported on corbels and springing from a beautifully foliated cornice. The drum is pierced by eight stained glass bi-partite windows, topped by a sex-partite rose; overall the composition is Gothic and secular. It has been described as giving CST the appearance of a capitol building in a mercantile city. Interestingly the design was significantly altered after Axel Haig’s watercolour, Figure 18, said to date from the last year of construction; the gables above the large bipartite windows were removed and the smaller lower windows integrated more closely with the upper, by a sharing of shafts and mouldings, but offset by the depth of mouldings and use of bar tracery. The dome does not have the oriental feel of Steven’s later domes at the BMC building and Churchgate. It is relatively small when compared with the ribbed dome at Florence Cathedral, of 130 feet diameter and 185 feet in height, and St Paul’s in London. Possible sources are the Rajabai tower at the university, with narrower crocketed octagonal lantern with steep gables similar to those in Haig’s watercolour, and Tom Tower at Christ Church, Oxford, designed by Christopher Wren, 1681-2, broadly of similar dimensions but at a lower elevation, placed above a gateway and flanked by a two-storey building; Tom Tower is square with a relatively deep octagonal lantern beneath a ogee-shaped dome. The CST dome is successful, I believe, because of its beautiful Italian Gothic design, with rounded arched apertures and use of natural stone without polychrome, but above all its proportion in relation to the overall structure is perfect, something Stevens does not achieve with the BMC building, where the principal dome is too tall in relation to the main structure and other lesser projections.

CST has often been compared with St Pancras\textsuperscript{168}, Fig. 20, widely thought to have inspired Stevens during his study tour in England. Here was a railway station in Gothic yet innovative, a symbol of modernity yet aesthetically pleasing, capturing the confidence of the age. The long winding and asymmetric façade facing Euston Road was dignified, powerful and rich if constrained, in its red brick. It dominated its surroundings through its elevation, as well as its architecture, in a way that the compact street-level site at CST did not allow. The huge rectangular tower at St Pancras, Fig. 21, with French gable and Mansard roof, above the station entrance and clock tower at the east end, square with projecting corbelled upper storey, turreted with spire-lets, did not find a parallel at CST but is not unlike the central towers in other Bombay buildings. CST had five square and smaller towers, with turrets, finials and spires, two each on either side of the wings and the last at the east end of the south façade. At St Pancras the two large towers dominate, whereas the towers at CST are integrated into the structure and it is the dome that is dominant. Stevens was seemingly not attracted by the Dutch gables or dormer windows but by the façade at the west end, giving access to the hotel from Euston Road and by the detailing particularly the interior of the hotel, on which Scott had lavished much attention. The west end hotel façade may have influenced the compositionally fairly similar wing facades of CST. Both share corner towers with turrets and spire-lets and grandly decorated portals, porte-cochères at CST.

Figs. 20 & 21 St Pancras Station, London http://www.stpancras1year.com & http://www.telegraph.co.uk, [accessed May 7 2012]

\textsuperscript{168} Simmons, \textit{St Pancras Station}, 142
A stylistic breakpoint seems to have come, between a relatively pure Bombay-version of Italian Gothic and a more Indian version, around the time that CST was building. Steven’s two largest, and most successful of his later buildings, the BMC and BBCI buildings, are significantly more Indian than CST. Why was this so and what makes them more Indian? A ready answer is their domes, more plentiful, larger and more oriental. Stevens was not unaware of the Indo-Saracenic architecture of Madras and other cities and had himself used such styles. There appear to have been two predominant influences at play: the powerful and persistent arguments of Kipling and Frederick Salmon Growse of the ICS that Indian design was appropriate for objects and architecture on Indian soil\textsuperscript{169}, arguments that were rooted as much in aesthetics as in the politics surrounding the revival of ancient Indian crafts and Chisholm’s design for the BMC building. Chisholm won the competition in 1883, with an Indo-Saracenic design, but subsequently the result was set aside and Stevens was commissioned instead. While Stevens rejected so overtly an Indian design he was to incorporate Indian features in his BMC and BBCI designs that had been absent from his earlier Bombay buildings. This suggests that Chisholm’s design was considered a step too far at the time but seems to have brought about a recognition that more Indian-ness was desirable.

\textit{Ornamentation}

Provision of large freestanding sculptures, in elevated positions, crowning architectural features was a feature of colonial buildings in Bombay before CST. At the High Court classically inspired statues of \textit{Justice} and \textit{Mercy} were placed atop spires on either side of the central tower\textsuperscript{170}. The dominant composition at CST is that of ‘\textit{Progress’}, fourteen feet in height and placed above the central dome, Fig. 22; a female figure in classical drapery holds a copper gilt flaming torch in her right hand while her left rests on a winged wheel by her side. Other large sculptures comprise ‘\textit{Commerce, Agriculture} and \textit{Civil Engineering}’; the first and last are placed above the gables of the two west facing wings and the other on the central gable of the south façade. In \textit{Commerce} the central figure extends a hand of welcome, that on the left

\textsuperscript{169} London, \textit{Bombay Gothic}, 98
\textsuperscript{170} London, \textit{Bombay Gothic}, 53
holds Britannia’s Trident and that on the right has a laurel wreath for successful enterprise. In *Agriculture* the central figure is, with cornucopia and ploughshare, representing plenty and the other figures represent sowing, with dibble and seeds, and reaping, with sickle and wheat. Lastly in *Civil Engineering* the central figures has the cylinder of a steam engine, while the other figures representing military and naval engineering hold a gunner’s quadrant and screw propeller\(^{171}\). Stevens was subsequently to place a colossal figure on the central gable of his BMC building representing ‘Urbs prima in Indis’ and below it a circular panel with the arms of the Corporation\(^{172}\).

![Fig. 22 CST, Dome with Sculpture](http://www.archives.digitaltoday.com)

[accessed May 7 2012]

Other significant sculptures, in bas-relief, include *Science* and *Trade*; these are described as being in tympanums suggesting an elliptical shape but are in reality triangular, and occupy the upper part of the tympanums, above the Gothic central portals of the porte-cocheres framed by its gable. In *Trade* a central female figure, representing *Peace*, fostering good relations between east and west, crouches with open arms and seemingly endorses a transaction represented by two part-lying figures shaking hand as if to confirm an agreement. In *Science* a female figure sits centrally with an open book, suggesting knowledge, surrounded by a globe and other artefacts representing geography, medicine and other sciences, while two part-clothed classical

---

\(^{171}\) *Builder*, ‘Decorative Sculpture for the Indian Peninsular Railway Terminus Administrative Offices’, No. 53, (1887), 362, 372 & 373

\(^{172}\) *Building News*, ‘GIPR Railway Station’, No. 53, (1887), 644
figures sit and crouch at her feet as if eager to hear science’s secrets. A free standing statue of the Queen Empress in state robes and orders holding a sceptre and globe, sculpted in stone and 9ft 6ins in height, was placed in a canopied niche in the central façade below the dome but has since been removed. A lion and tiger top the gateposts to the garden and central block providing access to the offices; these two large rampant animals are 9 ft 6ins long and 5ft 6ins high. These are the work of Thomas Earp of Messrs Earp, Son & Hobbs, are in Bath stone and were shipped from London.

Ten terracotta roundels, Fig. 23, occupy the tympanums of ground and first floor arcades of the centre block with carved heads, described as founders, directors and important figures behind the development of the GIPR; they include Lords Reay and Elphinstone, Thomas Watt, Colonel James Holland, Jagannath Shunkersett, Sir J Jijibhai, the Marquis of Dalhousie, the Earl of Dufferin, Mountstuart Elphinstone and Sir Bartle Frere. Roundels of Watt and Holland, which alone of the ten, are at first floor level, surmount three elaborate sculptural reliefs, of GIPR crests and allegorical figures, in tympanums immediately below. James Berkeley, engineer for the ascent of the Ghats, is included in a further portrait roundel on the south façade. On a smaller scale the ‘communities’ of Bombay are represented in sixteen bas-relief heads in each corner drum of the main façade; communities are identifiable by their distinctive headdresses including turbans. These are placed below a frieze with panels taken from GIPR crests. Terracotta work was a speciality of Griffiths and Kipling and roundels had been used at other Bombay buildings to frame important figures and at the Foreign Office in London, Fig. 24.

---

173 Builder, ‘Decorative Sculpture for the Indian Peninsular Railway’, 362, 372-73
174 London, Bombay Gothic, 91-3 and A City Icon, illustrations, 182-83
175 Building News, ‘The New Great Indian Peninsular Railway Terminus and Administrative Offices, Bombay’, No. 51, (1886), 602 and London, Bombay Gothic, 94-95
The exquisitely carved tympanum decoration on the first floor of the main façade is of open serpentine pattern, with allegorical floral designs incorporating indigenous birds and mammals surrounded by elliptical foliate mouldings. The beautifully carved capitals here are floral with local fruits, others include small indigenous animals. Similarly beautiful tympanum, Figs 25 & 26, decoration is to be found, using the peacock as a central motif and an allegorical representation of India, in open foliate design, beneath a pointed first-floor arch, in both wings\textsuperscript{176}. The many small animals in capitals, friezes, spandrels, Figs 27 & 28, are a particularly Indian feature, their significance further increased by their carving by local craftsmen. They are quite remarkable in their expression and sense of movement some like a small mongoose in a decorative spandrel are poised to spring; elsewhere owls look down the point of a spandrel, a mongoose, rabbits and mice stalk and adorn shared capitals. Owls, monkeys, dragons, kingfishers, even leopards are to be found in a frieze here or above a capital there. Gargoyles take the form of wild dogs. These and other sculptural decoration, apart from the large pieces by Earp, were undertaken by the students of the JJ School of Art, working under Professor Gomez and the overall direction of the principal, John Griffiths. They are the work of imagination, genius and sympathy.

\textsuperscript{176} London, \textit{Bombay Gothic}, 94
Ruskin praised use of precious materials and urged the need to concentrate ornament. Fine local materials have been employed at CST, but not the spectacular marbles found in Italian churches and nowhere at CST is ornament concentrated as in a cathedral west front, nowhere more evident than in the archivolts at St Marks, Venice\textsuperscript{177}. CST is a much larger building than even the largest churches and its appeal is its patterns of diffuse decoration, giant and symbolic sculptures and unexpected treasures, that are found when least expected, the many birds and mammals that appear in friezes, capitals, corbels and cornices, sometimes integrated into complex floral designs. These figures encapsulate the soul of India through their innate beauty of expression and suspended movement. Ruskin also sought legibility, the ability of ornament to be read from afar, close up and in the middle distance. Progress and the other dominating freestanding sculptures are large and bold and capable of being seen and understood from the streets below. Ruskin had demanded clarity in dominant figures\textsuperscript{178}.

\textsuperscript{177} Unrau, \textit{Looking at architecture with Ruskin}, 106-11
\textsuperscript{178} Ruskin, \textit{Stones of Venice} 1, (1898), 236-57
Ruskin believed in naturalism in sculptural decoration, but as in dimensions of arcades and portals, he rejected complete uniformity, believing that variation and minor imperfections best represented the quality of life. He sought noble abstraction, which he described ‘as taking the essential elements of the thing to be represented, then the rest in the order of importance, and using any expedient to impress what we want upon the mind, without caring about the literal accuracy of such expedient.’ He illustrated his argument by saying that the eyes in the tail of a peacock, its essence and uniqueness, needed greater expression than unadorned naturalism allows\textsuperscript{179}. Steven’s designed all constructional and freestanding ornament himself but did not carve it himself. Ruskin and Morris will have applauded his greatness of concept and skills in drawing while regretting that he did not actually carve. Use of Indian sculptors provided an essential link to community, drawing on local skills and people, and is likely to have encouraged ‘joy in labour’ that evocation of medieval craftsmen, as distinct from the regimentation of industrial work, so strongly espoused by Ruskin.

\textsuperscript{179} Ruskin, \textit{Stones of Venice} I (1898), 236-57
and Morris. It was the nature of the work, as much as the work itself that underscored value and meaning.

Colour was an essential ingredient in Italian Gothic, more subdued though in Venetian palaces than in Tuscan churches. Ruskin praised the delicate colouring of the Ducal Palace, where the wall surface was chequered with marble blocks of pale rose, the chequers being in no way harmonised, or fitted to the form of the windows; but as if the surface had been completed first, and the windows cut out of it\(^2\). Ruskin demanded colour harmonies, gradation, tints, with a mingling of hues, and use of natural materials. In the last CST could boast a universal use of rich unadorned materials with natural colour, buff coloured Porbandar and Kurla stone, local blue and Pune red basalt\(^1\); tints and gradation are more difficult to achieve without use of marble and precious stones as in Italian churches. Colour harmony is not easily defined but Ruskin knew that it was much more than the patterned brickwork then popular with Victorian architects. CST sculptures are in natural stone that would have found favour with purists but the polychrome of arcades and archivolts was patterned but not ostentatious and there was sufficient variety to prevent monotony. They did not overpower the building and with the beautiful detailing of friezes, cornices, capitals, constructional and decorative ornament they gave it a richness, to be found in Indian buildings, that will not have been thought garish. Many Europeans see only garishness in the polychrome of a Hindu temple *gopura* but Indians see an intensity and vitality that they value.

**Interior**

The principal public rooms used by travellers, in first and second classes, were in the north block and wing; third and fourth-class passengers used separate somewhat basic facilities, by contrast, along Hornby Road. The porte-cochere in the north wing leads directly to a corridor and thence to the elaborate Waiting Hall and Booking Office, Fig. 29, a highly elaborate vaulted space six bays long and two wide and forty-two feet in height. It is essentially Gothic in style with pointed arches forming the vaults supported by complex columns and mouldings, surmounted by capitals. There are

---

\(^2\) Ruskin, *Stones of Venice* I, 182-91

\(^1\) London, *Bombay Gothic*, 38
galleries on all sides separated from the main hall spaces by arcades of decorated arches. The vaults, which are wooden, were decorated with gold stars on a sky-blue ground, and the main ribs were emphasised with strong red, blue and gold lines, with pendants similarly coloured where the ribs intersect. The columns at the centre and sides of the hall were of polished Italian red and grey marble, with yellow veins and foliated capitals, some including floral features and others animal heads. The walls were lined and glazed to a height of 4ft 6ins with Maw & co tiles of foliated designs. The floor was made up of unglazed coloured tiles arranged in large panels of geometrical and foliated design. Contemporary photographs show a majority of Indians in the hall wearing turbans and fezzes, most probably wealthy merchants who would have travelled first or second-class, and servants. The hall is as large as the great hall at Euston and infinitely grander. The ground floor layout is shown in Fig. 30.

