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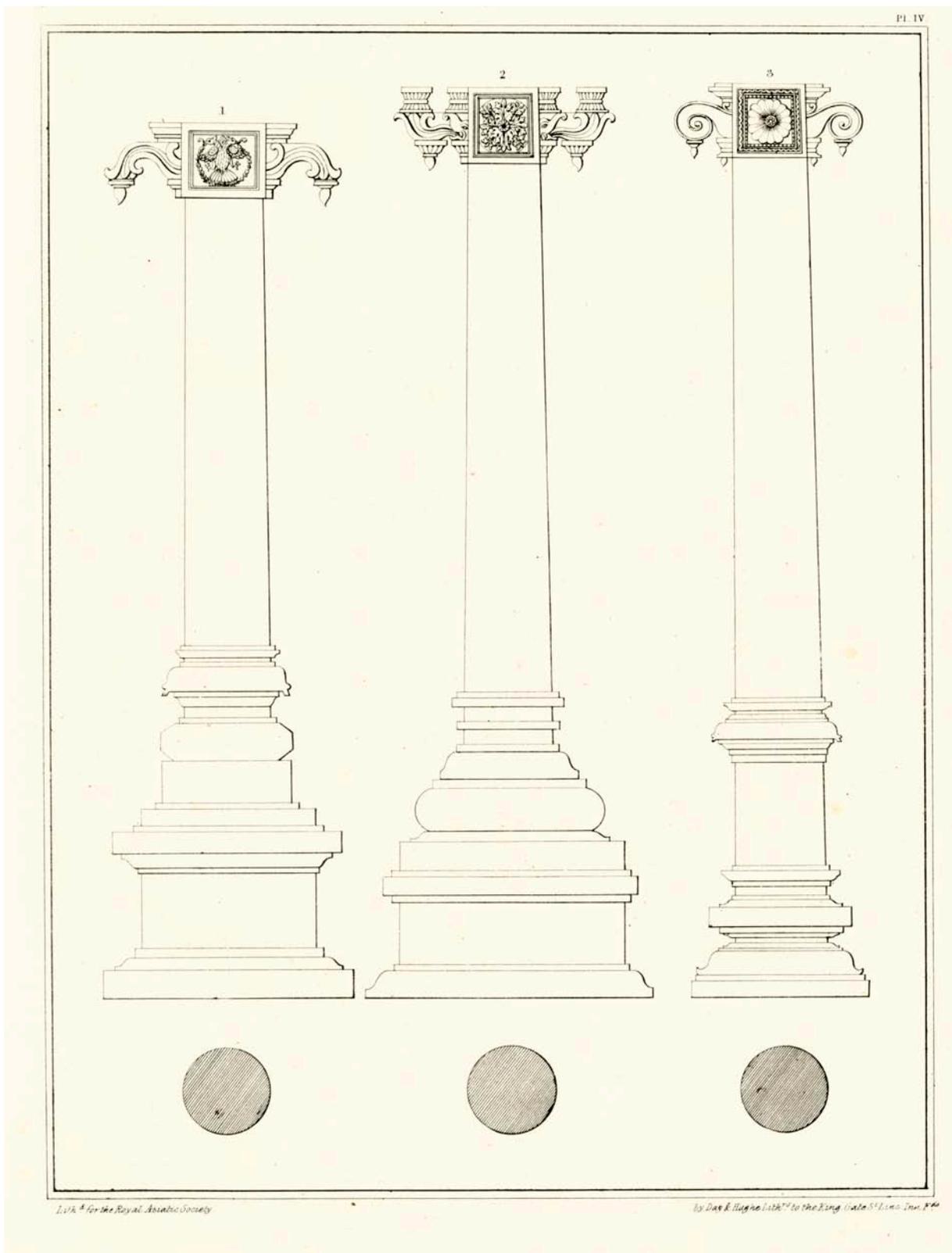
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**Figure 1** The relative proportions of parts of columns (from Ram Raz, *Essay on the Architecture of the Hindus* [London: Royal Asiatic Society of Great Britain and Ireland, 1834], plate IV)

# Interpreting an Architectural Past

## Ram Raz and the Treatise in South Asia

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The process of modern knowledge-making in late eighteenth- and early nineteenth-century South Asia was closely connected to the experience of British colonialism.<sup>1</sup> Driven by an interest to control and comprehend their emerging empire in the subcontinent, British colonial administrators and military officers set about collecting physical vestiges of the country's past and categorizing information on its geography, history, and culture.<sup>2</sup> Their efforts were mediated and supported by the efforts of Indian informants and assistants, and existing contexts, relationships, and connections were irrevocably altered. While the British might have been highly critical of eighteenth- and nineteenth-century South Asian life, the activities and publications of organizations such as the Asiatic (formerly Asiatic) Society held that "the arts and sciences of ancient India were of the highest standard."<sup>3</sup> For the orientalists who held this view, the source of such knowledge resided in so-called ancient texts.<sup>4</sup> As an extension of this idea, architectural treatises written in the Sanskrit language came to be viewed as critical sources of knowledge. Apart from their intrinsic value as texts, treatises could provide evidence that

the design and ornamentation of buildings (particularly Hindu temples), was an intellectual exercise rooted in the subcontinent's unadulterated "classical," and more significantly, "Hindu" past. A desire to elevate architecture to the rarefied realm of philosophy also drove the effort to closely align building practices and treatises.

