Introduction: writing photo-graphic histories of empire

In his well-known reflections on the revolution in France, Edmund Burke pointed to the emergence of a ‘new conquering empire of light’. Associating it with the liberatory rhetoric of Enlightenment thought, he took aim at its central metaphor – the empire of light and reason and its vision of a naked truth:

But now all is to be changed. All the pleasing illusions, which made power gentle and obedience liberal, which harmonized the different shades of life, and which, by a bland assimilation, incorporated into politics the sentiments which beautify and soften private society, are to be dissolved by this new conquering empire of light and reason. All the decent drapery of life is to be rudely torn off. All the superadded ideas, furnished from the wardrobe of a moral imagination, which the heart owns, and the understanding ratifies, as necessary to cover the defects of our naked, shivering nature, and to raise it to dignity in our own estimation, are to be exploded as a ridiculous, absurd, and antiquated fashion.¹

One does not have to endorse Burke’s critique to note his use of the language of light to express truth, and indeed it had been used to great effect by his predecessors, including Locke and Bacon.² Visual imagery had registered the era’s opposing concepts of the lumières and ténèbres in paintings, allegorical frontispieces or political tracts and journalism, giving material form to abstract concepts like liberty and knowledge.³ What is interesting in Burke’s characterisation of light as a new, conquering empire aligned with reason is that the intellectual foundation of Enlightenment thought is imagined not just in enlightened discourse between philosophes that had a wider public and historical resonance, but includes a powerful visual dimension.

Burke’s protean phrase nods towards the empire of light formed by developments in artificial illumination that accompanied the industrialisation of light, its new role in economic and industrial activity, its place in urban public life and spectacle and its transformation of the home and individual interiors, and its instrumentalisation through an industry of representation (photography, film, magic lanterns, theatrical lighting etc.). Wolfgang Schivelbusch has chronicled how a modern consciousness was forged amid these dramatic
transformations that sought to banish the night. So much so that Jonathan Crary views late capitalism as ushering in an era of permanent illumination, a 24/7 where the distinction between night and day is rendered irrelevant. Sean Cubitt extends this to a wider ‘practice of light’ where visual media and its production of an aesthetics of dominance are seen as the latest episode in humanity’s struggle to control light.

Burke’s conquering empire of light not only evokes such an industrial empire based on lighting technologies, but also points to the political circumstance of empire. Burke was, after all, writing in the middle of the impeachment trial of Warren Hastings, conducted between 1787 and 1795, in which he played a major role. Light had regularly been invoked in Enlightenment iconographies of vision and knowledge (Figure 0.1), with torch-bearing messengers removing the blindfold of error from the eyes of nations, truth opening the eyes of the blind, clouds parting to shower light upon superstition or the extinguishing of false light by means of the candlesnuffer. In the context of empire, these visual allegories of knowledge were appended to an imperial optics that equated darkened lands and colonial subjects with the blind. The discovery of new lands, the unveiling of Oriental mysteries and the civilising light of empire functioned as technologies of illumination, bringing darkened lands and peoples into view and within the domain of the knowable, affirming Jean Louis Comolli’s famous assertion of the ‘frenzy of the visible’ in the nineteenth century.

Alongside an industrial empire of light, Burke’s vision of a conquering empire therefore summons the light of empire, as light assumes a significant place within an imperial optics and its engagement with the colonial world. Even as light featured as a symbol of knowledge and progress in post-Enlightenment narratives, it was central to the visual politics and imaginative geographies of empire. Geographical spaces were mapped in terms of ‘cities of light’ and ‘hearts of darkness’, and ‘the civilising mission’ employed iconographies of torches or the lifting of the veil to indicate a passage into enlightened rationality. These were not merely discursive constructs but were supported by a material infrastructure of lighting and representational technologies that drew colonial subjects into its ambit. Imperial cartographies reproduced a world divided both temporally and spatially between zones of light and darkness where acts of seeing and technologies of making visible were invested with incredible power.

Nicholas Dirks notes that ‘colonialism provided a critical theatre for the Enlightenment project, the grand laboratory that linked discovery and reason’. Tasked with bringing light into the benighted corners of the world, the civilising mission of the British Empire cast its glare upon Indian epistemology, denouncing indigenous knowledge as superstitious darkness. Gayatri Spivak’s notion of an epistemic violence has cast this problem in the register
Benoît Louis Prévost after Charles Nicolas Cochin the younger, ‘Science’, frontispiece to the *Encyclopédie* of Diderot and d’Alembert, 1772
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of language and speech, where the erasure of local knowledge was viewed as an archival silencing of the subaltern voice. Burke’s empire of light and reason draws attention to this as a visual model at the heart of Enlightenment thought where light, truth and reason are bound together in a powerful matrix with its promises of freedom. Tied to empire, it postulates a visual regime garnered around light and reason that emerged as a potent instrument of subjection in the colony, producing new cartographies of visibility.

This study examines the terrain produced by a regime of light and visibility drawn from Enlightenment thought and its intersection with industrial and imperial technologies of light in colonial India. The industrialisation of light through the course of the nineteenth century and its circulation across the imperial economy effected a dramatic transformation of spaces and subjectivities as viewing and living arrangements were determined through new patterns of visibility. This account examines the contours of colonial subjects shaped by the light of empire, the demands for visibility through technologies of illumination and their inscription within an imperial regime of light and vision. It asks in what ways an imperial vision machine made visible colonial subjects and how subjectivity was engendered by the visibilities thus produced.

Through the course of the nineteenth century light and darkness had evolved into persistent metaphors endorsing an ideology of progress between an imperial centre that dazzled with the lights of civilisation and the primitive darkness of the peripheral colony. New technologies of light and spectacle reproduced a triumphant narrative of Western modernity – from the christening of Paris as the City of Light to what has continued in contemporary times in the displays of the dazzling ‘shock and awe’ tactics of war technologies. Meanwhile, hearts of darkness persist. The characterisations of the ‘dark continent’ or the ‘dark ages’ have evolved into the black holes of sub-Saharan Africa or rural Bihar, proffered as examples of a dark, prehistoric past that must make its way to the illuminated spectacles of modernity.

Recent scholarship has revaluated clair-obscur (chiaroscuro) as a more appropriate epistemological metaphor for the Enlightenment, rather than the common valorisations of light. The classic account of pictorial chiaroscuro comes from Roger de Piles’ Couers de peinture par principles (1708), a work that had a wide influence across western Europe and aligned chiaroscuro with the expressive qualities of colour rather than the intellectual aspects of line. Chiaroscuro was used in two distinct senses in the eighteenth century, as the arrangement of light and shade in pictures as well as in a wider understanding of the phenomenal workings of light and shade in the world. Its technical usage by painters and artists was soon surpassed by its entry into worldly spheres of discussion, so much so that by the mid-eighteenth century it had become one of the ‘figures of speech current among polite people’. Its
central motif of clarity and obscurity extended not only from the painterly to the rhetorical but across the cultural landscape to involve music, opera, dance and theatre within its ambit. As such, clair-obscur provided a visual metaphor for a wider epistemological pattern and practice, where darkness and shadows were either seen as obstructions to the clarity and immediacy of the truth or valorised for provoking the imagination beyond the rational. Mark Darlow and Marion Lafogue credit the rapid diffusion of the term clair-obscur and its widespread usage across the eighteenth century as a response to the new space-time of the night as chronicled in accounts by Alain Cabantou (Histoire de la Nuit, 2009) and Wolfgang Schivelbusch (Disenchanted Night, 1983) and the conquest of the night by urban lighting projects that had wide-ranging social, economic, psychological and legal implications.