Fig. 29 CST: Booking Office and Waiting Hall [http://www.mumbai-heritage-walk.com], [accessed May 7 2012]

Other public rooms were also elaborately decorated and first and second-class waiting rooms had richly panelled ceilings, decorated in two shades of cream, while the floors were of ornamental tiles in panels with rich foliated borders. The refreshment room had a similarly tiled floor and panelled ceiling but was divided into quadrants by broad pointed arches, resting on heavy polished marble columns with rich foliated

---


183 Furneaux, Glimpses of India, 203-4
capitals, which were decorated with floral patterns some including shields with GIPR emblems. Stevens is believed to have designed the teak furniture\textsuperscript{184}.

Fig. 30 CST, Plan of Ground Floor, Concourse and Garden\textsuperscript{185}, http://www.kamit.jp, [accessed May 21 2012]

The central staircase is an important architectural feature, Fig. 31, but one that would not have been seen generally by travellers or the public. Approached through the central porte-cochere the visitor arrives first in a large central hall from which this principal staircase ascends to the base of the dome and provides access to the administrative offices. The staircase, cantilevered from the walls and comprising overhanging slabs of blue stone more than eight feet wide, has a grandeur and massiveness as it climbs up to the base of the dome. Cast iron balustrades are provided throughout and on the various landings ornately decorated Gothic openings in the form of portals richly moulded above foliated capitals supported by marble columns. Walls are faced with Porebundar stone and lighting is provided by a series of richly carved Gothic windows with one and two lights below the rose. Mouldings and cornices are prodigious and richly decorated with the upper corners below the lantern providing a depth of mouldings encasing small jalis. Lower windows also use

\textsuperscript{184} Macleans Guide, 214-15
\textsuperscript{185} The Builder, ‘Great Indian Peninsular Railway Terminal Buildings, Bombay’, no 55 (1888), 269
jalis rather than glazing to provide ventilation while restricting sunlight\textsuperscript{186}. The comparison here is not with Euston but with the magnificent staircase inside the original main entrance to the Midland Grand Hotel at St Pancras, Fig 32.

Fig. 31 CST, principal staircase, http://www.archives.digitaltoday.com, [accessed May 7 2012]

Fig. 32 St Pancras, principal staircase of hotel, restored, 2011, http://www.telegraph.co.uk, [accessed May 7 2012]

Above the main staircase are two tiers of lights, forming a drum below the dome, Fig. 33, reached by a further two small staircases, leading first to a gallery inside the lower tier, outside of which is a balcony. The glass in the lower tier of smaller two-light windows is now modern, while the upper tier of eight two light windows has original glass. Designs comprise floral surrounds with a mix of circular floral motifs alternating with emblems of GIPR, which in turn are of varied patterns and colour. Further motifs include the elephant, locomotive and shield linked vertically by a golden stem entwined with red pomegranate fruit and golden leaves. Each two-light window has a sex-foil with floral decoration. Below one window is the text, V Jagannath & Co, Taher Building, Golpitha. However, The Architect and Building News of 1884 attributed the work to Messrs Charles Bushell Gibbs & Co. Judith Holliday believes that the such intricate designs of glass would have been more

\textsuperscript{186} Macleans Guide, 214-15
costly, per square foot, than the glass in the University Library and Rajabai Tower which are of more repetitive designs\textsuperscript{187}. Construction of the dome is clearly visible from the gallery and comprises eight ribs carried on fine-capped corbels, which spring from a richly ornamented cornice\textsuperscript{188}.

Fig. 33 CST, head of stairwell and base of drum with glass

\url{http://www.bayourenaissanceman.blogspot.com}, [accessed May 7 2012]

The inspiration for this rich interior more redolent of an Earl’s residence than a public building very probably came from St Pancras rather than Lord Bute’s Cardiff Castle or other private mansions being decorated with rich interiors at the time. At the entrance to the Midland Grand Hotel we find a deep triple-arched porch with richly carved shields of arms of England, Ireland and Scotland. Inside is a gorgeous twin-arched opening with a stout monolithic column in white-veined green stone, next a window with enriched tracery worthy of a fifteenth century Venetian Palazzo with stylised reliefs of birds on its cross members. Once inside a visitor soon encountered the magnificent staircase cantilevered from the walls, as at CST, decorated with balustrades. At the top there is no dome but the space is vaulted with paintings below, the arms of the Midland Railway and depictions of the seven virtues seated. The hotel was a space, like the Gentleman’s Clubs of the time, designed to appeal to the upper

\textsuperscript{187} Judith Holiday, ‘Nineteenth Century Stained Glass in Bombay: Its Role in the Architectural and Ideological Landscape’, (Ph.D. diss, University of Bombay)

\textsuperscript{188} Furneaux, \textit{Glimpses of India}, 203-204
and upper-middle classes, putting them at ease and resembling more a grand residence than a popular meeting place like a theatre; the richness of decoration was a reminder of the good taste and stability of the Midland Railway. At CST the richly decorated space was similarly reserved for the few, first and second-class passengers, making up less than 5% of all travellers.

**Railway station**

CST is readily fitted into a pattern of architectural, spatial and technological arrangement and development that characterised city railway terminals in the mid-late nineteenth century. It is a head station like St Pancras and the later Calcutta stations: that is to say that the principal buildings are placed at the head of the tracks and platforms. The head station had evolved from the one and two-sided station: its advantages were that it concentrated passenger facilities together allowing easy access from the street and to platforms, without crossing a footbridge. Additionally it provided a concourse, between passenger facilities and platforms, where passengers might wait until able to access platforms; it gave railway authorities the flexibility to switch trains between platforms, to meet traffic conditions, at short notice without inconveniencing passengers. Most head stations provided booking offices, waiting and refreshment rooms in the ground floor, as at CST, although unlike a European station its facilities for third and fourth-class passengers were originally placed alongside Hornby Road and remote from the head block. This had more to do with segregation and colonial practice than providing any practical benefit, although Indian passengers often arrived many hours, sometimes days, before travel, frequently had much baggage and may have been seen as an impediment to movement on the main concourse.

At the mid-century the Gothic style was widely chosen for large stations, examples, with Gothic head buildings include St Pancras, 1863-76 and Liverpool Lime Street, 1879. Towers were popular at Gothic and Italianate style stations, usually placed asymmetrically, as at St Pancras, to appeal to picturesque tastes. However, they had begun to be replaced by domes more likely to be centrally or symmetrically placed as

---

190 Meeks, *The Railroad Station*, 77-108
at Bucharest, 1893-5 by the late-century. The head buildings at St Pancras and Lime Street were predominantly used as hotels, whereas that at CST was largely a railway head office; all three had station offices and facilities at ground floor level. Most major London stations included railway head offices but often in side buildings, as at Paddington and Kings Cross; St Pancras and Lime Street had no need of head offices as these were elsewhere. Few colonial stations had hotels; in India journeys were long and business patterns different from Europe, where businessmen visiting major cities found railway hotels convenient.

The train shed, Fig. 34, as distinct from the office and head building, was built under the direction of T W Pearson, the District Engineer and was opened much earlier than the main block was completed, in January 1882. Architecturally it was of limited architectural or engineering interest; strictly functional, with two spans of 120 feet width supported on lateral triangular trusses and longitudinal girders, both 600 feet long it covers six platforms, subsequently increased in number. As compared with the great train sheds of Europe, at the time, or the magnificent elliptical structure at St Pancras, Fig. 35, it was modest and may have appeared claustrophobic, perhaps, with its throngs of passengers and tradesmen selling wares, although a clerestory over the concourse provided further light and ventilation. The ground floor of the station and office block was constructed by GIPR staff directly but subsequent floors were built by Burjorji Rustomji Mistri & Co. Stevens was assisted by Raosaheb Vaidya, Assistant Engineer, as at his Royal Sailors’ Home and M M Janardhan, supervisor.

---

191 Mehrotra and Dwivedi, A City Icon, 123
192 Mehrotra and Dwivedi, A City Icon, 146-52
Fig. 34 CST, a busy scene in train shed [http://www.news.bbc.co.uk], [accessed May 7 2012]

Fig. 35 St Pancras, Train Shed, [http://www.sciencephoto.com], 7 May 2012

The construction costs of CST are interesting in so far as they can be compared with other comparable buildings. The main office and station building cost R16,35, 562193, described by Indians as between R16 and R16 and a half lacs; the station, excluding permanent way cost R10,40,248, so R26-27 lacs overall. The BMC building opposite cost R12 lacs, or approximately £100,000194 and BBCI building 7-7.5 lacs195. CST costs in pounds sterling is assessed at £260,000-£300,000196 overall; on these bases a

193 Edwardes, Gazetteer of Bombay City and Island, Vol. 3, 381
196 Murray and London, Bombay Gothic
R lac is equivalent to £8-10,000. St Pancras in London built almost twenty years earlier cost £435,882\(^{197}\). A number of conclusions are possible, after allowing for possible differences in the way costs were assessed; CST was significantly cheaper to construct than St Pancras but more expensive than the BMC and BBCI buildings.

Apart from the obvious higher labour rates in London than in Bombay St Pancras had a huge elliptical single span train shed against the more modest ridge and furrow design of station roof provided at CST, also it was elevated, constructed on arches with a store beneath the platforms, in order for the tracks to be able to cross the Regents Canal on the level. As regards the Bombay buildings we can disregard the cost of the station itself in making comparisons but even then at 16 lacs Rupees CST cost more than twice the cost of the BBCI building and some 30 per cent more than the BMC building. CST was larger than the BBCI building, with its longest façade 370 feet against 280 feet but not twice as large; the unusual V-shape of the BMC building makes comparison difficult. On the face of it, CST made greater use of rich materials and was the more extensively decorated, and this was the reason for its greater cost, having regard to size but this is not conclusive. The piecemeal way expenditure was approved, resulting in an extended period of construction, may have been a further factor.

### 3.5 Summary

CST was much influenced by the Victorian Gothic style in Britain; starting as a church style, it soon influenced secular buildings then being erected in Britain’s burgeoning industrial cities. Ruskin had supported a Gothic style that was innovative and did not copy rigidly from the past. As an artist he placed emphasis on setting and visual content rather than structural coherence. Contemporary architects, including George Gilbert Scott, were much influenced by Ruskin, sharing his enthusiasm for European styles. Choice of Gothic in Bombay was much influenced by theory and practice in Britain.

\(^{197}\) Simmons, *St Pancras*, 44
Indian styles attracted interest on aesthetic as well as practical grounds. Ferguson and Cunningham documented archaeological sites and contemporary buildings, categorising and classifying what they saw. Colonial architects were divided over whether to use indigenous styles, and while some strongly espoused their use, others believed that empire required styles that were clearly European. Protagonists of local styles believed in synthesis, drawing elements from all sources; a fusion of styles had long existed in India and like British architects they believed in innovating rather than copying.

CST was one of an ensemble of largely Gothic buildings, erected between 1860 and 1900, broadly following the line of the old fort walls, some placed on open sites and others, like CST, arranged along traditionally arranged streets. The visual effect was less dramatic than that of a formal composition but more in keeping with Indian traditions. Like other contemporary buildings CST was large and symmetrical. Ruskin believed mass, perceived or real, was necessary to impress and he favoured asymmetry generally. St Pancras, by comparison, had picturesque qualities and a linearity that CST lacked and towered over its surroundings. Indian buildings, of all religious affiliations, were, though, largely symmetrical and temples often avoided massing by distributing smaller buildings regularly over a complex.

In aesthetic terms CST was successful with its many open arcades, avoiding monotony in their articulation through variations in motifs and polychrome decoration. They are Italian in their openness but not markedly Venetian, as sometimes claimed, symbolically redolent of a merchant city and adapted for climate. Wing facades, with their ecclesiastical appearance, baronial spires, spire-lets and projecting rounded towers are joyful, varied and lend dignity by the great dome above the principal facade. The large sculptures are conventional and legible, large enough to be seen from below, employing allegorical motifs readily recognisable to western eyes. The small sculptures are less legible but have a rooted-ness to India, mobility and expression. They are naturalistic but enjoy enough abstraction to arouse feeling, so admired by Ruskin. Carved by local craftsmen they epitomise the sanctity of joy in work, encapsulated in Ruskin and Morris’ plea to elevate the ‘nature of work’.
CST was a sumptuous building but it was not, we believe, markedly superior in aesthetic terms to other Bombay buildings, not least the university and BBCI buildings. What marked it out was its association with railways at a dominant point of empire; it had and has significant historical, cultural and social meaning. Its concourse and platforms functioned as a stage, crowded to bursting point and charged with energy, as groups and individuals more diverse and vibrant, than those anywhere else in a teaming city, jostled together and gave CST a unique place in Indian life.
4. Power, Politics and Meaning

In this chapter we discuss how architecture, and CST, projected power, embedded within a wider system of colonial representation\textsuperscript{198}. Postcolonial forms of analysis allow us to investigate colonial representation, together with the political and economic structures that employed it, and which it supported\textsuperscript{199}. We discuss what constitutes a colonial discourse, having regard to the work of Foucault, and discuss the acquisition, arrangement and uses made of specialised knowledge of the other, the colonised in culture, art and architecture, construction of travel narratives and representation of railways. Lastly we discuss semiotics, its role and value in further shaping meaning, building on analysis previously undertaken.

4.1 Colonial Discourse and Orientalism

Colonial discourse embraced the language and content of the colonists’ relationships with the colonised. In India the British sought to project power, enlightenment values and their professional and scientific superiority\textsuperscript{200}. Said argues in \textit{Orientalism} that colonists were influenced by a way of thinking, that he calls Orientalism, that distinguished attitudes from those in Europe. Foucault writing at very much the same time as Said shared his broad views but argued that discourse to be meaningful must relate to specific historical periods and places\textsuperscript{201}. He further believed that colonial texts, even those addressing technical subjects, were never wholly innocent of bias, saying judges and engineers, for example, were imbued as much as administrators by a colonial way of thinking\textsuperscript{202}.