As an Enlightenment preoccupation with classification extended to British attempts at comprehending all aspects of South Asian society, it resulted in the region being perceived primarily in terms of divisions along boundaries of religion and caste.<sup>5</sup> Within this scheme, Hindus and Muslims occupied different social realms and were presumed to have inherited different histories. More specifically, Hindus were supposedly privy to a pre-Islamic religious, cultural, and Sanskrit linguistic heritage that the orientalists perceived as being independent of its more recent Islamic context. This matrix of rigid religious categories was overlaid on an older set of distinctions between "turushkas," or Turko-Afghan Muslims, and a loosely conceived category called "Hindus."<sup>6</sup> While cultural, religious, and ethnic differences were a well-articulated reality in pre-colonial South Asia, these were also significantly more porous than their interpretation within colonial scholarship suggested, and was applied to the interpretation of the architectural treatise as well.<sup>7</sup> Texts that had circulated in the subcontinent between the twelfth and eighteenth centuries were plucked out of this context to stand as evidence of an unadulterated "Hindu" building tradition.

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One of those who contributed to this assertion of Hindu architectural identity was an Indian scholar, Ram Raz (ca. 1790–1834). Ram Raz reconceptualized an architectural past through assessment and analysis of architectural treatises originally written in Sanskrit, and in so doing, attempted to free a newly defined category of “Hindu” architecture from its Indo-Islamic context and argued for its formation through timeless concepts and trends.<sup>8</sup> Ram Raz showcased his findings in a volume titled, *Essay on the Architecture of the Hindus*, published by the Royal Asiatic Society in 1834. This publication ushered a new way by which an architectural past became legible. In particular, it marked a reorientation of the terms by which classical Sanskrit treatises on building practices were understood, as well as a shift in the conception of architectural categories and their relationship to religious affiliation. Treatises previously used to summarize practices and nomenclature for classifying typologies and ornamentation were now imagined as compilations of precise instructions. Ram Raz, influenced by European treatises on architectural practice, felt the need to demonstrate his findings through drawings based on European models used to illustrate neoclassical buildings (Figure 1). Ram Raz’s work, therefore, raises important questions about the historicity of the categories used to describe Indian architecture. Through a close analysis of the *Essay*, this article explores some of the ways in which Indians began to reconceptualize their architectural pasts, articulating these reinterpretations through colonial social, religious, and aesthetic constructs and technologies.

### Colonial Categories and Ram Raz’s Texts

The endeavors of colonial collectors and scholars such as William Jones, Colin Mackenzie, and Horace Hayman Wilson, who used the services of native interpreters and assistants, formed the larger context for Ram Raz’s efforts. Surveyor and military engineer Colin Mackenzie, in particular, had incorporated local knowledge as part of his effort at documenting objects and narratives. Besides performing specific tasks of drawing and documentation, Mackenzie’s assistants were also granted a larger editorial role in the creation of his archive.<sup>9</sup> Not being a classical scholar, Mackenzie depended heavily on the linguistic skills and cultural knowledge of his assistants. They translated manuscripts into English, collected oral histories, and mapped and illustrated the material landscape of southern India.<sup>10</sup> Ram Raz’s essay can be placed within a contemporary and similar field of scholarly activity.

Ram Raz collected and collated manuscripts of Sanskrit texts known as the *śilpashāstra*. These texts, composed

and compiled in various parts of South Asia, usually contained information that was specific to the stylistic preferences of a region or even a religious sect. Most of the texts that he collected had been produced within a southern Indian cultural realm. The texts contained instructions for building religious and secular buildings as well as for laying out ideal towns and villages. Besides information on proportional systems for plans and elevations of buildings, the texts also contained esoteric rules for a system of spatial organization known as *vāstu śāstra*. The authors of texts such as the *Mānasāra*, the text that Ram Raz principally consulted, were concerned with the laws concerning appropriate placement of functions within a structure or a town in accordance with principles that governed human beings and their relationship to both the physical as well as the spiritual environment. The *Mānasāra* contained information on a variety of subjects, including the proper way to acquire, prepare, and examine land and construct buildings, as well as information on various components, including ornamentation and furnishing. In its manuscript form, the *Mānasāra* contained neither chapter headings nor numbers for their *śloka* (couplets), elements that were added by their modern editors who cleaned and corrected its language into a more sophisticated version of Sanskrit.<sup>11</sup>

If Ram Raz’s *Essay* is overlaid on the *Mānasāra*, one can decipher certain distinctions in terms of focus and orientation between the two texts that are integral to his interpretation. Whereas the authors of the *Mānasāra* concentrated on ritual, individual components and ornamentation, Ram Raz focused on proportional systems, standardization, and architectural drawing as a medium of both illustration and abstraction. He selectively chose those terms and aspects of the *Mānasāra* that would be translatable to a classical European vocabulary, and sidelined those elements that did not lend themselves to such a process. He moved beyond the role of native informant into that of a scholar.<sup>12</sup> Expecting a close correlation between texts and buildings, Ram Raz was surprised to find that the information contained in the treatises dealt with generalities rather than specific instructions for design and construction. Nevertheless, he concluded that they had a direct connection to extant pre-Islamic “Hindu” buildings in southern India, particularly temples, and an oblique relationship to contemporary building practices in the region. Establishing a correlation between texts and extant buildings characterized as “Hindu,” became his central aim.<sup>13</sup>

The temple structures that Ram Raz selected for his demonstration were actually built, altered, and added on over several centuries. Although the construction of many of these structures had begun in the seventh and eighth centuries, well before the political ascendancy of Islamic regimes, they

had been modified and enhanced in an Indo-Islamic context. For instance, he illustrated the Srirangam temple that was begun in the Pandya period (thirteenth century) and then further embellished and expanded in the Vijayanagara (fourteenth to sixteenth century) and Nayaka (sixteenth and seventeenth centuries) periods.<sup>14</sup> The Vijayanagara kings and their Nayaka successors patronized architecture that drew on pre-Islamic as well as Indo-Islamic precedents and prototypes.<sup>15</sup> In other words, much of the design and construction of the Srirangam temple complex occurred within a larger Indo-Islamic milieu.