Dominant art-historical accounts of light have, on the other hand, viewed the passage to modernity as an emergence from the confines of the studio (and ‘tradition’), with its production of chiaroscuroist canvases, to the freedoms of plein-air painting that allowed the artist to confront natural phenomena anew. The emergence of plein-air painting has been linked to the growing importance of Romantic science and scientific experiments with light, reflected in the wider tonal range and an immediacy of engagement signalling an artistic authenticity, which correspondingly saw academic painting and its reliance upon chiaroscuro as artifice. Despite this significance of light in narratives of modernity, it has rarely been explored in relationship to Oriental light, a trope that figures significantly in artists’ travel writings and reflections.

Although portable paints and canvas were noted as tools crucial to the production of the immediacy of plein-air painting, the promise of an unmediated inscription of natural light has driven the Romantic vision that undergirds this narrative of modernism. Hollis Clayson’s study of the significance of artificial illumination in Paris that led to its christening as the City of Light points instead to the cultural preoccupation with artificial lighting technologies that impelled artists to seek novel techniques of accommodating the new sources of light in their paintings. She recounts the inclusion of multiple artificial sources of light in painting, and the wider conversation and enthusiasm generated by progressively newer lighting technologies denaturalising the discourse around plein-air painting to cast it as a conscious, selective choice. A number of exhibitions have recognised the emerging scholarship on the urban night, to signal a new direction in understanding the import of nineteenth-century painting. Meanwhile, the darkened interiors of chiaroscuro painting made way for an extraordinary new range of black drawing materials and innovative printmaking that conveyed the fascination with the urban night in studies of dimly lit interiors. Beyond painting, Krista Thompson’s study of the economy of light in contemporary video and
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photographic cultures of African diasporic communities reinterprets the logic of Enlightenment light in contemporary culture. Thompson posits an aesthetics of shine, shimmer and splendour that signifies a visual excess transcending rational vision, and she describes the retinal absorption of such practices of light as ‘afterimages’.

What did such an imperial discourse on light and modernity mean for colonial India?

Colonial darkness

In early twentieth-century India an explicit romantic cultural investment in light and shadow presented itself in the work of a number of artists, poets and filmmakers who drew upon the language of light to evolve an aesthetic idiom that countered dominant ideas of visibility. The literary movement that called itself Chhayavaad (Of the Shadows) was one prominent example that took refuge in the darkness. A romantic movement in modern Hindi poetry that emerged in the mid-1920s, it employed imagery of candlelight and lamps amid obscure shadows. The poet Mahadevi Varma included the recurrent motif of a lamp, often featured with the waiting woman, the virahini separated from her lover. Varma, who had been trained as a painter in ‘the realistic Ravi Varma style’ but emulated the fluid linearity of the Bengal School artists in her adulthood, included sketches along with her poetry. In her collection Dip-sikha (1942) the lamp figures as a surrogate for the creative self who lights the way but is consumed by her passions in the process.

Another significant example was Rabindranath Tagore’s play King of the Dark Chamber (1914), later reinterpreted in a powerful mural by K.G. Subramanyan (1963), which posed questions of truth around light and visibility. The allegorical play explicitly questioned the order of visibility within which meaning is formulated, featuring a protagonist (the king) who cannot be seen. If Foucault’s study of Las Meninas indicated a representational mode that organised visual subjects from the position of the sovereign, Tagore’s visual scheme posed one that still revolved around the king, but now invisible and thus unverifiable. King of the Dark Chamber asked questions about the limits of vision and its relationship to truth – questions that were pursued by philosophers like Ludwig Wittgenstein, who was intrigued enough to translate the play. Meanwhile, Rabindranath’s nephew, Gaganendranath Tagore, embarked upon a series of ‘nocturnes’ between 1915 and 1920, in paintings that at first explored vast shadows using Japanese ink-wash techniques and then took to portraying the landscape by night, including processions, temples and theatres lit up by flickering lights.

The metaphysical implications of light have had a long history in Indian thought, ranging from Rajput rituals around the sun and fire to Zoroastrian
rites or the Sufi belief in *fana* (annihilation) when faced with the brilliant light of god. The notable presence of the *Suhrawardi* (illuminationist) school of thought in the Mughal courts proposed an ontology of light where all existence was a reflection of god’s light, and that the ontological significance of all beings depended upon the degree of its illumination. The emperor emerged as an embodiment of divine light.24 As Abu’l Fazl writes in the Akbarnama:

Royalty is a light emanating from God, a ray from the sun, the illuminator of the universe … Modern language calls this light *farr-i izidi* (the divine light) and the tongue of antiquity calls this light *kiyān khwarah* (the sublime halo). It is communicated by God to kings, without the intermediate assistance of anyone, and men, in the presence of it, bend the forehead of praise towards the ground of submission … Many excellent qualities flow from this light.25

Painters like Abdur Rehman Chughtai (1897–1975), associated for some time with the Bengal School, sought to draw upon this heritage, claiming to represent a Muslim aesthetics in illuminated watercolours that included allusions to a mystic light as a specific point of difference against the darkness of the Hindu temple.26 Beyond Muslim aesthetics, the imagery of light was central to Christian missionary proselytisation practices in the colonial world, indicating the passage of the heathen from the darkness into the light of Christ – Holman Hunt’s *Light of the World* (1853), for example, was paraded around the imperial colonies between 1905 and 1908, drawing as many as seven million viewers.27 Edwin Arnold’s life of Buddha in *Light of Asia* (1879), later adapted for cinema by Franz Osten and Himanshu Rai in 1928, represented efforts to reinscribe the powerful vocabulary of light within an Eastern mysticism. The cinematic collaboration marked a long engagement with German technicians in the Bombay film industry and the production of a poetics of light and shadow that interpreted the aesthetics of film noir, marking an era of transnational collaboration in lighting technologies and practices.28

As the cursory examples above indicate, there is a rich archive of representational practices from early twentieth-century India using the visual language of light and dark to counter dominant practices of seeing. Why and how did light become a potent tool for these artists and poets? This study looks back to the long nineteenth century for an archaeology of such visual practices which confronted the role of light in modernity, not only in its ideological forms but also in its material manifestations in the increasing role of lighting and representational technologies in public life and entertainment. It argues that the empire of light formulated at the intersection of industrial and imperial visual technologies had a profound impact on public life and practices of seeing, instituting new regimes of visibility.

The following chapters evolve an argument for the drama of vision in its encounter with the opacity of Oriental lands. The book follows the trajectory
of a gendered visual regime based on light and reason and its attempts to unveil an Oriental darkness typically figured as feminine. An eroticised theatre of revelation and concealment structures this visual economy and its pursuit of Enlightenment notions of a ‘naked truth’. Rather than positing a distinction between natural light and artificial light, the endeavour here is to consider how light was instrumentalised to achieve certain ends. As such, this study views iconographies of unveiling as strategic technologies of illumination consonant with the lighting technologies of the day, to describe how colonial bodies and spaces were subjected to an imperial vision. The inscription of bodies within such an architectonics of light and visibility produces what Foucault has called ‘subjection by illumination’. Rather than a nostalgic recovery of the life of shadows proposed by the Chhayavaadis, this account argues that the Indian response to the aesthetics of illumination both adapted and elaborated the mechanics of the imperial gaze as complex affiliations between colonial perceptions and indigenous interests reformulated the terms of the discourse. Taking the case of the celebrated artist Ravi Varma (1848–1906) as exemplifying this model that sought to both approximate colonial visual paradigms as well as to contest them, it evaluates how his works negotiated an imperial architectonics of light and visibility.