\textit{Orientalism}

Orientalism was originally a term used to describe academic study of the east. Chairs were set up in European universities, including Oxford, following the Church Council

\textsuperscript{198} Metcalfe, \textit{An Imperial Vision}, 3-11
\textsuperscript{199} Hall, C (ed.), \textit{Cultures of Empire, A Reader} (Manchester: Manchester University Press, 2007), 3-11
\textsuperscript{200} Hall, C, \textit{Cultures of Empire, A Reader}, 14
\textsuperscript{201} Hall, S (ed.), \textit{Representation, Cultural Representations and Signifying Practices} (London, 1997), 46
\textsuperscript{202} Hall, C, \textit{Cultures of Empire, A Reader}, 14-16
in Vienne in 1312, in Arabic, Greek, Hebrew and Syriac, leading to study of language, religion and culture and establishment of oriental faculties. Much initial scholarship was Biblical, associated with the holy land, but broadened to include fields like Sinology and Islamism. Said argues that Orientalism was more than disinterested scholarship; it was a style of thought and a ‘corporate institution’ for ‘dominating, restructuring and having authority over the Orient’. He continues ‘My contention is that without examining Orientalism as a discourse one cannot possibly understand the enormously systematic discipline by which European culture was able to manage – even produce – the Orient politically, sociologically, militarily, ideologically, scientifically, imaginatively during the post-Enlightenment period’.

Said describes it as a body of knowledge, a way of thinking and a cultural enterprise, with its own imagery and vocabulary for understanding. This suggests that what had principally been wholly academic in purpose was appropriated by colonists but may never have been entirely free from unconscious bias.

By the eighteenth century Orientalism was evolving into the wider and comprehensive structure that Said described. This change was driven largely by colonisation. While the Portuguese and Dutch had established the first trading posts in Asia most were small and relations predominantly commercial. Colonies like India were created as a result of an increasing need to provide security to protect trade, requiring military protection and civil administration. The Orientalist was able to articulate, prepare and guide soldiers, officials, merchants and tourists in their relations with the east. It was inevitable, perhaps, that the European imbued with western values and superiority should characterise the areas of the orient, that were strange, often enticing and sometimes repugnant, opening up before him, as alien or other.

The colonial official was inculcated with the values that underlay a colonial culture at public schools, universities and through family, where most middle class families had members serving in the empire or military. Writers, philosophers and theorists including those known for liberal views shared established views on race and

---

203 Said, Orientalism, 50
204 Said, Orientalism, 3
205 Said, Orientalism, 31-40
206 Cohn, Colonialism and Its Forms of Knowledge, 4 & Metcalfe, An Imperial Vision, 26-35
imperialism; these included Carlyle, Ruskin, Arnold and J S Mill\textsuperscript{207}. That Palestine was the birthplace of Christianity further influenced European thinking and attitudes to Islam, frequently judged aggressive and barbaric. Concern over Jerusalem and the holy places had affected Europeans since their fall to Islam and the crusades. In India Islam was generally regarded more favourably, most particularly its architecture, than in the Middle East, although colonial officials were aware that the 1857 rebellion had predominantly involved Muslim troops.

Colonial proconsuls and ministers in European governments distinguished between scientific knowledge, in which Europe enjoyed superiority without question and knowledge of the oriental, as a subject people, justifying and facilitating imperialism. They apportioned the world between those in the west, who embraced the enlightenment and others whose culture was pre-Newtonian\textsuperscript{208}. In The Government of the Subject Races Cromer\textsuperscript{209} characterised Egyptians as lethargic, quarrellsome and unreliable, a political vision of reality that sought to justify European rule. In doing this he was drawing on an assumed cultural strength and long experience of dealing with Egyptians; he knew what worked and while he had recourse to military enforcement he hoped a veiled threat was sufficient to ensure conformity. In India such characterisation and generalisation required refinement, even if the principles were held to apply. Indians were perceived as intelligent by many, drawing avidly on educational opportunities provided by colonists, hard working and creative when actively engaged, as in the work of art students from the JJ School and artisan builders in constructing and decorating CST. So it was necessary to invent other handicaps and differences. Indians were seen as divided by religion, caste and culture; only European hegemony could provide the leadership and stability necessary to unlock their full potential\textsuperscript{210}.

\section*{4.2 Investigative Modalities}

This section draws particularly on the work of Bernard Cohn in Colonialism and its Forms of Knowledge, whose work on the relationship of power and knowledge, in

\footnotesize{\textsuperscript{207} Said, Orientalism, 9-15
\textsuperscript{208} Said, Orientalism, 32-47
\textsuperscript{209} Lord Cromer, British Agent and Consul-General, Egypt, 1883-1907
\textsuperscript{210} Dobbin, Urban Leadership in Western India, 154-71}
colonial discourse preceded the critical work of Said and Foucault. An investigative modality includes the definition of a body of information that is required, in this case to govern, the procedures by which it is gathered, ordered and classified, and then is transformed into usable forms, such as published reports, statistical returns, histories, gazetteers, legal codes and encyclopaedias. We take further our discussion of colonial discourse in the preceding section and then look specifically at investigative modalities in respect of architecture and travel that relate specifically to our understanding of CST.

Language and Culture

British thirst for knowledge of Indian laws, customs and language took the form of cultural appropriation between 1770-1785 with an increasing interest in mastering classical languages including Sanskrit, Persian and Arabic. Cohn argues that the systemised production of texts – grammars, dictionaries, translation of Hindu epics, etc – established a discursive formation, defined an epistemological space, created a discourse and turned Indian forms into objects. This invasion of Indian space provided a mechanism for increased control through greater understanding of thought and customs, through penetrating the world of Indian thinkers, previously not accessible to Europeans and by converting babus into junior colonial officials, who undertook administrative work for low wages and had an interest in maintenance of colonial rule.

In some respects the eighteenth century was a more enlightened period of colonial rule than the later nineteenth century, when there was a reaction against adopting and respecting Indian customs and against the authority of Pandits. Warren Hastings, governor general, 1774-85 had established a Sanskrit college in Benares and a Madrassa in Calcutta. He believed that Indians should be governed by Indian principles, particularly in relation to law. Hindu and Muslim law was expressed in codes; William Jones, scholar and judge, with his mastery of Persian and Sanskrit unravelled the Muslim and Gentoo codes. Muslim law was adopted for criminal cases.

---

211 Cohn, Colonialism and Its Forms of Knowledge, 5
212 Cohn, Colonialism and Its Forms of Knowledge, 20-21
213 Cohn, Colonialism and Its Forms of Knowledge, 20-22
but for civil cases each community was dealt with according to its own code. Increasingly officials mastered local languages; N B Halhed, who had translated the *Gentoos* code, found general principles in Indian languages and produced a Bengali grammar. In Madras, Francis Ellis, civil servant, collector and judge translated the legal code into *tamil*, so increasing understanding of it by local people and reducing Brahmin influence. He believed that they obstructed and deliberately confused communication with local groups\textsuperscript{214}.

Attitudes to Hindus were variable and unstable with some Europeans revolted by their religious and cultural practices and ignorant of their way of thinking, characterising them as ‘a race of gross idolaters’ but enlightened scholars challenged these views. These included John Howell, who had learned three Indian languages and understood the ‘religious tenets of the *Gentoos*’, Halhed and Ellis. Jones, despite his scholarship and colonial status was not hostile to Hindus, indeed he respected indigenous culture, conscious of his own Celtic roots\textsuperscript{215}. General Malcolm\textsuperscript{216} established principles governing relations with Indians saying: ‘our power in India rests on the general opinion of the natives of our comparative superiority in good faith, wisdom, and strength to their rulers. This important impression will be improved by the consideration we show to their habits, institutions and religion – by moderation, temper, and kindness, with which we conduct ourselves towards them’\textsuperscript{217}.

John Gilchrist, on the other hand, saw language as a means of command, principally in Hindustani to servants, soldiers and junior officials and of bypassing local elites. He identified three levels or styles in Hindustani appropriate for general communication, which he described as court, middle and vulgar expression. Indian languages employed a graded grammatical system of politeness, not always understood sufficiently by Europeans, with various degrees of familiarity and respect providing a minefield for the unwary and an easy source of misunderstanding\textsuperscript{218}.

\textsuperscript{214} Cohn, *Colonialism and Its Forms of Knowledge*, 20-56
\textsuperscript{215} Cohn, *Colonialism and Its Forms of Knowledge*, 23
\textsuperscript{216} Sir John Malcolm, Governor of Bombay, 1827-30
\textsuperscript{217} Cohn, *Colonialism and Its Forms of Knowledge*, 41-42
\textsuperscript{218} Cohn, *Colonialism and Its Forms of Knowledge*, 34-43
Said describes as historical confrontation this willingness, indeed enthusiasm, of historians for a deeper understanding of history of the orient, its peoples and customs. Growing interest in lexicology and philology encouraged a search for indigenous historical and literary sources and was accompanied by anthropological study, enabling races to be categorised. Scholars distinguished between races with Aryan roots and more primitive peoples and tribes. This comparative urge was accompanied by a sympathetic identification tinged with Romanticism, taken up by artists, musicians and writers. Exoticism, arose from dress, customs and a certain naivety, and with sensuality, sublimity, terror and other Romantic attributes admired and reproduced but as characteristics of the other\textsuperscript{219}. While Europeans admired oriental attributes at a distance, and when travelling, their admiration was often mildly condescending. Europeans serving in the orient were careful to maintain European customs and dress, while at the same decorating offices and houses with Romantic prints, indigenous artwork and artefacts\textsuperscript{220}.

In India European scholars focused more energy on the past than on the present\textsuperscript{221}. Religions, language, art and architecture were well suited to analysis and classification into families and sub-genres, itself an expression of European scholarly pre-eminence and mastery. This scholarship gave European scholars an authority over Indians to impress and to construct an Indian history and identity that included a decline from a great past to a divided and confused present\textsuperscript{222}. Over reliance of scholars on historical and religious texts, rather than dialogue with pandits, sometimes bred misunderstanding and incomprehension, as Indians relied on memorising religious tenets, conventions and law\textsuperscript{223}. Also the urge to classify led to cultural generalisations that were sometimes misleading and offensive, employing terms such as primitive and barbarous. Foucault says ‘a controlled derivation’ ensured that a network of related generalisations underwrote a typology of cultures\textsuperscript{224}. Colonists objectified India, coding and transforming objects into artefacts and commodities that could be exhibited and packaged with labels in museums\textsuperscript{225}.

\begin{flushright}
\textsuperscript{219} Said, \textit{Orientalism}, 18 & 59 and Metcalfe, \textit{An Imperial Vision}, 17-23
\textsuperscript{220} Said, \textit{Orientalism}, 116-20
\textsuperscript{221} Said, \textit{Orientalism}, pp 75-76 and Metcalfe, \textit{An Imperial Vision}, 25-27
\textsuperscript{222} Metcalfe, \textit{An Imperial Vision}, 26-35
\textsuperscript{223} Cohn, \textit{Colonialism and Its Forms of Knowledge}, 16-56
\textsuperscript{224} Said, \textit{Orientalism}, 119
\textsuperscript{225} Cohn, \textit{Colonialism and Its Forms of Knowledge}, Forward, N Dirks, xiv-xv
\end{flushright}
Ferguson’s *History of Architecture* and *History of Indian and Eastern Architecture* published in 1867 and 1876 respectively, provided a wide and detailed canvas of Indian buildings throughout the country. Although essentially scholarly and driven by genuine admiration of Indian styles, these works were also political, making value judgements on indigenous styles and culture. An example, of how scholarly study of the past might acquire political meaning, occurred in Gujerat in 1859, where a committee, appointed by Sir Bartle Frere, governor of Bombay, published a study, *Architectural Illustrations of the Principal Mahometan Buildings of Beejapore*, following archaeological work. In the forward to the work the principal surveyor wrote ‘These noble monuments may serve to lead our countrymen to appreciate the intellect, the taste and the high power of art and execution which they evince’.

While this sounds and was generous it was also political. He was saying that he and fellow archaeologists were authorities on indigenous monuments of the past, able to make value judgements on quality and culture, as Ferguson had. He was also calling on those in Britain and other officials to admire Indian monuments but within a framework that he and other scholars had constructed.

British architects in India studied local styles for practical as well as aesthetic reasons, suitability to climate, of local materials and skills. Mastery of local styles was also political as well as aesthetic, an exercise of power through superiority, with a right to select and appropriate for specific types of buildings, mingle or synthesize and select within a style, from a regional source or historical period. Interestingly Indian scholars have not generally criticised colonial buildings or their architects for their parody of Indian styles in subsequent years, whereas they have been highly critical of the cultural inferences and conclusions reached by Ferguson on the aesthetic merits of individual periods and styles and the ethnographic correspondences that were made.

French administrators and architects used indigenous styles but in a more systematic manner than the British. They believed that use of indigenous styles was a buttress

---

226 Metcalfe, *An Imperial Vision*, 39-40
against nationalism but also placed them in a wider colonial aesthetic and an urbanism that required a re-planning of colonial cities, with a dualism that embraced modernism and preservation. In Fez, and other cities in Morocco, they preserved large areas of medinas, while building a ‘French’ Ville Nouvelle alongside, with public buildings, straight avenues, industry, ports and railways. This approach that elevated cultural identity over uniformity was described as Association-ism, replacing earlier universal-ist principles that required assimilation and conformity. French planners also had eyes on those in France, where cities were seen as backward, unable to modernise effectively for a new age.

In Bombay most nineteenth century colonial buildings were on an axis, largely on land freed through removal of the fort walls, but were not designed in relation to each other, as in French cities. Indian areas of cities also were not consciously and systematically preserved but became more or less separate, as Europeans chose low-density development and cantonments. The French city displayed colonial and professional expertise, in an overt manner, accommodating industry and traffic, but without sacrificing indigenous monuments. Subsequent generations have admired the imagination and creativity of French planners and the free use of indigenous styles but they were no more successful than British achievements and policies in arresting nationalism. French colonial buildings have been naturalised like those of Bombay and belong not to colonists anymore but to the local people.

**Travel and Observational Modalities**

Europe in the nineteenth century was the first beneficiary of railways, steam shipping and travel companies, including the relatively recently established Thomas Cook, which sought to actively promote the delights and improving aspects of travel. Interestingly city railway stations were decorated with sculptures but more to emphasise a railway’s role in promoting commerce, industry and society than to espouse travel as such. Railway companies generally left decoration to architects, whereas today it is the province of marketing departments. In France critics and the artist Gustave Courbet, noted for his realism, argued for bold landscape paintings of

---

228 Wright, *The Politics of Design in French Colonial Urbanism*, 73-84
local and frequented places of interest, which also celebrated the beauty of France. But they were to be largely disappointed. Architects reworked allegory and grand tour images to represent travel and travellers despite critics arguing that abstract images in classical attire, or references to rich aristocrats with huge retinues, were unlikely to strike accord with the new bourgeois traveller seeking a summer holiday or a honeymoon. Visual images of sublime mountain peaks, picturesque ruins, luxurious trains and grand hotels to represent such delights to the traveller were undertaken instead by Thomas Cook, travel guides and companies. Post cards advertising GIPR services to Poona were striking and direct, Figs 36 & 37.