Ram Raz's list of texts or parts of texts extant in southern India in the early decades of the nineteenth century included fragments of the *Mānasāra*, *Mayamata*, *Cāsyapa*, *Vāyghanāsa*, *Sacalādhicāra*, *Visvacarmūya*, *Sanatcumāra*, *Sārasvatyam*, and the *Pancharatnam*. Most of his conclusions were based on the first four texts of which he had been able to compile "considerable portions."<sup>16</sup> He concluded that the *Mānasāra* was the most complete of these, since it was also considered to be the authoritative text for the construction of temples, and for resolving disputes over the appropriateness of design, though Ram Raz does not specify if this was still current practice in the early nineteenth century. His conclusions, he confessed, were based on the authority of the texts alone, since he believed that masons had moved away from the mode of building specified in these treatises, which he understood to be timeless and ancient. The *Mānasāra* has since been dated to the eleventh century and was originally associated with Chola traditions.<sup>17</sup> Texts circulated in manuscript form and were copied and collated with multiple variations and inconsistencies. For instance, when Prasanna Kumara Acharya began his translation of the *Mānasāra* in 1914, he consulted eleven separate manuscripts, three of which also contained the dates when they were copied: a copy of 1734 (now part of the Mackenzie Collection), an 1823 copy for the East India Company, and one made in 1830 for the Englishman Charles Philip Brown.<sup>18</sup> It follows that copies of manuscripts were produced and new texts also commissioned and compiled in previous centuries within an Indo-Islamic context.<sup>19</sup> In writing the *Essay* on the "architecture of the Hindus," Ram Raz felt obliged to ignore much of this Indo-Islamic context, since accepting a connection to such a past would be acknowledging a syncretic culture. The *Essay* indicated the ways in which social and religious identities were conceptualized and sorted through the experience of colonial modernity in early nineteenth-century India.

Colonial categories tended to be rigid. Early efforts at classifying Indian architecture almost always resulted in divisions along religious lines that were aligned with racial characteristics.<sup>20</sup> Writing in the late eighteenth century, for

instance, the artist William Hodges distinguished between darker complexioned "Hindoos" as the original inhabitants of the subcontinent and lighter complexioned "Moors" from "Tartary" and "Persia." Hodges's first encounter with an "original Hindu" architecture occurred in the southern parts of the subcontinent in 1781, and he first published an account in 1793, where he described the "few objects to be met with here, which serve to illustrate the history or characters of the original inhabitants of India. One, however, is too curious to be omitted, and that is a beautiful Hindoo Temple, or Pagoda, at Triplicane, two miles south of Madras."<sup>21</sup> "Hindoo" architecture was also represented by the "great Pagoda at Tanjore."<sup>22</sup> Having established his categories of "Hindu" and "Moorish," Hodges proceeded to write an essay on the comparative merits of various styles of world architecture including the "Egyptian, Hindoo, Moorish, and Gothic," that he admired as "wonders of architecture."<sup>23</sup> More liberal in his views than subsequent colonial historians of Indian architecture (such as James Fergusson), Hodges criticized his less generous contemporaries when he maintained that where non-Grecian styles of architecture were concerned, it was illogical to "unmercifully blame and despise them, because they are more various in their forms, and not reducible to the precise rules of the Greek hut, prototype, and column" (Figure 2).<sup>24</sup>

With a perspective similar to Ram Raz's, Hodges did not explicitly distinguish between the northern and southern styles of temple building. "Hindu" architecture therefore largely consisted of trabeated religious structures built before the late twelfth-century Ghurid invasions of northern India. This was a vast corpus and included a great variety of structures spread over the entire subcontinent. By the same logic, the subcontinent's "Islamic" architecture encompassed the largely arcuate religious and secular buildings patronized by various Indo-Islamic patrons after the twelfth century. Syncretic examples that could not fit into either category were classified as "hybrid" or more specifically as "Indo-saracenic."<sup>25</sup> However, this classification was derived to some degree from categories endorsed by Indian informants. While classifications became more rigid and unchanging as they entered colonial scholarly discourse, they were not created in a vacuum. Further, while the system that classified Indian architecture into distinct and irreconcilable categories of "Hindu" and "Muslim" might have originated within orientalist perceptions, it was readily embraced by South Asian antiquarians.

By confining his study to the temple architecture of southern India, Ram Raz endorsed such divisions, thereby cementing the association of "Indian" with "Hindu" architecture. Some scholars have maintained that as they dealt with a new



**Figure 2** "A View of the Great Pagoda at Tanjore" (from William Hodges, *Travels in India, during the Years 1780, 1781, 1782, & 1783* (London: J. Edwards, 1793), pl. 1. British Library)

colonial worldview, Indians began to define their identities in terms that conformed to these new categories, and through this process reformulated the structure of Indian society.<sup>26</sup> The beginnings of many forms of social conflicts, including those over caste and religious differences have been traced to such colonial exertions. Whereas cultural and religious differences, were certainly a factor in pre-colonial India, they were also more fluid than their colonial versions.<sup>27</sup>

### "Hindu" Knowledge and Sanskrit Sources

The Asiatic Society had been instrumental in collecting and translating texts from South Asian literature. William Jones, its founder, had initiated an ambitious project of translating Sanskrit texts into English.<sup>28</sup> Jones promoted a methodology for collecting, translating, and comprehending texts. Besides collecting manuscripts and artifacts, Jones further demonstrated his scholarly acumen through analytical papers that summarized and interpreted this material, setting the norms and parameters of orientalist scholarship. These were published in the inaugural volumes of the journal, *Asiatic Researches*. Henry Thomas Colebrooke was one scholar who enhanced this effort by investigating ancient and medieval texts for the source of eighteenth-century customs and rituals and by drawing conclusions regarding the evolution of contemporary customs through historical comparisons.<sup>29</sup>

For example, in his paper on the caste system in South Asia, Colebrooke deduced that practices current in the late eighteenth century anchored conclusions from ancient texts. If a history was to be devised for the subcontinent, it was presumed that it had to be excavated at least partly from texts. Where texts in Sanskrit were concerned, this was also, by implication, a Hindu past. Although Sanskrit learning was patronized by both Hindus and Muslims, colonials imagined such patronage to be exclusively Hindu, an activity that had lapsed with the advent of Islamic regimes in the subcontinent. Sanskrit knowledge, therefore, had to be both excavated and preserved. In compiling the *Essay*, Ram Raz performed just such an archaeological duty.