Ravi Varma has stood as a sign of the modern in narratives of Indian art, alternately valorised in the popular imagination as the pioneering ‘painter prince’ who equalled the colonial master, or denounced, as after his death, as imitative of European practices. In adapting the visual language of the coloniser, his works exemplify the contradictions of colonial modernity and afford us an opportunity to reconsider the legacy of Europeanised visual technologies in practices like oil painting in India. I step away from arguments on realism and perspective that have remained the dominant tropes for describing the impact of colonial visuality and Ravi Varma’s interventions, to view his contributions as visual experiments that embraced technologies of illusionism from oil painting, proscenium theatre and printmaking that were in conversation with technologies of light and vision within imperial networks. Rather than a biographical interest in Ravi Varma, this study employs his figure as a leitmotif that connects visual practices across India (given his professional engagements across the country) and contextualises his work with that of his contemporaries in Bombay and Calcutta who professed a similar admiration for academic painting.

While Ravi Varma’s prints have received a fair amount of scholarly attention, particularly the circulation of a devotional gaze within the networks of print capitalism, his paintings tend to be read through the lens of connoisseurship – either appreciative or dismissive – as a ‘bourgeois philistinism’ (the response by modernist painters including M.F. Husain and Tyeb Mehta to his retrospective exhibition in 1993). Their importance, moreover, has
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This project, however, asserts that Ravi Varma was equally invested in genres associated with *trompe l’oeil* painting and embraced portraiture and genre painting, which employed radically different visual modes that cannot be subsumed under the sacred and relate more properly to the globalisation of popular visual technologies. Rosie Thomas, in a similar vein, has claimed an alternative genealogy for the origins of cinema, proposing the dominance of the *qissa* or the Persianised fantasy tale, with *Alibaba and the Forty Thieves* as possibly the first film. Displacing the Brahmanic Hindu origins of cinema with the stunt film, full of gimmicks and visual sensation, she turns to Tom Gunning’s model of the ‘cinema of attractions’ to indicate a pre-narrative heterogeneous visual arena enthralled by the deceptions and illusions of new media technologies. It is to these modes of spectatorship from cinema and theatre, circulated within imperial visual networks and forged through the representational infrastructure authorised by light, that this study directs its attentions. Taking Varma’s work as a paradigmatic example, I ask how viewing practices aligned with lighting technologies implicated colonial subjects.

Ravi Varma’s works are an example of the new visual language spoken by the elite male subject that frames the dominant narrative of the modern nation. Even as it acknowledges and adopts the dynamics of imperial visuality in its adoption of ideas of light and darkness, it is nevertheless haunted by its shaded past. As Varma marks his distance from the European, the pre-modern and the subaltern, he cannot but produce a mode of visibility that both registers its conditions of production and seeks to exceed them, ambivalently and uncertainly. The articulation of a new mode of visibility in the colony was thus necessarily embattled and unstable, haunted by the ghost of its excluded others who needed to be erased.

Urban chiaroscuro

Discussions of light in modernity have revolved predominantly around questions of time and the prolongation of the day through lighting technologies that aided unhindered industrial activity. Joseph Wright of Derby’s rendition of Richard Awkright’s cotton mills at Cromford (*Awkright’s Mill in Moonlight, 1783*) is proffered as an example of the industrialisation of light, portraying the factory lit up at night, humming with activity even as the countryside sleeps. Yet light was equally significant in ‘producing space’,
as the transformation of the picturesque countryside in Wright’s painting reveals; and Schivelbusch suggests that a significant impact of gas lighting was its transformations of distance. While one can imagine the production of space through light in discrete structures like rooms, or even the landscape presented in Wright’s painting, how might we consider more expansive geographies between empire and colony, for example, or complex architectures like city spaces produced by light? Henri Lefebvre’s ideas about the production of space tie it into processes related to industrial capitalism, and indeed the industrialisation of light and its international infrastructural distribution through a wide range of products and practices present a particularly useful mode of thinking about the production of space as lighting technologies territorialise space to shape a network of places in modernity – of the theatre, the factory, public spaces in the city, of homes and interiors and of the routes and passages between them.

Significant among the spaces produced by the conquering empires of light were new relationships between empire and colony. Take for instance *Babylon Electrified* (1890), an early work of science fiction from the late nineteenth century that presents the promises of technologies of light appended to the civilising mission. A British exploration mission led by a rich baronet, Badger, including scientists and technicians, venture into Babylon in a bid to gain control of the trade routes with Europe. Identified for its ‘tyrannical sun’ and barbarous populations, Babylon is sought to be transformed by the superior technical knowledge of the British scientific team, a concrete example of the alliance between light, reason and freedom envisaged by Burke. The empire of light which it imagines is appended to both imperial ambition and industrial progress, as it is proposed that Babylon’s abundant sunlight would produce electricity that could fuel the railways and be transmitted back to Europe through giant cables. At the heart of this great game lies a utopian dream of establishing an all-electric city upon the site of the ancient empire in Babylon – to be named Liberty, where science and the powers of reason would prevail and transform the population into the most civilised people on earth.

In this cannily prescient narrative light inflects both bodies and spaces, juxtaposing stereotypes of the primitive East with its tyrannical sun and natural light, with British technological expertise in harnessing its powers. Badger’s daughter, Nelly ‘the blond incarnation of the mists of the north’, befriends and rescues Fatma, ‘the creation of the burning sun of Asia’, tempering imperial ambition with liberal redemption. When Liberty is finally illuminated, it provides a strange and wonderful spectacle that brings to light treasures from the Babylonian past – stones with inscriptions, statuettes and foundations of old palaces, all the while embodying the modern promise of technology in the elimination of labour as it facilitates innovations like the electric tilling of the land, electrical cooking and heating, even assisting in medical surgeries.
It leaves its viewers ‘intoxicated with light and astonishment as they bask in the festive atmosphere’. However, the festivities are short lived, as, stirred by a religious fanaticism, the local population comes to view the electrical experiments as diabolical and rises up against the foreigners. Badger, who is, tellingly, blinded by his injuries, retreats to London, reasoning that local populations need to be more involved in grand projects like his.

In its imagination of a utopian city revived by electricity, *Babylon Electrified* reflected the promise of light as an imperial agent of social good. Despite its tyrannical sun, Babylon could be rescued from its darkened fate under the Turks only by a scientific application of the technologies of light, bequeathed by the industrious British. At stake is an ambitious geopolitical restructuring of the region through an urban space that writes over the past by presenting a technocratic dream of transparent, illuminated spaces. As Liberty casts new light upon Babylon’s ancient ruins, exposing hidden treasures, it provides a safe space for women and children to venture into the streets at night and permits unveiled women to enjoy the night-time sky from their terraces at home. Imperial and industrial ambitions align to imagine a new city, new spaces and new publics through light.

This dream for Babylon did not of course exist in isolation; it was in fact a response to the transformations in urban space as it grappled with the changing character of the night as lighting projects impacted on crime and commerce, law and order – but it also played a significant role in shaping the visual poetics of the city by night. Lynda Nead portrays London as a ‘Victorian Babylon’ that constantly looked back to the Assyrian capital as a model as gas lighting transformed the London streets into a stage, creating patches of light amid pools of darkness. Unlike electric light that annihilated the night, the ‘poetics of gas’, she suggests, illuminated the night but did not destroy it. The emergence of Paris as the capital of the nineteenth century was in no small part because of its spectacular lighting technologies that illuminated the city’s arcades stocked with luxury silks and crystals, its boulevards, cafes, restaurants and theatres all brightly lit by gaslight. Walter Benjamin’s evocative description of the labyrinthine spaces of the city revives an archaic topography, imagining the new city as a tricky maze that deliberately defies the unobstructed views of Haussmann’s planned Parisian boulevards. A discrepant topography of the city emerged, where luxurious neighbourhoods dazzled while the larger part of the city remained dark, employing candlelight within its domestic interiors. Light produced these new topographies of the city between the enchantments of light and the inky shadows, instituting what some consider the very foundation of the nineteenth-century visual regime and its spectacle of the modern night.