Figs. 36 & 37 GIPR Post Cards, advertising Poona Race Specials and Express Mail trains, [http://www.movinghere.org.uk](http://www.movinghere.org.uk) [accessed May 7 2012]

By the 1870s the tourist and traveller were being encouraged to look beyond European shores to exotic India and beyond. The opening of the Suez Canal in 1869 and the opening up of India by the railways greatly facilitated foreign travel. A repertoire of images and a typology of Indians were created and thus determined what was significant to the European eye. Narrative structures accompanied set itineraries that included specially selected sites. Mode of travel influenced itineraries. In the seventeenth century travellers arrived on the west coast and proceeded to Ceylon and then up the east coast to Madras and Calcutta, all by boat. In the eighteenth century

passengers began to go directly to Madras and Calcutta, from which they travelled up the Ganges to Delhi. By the mid-nineteenth century Bombay had become a natural gateway with the opening of the Suez Canal, steamship and railways.

Travel routes were conceived as linear and continuous and included obligatory sites: Benares, the fort at Allahabad, Delhi and Agra. These included visits to religious sites, witnessing ancient practices, meeting holy men and the many social types with their colourful and distinct forms of dress. In Egypt, for example, excavation and scholarly discourse constructed Egyptology as a subject of academic study and a site for travellers to visit and observe British achievements. This was also as part of an Orientalist structure, which narrated a long decline from a period of greatness to the present. Ancient Egyptians were presented as great and cultured in contrast to the dirt and lethargy of the modern Egyptian. Race was a central source of debate with many questioning how, if the ancient Egyptians were black, they could have created such a high level of civilisation. As in India ethnographers sought Aryan linkages to underwrite civilised races\textsuperscript{230}.

While travel modes changed and facilities improved with development of hotels, for example, the places visited and scenes experienced changed little over two hundred years. What the traveller saw and experienced was mediated by specially constructed socio-political contexts, as well historically specific and Romantically inspired aesthetic principles that included the sublime, picturesque, quaint and realistic. These constructs based on a colonial and Orientalist discourse were both consciously and unconsciously constructed\textsuperscript{231}. As the nineteenth century advanced and rail travel became more widespread and comfortable the traveller was enjoined to admire images of Indian landscapes and monuments that emphasised their mystery and beauty but always with qualifications, allowing the traveller to witness them while still standing apart from the scene observed. Segregation of travel by class and provision of separate facilities at stations, nowhere better illustrated than at CST, ensured that the Indian was kept at a safe distance.

\textsuperscript{230} J Barrell ‘Death on the Nile: fantasy and the literature of tourism 1840-60’ in \textit{Cultures of Empire, A Reader}, 187-206
\textsuperscript{231} Cohn, \textit{Colonialism and Its Forms of Knowledge}, 6-7
The Indian traveller, particularly the newly educated and increasingly vocal Hindu literati, took quickly to rail travel also\textsuperscript{232}. The impact of travel for pleasure, amusement and knowledge was well documented in the vernacular press. While colonists promoted the railways as promoting homogeneous economic space that would facilitate trade and open new markets, Indians were concerned about social and moral issues raised, not least enforced proximity of high and low caste Hindus and lack of privacy afforded women. Stations were spaces to be negotiated, chaotic, threatening, promoting segregation and stratification, not based on caste but essentially racial as Europeans enjoyed the lavish facilities available to them at CST and other stations while third and fourth class passengers, predominantly Indian, were denied these pleasures and herded into remote waiting areas, resembling cattle pens.

Despite these fears and concerns educated Hindus quickly realised the power of the railways to promote Hindu cultural identity, facilitating pilgrimages to Benares, Hardwar and other religious sites. The poet Bharatendu Harischandra, for example, travelling in the 1870s, both marvelled at the technological achievements of the British but increasingly felt the frailty of Hindu culture, as evidenced by the decline of the Indian quarters at Lucknow and other cities and the depravity of the inhabitants, being supplanted by a colonial bureaucratic culture\textsuperscript{233}. Reconstructing Hindu space focused on the \textit{tirtha}, or pilgrimage site, that paradoxically the railways made more accessible to pilgrims. A combination of a newly educated Hindu elite and vernacular press allowed and encouraged a bringing together of older literary treatments of nature with contemporary accounts of travel through the landscape. The concept of an embodied landscape, a sacred topography, that joined together \textit{tirtha} sites resonated with mythic and legendary stories associated with these sites and idealised visions of pastoral life\textsuperscript{234}.

\textsuperscript{232} Bury, ‘Novel Spaces, Transitional Moments: Negotiating Text and Territory in Nineteenth-Century Hindi Travel Accounts’, 3
\textsuperscript{233} Bury, ‘Novel Spaces, Transitional Moments: Negotiating Text and Territory in Nineteenth-Century Hindi Travel Accounts’, 6-9
\textsuperscript{234} Bury, ‘Novel Spaces, Transitional Moments: Negotiating Text and Territory in Nineteenth-Century Hindi Travel Accounts’, 16-19
4.3 Colonial Discourse and Indian Railways

Railways in India in the nineteenth century were a pre-eminent colonial achievement, and widely seen as such, a product of capitalism, technology and the artisan skills of those that built them, over difficult terrain, and ran them. They reordered urban and rural space, compressing it as travel times reduced, valorising it as agriculture found new markets and expanding it as new areas were settled. In this section we discuss how railways affected India and Bombay, what they achieved and how they were perceived. Stations in India, as in Britain and elsewhere in the nineteenth century and now, were more than works of architecture and operational nodes. They represented and signified notions about railways in general and specifically, in relation to a particular city or railway company. They utilised architectural style, form and decoration to inform and impress. Stations were the focal points at which passengers left and joined trains, where the public met socially and commercially.

Socio-Economic Impacts and Perceptions

Railways had a huge and dramatic physical presence in Bombay itself and across rural India. The spectacular viaducts and tunnels, that facilitated the GIPR ascent of the Ghats, dominated the dramatic landscape for miles around and were highly visible to passengers travelling between Bombay and the Deccan, whose numbers increased from 1.5 million in 1870 to 7.8 million in 1890. In Bombay there were the huge terminal stations of the GIPR and BBCI, freight and passenger yards, locomotive and carriage workshops and railway lines penetrated every corner of the expanding docks, which could not have functioned without them. Reclamation of the foreshore, a highly visible undertaking, had facilitated access for both GIPR at Mody Bay and BBCI at Back Bay to the city itself. The vast workshops of the GIPR at Parel, which opened in 1879, employed 7410 workers in 1909 and with BBCI, which had similarly large workshops, railways were very large employers in the city, when all their activities were put together, employing 70,000 staff by 1909.

---

235 Edwardes, Gazetteer of Bombay City and Island, 346-47 – figures are for passengers to and from Bombay only
236 Edwardes, Gazetteer of Bombay City and Island, 346
The Robertson Report, 1904 commented on a lack of finance for expansion and yet what had been built was gold-plated. The density of the system was very low compared with Europe and North America; it was also beset by red tape and bureaucracy. Recent historians comment on ‘the extravagance of their ornate station structures and the slow rate of construction progress’. Strategic priorities led to sub-optimal alignments from a commercial standpoint; the most seriously misaligned route was the GIPR. There were winners and losers from railway development and this influenced perceptions but it is widely recognised that port cities like Bombay were significant net beneficiaries. It has been remarked previously that Indians used the railways in great numbers; 20 million travelling third class annually on the EIR in the early 1900s whereas ‘the first class passengers and mails hardly pay for the grease used in the axle boxes of the vehicles that carry them’.

Colonial space was transformed by railway development. Cities, landscape and the nature of colonial space were changed forever. Railways were not only acutely visible and dominant, they divided some communities by their presence, while uniting others, were a source of wealth and freedom for many. But they were also a repository for the poor and dispossessed, who laid their bedding roll on a station floor every night or who occupied shantytowns besides the tracks. The already advantaged were further advantaged; areas within 50 miles of a railway benefited while others did not, like the tribal belt in east central India, which was all but excluded. Railways frequently breached physical space in villages while passing the villagers by economically and socially. In the Bombay Presidency urban elites were strengthened and moved increasingly to Bombay city, where literacy was significantly higher than elsewhere; towns that were bypassed by the railways declined most and even those on the railway did not always prosper. Poona is an interesting and unusual case; it was on the GIPR.

---

237 C A Stanuell, ‘The Railways in India’, *Railway Magazine*, no 15 (1904), 114-120
241 G Huddleston, ‘The East Indian Railway’, *Railway Magazine*, no 16 (1905), 481-488
242 Kerr, *Railways in Modern India*, 9-16
system but not at its apex like Bombay. However, it did not decline, relatively to Bombay but became more nationalistic, less overtly commercial and more attractive to intellectuals on account of its educational establishments including the Indian-run Ferguson College. Seemingly the railway accentuated cultural differences between the two cities that had already existed\(^{243}\).

Railways provided the glue that held a growing Bombay together; they facilitated and responded to a growing flight to the suburbs, Fig 39. The unusual topography of this long narrow site, Fig. 38, meant that the city could only expand northwards along the lines of the GIPR and BBCI. Space was reordered, reallocated and consumed in ways that only a railway permitted and encouraged. The driving forces of the railway and topography delivered a linear development that shaped spatial values based on access. The great plague of 1896 turned a gradual move away from the old fort area into a stampede, as many as 40,000 people are thought to have left, as middle class Indians sought safety from disease accentuated by overcrowding, poor sanitation and hygiene. But many of them still needed to return to the city daily, made possible by the railway. Inner suburbs, including Byculla, Mazagaon and Parel, that had been occupied by the grand houses of the ruling elite and the wealthiest merchants in the eighteenth and early nineteenth centuries became industrialised, with cotton mills, railway and other workshops\(^{244}\).

Interestingly segregation by class, religion, caste and occupation was increased, rather than diminished, as groups sought to colonise suburban districts through communal societies and cooperatives. This process was further accentuated by the failure of the colonial authorities to adequately plan redevelopment based on access to railway stations; what they had sought to do in the city centre they failed to do elsewhere, preferring to leave decisions to market forces and individual choice. Cowasji Murzban, distinguished architect and engineer for many public buildings in Bombay, initiated some planned developments but exclusively for Parsis, although special provision was made for the poor. Ambitious attempts by Jamsetji Tata, the great Parsi

\(^{243}\) Gumperz, ‘City-Hinterland Relations and the Development of a Regional Elite in Nineteenth-Century Bombay, 122-125
\(^{244}\) Chopra, Preeti, ‘Free to move, forced to flee: the formation and dissolution of suburbs in colonial Bombay, 1750-1918’, Urban History, 39 (2012), 83-107
industrialist, to undertake larger and less exclusive developments, based on local railway stations, were frustrated by the authorities lack of vision and retrograde tax policies. Bombay is now, more than a century later, even more dependent on railways to access a fast growing urban space; expansion in previously isolated areas to the east has required and been facilitated by metro tunnels across the bay to substantial developments at Navi Mumba.

![Map of Bombay](http://www.lib.utexas.edu) and Railway Map, [accessed May 17 2012]

Railways were industrial and technological, embracing new and complex processes, a large and highly disciplined work force and a modern professional management. Managers and engineers came from Britain, as did rolling stock, rails and other equipment and even coal to fire the locomotives even though India had large reserves. Most locomotives were built in Britain until the early twentieth century but nevertheless the railways introduced the first real industry into India with their huge

---

245 Chopra, *Free to move, forced to flee: the formation and dissolution of suburbs in colonial Bombay*, 83-170
246 International Railway Journal, February 2012
247 Edwardes, *Gazetteer of Bombay City and Island*
workshops\textsuperscript{248}, Fig. 40, employing between 5,000 and 20,000 workers each, for repair and maintenance of locomotives and rolling stock; previously mills and factories were relatively small and largely processing agricultural products. Civil engineering was a significant employer of labour also with more than a hundred workers being required to build a mile of track and some 200,000-450,000 being employed simultaneously in the period 1870-1890. Large British-Indian contractors undertook much initial construction with the Parsi contractor Jamsetjee Dorabjee undertaking four large contracts for the GIPR. Innovation in tunnelling and bridge building was significant; monsoon rains hugely increased the width, depth and flow of rivers in the wet season requiring long multi-span bridges supported by deeply excavated piers of a type more advanced than anything in Europe at the time\textsuperscript{249}.

Fig. 40 Railway workshops, Jamalpur, EIR, http://www.thejamalpur.com [accessed May 7 2012]

Railways attracted admiration and fear in equal measure in a country that was traditional in habits and beliefs and unused to machines. The train was large and rapid, breathing fire as it bestrode the landscape. Remarkably little though is known about the social and cultural impact of the railways or indeed of science and technology more generally in India. Contemporary accounts of antipathy from

\textsuperscript{248} Kerr, Railways in Modern India, 6-15
\textsuperscript{249} Derbyshire, ‘Private and State Enterprise: Financing and Managing the Railways of Colonial North India’, 268-303
Brahmins and vested interests are now considered Orientalist, with the traditional Indian fulfilling a role prescribed by the coloniser, although not wholly devoid of truth. There is much ambiguity but evidence that some western educated Indians embraced science on grounds of status and identity while others rejected it not on its own account but more because of the agency that introduced it. Most engineers were until the end of the nineteenth century British but a substantial expansion of colleges for training engineers occurred in India concurrently with railway construction.