The *silpashāstra* texts that Ram Raz consulted were compilations and reassessments of earlier texts, often combined with additional information and interpretations. In some instances, authorship was ascribed to mythological figures, while in other texts, patrons were identified as their creators. Just as with such traditional texts as the *purāna*, information from older manuscripts was often selectively incorporated or amended as a new text was commissioned or created.<sup>30</sup> Although texts formalized tradition, they actively engaged regional and vernacular practices, summarizing selections from older writings when they were relevant, often referring to or reinstating past practices. The building practices of Hindu patrons, such as the fifteenth- and sixteenth-century

Vijayanagara kings and the fifteenth-century Rajput chief Rana Kumbha, ruler of Mewar in western India, support this conclusion. In addition, information on *vāstu*, the science of analyzing the physical orientation and disposition of functions and activities in a building, was often incorporated along with newer styles and forms that could allow nineteenth-century historians to place a building within an “Indo-Islamic” category. Thus, the *vāstu* component of a *silpashāstra* text continued to be relevant and to inform Indo-Islamic practice. Forms and ornamentation described in texts could also reflect a sectarian religious bias—for instance, the Shaivite, Vaishnavite, or Jain affinities of their authors.<sup>31</sup>

For Ram Raz, this was a project where knowledge had to be excavated from the *silpashāstra*, although he complained that their authors “in endeavouring to communicate instruction to the world have been guided rather by a mistaken ambition of rendering themselves reputable by the difficulty and abstruseness of their style, than by an anxiety to make themselves intelligible.”<sup>32</sup> Pursuing the model pioneered by Colebrooke, Ram Raz compiled fragments of the *silpashāstra* to derive a history for a pre-Islamic and pristine “Hindu” architecture, completely ignoring that these texts had been copied and recompiled within an Indo-Islamic context. Texts remained in circulation as repositories of traditional knowledge and were used selectively for the application of certain concepts or ideas that were seen as referencing a usable past. Most working masons had little direct contact with the texts, which is why Ram Raz found that understanding their content through their interpretations by masons was difficult, if not impossible. Since architectural principles were transferred through practice between successive generations of masons, this knowledge did not find its way into texts. Moreover, most masons were not trained in the use of Sanskrit, so most of the terms and definitions used in the texts would have been meaningless to them. The fifteenth-century master mason Sutradhar Mandan, who is credited with the compilation of several texts on building practices, was an exception. Even so, Mandan’s texts were meant as guidelines, to be seen in light of contemporary building practices and the patronage of Rana Kumbha.<sup>33</sup> This suggests that the texts were never intended as manuals for artisans; rather they were composed as summations and descriptions of current practices intended to guide in a general way rather than instruct in detail.<sup>34</sup> It is here that Ram Raz misread the intention behind the *silpashāstra*. Analyzing them with an expectation of finding precision and detail, he missed their changing relation with contemporary practice.

Ram Raz was not an exception. Instances of indigenous engagement with a classical past have been documented

through travel accounts and in the memoirs of early colonial scholars; one is recorded in the travel memoirs of Enugula Veeraswamy. An Indian employee of the East India Company, Veeraswamy undertook a pilgrimage across the subcontinent in 1830–31. One of the stops on his journey was Ramtek, that remains a popular pilgrimage site in present-day central India. He described the fifth-century-CE temples that he found on the hills there as being “small but constructed beautifully,” adding: “There are two shrines on the hill for the images of Lord Narasimha and Lord Varahamurthi here. These images have been carved out beautifully following the Silpasastra traditions and appear as if they are endowed with life.”<sup>35</sup> The three structures that Veeraswamy found on the Ramtek hills were clearly distinct in both plan and elevation, from the eighteenth- and nineteenth-century structures that Veeraswamy also encountered on his travels. Dedicated to the Vaishnava deity Narasimha, two of the shrines consisted of single cells with enclosed antechambers and a flat roof. A third shrine dedicated to the deity Varaha consisted of a simple stone pavilion with a miniature tower that rested on a flat roof. All three structures were distinct from syncretic eighteenth- and nineteenth-century examples with their modulated *shikharas* (towers), domed *mandapas* (halls), and carved Mughal columns (Figures 3–5).

Celebrated through colonial antiquarian efforts, the Ramtek temples were clearly from another time, but beyond speculations regarding their antiquity, their precise age had not been established.<sup>36</sup> Veeraswamy, however, made a distinction between these temples and ones built in the eighteenth and nineteenth centuries, and did not mention the *silpashāstra* in any discussion of the latter. Such references were reserved for the fifth-century Varaha and Narasimha temples and by implication to examples that predated the arrival of Islam. Veeraswamy’s perceptions with regard to his social and physical landscape were influenced by colonial knowledge. At the same time, belief in the *shāstra* as a valid antique source for the social and ethical regulation of Hindu society was clearly not restricted to the British, as Veeraswamy’s deliberations on the subject amply illustrate.<sup>37</sup> Like Veeraswamy, Ram Raz combined selective elements from colonial knowledge with his own belief systems to order his historical expectations. These beliefs intersected with the colonial position that the *sāstra* governed all aspects of Hindu life.