The chiaroscuro production of urban space was best articulated in guidebooks of New York City that employed the metaphor of sunshine and
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shadows to map its spaces into symbolic zones for rich and poor. Matthew Hale Smith’s *Sunshine and Shadow in New York* (1868) and James Henry McCabe’s *Lights and Shadows of New York Life* (1872) both portrayed the contrasting life-styles of rich and poor, assigning them with respective moral qualities and instructing viewers about the qualitative spaces and social types that populated the city.\(^{41}\) Winslow Homer’s woodcut engraving *Thanksgiving Day 1860* presented the elite subjects lounging in the brightly lit interiors on the left-hand side, labelling them as ‘Those who have more dinners than appetite’. They are waited upon by servants whose faces, unlike the well-illuminated elite subjects, bear shadows tying them with the heavily shadowed characters on the right-hand side, scrounging in dingy rooms and captioned ‘Those with more appetite than dinners’.

This chiaroscuro picture of the city produced what social commentator George Foster called a ‘moral geography’ that readers could use to navigate the highly stratified regions of the city.\(^{42}\) Foster’s nightly rambles as a reporter for the *New York Tribune* chronicled ‘the festivities of prostitution, the orgies of pauperism, the haunts of theft and murder … the underground story – of life in New York!’\(^{43}\) Foster set the stage for the birth of a genre of journalism that sought to expose and sensationalise urban realities and would find its best-known exponent in the exposure photography of Jacob Riis, whose innovative use of flash literally shone a light upon the underbelly of the city.\(^{44}\)

The uneven production of spaces through chiaroscuro lends itself particularly well to the Trotskyite discussion of ‘combined and uneven development’ that undoes the traditional centre-and-periphery model of imperial studies with a geographical approach that proffers an uneven spatial patchwork to understand how everyday capitalism is lived.\(^{45}\) In India the colonial city was similarly divided between the Black town of the natives and the White town of its European residents, mapped along racial and class divisions.\(^{46}\) Mark Twain presented Bombay as a city rife with pestilence and *thugees*, with dimly lit native quarters where rats scurried against sleeping bodies sprawled on the streets at night. Yet, in the midst of this darkness lay glittering displays of festivity. Wedding celebrations using gas lighting in the homes of the wealthy were presented as Oriental fantasy: a ‘conflagration of illuminations – mainly gas-work designs gotten up specially for the occasion. Within was abundance of brilliancy – flames, costumes, colours, decorations, mirrors – it was another Aladdin show.’ This festivity soon melted into the dark, deep silence of the city with its scurrying rats and ‘counterfeit corpses sleeping motionless in the flicker of the counterfeit death lamps’.\(^{47}\) Rudyard Kipling extended this geography of the colonial city into a phantasmagoric realm with his short story and book, both titled *City of Dreadful Night*.\(^{48}\) Taking its title from James Thomson’s feverish poem of London, Kipling addressed both Lahore and Calcutta in the two versions of the story, which presented the
writer as a nocturnal flâneur visiting brothels and graveyards in the light of a sickly moon where waters flashed like ‘heliographic signals’. S.M. Edwardes’s *Byways of Bombay* (1912) similarly portrayed the seedy underbelly of the city populated by courtesans and opium eaters in cavern-like spaces dimly lit with oil lamps. The second edition of the book was illustrated by the Bombay-based painter M.V. Dhurandhar and included sketches of opium dens and spirit possessions (Figure 0.2).

Twain’s report persisted in Orientalist fantasies of *Aladdin*, even as lighting technologies were making inroads into social and cultural life. The proliferation of lighting technologies through the nineteenth century effected a dramatic transformation of spaces, both public and private, in colonial India, tied closely to developments in industrial and retail technologies (Figures 0.3 and 0.4) in Europe. Using imperial networks, lighting technologies formed an important part of infrastructural projects in colonial India, along with railways, roads, telegraph, irrigation and hydroelectric projects which created an infrastructural grid that shaped public and private spaces. This new space of technics gradually bridged the divide between early practices of illumination forged around community and festivity and the new infrastructure of the modern city – the lighting of its ports, lighthouses, recreational spaces and the industries it supported, including mills and printing presses. Perceptions of novelty and entertainment continued with public lighting projects, which were sporadic and often sponsored by private interests until the early decades of the twentieth century, however, the infrastructural grid established was central to the project of urban modernisation – the 400km of underground pipelines laid by the Bombay Gas Company in the mid-nineteenth century, for instance, are today being repurposed for fibre optic cables.

Although electric light was introduced in Calcutta and Bombay in the last two decades of the nineteenth century, gas lighting had made its way there as early as 1834, powered at first by oil and then by coal. The shipbuilder and engineer Ardaseer Cursetjee is credited with the first gas project, illuminating his house and garden at his own expense. It drew many visitors who travelled several hundred miles to see the house lit up, which he opened for public inspection for several months. The private lighting projects (both gas and electric) that followed fuelled a steady supply of generation equipment for wealthy homes and ostentatious wedding celebrations, creating a community of practitioners – electrical engineers and ingenious mistris, educational journals and magazines, public lectures on the effects of electrical discharge and university degree programmes in electrical engineering. However, the perception of electricity as a luxury persisted. When the Madras Municipal Corporation considered lighting the city with electric bulbs, some viewed it as a wasteful expense that would be better devoted to ‘more dust bins, more sewage, rubbish carts and the energetic flushing of drains’.
At the same time, public lighting projects initiated new recreational spaces and facilitated industrial uses. Amongst the first places to exploit the uses of hydroelectric power were the Kolar gold fields, which involved high transmission lines over 92km, making the project amongst the largest in the British
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In Calcutta the Oriental Gas Company was awarded a contract to light fifty-five lamps from Bow Bazaar to Harrington Street in 1857, and reports acknowledged the thronging crowds that greeted the arrival of the lights, often running along with the lamplighter as he sprinted along. To see fashionable Calcutta one could go to the Maidan at the close of day, where the place was lit brilliantly with lights and a military band played as the wealthy residents of the city participated in festivities. In 1875 there were 3,502 public lights and 37,301 private lights maintained by the Oriental Gas Company, including at important buildings like the Imperial Museum, the Hooghly bridge, clubs, jetties, wharves and the railway station. By 1890 places like the Esplanade were entirely lit up with gas; however, electric lighting could not be introduced by the Calcutta Municipality because the contract with the gas company ran until the end of the century. In 1899 agents of the Crompton Company installed dynamos in the first generating station at Emambagh Lane and inaugurated thermal power generation in India.

Street lighting for Bombay was first proposed in 1833, and by 1853 it employed fifty oil lamps lit from dusk to midnight. The Bombay Gas Company, formed in 1862, was involved in the distribution of gas lighting, using gas produced from coal imported from England, and included 5,000–6,000 consumers, amongst them the Bombay Municipal Company for lighting streets and public structures. There were problems with the spread of gas lighting in Bombay due to the great distances between the houses of the wealthy, with their large compounds, which raised the cost of individual supply. Lower-class homes were generally single-room ‘chawls’ that used coconut-oil lamps, given the low wages that could scarcely afford better. Electric light had a small presence in Malabar Hill, and by 1894 was limited to small areas like the yacht club, and a series of flats erected near it by the Sirdar of the Nizam. Early public lighting projects were not limited to colonial capitals but extended to smaller outposts, including Simla, Darjeeling, Mysore, Indore and Travancore.