If railways were one of the pre-eminent achievements of colonial India they needed to be represented as such. The station was the public face of the railway, more prominent and intelligible than yards and workshops. ‘Nothing symbolised Britain’s power in India so completely as the railway station’. If the fortified Lahore station, Fig. 41, represented uncertainty and an emphasis on security after the Indian Rebellion, 1857 CST in its richness represented a period of confidence and growing prosperity some 30 years later. Important changes occurred in the locating and appearance of stations in the nineteen sixties and seventies as needs of security gave way to commercial considerations. The need to improve profitability required encouraging more Indians to travel through making stations less threatening and more user friendly and situating them in or close to cities, previously rejected for security reasons. The British aimed to attract the consent of Indians by promoting the aesthetics of a colonial public space, manifest in decorative stations. The consulting engineer of the PWD wrote, ‘the government can safely afford to place each station with a view merely to commercial interests. The more the inhabitants of large and influential cities are identified with the railway thereafter the better the country will generally be. The people will see in the railway as a developer of industry and the works that grow by

251 Derbyshire, ‘Private and State Enterprise: Financing and Managing the Railways of Colonial North India’, 271-278
252 Richards and MacKenzie, The Railway Station, 68
253 Richards and MacKenzie, The Railway Station, 69-75
peace and not merely an engine of war isolated as much as possible and kept to hold them in subjugation.’ 255

Fig. 41 Lahore Station, 1859-60, [http://www.en.wikipedia.org](http://www.en.wikipedia.org) [accessed May 7 2012]

In Bombay a prominent terminal station might reasonably, therefore, be expected to reflect the values and culture of the city through the vastness of the structure and sculptures that used classical figures and allegory to illustrate achievements and use of rich materials. Decorative sculpture points in various directions with large narrative figures proclaiming values and achievements of empire: progress was arch-embracing with Commerce, Science and Agriculture, each related to the creation and fruits of the railway symbolised. But Indian-ness, while not markedly apparent in architectural style, is recognised in sculptures of the Indian castes, medallions of the Indian directors of the GIPR and in the many Indian animals that abound in the structure, in capitals, friezes and elsewhere.

Country stations frequently sought to reflect the values of local people, whether in the Cotswolds, Himalayas or Bombay suburbs; stations in Indian hill resorts sought to encapsulate Englishness and values espoused by officials and families escaping summer heat on the plains256. The difference in representation between Indian and

255 British Library, London, India, Proceedings of PWD, Capt de Bourbel, No 171 (1864)
European stations was subtle; both celebrated common achievements and travel analogies but those in India and other colonies were also required to demonstrate that these benefits resulted from colonial rule. This coded message had to be intelligible to a wide audience of colonists, indigenous peoples and those at home in the mother country. Most railway historians agree that railways represented progress and modernity and in many countries railway builders shared broadly similar beliefs with the wider public and travellers\textsuperscript{257}. But this acceptance was ambiguous with colonists seeing the strategic power of the railways to move troops rapidly so ensuring any rebellion could be quickly put down and nationalists seeing the power of the railways to unite and breakdown difference, an argument also used to justify imperialism.

4.4 Meaning and Semiotics

This section brings together the various strands in a historically and culturally specific discursive formation that includes colonial aesthetics, architecture as a prime source of colonial representation, the means by which Europeans conceptualised the orient that we now call Orientalism and perceptions of Indian railways by colonists and Indians as elements in a process of giving meaning to CST as a visible symbol.

Semiotics

Semiotics is a process of sign making and interpreting cultural meaning. The sign is made up of a signifier and a signified, which use culturally specific codes, including language, to convey meaning. Saussure, a father of modern linguistics and architect of semiotics, believed that meaning arose from differences between binaries, such as black and white. Derrida, though, rejected the proposition that the meaning of signs could be situated in a signified determined by internal oppositions in a synchronic system but argued that meaning arose from the movement from signifier to signifier, as part of a continuing process. Importantly semiotics is dynamic, therefore, and meaning is not fixed but constructed by each viewer\textsuperscript{258}. Modern semiotics is relatively sympathetic, as compared with its earlier phases, with art historical approaches to interpretation and, it can be argued, complements iconography. But as a process of

\textsuperscript{257} Kerr, ‘The Railway Workshops and Their Labour’, 295

\textsuperscript{258} Hall, S. Representation, Cultural Representations and Signifying Practices, 30-37
interpretation it places more emphasis on reception and less on the artist, author or production narrative than art historical approaches.\

**Contexts, Authorship and Reception**

Art historians in determining context generally assemble material including social and historical data but semiotics argues that this context is not a given assembly of data, as is sometimes suggested, but is dynamic, as the art historian makes choices in deciding what to include and what to leave out. For some art works relevant material will be scarce or unreliable, giving rise to an increased need for interpretation. Semiotics, therefore, places context and text in a dynamic relationship and argues that the two are not as distinct as the adage that ‘history stands before artefact’ suggests, by pointing to examples of ‘chronological reversal’, where context is generated out of the image.

Art historians construct a narrative of convergence from the context in seeking to determine what factors make a work what it is. In semiotics the principle of convergence is accepted but not its singularity; works of art function as signs but are iterative not singular in structure. Signs are repeatable and each viewer generates a new set of contexts, a plurality that sees signs opening out from a work in the permanent refraction of reception. In chapter 2 we provided the historical context for CST, which is judged helpful and informative in situating CST in colonial late nineteenth century India and the mercantile city of Bombay but it is not exhaustive nor cannot it be. We have made choices over what to include and what to leave out, even though we have attempted to look impartially at Indian society and attitudes, as well as British, emphasising that context is not fixed but created. Incomplete as it is, it is a necessary part of determining meaning.

Vasari praised the genius of the artist in his ‘Lives of the Artists’ written in Italy at the time of the Renaissance and the artist has remained, for the art historian, a critical element in interpretation. Roland Barthes challenged this established orthodoxy in his ‘Death of the Artist’; similarly Foucault rejected this hegemony asking ‘What is an

---

260 Bal & Bryson, ‘Semiotics and Art History’, 174-179
author’; both believed that authorship was no more a natural ground of explanation than context. Foucault pointed out that a name is arbitrary and communicates only what we already know of a person, be they artist or author, and it may be nothing or a preconditioned view \(^{261}\). In semiotics the author or artist function operates very similarly to that of context, that is to say it is not fixed, but subject to discursive operation and analysis, in which the viewer is central. If we take Stevens, architect of CST, we know very little of his life and our views of him are conditioned by what others, particularly architectural historians, have thought of his work and these are likely to further alter over time. Semiotics does not posit a formalist analysis of CST rather an acknowledgement that authorship is not a fixed body of knowledge but is dynamic \(^{262}\). More information on Stevens’ life may become available but more importantly viewers will adjust their understanding of what exists, add to it perhaps, over time, and opinions of him and his work will vary.

Reception is a central, if not the central, aspect of semiotics. It rejects the concept of ‘the viewer’, a contrived and abstract figure in art historical interpretation, as too generalised and biased, preferring that we speak of viewers. Viewers comprise groups and individuals, in reality, and any absences, for example, women, or in the case of CST, low income Indians, should either not be ignored or meaning qualified. Individuals and groups adopt codes of viewing based on cultural identity and these are necessarily acquired over time and understanding within a group need not be homogeneous. In Iconography it is similarly recognised that culture, education and class condition viewers, with only the best educated recognising, for example, classical allegory in works of art. Semiotic analysis identifies the plurality and unpredictability of understanding and meaning, given the instability of contexts and the discursive configurations that produce them together with possible conflicts between residual codes of viewing \(^{263}\).

\(^{261}\) Hall, S. *Representation, Cultural Representations and Signifying Practices*

\(^{262}\) Bal & Bryson, ‘Semiotics and Art History’, 180-184

\(^{263}\) Bal & Bryson, ‘Semiotics and Art History’, 184-188
Interpretation and Meaning

First we must select a viewer and determine what is being viewed. The viewer can be a European or an Indian, a Bania or Konkan Brahmin in 1888, when CST was completed, Lord Curzon, the viceroy, in 1911, Nehru, India’s first post-independence prime minister in 1948, or a European tourist last year. These are but a tiny sample of possible viewers available; Curzon and Nehru are individuals while Banias and Konkan Brahmins are groups that may not be wholly homogeneous. Semiotics requires specificity, that we define the viewer, state time and circumstance and determine what is being viewed.

Fig. 42 Axel Haig, *The British Raj Great Indian Peninsular Terminus*, 1878

We must determine the unity of the artefact, or image, to be viewed. A viewer has many choices with CST; he may view the structure as a whole, as Axel Haig, Fig. 42, did in his watercolour of 1878 or he may situate himself, or herself, on the concourse close to the teeming platforms, or indeed anywhere, even on an upper floor of the nearby City Hall. By way of example, in the *Railway Station*, 1860, Fig. 43, Frith depicts a platform scene, where passengers are disgorging themselves from a recently arrived express. This scene has been described as an image of modern life and so in
many respects it is; a further narrative suggests that a god-given imposition of order
gives meaning to the chaos. The image or interpretant that this depiction generates
suggests an object. That object is a subjective choice of the viewer; it may be an
abstract concept like modern life, itself open to much qualification, or it can also be a
material object. In India choice of object is limitless and heavily conditioned by the
culture and experience of the viewer, for as we have speculated, Lord Curzon and a
Konkan Brahmin will approach the image from different cultures, codes of viewing
and understandings of context. The concourse, or a platform, of CST may signify
modern life, an abstract but meaningful concept, much as Frith’s depiction does, but
with added complexity, as class, caste and social relationships are played out.

Fig. 43 W P Frith, The Railway Station, 1860, Royal Holloway College, London
University

If a viewer faces the main façade, that of the central block, with entrance to the offices
and main dome above, situated behind the small garden, with two wings either side
with porte-cocheres, used to enter the various elements of the station, he is confronted
by a multiplicity of signs, increasing as more of the structure is consciously absorbed.
A first reading might suggest the size and richness of the structure, later the large
sculptures might be read, then smaller motifs and art work, each individually and
collectively generating signs. A sign, representing a main façade, is not Iconic as the

\[264\] Richards and MacKenzie, The Railway Station, 318-19
signifier does not resemble the signified, as with a portrait, or a realistic sound, but is *Indexical* suggesting a signifier that is not arbitrary, as in language, but is connected in some way with the signified. A generalised sign of CST points to a rich and large building; its referent may be power, an abstract concept, that viewers in nineteenth century Bombay, with its many elaborate colonial buildings, may have come to associate with grand buildings.

A closer look at the large sculptures, however, generates signifiers that are more specific, the sculptural figure of *Progress*, in classical drapery holding a copper gilt flaming torch, *denotes* allegory that the western viewer associates with progress and further *connotes* railways as a progressive trans-formative force in a colonial order. This last process Barthes describes as *myth*, achieving a closer understanding of a sign than the more self-evident denotation. The sign generated by or through the sculpture is *Iconic* and *Indexical*, because a conventional reading of the allegory, with a depiction of flaming torch and wheel, suggests progress linked with railway development but this code will not be universally understood in a diverse city with many distinct cultures.

There is no sign that suggests that CST is a station, or is there? CST is broadly similar in appearance to the BBCI building, for example, which is not a station. A viewer will only know that it is station through convention and secondary signs. While a church may operate *iconically* a station does not; there are no clear indicators of function. While the fort-like station at Lahore suggested military might and security induced by the railway, CST, although not immediately recognisable as a station, points to a different understanding of railways. Further sculptures depict *Commerce, Agriculture* and *Science* indicating economic benefits of railways, appropriate for a port city and a period of growing prosperity. Both Lahore station and CST signify power but the context has changed, from one to the other; concern over security, following the rebellion in 1857, has been replaced by an emphasis on economic achievement. Power in a colonialist context is the power of the state; political power is exercised for economic ends. Military power, law and order, education and the railways, above all

---

265 Hall, S. *Representation, Cultural Representations and Signifying Practices*, 68
surely, fit India to meet the needs of the colonial power, which are principally economic in a colony that is not a settler state266.

The large sculptures of Progress, Commerce, Agriculture, Engineering and Trade proclaimed by their size, dominance and presence and not least their composition that the success of this mercantile city was tied to empire and the railways. The various classically attired figures drew on acknowledged western symbols of progress that other sculptures of science and engineering articulated. They were supported by the rule of law and enlightenment values that a civilised nation brought to a divided people. They also represented a colonial collaboration, a joint enterprise that involved Parsis, Banias, Bohras, Bhatias, Khojas and Memon, to list but a few of the groups, which dominated the trade of the city. Colonists prided themselves on promoting unity, never to be taken for granted; communal tensions, always simmering, exploded in inter-communal riots in 1851 and 1874267. Stevens in decorating CST was following a pattern of representation established through earlier buildings in Bombay and at the Colonial and India Office in London268. Despite an innate sympathy with Indian culture, he shared a distinctive colonial culture, consciously or unconsciously, with colonial colleagues, a concern with political effect manifested in architecture, having worked in the PWD for many years269.

Meaning to Indians viewing CST was as likely to have been conditioned by attitudes to colonisation and railways as to their appreciation of the structure itself. Economic evidence suggests that Bombay merchants benefited hugely270; Shets, Banias and Bhatias saw increased profits and trade from cheap access to raw cotton and agricultural produce and markets for ready-made goods that the railways provided271. Other Indians saw CST rather differently but not necessarily critically although some did. These were a far from homogeneous group that included Brahmins and Hindu literati on the one hand but also small traders like Memon and lower castes and their views were sometimes ambiguous and contradictory.

266 Foucault, 78-89
267 Dobbin, Urban Leadership in Western India, 217-246
268 Metcalfe, An Imperial Vision, 3
269 Metcalfe, An Imperial Vision, 2
270 Gumperz, ‘City-Hinterland Relations and the Development of a Regional Elite in Nineteenth-Century Bombay’, 97-103
Colonists made powerful claims for the railways, economically and socially but research undertaken by scholars in the twentieth century throws some doubt on these claims\textsuperscript{272}. Nationalists at the time and subsequently saw the railways as a vehicle for imperial exploitation and a financial ‘drain’, a subject discussed in the previous section; these included Dadabhai Naoroji, Mahadev Ranade and Romesh Dunn\textsuperscript{273}. While Hindu literati rejoiced in a new found ability to visit holy pilgrimage sites and view sacred landscapes from a carriage window others saw the railways as reinforcing difference and stratification. Stations segregated travellers by class of travel, nowhere more so than CST, and railways excluded Indians from management and critical artisan tasks. Brahmins and upper caste Hindus were acutely offended by enforced travel with and greater proximity to lower castes\textsuperscript{274}. Railway stations and carriages signified a new colonial social hierarchy that was based on race and wealth rather than on caste.

Despite these concerns Indians took to rail travel, on a scale, unimagined by the authorities; annual passengers reached 80 million in 1880 rising to 200 million by 1904. The number of miles travelled per passenger each year exceeded that in Europe, overall numbers were higher than those in France and the proportion of the third and fourth-class travel was significantly higher than in Britain in this period\textsuperscript{275}. CST was thus more than a monument to many Indians of all classes; it had meaning because they used it. It had a relevance to their lives in a way architecturally pleasing stations in many countries have now lost, nowhere more apparent than in South and North America.