### Sharing an Architectural Vocabulary

Religious distinctions in pre-colonial India meant that elite Hindus and Muslims were conscious of separate identities, even as they participated in a complex Indo-Islamic culture



**Figure 3** Narasimha temple, Ramtek, Maharashtra, India (author's photo)



**Figure 4** Varaha temple, Ramtek (author's photo)



**Figure 5** Rukmini temple, Nagpur, Maharashtra (author's photo)

in which Persianate influences predominated. At the same time, innovations and ideas were exchanged with the early modern world (especially the Islamic world) in sixteenth- and seventeenth-century India and architectural practices remained responsive to the demands of tradition as well as innovation. In this climate, differences in form could be distinguished as “modern” versus “ancient,” rather than be conceived as “Islamic” versus “Hindu.” To put it another way, group identity and architectural style in pre-colonial India, had a variable affinity. The nature of these connections changed as Indians engaged with and reassessed their own past in the context of a colonial modernity. Besides the wide acceptance of “Hindu” and “Islamic” architecture, such reassessments, as Ram Raz’s work indicates, included a systematization of terms on the basis of European models, an emphasis on measured drawings as a means of investigation and documentation, and a renewed focus on classical Sanskrit texts. Further, with its emulation of European models and the privileging of abstract geometries, it signals an attempt to elevate architectural knowledge into the rarefied realm of philosophy.

Indian masons in the nineteenth century were privy to a style of building that colonial scholars such as Fergusson and the Indian art historian and archaeologist Rajendralal Mitra termed “Indo-saracenic.”<sup>38</sup> The term has come to

mean the marriage of “Hindu” and “Islamic” building traditions as evidenced by the early eighteenth-century Adishweshwar temple at the north Indian pilgrimage city of Banaras (Figure 6). When European orientalist and amateur observers began to describe the architectural landscape of the subcontinent, they often encountered examples that could not easily fit into pre-ordained categories. Hodges had suggested as much when he wrote about the contemporary architecture of Bengal in the 1780s as “the more modern style of Moorish Architecture, in which all the great monuments are constructed.”<sup>39</sup> Although Hodges distinguished this architecture from that of the “original Hindoo” building styles of the subcontinent, he implied that there was no distinction between architecture commissioned by “Hindoo” or “Moorish” patrons in the late eighteenth century.<sup>40</sup> James Prinsep, writing in the 1820s, also observed that head masons or “rajmistrees” in Banaras often grafted what he described as the “Moresque” style on inherited designs of plans and elevations “of the purer Hindee” taste, implying a continued focus on *vastu*-based knowledge.<sup>41</sup>

Pre-colonial architectural categories were never aligned along exclusively religious lines, although these identities were associated with particular building styles in some contexts.<sup>42</sup> While Ram Raz’s immediate field of inquiry was a post-Nayaka/Vijayanagara southern India, his sensibilities



**Figure 6** Adi-Vishweshwur temple, Banaras, Uttar Pradesh, India, early eighteenth century (author's photo)

and tone indicate a pan-Indic consciousness. In other cases, distinctions were made between “modern” versus older, pre-modern styles of architecture. For instance, the first Mughal emperor, Babur, a relative newcomer to the subcontinent, upon visiting Gwalior made a distinction between its temples that were of an “ancient” style heavily covered in stone sculptures and newer temples whose spatial schemes were akin to systems devised with “tall domes and chambers.” The former, probably the Sas-Bahu temples in the Gwalior fort, were topped with what he termed as “narrow, constricted domes carved of stone.”<sup>43</sup> In his memoir Babur distinguished between older and newer architectural styles, suggesting that the latter was an area of innovation and change rather than a static practice dependant on a set of codifications (Figures 7, 8).

To note another example, when writing about the temples of Ellora in the seventeenth century, Rafi al-Din Shirazi, a courtier from the Bijapur sultanate in southern India, distinguished more generally between modern built environments and premodern ones. His Persian text titled *Tadbkīrat al-muluk* (Memorial of Kings) was a history of Bijapur and included descriptions of its “wonders.”<sup>44</sup> Shirazi’s

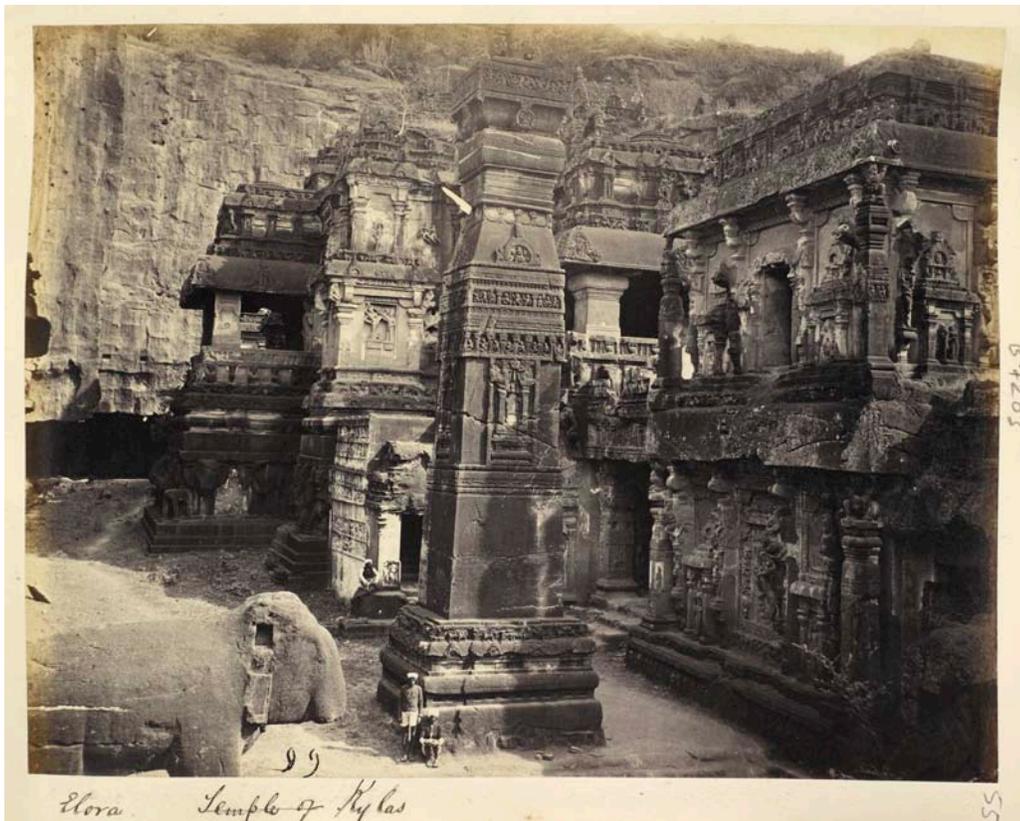
account included a retelling of popular narratives on significant aspects of the built environment. He attributed the creation of the temples of Ellora to an invented character, an emperor, “Parchand Rao,” and his prosperous and peaceful reign.<sup>45</sup> Significant aspects of this account included Shirazi’s admiration for the Kailasnath temple with its “*kbikwat-kbānā*” (retreat) and great “*taq*” (arches).<sup>46</sup> His account did not distinguish Ellora as the product of a “Hindu” past. Rather, he expressed admiration for a monument that he understood within contemporary terms and frameworks. Ellora was described as a palace, a gleaming stone edifice, one of the wonders of the Bijapur sultanate, rather than as a Shaivite Hindu temple of the Rashtrakuta period.<sup>47</sup> Shirazi’s account suggested that distinctions between “Hindu” and “Islamic” built environments were contingent, and often referenced a shared past.<sup>48</sup>