Writing with light

Our best machines are made of sunshine … (Donna Haraway, The Cyborg Manifesto)

As photography moves from light-based processes to digital measures of inscription, the workings of light, which seemed an obvious and transparent modality in an earlier era, acquire a new texture. Instead of a medium that seamlessly links seeing and knowing, light is shown up as having a material and ideological presence that inflects bodies and spaces. This is indicated in the recent spate of scholarship on the social and material cultures of light, its
embedded infrastructures, anthropologies of luminosity and geographies of darkness that have evaluated relationships between its material forms and its symbolic valences. In what follows I use photography as paradigmatic of a practice of writing with light, of inscribing material surfaces with technologies or practices of light that had correlations with developments in optical and lighting technologies. This participates in an argument about the heterogeneous origins of photography to draw attention to that aspect of the history of photography – its characterisation as a ‘writing with light’, so prominent in early nomenclatures for the process such as ‘sun painting’ or heliography.

This literal understanding of photo-graphy has receded in the contemporary imagination, existing either as a banal fact in an era of electronic and digital processes or in discussions about the truth-claims of indexicality. My intervention is concerned not with the desire for referentiality that structures discussions of the latter but with the immanent logic of light impressions upon a photosensitive medium. Writing with light finds new meaning in attempts from science studies and broader materialist scholarship that explore relationships between materiality and writing, foregrounding the role of inscription technologies in the production of texts. The camera exists as an example of such a writing machine, inscribing light upon a chemically charged surface and presenting a visible trace, but the body too presents itself as a charged medium, a site written upon by various technologies of power, including light. Could one, then, conceive of a more complex machine, in the manner that Deleuze and Guattari present the machine as an assemblage of multiple entities, institutions and practices that refracts and imprints the qualities of light upon photosensitive material, objects and bodies? The industrialisation of light in modernity summons the vast material culture associated with light, not just lighting technologies but also the commercial industry of representation (photography, film, magic lanterns, theatrical lighting etc.) that inscribes light through an infrastructural network upon an array of surfaces – film and screens, but also bodies, now bound together in new patterns of viewership determined by the distribution of light and darkness. As technologies of light shaped spaces, they also inscribed bodies.

Journals, magazines, technical and mechanic manuals attest to the wide range of industries fostered by the commercial instrumentalisation of light in the nineteenth century – from retail equipment involving meters and lanterns, to servicing the coal industry, to mechanical parts like valves and engines, to piping and hydraulic machinery – all of which coalesced around the emerging industrial applications of light. Photography itself saw the growth of an industry revolving around studios, cartes de visite, newspapers and publishing, manufacturing of photographic equipment and supplies, as well as the growth of related devices like stereographs and dioramas. The arrival of photography in India was largely through these commercial
networks that introduced circuits of mobility between European manufacturers and Indian markets and consumers (Figure 0.5), that presented the camera as a scientific amusement and a novelty that was advertised alongside other imported consumer goods like cutlery, magic lanterns and pocket-knives. Here too, the daguerreotype camera was advertised as making possible ‘the new art of sun drawing’, and photogenic boxes were presented for ‘copying objects by means of the sun’.

If the technologies, institutions and practices that accompanied the industrialisation of light granted a new materiality and texture to light, forming one crucial cog in an imperial vision machine, the veil was another visual device for controlling light in an imperial optics. Although the iconography of unveiling had a long, hallowed tradition, it acquired new valence in its exposures of Oriental worlds and subjects, claiming to illuminate the darkness that lay behind the veil so as to offer a view into its hidden secrets, often aided by torches that mark a passage into the light. The veil structures new cartographies of visibility in an imperial optics, consonant with the extended invasive vision of optical technologies which promised to reveal the unseen and expand visual horizons, granting a new legitimacy to the visible.

To view the veil as a visual device is to see how it stood as an obstruction to this field of the visible, where a panoptic desire to ‘see all’ reflected the legacy of Enlightenment attitudes to visibility and transparency. The stubborn opacity of the veil is particularly relevant to the colonial experience as a denial of the inquisitorial demand for a narrative made upon the colonial subject, in the production of what Homi Bhabha calls the ‘calculable individual’. The Indian response, he suggests, was a ‘sly civility’ that spoke with a forked tongue at the instantiation of the colonial master. Edouard Glissant has supported a ‘right to opacity’ against imperial demands for transparency, proposing opacity not as a hermeneutic challenge to unveil into the light, but as a sign of an irreducible singularity, necessary for a generative politics of relation. Beyond imperial politics, visibility has remained an important indicator of power in queer theory, from its early formulations of an epistemology of the closet to later strategic plays of ‘hide and seek’, and most recently in considerations of the figure of the ‘trapdoor’ and the protocols of visibility that it enables. Scholarship on race, too, has grappled with the question of visibility beyond the epidermal logic that has traditionally defined it, to face the invisibility of DNA coding. Judith Butler extends the principle of transparency to questions of selfhood, rejecting an imagined transparent access to the self to propose a subjective opacity as the source of an ethical relationship to others.

In viewing eighteenth-century iconographies of unveiling as technologies of illumination aligned with more modern lighting devices, the aim here is to work with an expanded understanding of visual technologies as encompassing
both practices of seeing and the optical and lighting technologies commonly understood by the term. In that vein, rather than posing an opposition between natural light and artificial light, this study instead considers the instrumentalisation of light and the technologies and practices of seeing which it enabled in specific instances. Technology as *techne* veers between its roles as technique and tool, between practices (of viewing) and the technical apparatus, so that the machine is not simply a technical device and apparatus but a social arrangement of technical, bodily and intellectual components. For Deleuze this notion of the machine as social organism was linked to the visual: ‘A machine does not have to be optical; but it is an assembly of organs and functions that makes something visible and conspicuous.’

Deleuze mused that the panopticon was a system of light before it was a figure of stone, a luminous arrangement of gazes that fashioned a visual assemblage of power between what is seen and who sees. As a ‘seeing machine’, the panopticon enabled an all-encompassing vision that provided a model for the efficient exercise of power through the gaze. The prison apparatus, like any other apparatus, was premised upon visibility, a visibility that could not necessarily be traced back to a source of light but to ‘lines of light’ which formed variable shapes, which were inseparable from the apparatus: ‘Each apparatus has its way of structuring light, the way in which it falls, blurs and disperses, distributing the visible and the invisible, giving birth to objects which are dependent on it for their existence, and causing them to disappear.’ Visibilities, therefore, are neither the acts of a seeing subject nor perceptible matter, but conditions engendered by the play of light and dark, transparency and opacity, the seen and the not-seen. What Deleuze proposes here is an ontology of light where objects (and subjects) are born through light, suggesting that if we are to conceive of apparatuses historically at all, we need to consider them in terms of regimes of light.

Foucault, importantly, viewed the panopticon as analogous to the political and moral order of the Enlightenment – Bentham as the complement to Rousseau, in their common vision of the equivalences between an optical and political transparency. Each presented a dream of a transparent society, visible and legible in each of its parts, the dream of there no longer existing any zones of darkness, zones established by the privileges of royal power or the prerogatives of some corporation, zones of disorder. It was the dream that each individual, whatever position he occupied, might be able to see the whole of society, that men’s hearts should communicate, their vision be unobstructed by obstacles, and that opinion of all reign over each.

Despite the current fatigue with panopticism, given its indiscriminate application to a wide range of surveillance studies that have reproduced a
simplistic idea of centralised repressive power, its diagrammatic architecture remains a powerful model for visual subjectification, particularly the asymmetries of the gaze between empire and colony. Moreover, state surveillance, now allied with a consumer industry, has re-emerged as a powerful mechanism for producing routine knowledge of subjects. Rather than this aspect of surveillance, however, I am more interested in how the panopticon relies upon an instrumentalisation of light to produce a certain space and a visual subject inscribed by such light.