Accounts of travel made by Hindu literati are important in understanding how Indians sought meaning in CST through the railways. Pandit Ramshankar Vyas, a religious official travelling in 1902, undertook pilgrimages facilitated by the railways but also made many visits to see the benefits of technology and urban improvement.

\textsuperscript{272} Hurd, ‘A huge Railway System But No Sustained Economic Development’, 313-362
\textsuperscript{273} Goswami, \textit{Producing India: From Colonial Economy to National Space}, 104
\textsuperscript{274} Goswami, \textit{Producing India: From Colonial Economy to National Space}, 103-31
\textsuperscript{275} Goswami, \textit{Producing India: From Colonial Economy to National Space}, 108
undertaken by the British, which he greatly admired. Har Devi, a Punjabi Kaywarth, travelling in 1883, was more concerned with railway stations, which she saw as chaotic and intimidating most particularly to a middle class lady like herself, as to sites visited or views from carriage windows. She and other writers remarked more on the noise, crowds and hardship that stations represented rather than their architecture. Harischandra, searching for a stronger Hindu identity, discussed in the previous section, reversed colonial concepts of railways by substituting Hindu for colonial space.

How then did the many Indian sculptors working on CST view it and their work? Indian sculptors had worked on the sculptures of many Bombay Victorian buildings, under arrangements agreed with the PWD that did not exist in other cities, starting with those of the university buildings, 1869-74, where Muccoond Ramchander oversaw work assisted by Kipling. Ramchander’s delicacy of style won him much praise and many commissions that included Elphinstone College, Byculla. In 1874 the Times of India reported ‘Native workmen have been as apt to learn as their confreres in Europe…Art (in India) can only be permanent when the knowledge of it has become indigenous’, and went on to praise them for making the clay models from which the sculpture was produced. Indian sculptors primarily undertook furnished capitals, corbels, gargoyles and other architectural detail, including the enchanting animals to be found placed as if at random throughout CST. They did not undertake the giant and overtly European statues that adorned CST and other Bombay buildings; these were made in Europe and shipped out.

Griffiths is said to have supervised the sculptors at CST, Kipling having moved to Lahore in 1880, but the day to day direction appears to have been left to Master sculptor Gomez. Gomez may have been inspired by the delicate sculpture of Muccoond Ramchander, who was continuing to work in Bombay. The influence of

---

277 Bury, ‘Novel Spaces, Transitional Moments: Negotiating Text and Territory in Nineteenth-Century Hindi Travel Accounts’, 8
278 Mitter, Art and Nationalism in Colonial India, 60-61
279 London, Bombay Gothic, 51
280 London, Bombay Gothic, 90
281 Report on Public Instruction, 53
Kipling may also have continued, however, Lahore and Bombay being well connected by rail at the time and he and Griffiths were personal friends, who had trained together in London. Griffiths and Kipling appear initially at least to have accepted the contradictory approach of the art schools to sculpture, where the curriculum promoted a classical aesthetic, in contrast to an acceptance of Indian abstraction in decorative design, but by 1886, two years before completion of CST, Kipling had become much interested in ancient Hindu sculpture, as evidenced from writings in *The Journal of Indian Art and Industry*\(^{282}\). A critical question is the extent to which he, or Gomez, allowed the students free play in the decorative aspects of the work? The Report on Public Instruction, 1872-3 says Kipling drew on the Maharastran talent for sculpture and allowed students ‘to give play to the grotesque and the fanciful common to Indian and Medieval art’\(^{283}\). While this relates to a period earlier than the CST sculptures and before Kipling left for Lahore it is indicative of a relative freedom enjoyed by the students that likely continued.

A key figure may also be Stevens himself, who designed the decorative sculptures at CST\(^{284}\), relatively unusual for an architect designing a large building; Stevens had collaborated with Griffiths from 1869 and had become a government examiner at the JJ Art School in 1876\(^{285}\), suggesting a knowledge of decorative sculpture and Indian-ness. The inclusion of the many small animals can only have been deliberate choice but to what extent was the abstraction in individual sculptures taken from the drawings or shaped by the sculptors? Only a close examination of Steven’s drawings, and a comparison with the finished work, would reveal the extent to which Gomez and the students were free to innovate but it may be reasonable to assume that Stevens was very mindful of indigenous sculptural skills and reflected these in his designs.

The four decorative sculptures shown in Figs. 25-28 illustrate Indian-ness in style and content and are indicative of other decorative work at CST that included sixteen bas-relief heads, in corner drums on the main façade, representing the communities of Bombay, identifiable by headdress. The many small animals included in the decorative sculpture, some central to a foliate design and others placed as if by

\(^{282}\) Mitter, *Art and Nationalism in Colonial India*, 42
\(^{284}\) Mehrotra and Dwivedi, *A City Icon*, 157
\(^{285}\) Obituaries, *RIBA Journal, Times of India*, and *Building News*
random, resonate with a Hindu veneration of sacred animals\textsuperscript{286}. Indian sculptors will have rejoiced in undertaking this decorative sculpture with its rich patterning, abstraction and inclusion of sacred Hindu animals, giving meaning to CST as an organic structure with a discrete Indian-ness. For them CST signified a colonial structure certainly but with an embedded Indian-ness that they themselves had helped create; use of local materials, stone worked by the hands of a Hindu craftsman had a significance unrelated to cost and a spiritual content\textsuperscript{287}. CST was in this way anchored to the soil and to India, capable of being understood in an Indian way.

The wider audience and message represented were, though, complex and unstable, even to Europeans. Jan Morris describes CST as the central building of the entire British Empire\textsuperscript{288} and Richards and Mackenzie in their \textit{The Railway Station: A Social History} claim that ‘VT perfectly represented the immense complexity of British power in India\textsuperscript{289}. Kerr says ‘VT was built to represent a set of attitudes, beliefs and relationships: an attitude of British superiority increasingly measured by machines; beliefs in the progressive and civilising power of railways; relationships anchored in the fact of colonial rule to which compliance was fostered by grand buildings like VT\textsuperscript{290}. These definitions and assertions underline that CST’s importance was allied with the representation of railways and their many attributes. So if the seminal building of empire was a railway station, and not a city hall, governor’s palace or court of law, why was it CST?

Use marked out CST from other colonial buildings in Bombay; it was a site and space of social interaction. Whereas high courts, government offices and universities were the preserve of the few, railway stations provided a forum of encounter open, even in nineteenth century India, to all regardless of race, caste, religion and wealth. Indian stations were spaces to be negotiated, transitional and novel spaces. They were a melting pot where high officials, rajahs, wealthy Parsis, craftsmen and tribesmen encountered each other peacefully within the frame of the railway that serpent that

\begin{flushleft}
\textsuperscript{286} Michell, \textit{Hindu Art and Architecture}, 30-32
\textsuperscript{287} Cohn, \textit{Colonialism and Its Forms of Knowledge}, 19-21
\textsuperscript{288} Morris, \textit{Stones of Empire}, 133
\textsuperscript{289} Richards and MacKenzie, \textit{The Railway Station}, 70
\textsuperscript{290} I Kerr, ‘Representation and Representations of the Railways of Colonial and Post-Colonial South Asia’, \textit{Modern Asian Studies}, 37/2, (2003), 292
\end{flushleft}
embraced the huge sub-continent and dictated a central railway time in every city on which trains came and went.

Wittgenstein argues that meaning and use are intimately, inextricably related, because use helps determine meaning. That the BBCI building in Bombay, very similar in appearance to CST, also designed by Stevens at broadly the same time and greatly admired as a work of architecture, has largely been ignored, except by a small band of architectural historians, bears out that use valorises. It remains an impressive work of architecture, but as a railway office and not a station, it lacks significant meaning as such. Whereas CST has acquired greater, more diverse and reciprocal meaning as a station, focal point for visitors arriving in India over more than a hundred years and is now a fount of contemporary Indian life. Today CST is the focal point of a commuter network that brings some six and a half million commuters daily into and from the city daily, amongst them tiffin carriers servicing the city’s huge commercial life. Platforms are festooned with market traders, shoe shine boys and its railway children, originally homeless but now an adjunct to a huge and greater railway family.

Fig. 44 Mumbai, Commuting today, [http://www.writechoice.co.in](http://www.writechoice.co.in) [accessed May 7 2012]

---

291 Hall, S. *Representation, Cultural Representations and Signifying Practices*, 70
In addition to place and use, time is of the essence and the period of construction, 1878-88, is critical in interpreting CST. This was the zenith of high imperialism when Joseph Chamberlain believed that colonies would secure national prosperity and wealth and Cecil Rhodes dreamt of a white Central and South Africa and a Cape to Cairo railway292. Construction of CST had commenced only two years after the Royal Titles Act; 1876, conferring the title of Empress on Queen Victoria, and its completion all but coincided with the Queen’s Jubilee and on that day, 20th June 1887, it was named Victoria Terminus in her honour; actual completion followed in May 1888293. It was a railway station built at a critical historical juncture.

Like St Pancras Station in London CST was built at the zenith of High Victorian architecture and of railways, as well as of empire. Extravagant and well-illustrated descriptions of the terminus, to which we have previously made reference, followed its official opening in *The Builder, The Building News*, architects and other journals. Terminal stations built before and after these two giants seldom matched them aesthetically, although larger and more advanced technologically, and the First World-War shattered confidence in Britain and across the world; empire continued but colonial relationships were never the same again. CST, despite its grand head-structure, lacked a train shed to match the soaring beauty of St Pancras’s curved lattice girders reaching up to heaven, largely because it was built in 1888 and not in 1864. Changes were afoot. Waterloo Station in London and Howrah Station in Calcutta were much larger than St Pancras and CST, as built294, respectively and employed the very latest hydraulic and electrical equipment; arguably they were better stations in functional terms but they were long, wide and low and pierced no skylines. An elaborate verticality gave way to horizontality and functionalism, signalling an end to eclecticism and sophistication in the construction of great city termini295.

We return to the question we posed at the outset of this dissertation. Why was CST considered the most important building of empire? Was it the quality of its architecture, railway association, situation in and within a dominant port city or

---

292 Hall, C, *Cultures of Empire, A Reader*, 9
293 Mehrotra and Dwivedi, *A City Icon*, 138-39
294 Capacity was almost doubled at CST, 1926-29
timing, coincidental or otherwise, contemporary with the Jubilee and birth of empire under the Royal Titles Act, 1876 leading to the ultimate accolade, being styled Victoria Terminus? Or in this celebrity world has CST become a celebrity itself representing all the other fine colonial buildings or railway stations in India, and across the former empire, that few except art historians trouble much about? We believe it is the latter, that it is not possible to argue that CST is inherently superior to Bombay university library²⁹⁶ or convocation hall, the BBCI building by Stevens or indeed Chisholm’s Madras Egmore Station in its Saracenic style. CST’s meaning is primarily, we believe historically and culturally based. Railways had and continue to have a special place in the Indian imagination and much as colonists wished, albeit for different reasons, railways have proved a source of unity, little understood in a more homogenous west, where railways have been progressively eclipsed, losing much of their magic.

4.5 Summary

In this chapter we have sought cultural meaning, through developing a colonial discourse, in which to situate CST, and have discussed semiotic approaches, with their dynamism but recognising that they are less historical than a discursive approach, a material factor in interpreting an historical structure. We have discussed Orientalism, as a discourse, a way of thinking, embracing attitudes and practices, based on scholarship and research, allowing western governments, imperialists, travellers and tourists to objectify and dominate the oriental and his culture. We have sought the historical specificity, required by Foucault in his approach to discourse²⁹⁷, by considering closely nineteenth century India and the work of scholars and administrators, as a necessary context for understanding. We have discussed signification and complex questions of the unity of the artefact, diverse audiences and multiplicity of viewing codes across cultures.

We have examined the process by which knowledge was acquired through excavation and other means, ordered, recorded and classified. This ability to classify and record and construct history reinforced an existing hegemony and inculcated into imperialist

²⁹⁶ Butler, ‘George Gilbert Scott and the University of Bombay’, 10-13
²⁹⁷ Hall, S. Representation, Cultural Representations and Signifying Practices, 46-49
relationships a superiority verging on condescension. We have focused on acquisition of knowledge in archaeology and architecture, so as to look more closely at the process, and tourism and travel, where travel narratives have been constructed with a typology of Indians and holy sites, duly sanitised for consumption. We have recognised that in reality Britain’s relations with Indians were not capable of these broad generalisations used for representational purposes, neither could or should Indians be equated with Egyptians or other races. There was, we believe, a mutual respect and interdependence between races in India, that did not exist in all colonies, with a strong British regard for Indian qualities, including intellectual imagination, craft skills, hard work and loyalty.

We have argued that use, place and time were dominant factors in determining meaning, making CST what it is. We have, therefore, explored the critical importance of railway development, economically, industrially, culturally, socially and spatially helping to shape Bombay. We believe railways transformed India, although not always in the ways anticipated, and were represented as a dominant force for progress and good, unifying diverse peoples in a growing prosperity. Railways underlined colonial power and a benevolent hegemony that unified Indians, divided by race, religion, caste and wealth in ways of which they were not themselves thought capable. CST represented all those positive qualities perceived as belonging to railways. It was also a unique, public, social space where cultures and travellers met and experienced each other and railways first hand.

CST was importantly built at a critical historical juncture in a mercantile and gateway city, a conduit between east and west. Its completion coincided with a high point of imperialism, as yet not seriously questioned, creation of an Indian Empire under Queen Victoria in 1876 and then her Jubilee in 1887, with its outpouring of national spirit, patriotism and pageantry, leading to the naming of the terminus after her. St Pancras in London it was built at the high point of Victorian Gothic; both stations were dominant at the time and still are, as later more advanced and functionally designed stations have failed to strike the same chords in the public imagination. While it is not possible to argue that CST is architecturally superior to all other colonial buildings in Bombay or in India as a whole, although it is unquestionably one of the finest, it has come to represent all those other colonial buildings in their
contrasting styles and the unifying power of railways, still perceived in India as a huge family. It has been naturalised and is now cherished by Indians, who recognise the enormous part railways continue to play in the Indian psyche, unimaginable in the west where railways have lost glamour and utility, and in Indian history, nationalism and the welding of a unified nation from such diverse sources.
5. Conclusions

At the start of this dissertation we undertook to validate the various assertions that CST was the most important colonial building of empire: foremost railway station and oriental successor to St Pancras. In order to understand CST, question and validate these claims, we have looked at the historical context in which it was built and have analysed aesthetic and architectural quality before finally showing how its material form embodied a politically developed system of meaning.