To classify *silpashāstra* texts as exclusively pre-Islamic would clearly be incorrect. Two texts from northern India, the *Rājvallabhamandanam* and the *Devatāmurtiprakaranam*, attributed to the master mason Sutradhar Mandan, and compiled (ca. 1450) under the patronage of Rana Kumbha, must be understood against the context of the Indo-Islamic architecture that Kumbha sponsored at the Kumbhalgarh fortress among other sites. The Mughal Emperor Jahangir described the fortress in his autobiography, the *Tuzuk-ī-Jahangīri*, as a structure built with liberal adoption of arches and domes.<sup>49</sup> Kumbha was the patron of the temple complex at Ranakpur, where domes were combined with pre-Islamic column types, now part of a shared language for Hindu and Muslim patrons and users in western India (Figures 9, 10).

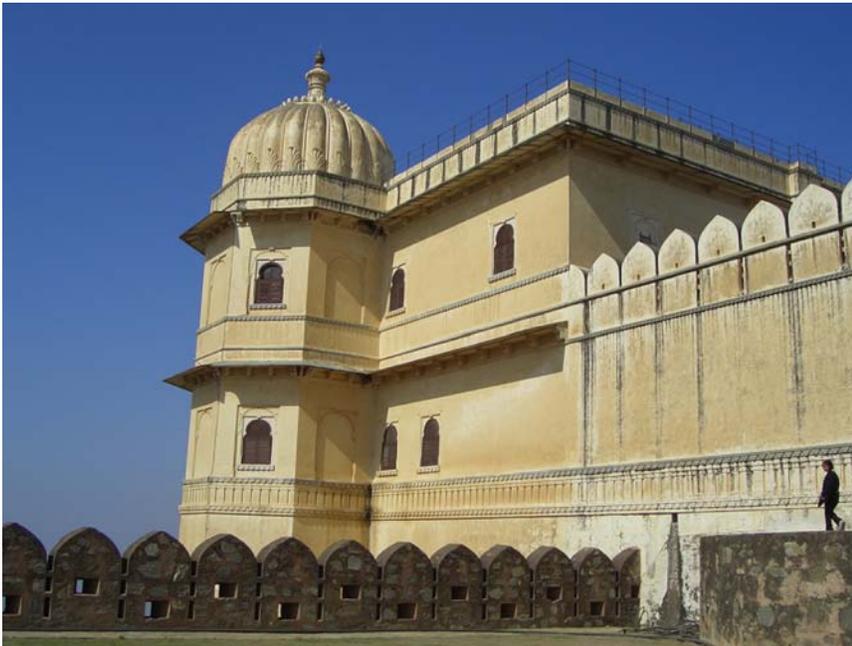
Mandan combined information drawn from a number of older texts with descriptions of current practices. These include the *Samarānganasutrādhar*, *Aparājītapriccha*, *Bṛhatsamhita*, *Matsyapurāna*, *Agnipurāna* and the *Vishnudharmottarapurāna*. Of these, the *Samarānganasutrādhar* is a *silpashāstra* text whereas the other texts have a focus on deities and their eulogies besides containing information on building. The *purānas* often had greater circulation and more active currency than specialized texts such as the *Samarānganasutrādhar*. The fact that such information was incorporated into the *purānas* at all, suggests its continued relevance.<sup>50</sup> Mandan also drew information from the southern Indian text, the *Mayamata* (which Ram Raz also consulted), and described guidelines for the construction of a *gopura*, a term used to describe the gateways of southern Indian temple precincts. In the *Rājvallabhamandanam*, however, the *gopura* is described in a section on domestic architecture. This text includes a discussion on the appropriate use and incorporation of types of columns in various building types, suggesting that a wide variety of types were classified not only on the basis of



**Figure 7** The larger Sas-Bahu temple, Gwalior, Madhya Pradesh, India, ca. tenth century (photographed ca. 1880 by Deen Dayal, British Library)



**Figure 8** Kailasnath temple, Ellora, Maharashtra, ca. eighth century (photographed in 1875 by J. Johnston, British Library)



**Figure 9** Fortress at Kumbhalgarh, Rajasthan, India, ca. fifteenth century (author's photo)

systems of proportion but also on the basis of building function and use.