The panopticon authorises a visual subject formed at the interstices of the discourse on light, knowledge and power. Light functions as an instrument of power, such that seeing and knowing fashion being. Yet the panopticon is only one example of the arrangement of discourses of light and its implication of bodies, as pointed out in studies of the limitations of focusing on the panopticon. Imperial architectonics and the material infrastructures of lighting technologies presented other visual arrangements of the visible and the invisible to produce regimes of light that impacted upon bodies. Foucault poses the idea of ‘subjection by illumination’, envisioning a pattern of visibilities produced by the assemblage within which bodies are enmeshed, bringing up the idea of a photo-graphy of sorts – of bodies inscribed by regimes of light. To study the material effects of light as power, therefore, is to study how bodies were subjected to discourses of visibility, examining regimes of light and how they in turn shaped viewing subjects. How might we locate the colonial body within such architectures of light as power?

Akira Lippit has characterised the ideal of complete visibility associated with Western Enlightenment as a ‘catastrophic light’. Identifying within its irradiant structure a totalitarianism that culminates in the ‘atomic light’ of Hiroshima, Lippit seeks to evaluate an Oriental response to the tyranny of its luminosity through a reading of Tanizaki’s In Praise of Shadows, and its offering of an Oriental preference for a darker aesthetics: ‘Were it not for shadows, there would be no beauty.’ In his tract, Tanizaki deals with the practical problems associated with living with processes of modernisation that displace older forms, particularly the new lighting technologies transforming homes, inciting a polemic between Western and Japanese architectural spaces, luminosity and opacity, darkness and visibility. Based on Tanizaki’s experiences, Lippit proceeds to draw out a topology of the body constituted between these spaces, inscribed by the violent light of the new architectonics. In a consideration of an inscription of the Oriental body within a discourse of light and illumination, Lippit acknowledges a photo-graphic archive that is thus constituted of bodies indelibly marked by light. The following chapters of this book, by example, take photo-graphy as emblematic of a process of the material inscription of light to explore an Indian terrain of spaces and bodies impressed by the light of an imperial optics.
In a wonderful example of the impact of colonial perspectival norms on Indian art and iconographic practices, Christopher Pinney notes the displacements made by Edward Moor’s *Hindu Pantheon* (1810), which included a collection of reproductions of Hindu gods and goddesses. The frontispiece of Moor’s narrative is an image of Ganesh (Figure 0.6), the elephant-headed son of Siva and Parvati, commonly invoked as a sacred figure at inaugurations. The image turns on its axis such that it reveals a three-dimensionality that points to its location within the rules of single-point perspective. The slight rotation, Pinney suggests, displaces the sculpture into the space of a European representational system, indicative of the changes that were wrought in Indian art with the onslaught of colonialism. The flat, hieratic signifier of divinity is now invoked within the mathematically ordered space of European representational practice, a template of the displacements ushered into visual practice with colonialism.

Perspective has remained the dominant trope for evaluating the impact of colonial visuality in South Asian art history, a response no doubt to the significance of perspective within the larger narrative of art history itself. However, Edward Moor’s frontispiece of Ganesh posits another aspect of the colonial vision machine that is overlooked in Pinney’s analysis: the brilliant burst of light that crowns the sculpture to endow it with the reverence accorded to a sacred object. It casts a diffuse shadow in the background and a more defined shadow at the foot of the sculpture, violating a central premise of Hindu belief – that the gods, unlike humans, cast no shadows. This is because the gods are made of light and their gaze is, moreover, transcendent (they do not blink); but Moor’s slight rotation and its shadows cast Ganesh clearly as a figurine, not a god, drawing it simultaneously within a spatial order where light and shadow accord new values to gods and humans alike. What was this new order of representation, which abrogated the sacral authority of the gods to draw them into the realm of the human?

The following chapters explore this visual regime of light and shadow, taking for its beginning the apparent obscurity of the Indian nation in late eighteenth-century England – what Sara Suleri has referred to as the ‘representational difficulty of colonial India’ – and its subsequent emergence into vision and visibility. The first two chapters of the book address the hermeneutic problem in envisioning India and the visual strategies employed to illuminate its hidden interiorities in the late eighteenth and early nineteenth centuries. Metaphors of darkness abounded in descriptions and visual documentation of India, whether of the sprawling shade of its banyan trees, the unspeakable horrors of the Black Hole tragedy or the riddle of the laborious energies invested in its ‘gloomy’ caves.
Edward Moor, frontispiece, *Hindu Pantheon*, 1810
Chapter 1 looks at how Elephanta emerged as a powerful cipher in this darkened landscape, haunting the imagination of viewers and leaving a lasting imprint on how the nation would be viewed, as caves served to define the Indian landscape in accounts as long lasting as E.M. Forster’s *A Passage to India* (1924) or Fritz Lang’s *The Indian Tomb* (1959). As a sign of a hermeneutic impasse, darkness presented a challenge to make visible, and the first chapter examines how a complex visual and discursive matrix wove itself around the caves, claiming to unravel the mysteries of their ghostly interiors and monstrous iconography and to illuminate their hidden secrets, only to produce ghostly visions that made claims to the real. An example of this haunting is exemplified in Thomas Rowlandson’s satirical prints of Elephanta published in *The Grand Master, or Adventures of Qui Hi? in Hindostan* (1816). The prints enlist a range of optical devices, including the magic lantern and the kaleidoscope, that mock the antiquarian interest directed at the caves to emphasise instead their phantasmagorical character. Rather than aiding vision, Rowlandson presents the optical devices as magical technologies consonant with practices of the occult associated with Hindu ritual, promising a clairvoyant ‘view of futurity’. This ghostly character of the caves persisted, going on to feed a fantastical visual archive of the caves (and, by extension, the Indian landscape) in German cinema of the early twentieth century, including three films (from 1921, 1938 and 1959) based on Thea von Harbou’s novel *Das Indische Grabmal* (*The Indian Tomb*, 1918).

How, then, was this darkness dispelled? Chapter 2 examines various technologies for illuminating the darkness, featuring a recurrent iconography of unveiling that characterised the emergence of the Indian nation into view for the Western viewer. Pierre Hadot has identified the motif of unveiling nature as an antique trope with roots in the pre-Socratic idea that ‘nature loves to hide’, proposing that it found renewed popularity in Enlightenment Europe as the ‘veil of Isis’ and expressed the promises of science to expose the secrets of nature. It was widely adopted by figures of the German Romantic tradition such as Schiller (*Das verschleierte Bild zu Sais*, 1795) and Novalis (*Die Lehrlinge zu Sais*, 1798–99), and by artists including William Hogarth (*Boys Peeping at Nature*, 1731) and Benjamin West (*The Graces Unveiling Nature*, 1779). The veiled Isis figures as a prototype for a mysterious feminised Orient conflated with nature, and the iconography of unveiling enacts the drama of sight in its quest to illuminate her secret interiorities. Remarking upon the currency of this feminised unveiling of Oriental mystique, Edward Said noted how ‘The cultural, temporal and geographic distance [between the Occident and the Orient] was expressed in metaphors of depth, secrecy, and sexual promise: phrases like “the veil of an Eastern Bride” or the “inscrutable Orient” passed into the common language’. The secrets of a feminised Orient organ-
ised a visual economy of knowledge and concealment where acts of unveiling mobilised a desire to see and to know, promising the disclosure of hidden secrets. For instance, *The Oriental Portfolio* (1839), a lavishly produced travel portfolio featuring lithographs of India featured a frontispiece of the Graces unveiling an image of the Indian landscape, with subsequent pages leading the eye into the heartland and culminating in the disclosure of veiled interior spaces like the harem, typically closed off to the outside eye. Such technologies of illuminating the darkness of the Indian landscape colluded with tropes of the civilising mission, which sought to introduce the light of civilisation into the ‘benighted darkness’. A statue of the noted Oriental scholar William Jones features a roundel (see Figure 2.6) displaying heroic Greco-Roman figures drawing aside the veil that shrouds a nation steeped in the ‘monstrous’ Pauranic deities and illuminating the ‘superstitious’ mythological stories of its *Puranas* with radiant torches.