CST was built between 1878 and 1888 in Bombay, a hugely significant node of empire, economically and politically. The rebellion of 1857 had ushered in full colonisation, providing political stability and growth in trade that was particularly to benefit Bombay. Sir Bartle Frere had set out a grand vision for Bombay as early as 1843, entitled Urbs Prima in Indis, and promoted it strongly as Governor, 1862-67. As we saw in Chapter 2 the opening of the Suez Canal in 1869 and growth of railways in India were hugely important for Bombay. The first trains ran in 1854, ascending the Ghats in 1865, and opening up the whole of India to trade.

Between 1860 and 1900 the city grew quickly and industrialised with cotton mills and large railway workshops. With railways came enclosed docks and the large public buildings that reinforced and communicated Bombay’s growing hegemony. Its hugely varied and vibrant population allied with stability and technological advances were essential ingredients of growth, with traders, intellectuals and workers converging on the city from far and wide. Political recognition took the form of the Imperial Titles Act, 1876 creating an Indian Empire, with Victoria as Empress, soon followed by her Jubilee in 1887. Empire had reached a high point, formal apogee, of high imperialism and there were few clouds then in the imperial sky.

This was the context in which the built environment came to play an important role in asserting British power. At the most basic level the huge growth of public buildings provided for the modern requirements of state administration. Their architecture and aesthetics owed much to Britain’s remarkable Victorian public buildings, strongly

298 Hall, C, Cultures of Empire, A Reader, 7-9
influenced by John Ruskin. The leading architects of the period shared his interest in European styles and in innovation, to provide a modern Gothic style able to reflect a new age. Bombay’s architectural debt to Britain and to Gothic began with Frere’s early association with Scott over the design of the Afghan church in 1840 and continued with Scott’s designs for the university.

In analysing CST we have sought to determine its aesthetic merit, having regard to architectural theory, views of leading architects, then and now, its relationships with St Pancras and other comparable buildings. Such detailed analyses of styles, motifs, materials and Indian-ness have not been undertaken elsewhere and provide an essential basis for determining meaning and questioning the assertion that CST was and is the central building of empire. In aesthetic terms CST is grand, imposing and rich, but is it the most important building of empire and finest railway station? We believe that these claims cannot be justified solely on aesthetic grounds but rely on political, cultural and social association. The University Convocation Hall and Library are outstanding buildings with a delicacy not found generally in Bombay. CST is not, in ‘my’ view, inherently superior to the BBCI building either, in architectural terms. The BBCI building was solely an office, not a station, and was seriously damaged by fire after construction and has never captured the hearts of Indians as CST has. Both Howrah and Sealdah in Calcutta are larger than CST but lack its stature; when they were built high imperialism was passing and High Victorian Gothic had passed. Madras Egmore rivals CST in aesthetic terms, but Madras was not Bombay and politically how could an Indo-Saracenic building really represent a British empire? T R Smith had argued as far back as 1863 that an empire should wear its own clothes299. CST was demonstrably a European building, albeit with oriental feeling: it was a powerful statement of imperial power astutely tempered with measure of sensibility towards indigenous sensitivities.

The mechanisms through which political power was transformed into and reproduced by material form were explored in the preceding chapter. Architects used knowledge of indigenous architecture and culture to design buildings that would impress and dominate. Style, mass and ornament were manipulated to achieve a grandeur but

299 Smith, ‘Architectural Art in India’
within a framework of dominance. They represented power within an ‘Indian’ empire and were designed to appeal to Indians but on the coloniser’s terms that left sufficient distance between the two cultures. Foucault believed that actions, events and dialogue must be understood within a discourse that is spatially and historically specific. The discourse was orientalist in structure and the place was Bombay in 1870-90, geographically and culturally part of India, but a mercantile city that owed its prosperity to British rule and was closely connected to Britain by sea and the rest of India by railways. Stations facilitated travel, were the public face of railways and the means by which they expressed modernity and progress. Uncertainty following the rebellion of 1857, reflected in the fort-like appearance of Lahore station, had given way to a relative confidence and growing prosperity by 1878-88 when CST was built. Not all Indians shared such a positive view, but in Bombay many did, including rich and powerful merchants and thinkers.

CST’s dominant sculptures represented empire as a progressive, technological and creator of prosperity. While there was little that was truly Indian in style, there was much for Indians, of all classes, castes and faiths, to cherish; not the large sculptures, imported from England, but the many small animals, plants and floral designs to be found in friezes, capitals, above doorways. These were carved by local sculptors, trained within the city, albeit within colonial schools, but imbued with a strong belief in India’s great ancient crafts. They stirred the imagination of a people rooted in nature and place. But it would be wrong to suggest that one can equivocally fix meaning, or even a range of meanings, to the physical presence of CST indefinitely. Instability of meaning accompanied uncertainty over target audiences from the colonisers themselves, in India and back in Britain, and Indians of all hues. Colonists needed to impress those in Britain, on whose support colonisation depended, and a varied audience in India. Many Indians were educated in colonial schools and sought to emulate British taste, while others rejected attempts to erase indigenous culture through education, art and public architecture.

Railways were the single most powerful source of meaning for CST. In India they occupied a unique space, initially a colonial state space, modern, technological,
capitalist and culturally pervasive with a huge physical presence\textsuperscript{300}. In 1888 when CST was completed they straddled this vast and diverse country, climbing the Ghats, bridging giant and symbolic rivers, bringing wealth to some and ruin to others as they transformed business practices and social mores. Situated in India’s principal port and commercial city CST was built to represent the power of the railways to transform Britain’s largest and proudest colony. The huge sculptures signified modernity and progress, industrial, agricultural, educational and technological. Educated Hindus and proto-nationalists disputed these and other colonial claims arguing that the railways were a financial drain designed to impoverish the country and increase western domination. Subsequent research has confirmed that the railways did not bring the economic development that might have been expected, and occurred in other counties at about the same time, due to the ways were built and used.

Yet because of and in spite of these claims and counter claims railways in India became a central part of national life and the Indian psyche occupying a national space unique in railway development anywhere. It is not altogether surprising that the colonists cherished such hopes on the railways and spared no effort to represent them so proudly and boldly to signify progress. India was the jewel in the crown, large, diverse, culturally rich and an essential economic adjunct to Britain. Other colonies were either small or culturally ‘barren’ in the sense that, although physically large like Australia or Canada, they were sparsely populated before the arrival of settlers and indigenous peoples posed no threat militarily or culturally. Railways in these countries and colonies would have a dominant economic role but would not be absorbed into the culture of the country. In India not only did nationalists contest the claims of colonists as to railway achievements but were able to naturalise them, using them to create a national unity, where none had existed before, and at a cultural level absorbing them into daily life in a way unimaginable in Europe and other countries.

Indians of all classes, faiths and castes quickly took to travelling on the railways yet colonists had seen the railways primarily as a means of moving goods. They travelled more and further than passengers in Europe in the late nineteenth century and more

\textsuperscript{300} Goswami, \textit{Producing India: From Colonial Economy to National Space}, 9
poor people travelled also, 96% travelling third or fourth class\textsuperscript{301}. The railways allowed them to discover their own country with its symbolic landscapes, isolated villages, commercial centres and pilgrimage sites. The railways touched the lives of literally millions of Indians, if not always in the ways anticipated by colonists. Their presence in a town, proximity to family lands transformed lives. As colonists retreated Indians occupied the marble halls and tiled corridors at CST and elsewhere that had once been occupied by Europeans. Indians were not alone in colonising and naturalising stations and trains, transforming them into commercial and domestic space but they did it and do it on a bigger scale and more systematically than other races. Stations provide the sales counter, places of exchange for countless small traders and in rural areas passenger trains convey fresh produce and artisan wares to market. Stations in major cities, not least Bombay, are home to countless thousands of homeless poor, driven from villages through poverty and then a failure to find more than casual work in the town, and orphaned children, sometimes called railway children. The railways provide a neutral space, where small business is transacted and the poor are succoured.

Railways now represent modern India and stations signify Indian-ness, a quality that combines so many apparent contradictions. Indian stations are chaotic yet India runs efficiently a huge and complex railway system. Indians are diverse, observe unusual religious practices and many follow traditional patterns of dress yet are well-educated and successful in business. While railways have largely been replaced in popular culture across the world by fast cars and airport lounges they are still at its centre in India. Literature, poster art and film, including Bollywood, across the sub-continent continue to place railways at their heart, providing a backcloth to events depicted\textsuperscript{302}. Railways continue to underpin the unity of this vast country physically, economically and metaphorically, signifying modern life but in an Indian frame. In the Bollywood film, \textit{27 Down} (1973) a wave of commuters descend from an arriving train and engulf CST\textsuperscript{303}; no more enduring image is easily imagined of the vitality of modern Indian life, underpinned by the railways. This image, with CST at its heart, signifies modern

\textsuperscript{301} Goswami, \textit{Producing India: From Colonial Economy to National Space}, 108
\textsuperscript{303} Kerr, ‘Representation and Representations of the Railways of Colonial and Post-Colonial South Asia’, 323-24
life but a distinctly Indian modern life where the traditional coexists with the modern and where the unity facilitated by the railways embraces a living diversity.

We believe that CST was, and remains, the central building of the British Empire because it was a railway station in the principal commercial centre of Britain’s largest former colony, India, a country that has come to symbolise empire through its extraordinary diversity and richness, pageantry and complexity. We believe that the conjunction of aesthetic quality, an embedded Indian spirituality, the power of railways to make and transform, its geographical location and the historical significance of the few years in the late nineteenth century that we now see as the apogee of empire. Aesthetic quality has marked CST out as a fine building, built at the summit of the High Victorian Gothic style, but it does not and cannot alone validate the claim as to its overall centrality in empire. We have discussed and described other aesthetically successful buildings in Bombay and elsewhere in India, in Gothic, Indian and hybrid styles that are at the very least comparable to CST and some very possibly better. We have not come to this conclusion lightly but after detailed analysis of form and ornament, designed to determine aesthetic quality, in which we have also uncovered embedded decorative features that have an Indian spirituality and appeal.

In this process we questioned the assertion that CST was the foremost railway station, and of Ian Kerr that railways conferred significant meaning and that this was manifested in grand buildings. We believe that railways were critically important in the late-nineteenth century, seen by most then and now as the single greatest achievement of empire, strategically, technologically and commercially; they gave meaning, we believe, to CST that its architecture alone was incapable of expressing. Stations were the accepted public face of railways but there were many others besides CST in India and other colonies. That CST has acquired pre-eminence is through the greater symbolic importance and material transition that railways have wrought in India compared with other colonies and Bombay’s place as their lynchpin. Built at the zenith of empire its construction started two years after the translation of India from colony to empire, and was completed almost contemporaneously with the Queen’s Jubilee, being named Victoria Terminus at around the same time. The conjunction of empire’s greatest commercial city and largest railway system gave CST meaning in a
way that is difficult to understand today when empire has long gone and railways are no longer seen as modern, able to transform peoples, places and cultures.

CST was and is a prism through which to view India, its concourse a stage, on which the diversity and richness of Indian life is celebrated every hour of every day. Business travellers jostle with tiffin carriers, shoe shine boys and holy men, as they thread their way through the throng, avoiding the bedding of destitute children who live on the station. Sheltered, day and night, from sun and monsoon rain, they continue to enjoy the munificence of railway officials, imbued with the life giving powers of the railway, winding like a river of life across the huge subcontinent. CST stands for all those other colonial buildings, and what they stood for, across India, that are generally ignored or forgotten by the many. The modern viewer is encouraged to admire single artefacts, as symbols that embody cultures; CST is and was such a symbol.
DEFINITIONS

Abbreviations

BBCI, Bombay Baroda and Central India Railway
BMC, Bombay Municipal Corporation
CIE, Companion of the Indian Empire
CST, Chhatrapati Shivaji Terminus, Mumbai
DN Road, Dadabhai Naoroji Road, formerly Hornby Road
EIR, East Indian Railway
GIPR, Great Indian Peninsular Railway
GOI, Government of India
ICS, Indian Civil Service
ILN, Illustrated London News
IRJ, International Railway Journal
JJ School of Art, Jamsetjee Jeejeebhoy School of Art
PWD, Public Works Department
RGS, Royal Geographical Society
RIBA, Royal Institute of British Architects
SOAS, School of Asian and Oriental Studies, London
UNESCO, United Nations Educational, Scientific and Cultural Organisation
VT, Victoria Terminus, Bombay

Place, Street and Other Names

I have used the Indian name, Chhatrapati Shivaji Terminus, Mumbai, generally shortened to CST, for the city’s principal railway station and subject of this dissertation. I have used the old, and better known British name, Victoria Terminus or VT, only in direct references to nineteenth century events.

At the price of some inconsistency I have generally described the city as Bombay, as it was known in the colonial period, using Mumbai only in direct references to recent events. Similarly I have generally referred to other Indian cities by their colonial names. For streets and buildings in Bombay and elsewhere I have also used colonial names, only using post-independence names in relation to recent events.