Some medieval Sanskrit treatises on architecture also included instructions on the building of mosques, further suggesting a shared language of building.<sup>51</sup> In a similar vein, the *Vāstusaukhyam* of the *Todarānanda* was sponsored (ca. 1589) by the Hindu Mughal grandee Todar Mal. Divided into nine sections, this text selectively incorporates information on South Asian building traditions. The *Vāstusaukhyam* is also part of the larger, multivolume *Todarānanda* (also known as the *Sambitasaukhyam*), which includes treatises on rituals that guide an individual through life.<sup>52</sup> The *Vāstusaukhyam* includes an introduction to the idea of *vāstu*, instructions for examining sites and acquiring quality building materials, for laying out plans and reusing building materials, for designing houses for rulers and common people, for the appeasement of various deities, and for the placement of doorways and the goddess of wealth, with a final section on dedication ceremonies for buildings.

These fifteenth- and sixteenth-century texts are compilations culled from older treatises on the tradition of building; they leave space to accommodate newer inclinations. Mandan, for instance, compiled information based in various regional traditions that had only a tangential connection to the practice of architecture in his own region of Rajasthan, and specifically the kingdom of Mewar.<sup>53</sup> None of Mandan's texts nor the authors of the *Vāstusaukhyam* ever described their subject as "Hindu" architecture. Instead, they referenced a past that was to be emulated by all, rather

than limiting their scope to a particular religious sect and its traditions. These texts may be archaic in content, but they preserve valuable traditional knowledge. Texts then could have a tenuous relationship with the corpus of built examples that they were supposed to describe. Texts were copied and compiled as late as the eighteenth century, with regional rulers commissioning copies for their libraries.<sup>54</sup> Later texts retained a preoccupation with ritual ceremonies and spatial arrangements, even though passages that referred to the actual design and construction of formal elements were eliminated or condensed. This indicates a continuing value for certain aspects of tradition, even as preferences and tastes for certain styles of building changed. In an Indo-Islamic environment, these texts and traditions had led hybrid lives.

### The Essay

Ram Raz began his career as a clerk attached to a regiment in the army of the English East India Company. Born about 1790 in southern India, he had pursued some study of English at a young age, which he had opportunity to refine in his work for the company, but he also had opportunities to acquire a more systematized knowledge of the grammar of various other regional and vernacular Indian languages, a skill the company valued.<sup>55</sup> Ram Raz, hired first as an interpreter, rose to the position of *vakil*, or agent. By 1815, while a clerk in the Military Auditor General's office at Madras, he produced a major work of translation—a code of land



**Figure 10** Jain temple, Ranakpur, Rajasthan, ca. fifteenth century (author's photo)

revenue regulations drawn up by order of Tipu Sultan, the erstwhile ruler of Mysore. In his erudite translation, Ram Raz offered extensive notes tracing the linguistic roots of various words that had entered the Marathi language.

Neither a trained architect nor a draftsman, Ram Raz's skills lay in his linguistic abilities, which secured his position as "Head English Master to the native classes" in the East India Company's College at Fort St. George, and he retired as a judge and magistrate in the company's government.<sup>56</sup> Ram Raz had great skill and curiosity about architectural concepts and their translation across cultures, as also an interest in collecting *silpashāstra* manuscripts.<sup>57</sup> In 1827, he wrote to Richard Clarke, an influential Englishman attached to the company's Madras offices, and indicated that he had enough materials for an essay on "our ["Hindu"]

architecture."<sup>58</sup> For a number of elite Indians in the nineteenth century, a confessional Hindu identity was increasingly replaced by its proto-nationalist articulation, often in opposition to an Islamic identity and the prevalent elite Persianate culture.<sup>59</sup>

Ram Raz's *Essay on the Architecture of the Hindus* was his entrée into scholarly circles. In 1828 he was elected a corresponding member of the Royal Asiatic Society. By 1831 the manuscript, consisting of his translation and analysis along with accompanying drawings, was presented to a committee of the society in London that included Sir Alexander Johnston, Captain Doyle, and Graves Haughton.<sup>60</sup> The artist William Daniell and architects William Wilkins and Charles R. Cockerell reviewed it and supported its publication. The project, which also had the support of the celebrated British

architect Sir John Soane, was published by the Royal Asiatic Society in 1834.<sup>61</sup>

Ram Raz tapped into his own heritage and culture. In the preface to the *Essay*, Captain Harkness, Ram Raz's patron at Madras, supplied the author's biography: "[H]e used to boast of being a collateral descendant of Ram Raj, or Ram Raz, the last of the kings of Vijayanagara."<sup>62</sup> Vijayanagara (1344–1565) had been a southern Indian kingdom that symbolically heralded a religious and cultural revival. Although Vijayanagara resided in the Indo-Islamic milieu of south India dominated by Perso-Turkic sultanates, its kings selectively patronized a Hindu revival through support for temple architecture and ritual. They also adopted certain Indo-Islamic mores of architecture, dress, and social custom.<sup>63</sup> The last Vijayanagara ruler Rama Raya, was beheaded in battle by Hussain Bahman Shah in 1565.<sup>64</sup> Vestiges of Vijayanagara survived, as the Nayakas (one-time governors of the erstwhile empire), continued to rule over parts of southern India and patronized the revival of several ritual centers, including the Meenakshi temple at Madurai.<sup>65</sup>

Burton Stein has suggested that the temple building and associated ritual activity of the Vijayanagara age was directly connected to efforts by commanders and governors to command resources that would, in turn, insure political control.<sup>66</sup> The Vijayanagara age saw a proliferation of temple construction and expansion, with increasingly elaborate institutional structures and ritual schemes.<sup>67</sup> Architectural practices at Vijayanagara—the archaeological site of Hampi—such as the Lotus Mahal and the elephant stables, testify to the hybrid Indo-Islamic cultural formation (Figure 11). Temple architecture under Vijayanagara patronage also consciously referenced and revived examples from the Pandya and Chola periods in Tamil history, even in territories beyond the Tamil country, such as the Virupaksha temple at Hampi (Figure 12).<sup>68</sup> Texts such as the *Mānasāra* and the *Mayamata*, which Ram Raz consulted, had their origins in these same periods in history, and shared Chola affiliation. It can be suggested that this relatively recent period of temple building required mining knowledge from earlier *śilpashāstra* texts and it is this regenerated legacy that Ram Raz excavated and interpreted. For instance, the five-storied *vimāna* that he documented from the Rajarajeshwara temple is identifiable as the *vimāna* of the seventeenth-century Nayaka-built Subrahmaniam shrine in the courtyard of the great temple at Tanjore. However, in keeping with the spirit of his project, that of excavating a timeless Hindu past, Ram Raz did not refer to the relatively recent date of its construction.