Chapter 3 turns to the introduction of the veil as the curtain in the representational apparatus of Parsi proscenium theatre, and the drama of revealing and concealing that it introduces into the fluid spaces of folk and processional performance. As an early site for organised entertainment in urban India, theatres experimented both with lighting technologies for its spectacle and with strategic use of the curtain or the *purdah* in its stage practices. While Parsi theatre has largely been presented as a performative development of a literary culture, this chapter reassesses theatre as the site of experiments with visual technologies and cultures in urban India as illusionist painting, directional lighting and lavish costumes presented sensational stories with verisimilitude, enticing viewers into its world (Figure 0.7). Exploring the links between Parsi theatre and Ravi Varma’s paintings, it proposes melodrama as an alternative aesthetic mode that resonated with viewers and relied upon visual tricks, and argues that innovative optics of theatre and painting were influenced by and in conversation with technologies of the spectacle within imperial networks.

Theatre was amongst the earliest institutions to experiment with lighting technologies, a fact made relevant to Indian experiments through the scope and dimension of travelling theatre companies and the circulation of industrial technologies and professionals. As such, theatre represented a key site in the intersection between industrial and imperial technologies of light, creating an infrastructure for public entertainments based on lighting technologies that would migrate to cinema in the early decades of the twentieth century. Gaganendranath Tagore’s rendition of Madane Theatre (Plate 1) attests to its place in the urban night-time landscape, portraying it as bathed in light, with people milling around. Instituted by the Parsi entrepreneur J.F. Madan (1856–1923), an erstwhile actor with the Elphinstone Theatre Company, Madan Theatres was an entertainment business that at one time
Theatre advertisements from The Statesman, Calcutta, 1875–1915
employed up to 1,000 people, with branches in Darjeeling, Lucknow and Bombay, among others. The Madan enterprise graduated from owning theatre companies, including the Elphinstone, Khatau-Alfred and the Corinthian theatre in Calcutta, to showing films in theatres, thus displaying the symbiotic relationship that developed between theatre and cinema. Madan established the first permanent site for film screenings in South Asia in 1902 in the Maidan in Calcutta, going on to build the Elphinstone Picture Palace in Calcutta (1907) and produce a large number of feature films in Bengali, Hindi and Urdu. Their films, like academic paintings and prints, relied upon grand theatrical sets and the Europeanised tastes of elite society. As noted in this review of *Nal Damayanti*: ‘the settings around the pauranic characters are the marble statues of Omkarmal Jethia’s bungalow, the Venetian fountains of Raja Rajendra Mullick’s Marble Palace, and huge Corinthian pillars. Nal and Damayanti looked rather incongruous in these surroundings’.96

If theatre formed the ‘connective tissue of images, tastes, and values’ that bound nineteenth-century visual culture, according to Kathryn Hansen, the stories which it told foregrounded the threatened female body.97 Chapter 4 examines emerging nationalist anxieties about veiling and unveiling the female body, juxtaposing Ravi Varma’s investment in dress and the fashioning of an identity for the New Woman alongside his experiments with the nude. Introduced through European prints and sculpture and taught at the British-run academic art schools in India, the nude was displayed in the houses and palaces of the elite as a symbol of good taste. The nude is presented in Victorian imagery and art-historical writing as the naked body ‘clothed’ in art. Lynda Nead has pointed to the fallacy in this assumption – that of the naked body as ‘natural’ and prior to representation and the clothing of the body in its social and cultural guises as a secondary order of representation from this ideal self.98 However, if one disavows the primacy of the unalienated naked body as standing outside representation, nakedness may be seen as intricately woven into the social fabric, its place defined equally through cultural practice, much like the nude. The chapter investigates how a valorisation of the ‘naked truth’ inflects discussions of the nude body and rubs up against the centrality of adornment in Indian imagery and social practice, where the purely naked body is disavowed as inauspicious. Consequently, the female body becomes a charged site of both erotic investment and a threatening sexuality in nineteenth-century Indian pictorial practice, premised upon such a mechanism of veiling and unveiling.

Chapters 5 and 6 examine two small paintings of men reading, by Ravi Varma, that use chiaroscuro to examine the subjective fashioning of masculine identities within the new economies of light sponsored by technological innovation. Chiaroscuro was a newly learned device for Indian painters in the early twentieth century and its treatment of pictorial space appeared ‘modern’
to Indian artists in that it presented illusionist space. The symbolic qualities of light and dark allow Ravi Varma to make claims of subjecthood for the elite Indian man, challenging the dominant paradigm of anthropological portraiture within which Indian identity was typically represented. Transcending the frontal visibility of the anthropological portrait, the suggestion of a buried self (shown reading) allows for a transition to the fiction of an assured subjectivity. Chapter 5 explores the subjective fashioning of interiority upon the masculine subject and its relationship to artistic selfhood, arguing for bourgeois precedents in the imagination of the private self.

And yet, it throws up the question of who is granted such subjecthood. Chapter 6 examines the painting *The Student* (Plate 17), where we witness an anonymous waiting servant relegated to the shadows while the reading subject glows in the light of a kerosene lamp. The arrangement of subjects within the pictorial space and their exposure to the light determines the coordinates of the new patterns of visibility. There is a differential inscription of the colonial body that emerges as a result of the encounter with imperial technologies of vision – elite artists and subalterns rendered visible in different degrees in the imperial visual economy.

In a telling analogy, a monograph on Ravi Varma compared his prints to ‘the ubiquitous Dietz lantern’ in creating ‘a taste for decoration in the Indian home’.99 The inclusion of devices like the kerosene lamp in the scholar paintings draws attention to this significant transformation of public and private spaces and to the perceptions of lighting technologies as agents of modernisation. Retaining the more expansive definition of chiaroscuro as the use of light and dark to describe space, it is possible to counter the familiar relegation of chiaroscuro to Europeanised histories of the Baroque and the subsequent characterisation of such painting as the product of a belated, non-Western modernity. Instead, Indian painters’ adoption of chiaroscuro both drew from contemporary experiences with lighting technologies and borrowed from European art-historical prints in a non-linear fashion that corresponded more closely to the mobility and circulation of prints rather than to temporal progression.100 A more appropriate comparison emerges with film noir that has resituated the pictorial language of chiaroscuro within industrial modernity and the urban experience.101

This intervention in the emerging scholarship on the material and visual cultures of light in modernity engages with the fact of empire in art-historical discourse through its representational infrastructures and the visual regimes which it engendered. In its delineation of a pattern of visibilities produced by imperial technologies of vision, it traces transnational relationships between empire and colony beyond questions of influence and mimicry, to understand their mutual imbrication in the production of spaces and subjectivities. As such, it extends methodologies largely employed in cinema,
photography and design scholarship to art-historical material by adopting a Foucauldian approach to the study of the material effects of light as power and the place of visual technologies in imperial networks. Although recent critiques of the Foucauldian power/knowledge paradigm in postcolonial studies have pointed to its shortcomings in thinking the practice of power primarily through rationality and governmentality (leaving other acts of violence unaddressed) and resurrecting an ‘anthropological effigy of the subaltern’, such critique based on textual paradigms hold less water in art-historical studies, where Foucauldian visibilities and surveillance studies have increasing political relevance today.\(^\text{102}\) Moreover, rather than seeking to rescue subaltern agency, as implied in this critique, much postcolonial analysis relying upon Foucault has shown the mutual imbrication of elite and subaltern discourses, an interdependence between the empire and colony that acquires its own logic.\(^\text{103}\)