For Indian names I have used widely accepted transliterations but there are other forms. I have sought to be consistent in this respect throughout.
For the two Bombay railway companies I have used the old names. The modern Central and Western Railways broadly correspond with the GIPR and BBCI respectively.
Glossary

Babu, a clerk or junior official
Banias*, a merchant caste originally from Gujerat, Hindu or Jain
Bhatias*, a convert to Vaishnavism and vegetarianism, merchant, favourable to western education
Bohra*, a Muslim converted from Hinduism, originally from Gujerat
Caiya, a prayer hall
Caravanersaei, a refuge or inn with courtyard, used by caravans
Crores, ten million
Ghat, steps leading down to a river, steep mountain escarpment
Goporas, gate tower
Jalis, a pierced stone screen, also used to shade window opening
Janatas, stories of the life of the Buddha in animal and human forms
Khojas*, Shia Muslim but adopting appearances of a Sunni Muslim
Lakh, one hundred thousand
Maidans, a large open space in town, park
Medina, traditional area of Arab town
Memonas, Muslim convert, tailor or small trader
Pandits, a learned Brahmin
Parsi, Zorastrian refugee from Persia after Islamic conquest in eighth century, moved to Bombay in eighteenth century, many engaging in trade
Prahbus, a caste accustomed to working as clerks or officials for British and Portuguese colonists, much attracted to higher education
Saraswats and Chitpavan Brahmins*, Maratha Brahmins, originally from Poona, attracted to higher education and clerical occupations
Shets, a banker or trader
Shikras, a tower built above a sanctuary, often of curvilinear form
Shetias, a head of a caste or trading body
Stupas, Buddhist memorial or reliquary mound
Tiffins, lunch
Viharas, a monastery or residence hall for Buddhist monks
* Dobbin, *Urban Leadership in Western India, Politics and Communities in Bombay City*, Edwardes, *Gazetteer of Bombay City and Island* & Enthoven, *Tribes and Castes of Bombay*
Bibliography

Primary Sources

MANUSCRIPTS

India Office Records, British Library, London
Royal Geographical Society, London
Royal Institute of British Architects (RIBA), London

PERIODICALS

Bombay Builder
Bombay Quarterly Review
Bombay Times
The Builder
The Building News
Calcutta Review
Friends of India
Graphic
Illustrated London News (ILN)
Indian Engineering
Journal of RIBA
Journal of Society of Arts
Railway Magazine
Times
Times of India
Transactions, RIBA

BOOKS AND ARTICLES

Bell, Horace, *Railway Policy in India* (London: Rivington Percival, 1895)
Birdwood, George, *The Industrial Arts of India* (London, 1880)
Chisholm, R F, *New College for the Gaekwar of Baroda with notes on Style and Domical construction in India*, presented RIBA 11 June 1883
Davidson, E, *The Railways of India* (London, 1868)
Edwardes, S M *Gazetteer of Bombay City and Island* (3 Vols, Bombay, 1909)
Emerson, William, *A Description of some buildings recently erected in India, with some remarks on Domes and the Mingling of Styles of Architecture*, presented at RIBA, 19 May 1884
Enthoven, R E, *Folklore of Bombay* (Oxford, 1924)
Enthoven, R E, *Tribes and Castes of Bombay* (Oxford, 1924)
Ferguson, James, *History of Architecture, 1867 and History of Indian and Eastern Architecture* (London, 1876)
Ferguson, James, *History of Modern Styles* (London, 1862)
Forrest, G W, *Cities of India* (London, 1903)
Furneaux, J H *Glimpses of India: a Grand Photographic History of Antiquity, the Vast Empire of the East* (Philadelphia, 1895)
Havell, E B, *Indian Architecture, its Psychology, Structure, and History from the first Muhammadan Invasion to the Present Day* (London, 1913)
Hodges, W, *Travels in India* 1780-3 (London, 1793)
Huddleston, G, ‘The East Indian Railway’, *Railway Magazine*, no 16 (1905), 481-488
Jones, Owen, *Grammar of Ornament* (London: Day & Son, 1856)
Lawrence, J T ‘Railways in South India’, *Railway Magazine*, no 2 (1898), 307-15
Lawrence, J T ‘The Railway System of Northern India’, *Railway Magazine*, no 3 (1898), 446
*Macleans Guide to Bombay* (Bombay, 1888)
Mukharji, T N, *Art Manufactures of India* (Calcutta: GOI, 1888)
Murray, Handbook for Travellers in India and Ceylon (London: Murray, 1881)
Petali, B N, *Speeches and Addresses of Sir Bartle Frere*, (Bombay, 1870)
Ransome, James, *European Architecture in India*, a paper read at RIBA, 23rd January 1905
Ruskin, J, *The Seven Lamps of Architecture*
Ruskin, J, *Stones of Venice* I & II (London: George Allen, 1897 and 1898 republications)
Smith, T Roger, *Architectural Art in India* presented at Society of Arts, 28 February 1873
Stanuell, C A, ‘The Railways in India’, *Railway Magazine*, no 15 (1904), 114-120
Temple, R, *India in 1880* (London: Murray, 1880)

**Secondary Sources**

*Published Books*

Broadbent, G, and others (eds.), *Meaning and Behaviour in the Built Environment* (Chichester: J Wiley & Sons, 1980)
Carter, I, *Railways and Culture in Britain: The epitome of modernity* (Manchester: Manchester University Press, 2001)

Chopra, Preeti, *Free to move, forced to flee: the formation and dissolution of suburbs in colonial Bombay, 1750-1918* in Urban History No 39 2012 pp 83-107


Hall, C (ed.), *Cultures of Empire, A Reader*, (Manchester: Manchester University Press, 2007)


Kerr, I J, (ed.), *Railways in Modern India: Themes in Indian History* (New Delhi: Oxford University Press, 2001)


Saloni, Mathur, *India by Design: Colonial History and Cultural Display* (Berkeley: California University Press, 2007)
Simmons, Jack, *St Pancras Station* (London: George Allen & Unwin, 1968)
Tillotson, G H R, (ed.), *Paradigms of Indian Architecture, Space and Time in Representation and Design* (Richmond: Curzon, 1998)
Tindall, G, *City of Gold, the Biography of Bombay* (London, 1982)
Wolfflin, H, *The Principles of Art History*
**Chapters in book and articles in journals**

Arnold, D, ‘Bodies of Knowledge/Highways of Steel: Science and Technology in Modern India’, Kerr, I J, (ed.), *Railways in Modern India: Themes in Indian History* (New Delhi: Oxford University Press, 2001)


*Unpublished Thesis*

Holiday, Judith, ‘Nineteenth Century Stained Glass in Bombay: Its Role in the Architectural and Ideological Landscape’, (Ph.D. diss, University of Bombay)

*Illustrations and Photographs from Websites, where shown, and Other Sources*

Frontispiece: The British Raj Great Indian Peninsular Terminus, 1878, Axel Haig, [http://www.artfinder.com](http://www.artfinder.com) [accessed May 7 2012]

Fig. 1 Chhatrapati Shivaji Terminus, Mumbai (CST), [http://www.2asanesco.blogspot.com](http://www.2asanesco.blogspot.com) [accessed May 7 2012]

Fig. 2 CST, Passenger Station with head building on right, above it the Goods Station and storage tracks on left, [http://www.googleearthimages.blogspot.com](http://www.googleearthimages.blogspot.com) [accessed May 7 2012]

Fig. 3 Bombay City and inner suburbs [http://www.mapsofindia.com](http://www.mapsofindia.com) [accessed May 7 2012]

Fig. 4 Sir Jamshedji Jijibhai, leading merchant, in traditional Parsi dress, [http://www.sirjjarchitecture.org](http://www.sirjjarchitecture.org) [accessed 23 May 2012]

Fig. 5 G E Street, Law Courts, London [http://www.victorianweb.org](http://www.victorianweb.org), [http://www](http://www) [accessed May 7 2012]

Fig. 6 Alfred Waterhouse, Manchester Town Hall [http://www.oldukphotos.com](http://www.oldukphotos.com), [accessed May 7 2012]

Fig. 7 Sculpted wheel, Sutya temple, Konarak, Orissa, Ganga period, mid-thirteenth century [http://www.allposters.com](http://www.allposters.com), [accessed May 7 2012]

Fig. 8 Madurai, temple with open court and *gopura* [http://www.esentravels.com](http://www.esentravels.com), [accessed 7 May 2012]

Fig. 9 Sir Bartle Frere [http://www.friends.stjames.btinternet.com](http://www.friends.stjames.btinternet.com), [accessed May 7 2012]

Fig. 10 Bombay, Road Layout [http://www.cbi-theater-2-home.comecast.net](http://www.cbi-theater-2-home.comecast.net), [accessed May 7 2012]
Fig. 11 Bombay University with Rajabai Tower http://www.skycrapercity.com, [accessed May 21 2012]

Fig. 12 Convocation Hall, University http://www.oldindianphotos.in [accessed May 7 2012]

Fig. 13 University Library with Venetian arcade and stairway, http://www.urbanphotonet, [accessed May 7 2012]

Fig. 14 Bombay Municipal Corporation (BMC) building http://www.skycrapercity.com, [accessed May 7 2012]

Fig. 15 GiPR, Crest http://www.wiki.fibis.org, [accessed May 7 2012]

Fig. 16 GiPR, Bhor Ghat http://www.indianetzone.com, [accessed May 7 2012]

Fig. 17 GiPR Post Card of VT http://www.harappa.com, [accessed May 7 2012]

Fig. 18 Axel Haig, Engraving of VT http://www.netmuseum.org, [accessed May 23 2012]

Fig. 19 Venice, Ducal Palace http://www.gothereguide.com, [accessed May 7 2012]

Figs. 20 & 21 St Pancras Station, London http://www.stpancras1 year.com & http://www.telegraph.co.uk, [accessed May 7 2012]

Fig. 22 CST, Dome with Sculpture, Progress http://www.archives.digitaltoday.com, [accessed May 7 2012]

Fig. 23 CST, Decorative Roundel, http://www.stockimagesonline.com, [accessed May 7 2012]

Fig. 24 Foreign Office, London: Durbar Court, http://www.worldofbadger.co.uk, [accessed May 7 2012]

Figs. 25 & 26 CST, Tympanums with serpentine designs http://www.stockimagesonline.com, [accessed May 7 2012]

Figs. 27 & 28 CST, Spandrel and Frieze Sculptures http://www.stockimagesonline.com, [accessed May 7 2012]

Fig. 29 CST: Booking Office and Waiting Hall http://www.mumbai-heritage-walk.com, [accessed May 7 2012]

Fig. 30 CST, Plan of Ground Floor, Concourse and Garden, http://www.kamit.jp, [accessed May 21 2012]

Fig. 31 CST, principal staircase, http://www.archives.digitaltoday.com, [accessed May 7 2012]
Fig. 32 St Pancras, principal staircase of hotel, restored, 2011, [http://www.telegraph.co.uk] [accessed May 7 2012]

Fig. 33 CST, head of stairwell and base of drum with glass [http://www.bayourenaissanceman.blogspot.com] [accessed May 7 2012]

Fig. 34 CST, a busy scene in train shed [http://www.news.bbc.co.uk] [accessed May 7 2012]

Fig. 35 St Pancras, Train Shed, [http://www.sciencephoto.com] [accessed May 7 2012]

Figs. 36 & 37 GIPR Post Cards, advertising Poona Race Specials and Express Mail trains, [http://www.movinghere.org.uk] [accessed May 7 2012]


Fig. 40 Railway workshops, Jamalpur, EIR, [http://www.thejamalpur.com] [accessed May 7 2012]

Fig. 41 Lahore Station, 1859-60, [http://www.en.wikipedia.org] [accessed May 7 2012]

Fig. 42 Axel Haig, The British Raj Great Indian Peninsular Terminus, 1878

Fig. 43 W P Frith, The Railway Station, 1860, Royal Holloway College, London University

Fig. 44 Mumbai, Commuting today, [http://www.writechoice.co.in] [accessed May 7 2012]

---

304 Edwardes, Gazetteer of Bombay City and Island
Index

Birdwood, Sir George, 51, 52
Birmingham
  City Hall, 13
Bombay, (Mumbai),
  Afghan Memorial Church, 26, 53
  BBCI Offices and Station, Churchgate, 33, 60, 68, 83, 84, 110, 122
  Chhatrapati Shivaji Terminus, 59-84, description, 1, 2, 18, 22, 23, 25 - 31, 33, 34, 42
  City Hall (BMC), 34, 60, 62, 63, 70, 71, 84, 108, 116, 118, 14
  Crawford Market, 59
  Elphinstone College, 34, 36, 59
  GPO, 54
  High Court, 54-58, 64-70
  JJ School of Art, 35, 52, 59, 73, 89, 115
  Maps/Plans of city, 3, 9, 38, 39,
  Secretariat, 56
  University, 18, 36, 24, 29
Bombay Association, 27
BBCI, 30, 33, 61, 98, 100
Burges, William, 40, 53, 59
Calcutta
  Howrah Station, 118, 122
  Sealdah Station, 122
Chisholm, Robert Fellowes, 49, 50, 70, 118
Cole, Sir Henry, 51
Dalhousie, Lord, 25, 61, 72
East India Association, 26
East India Company, 27
EIR, 31
Ellis, Francis, 91
Emerson, Sir William, 49, 50
Ferguson, James, 44, 48, 93
Frere, Sir Bartle, 20, 26, 29, 53, 72, 93, 121, 9
GIPR, 11, 13, 29, 32, 33, 60-63, 72, 79, 82, 95, 98-100, 102, 104, 15-17, 36, 37
Gomez, master sculptor, 73, 115
Griffiths, John, 52, 53, 59, 73
Growse, F S, 70
Halhed, N B, 91
Hastings, Warren, 90
Havell, E B, 51
Jijibhai, Sir Jamshedji (JJ), 35, 59, 61, 72, 4
Jones, Owen, 51
Jones, Sir William, 90
Kipling, John Lockwood, 52, 53, 59, 670, 113, 114
Lahore Station, 11, 103, 110, 114, 123, 41
Liverpool
  Lime Street Station, 34, 81, 82
  St George’s Hall, 13
London
   Foreign and Colonial Office, 72, 111, 24
   Houses of Parliament, 39
   Kings Cross Station, 82
   Law Courts, 35, 56, 5
   Paddington Station, 82
   St Pancras Station, 11, 12, 21, 64, 69, 79-82, 84, 85, 117, 118, 119, 122, 20,
   21, 32
   Waterloo Station, 118
Madras
   Egmore Station, 118, 122
Manchester
   Assize Courts, 41
   Town Hall, 13, 34, 41, 6
Morris, William, 42, 43, 51, 75, 76, 85
Murzban, Cowsaji, 100
Naoroji, Dadabhai, 36, 112
Oxford
   Christ Church College, 68
PWD, 37, 55, 59, 60, 103
Pugin, Augustus Welby, 18, 20, 39, 40, 63, 113
Ramchander, Muccond, 51
Ruskin, John, 18, 20, 40, 40-44, 50, 63, 67, 74-76, 84, 85, 122
Scott, Sir (George) Gilbert, 40, 41, 50, 53, 58, 69
Shankershet, Jagannath, 36, 61, 72, 84
Smith, T R, 48, 53
Stevens, F W, 18-21, 54, 58-60, 68-70, 78, 82, 111, 115, 119
Street, G E, 41
Tata, Jamshedji, 35, 100
UNESCO, 12
Vaidya, Raosaheb, 82
Venice, Ducal Palace, 56, 67, 76, 19
Waterhouse, Alfred, 34, 41, 42
Wood, Sir Charles, 30

Notes:
   1. Pages devoted solely to description of CST are in bold print
   2. Figures in Italics refer to illustrations