Ravi Varma stands in ‘an age of optimism’, as Partha Mitter called it, when Enlightenment ideas were both endorsed and actively negotiated, and as such represents an exemplar for the assimilation and contestation of trajectories of light, vision and power in the imperial economy.\(^\text{104}\) As an exemplary colonial subject Ravi Varma remained what David Scott has called a ‘conscript of modernity’, bound to the Enlightenment project not out of choice, but circumscribed by its conditions of possibility for action and imagination because of the history of empire. In his tragic account of the postcolonial legacy of the Enlightenment, Scott renounces the ‘conventional romance of revolutionary overcoming’ in anti-colonial narratives, proposing that we seek freedom in ‘the very technologies, conceptual languages and institutional formations in which modernity’s rationality’ sought our oppression.\(^\text{105}\) This is, admittedly, unpopular in an intellectual and social climate where Enlightenment values have been systematically eroded and questioned, not only by a wider popular culture but by a rising tide of decolonial scholarship as well. To recall the legacy of the Enlightenment here is not to nostalgically seek to restore its universal liberal values or to investigate in what ways these were in fact compromised by their colonial policies – grounds well trodden. Foucault has cautioned against the ‘intellectual blackmail of being for or against the Enlightenment’, and the aim here is to unravel entangled material and visual histories indelibly inscribed by the light of empire and of the shaping of spaces and subjects through technologies of light.\(^\text{106}\)

Notes


See the special issue on *clair-obscur* edited by Mark Darlow and Marion Lafogue, *Journal for Eighteenth-Century Studies*, Vol. 37, No. 4 (December 2014).

This research on the changing character of the night has in fact sparked off an interdisciplinary collective interest in the ‘anthropology of the night’ studying transformations in cultural experiences of the night. See J. Galinier, A.M.
Becquelin et al., ‘Anthropology of the Night: Cross-Disciplinary Investigations’, *Current Anthropology*, Vol. 51, No. 6 (2010), pp. 819–847. It is a broad, multi-pronged effort that describes itself as a new field of enquiry extending from the early modern world and across several ethnographic communities to study what it calls ‘nocturnity’, including sleep patterns, memory, dreams and myths about the night. While the turn to conceiving the night not merely in terms of an absence is a welcome step, their approach of treating myths of tribal societies like the Mayans and the Inuits as an unchanging reality preserved in time fails to examine how these communities participated in the disenchantment of the night signalled by modern lighting technologies.


27 There were three versions of the *Light of the World*; the first and the third copies were the ones that had an impact upon colonial audiences. See Eleanor Fraser Stansbie, ‘Christianity, Masculinity, Imperialism: The Light of the World and Colonial Contexts of Display’, in Serena Trowbridge and Amelia Yeates (eds), *Pre-Raphaelite Masculinities: Constructions of Masculinity in Art and Literature* (Burlington, VT: Ashgate, 2014), pp. 189–211.


33 See the discussion around Richard Arkwright’s mills in *Light! The Industrial Age 1750–1900*, p. 32 for example.

34 Schivelbusch, *Disenchanted Night*, p. 44.


George Foster, *New York in Slices* (New York: W.F. Burgess, 1850), p. 120.


A good collection of essays that looks at the aesthetics of darkness in urban culture through a dystopian lens is Gyan Prakash (ed.), *Noir Urbanism: Dystopic Images of the Modern Global City* (Oxford and Princeton: Princeton University Press, 2010).


The book was a collection of eight articles by Kipling describing Calcutta, originally published in the *Pioneer* in 1887–88, and later as *The City of Dreadful Night and Other Sketches* (Allahabad: A.H. Wheeler, 1890). A story with the same title about Lahore was first published in the *Civil and Military Gazette* of 10 September 1885.


Sita Ram, a painter who accompanied the viceroy, Lord Hastings, on a journey across upper India between 1814 and 1815, included several watercolours of festive illuminations, including fireworks, and illuminated transparencies in his albums. They featured events celebrating the reception of the party and also important events like military victories or monarchical anniversaries. Fireworks had featured prominently in paintings even earlier, the most notable amongst which are paintings of the wedding procession of Dara Shikoh (1633), where illuminations functioned as important aspects of the pomp and ceremony of royal celebrations.

Illuminations had always figured as significant for weddings and festive occasions, where the most favoured form comprised 'lines and arches of gas piping, with burners and opal globes about eight inches apart, sometimes a "Welcome".


60 ‘Gas in Foreign Countries’, Report by H.E. Bode, Vice Consul, United States Consulate, 2 May 1890. Published in Special Consular Reports, Vol. 6, p. 118, Published by Department of State, Washington, 1891 and 1892.


62 For scholarship that examines this transition see Sean Cubbit, Daniel Palmer and Nathaniel Tkacz (eds), Digital Light (London: Open Humanities Press, 2015).


The advertisements in industry-specific journals like *The Journal of Gas Lighting, Water Supply and Sanitary Improvement* (London) or *The Gas World* (London) provide good examples of the range of applications made possible by new lighting technologies.


80 Deleuze, *Foucault*, p. 57.


85 Chris Otter argues that it over-determines the role of the state in subject formation without adequate consideration of either individual agency or the exigencies of material infrastructure. Moreover, in his opinion, the very dream of a perfect transparent vision of society was idealistic and by that very virtue elusive, impossible and hence practically unrealisable. Bentham himself acknowledged its limitations in proposing screens for defecating prisoners. See Chris Otter, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800–1910* (Chicago: University of Chicago Press, 2008).


94 Amy Holzapfel draws similar conclusions in her study of nineteenth-century realist drama in Europe suggesting scenography produced a modern optical space and theatre democratised the experience of seeing, *Art, Vision, and

95 See Harry Miner (ed.), American Dramatic Directory for the Season 1884–85 (New York: Wolf and Palmer Dramatic Publishing Company, 1884) for a directory of theatres worldwide that formed a route around the world that could be taken by travelling theatres. It includes several cities in India and information on their facilities, including stage design, scenery, lighting, newspaper advertising, musicians and stage hands. An excellent source for the circulation and production of early cinematic films based on the Madan theatres is Ranita Chatterjee’s unpublished dissertation ‘Journeys in and Beyond the City: Cinema in Calcutta 1897–1939’, University of Westminster, 2011.

96 Cited in Chatterjee, ‘Journeys in and Beyond the City’, pp. 89–90.


101 See, for example, Edward Dimendberg, Film Noir and the Spaces of Modernity (Cambridge, MA: Harvard University Press, 2004).


103 Although Dutta’s example in The Bureaucracy of Beauty addresses a visual topic: Gyan Prakash’s study of the museum in Another Reason: Science and the Imagination of Modern India (Princeton: Princeton University Press, 1999), it poses a misreading of Prakash’s ‘second sight’ as a nativist resistance to Enlightenment reason whereas Prakash presents it as: ‘Signifying neither a superstitious eye nor a scientific gaze, it was a vision re-formed by its encounter with science’s representation as wondrous and useful Western knowledge. Equipped with such a vision, Western educated Indians surfaced as modern subjects who could claim to represent and act upon the subaltern masses from whom they distinguished themselves.’ Prakash, Another Reason, p. 34.