The success of Ram Raz's *Essay* was based on the challenging task of compiling widely dispersed manuscripts. Further, their interpretation required an engagement with the

multiple disciplines of architectural practice and philology followed by a translation of all this material into English, "the technical and scientific language of a foreign people."<sup>69</sup> Keeping divisions of Hindu and Islamic as a framework, Ram Raz concluded that he was engaged in interpreting what was for all purposes in the early nineteenth century an archaic art, no longer representative of contemporary architectural practice. While this conclusion was somewhat accurate, the texts were still relevant to the masons' craft, even if they were viewed as repositories of tradition. Manuscripts supplemented oral culture, or in the case of architectural practice, a craft tradition.<sup>70</sup> His patron Harkness betrayed the limited context within which Ram Raz and his patrons viewed the *śilpashāstras* when he said, "the study of this, as well as other sciences, has been very generally laid aside by the higher classes for acquirements more in unison with the tone and feelings of the times."<sup>71</sup> Following colonial trends, Ram Raz treated the texts as compilations without their own histories or contexts of practice. If orientalism "incorporated in itself something of indigenous knowledge," its Indian practitioners, to some extent, also began to view traditions as timeless.<sup>72</sup>

Ram Raz does not describe his sources for the manuscripts. He reports that "works on *Silpasastra* are very scarce," and that "even the few scattered fragments that can be had are scarcely intelligible to our best educated pundits."<sup>73</sup> He consulted several Brahmin scholars in his attempts to decipher the Sanskrit writings. He found instead that although nineteenth-century experts were well versed in both Sanskrit and the tradition of memorization, they had little knowledge of architecture and could not comprehend the relevant terminology. Among members of the elite, architecture was not especially valued as a profession, since it was "confined to a class of people whom our ancient legislators have ranked among the lower orders of society."<sup>74</sup> Textual study added intellectual value to what was traditionally an artisan's purview.

Prasanna Kumar Acharya, who began his own research on the *Mānasāra* in 1914, concluded that this text had never been a refined form of Sanskrit but that its language had always been somewhat corrupt, suggesting origins outside traditional brahminical circuits. The chapters of the *Mānasāra* are concerned with a variety of subjects ranging from the qualities of an architect to the appropriate placement of doorways in a building.<sup>75</sup> A substantial section of the text is concerned with the ritual consecration of sites as well as appropriate spatial arrangements that would adhere to the rules of *vāstu śhāstra*. Building components are classified and described through analogy. For example, there is an entire chapter on the classification and terminology of columns and



**Figure 11** Lotus Mahal, Vijayanagara, Karnataka, India, ca. fourteenth–sixteenth century (photographed ca. 1868 by Edmund David Lyon, British Library)



**Figure 12** Virupaksha temple, Hampi, Karnataka, ca. fourteenth–sixteenth century (photographed ca. 1856 by William Pigou, British Library)

their parts. Several are concerned with types of buildings classified on the basis of number of stories, types of towers (*vimāna*), gateways (*gopura*) and pavilions (*mandapa*). Additional chapters are devoted to the description and placement of building components such as gateways and doorways. Others describe pieces of furniture and ornamentation. The texts allowed craftsmen to devise multiple combinations within a general set of guidelines. While the *Mānasāra* is expansive when laying out systems of proportion for building plans and elevations, it is less precise when it comes to accurate descriptions of ornamental features such as moldings and sculpture. In this regard, the *Mānasāra* clearly references contemporary practice.

As Ram Raz found, there was much variation among manuscript copies of the same text. They fell short of modern standards of uniformity and consistency and could only be used to describe the built environment in a limited way. Rajendralal Mitra, who worked in Bengal and Orissa some three decades later, found numerous discrepancies between Ram Raz's description of the *Mānasāra* (58 chapters) and a manuscript of this text in the library of the Asiatic Society of Bengal (46 chapters). In addition he explained, "the topics though the same, are differently arranged."<sup>76</sup> Following the tradition established by Ram Raz, Mitra correlated the manuscripts' information to existing buildings as well as contemporary building practices of masons in Banaras.

Most of the copies of *śilpashāstra* texts that Ram Raz acquired had belonged to masons rather than Brahmins. He surmised that these texts were valued as symbols of tradition, though they might have little precise relevance to the practice of the mason's craft in the nineteenth century. Although masons generally found Sanskrit incomprehensible, his most valuable informant was a mason of the "Cammata tribe," who attempted to find some correlation between the terms Ram Raz provided from texts to building practice.

In the 1830s masons' vocabularies had been shaped through late Indo-Islamic and colonial contexts: "The best of our workmen have been so long disused to their own ancient style of building durable public edifices, that it is not to be wondered at they should now ascribe their ignorance of the art as revealed from heaven to the want of encouragement, which appears indeed to have ceased on the decline of native rule."<sup>77</sup> Ram Raz concluded that he would have to mediate between different streams of knowledge and frame their essence through the methods and language of "science." In the first part of his *Essay*, Ram Raz traced a genealogy for the texts that he had located. As he related to Clarke, he had collected "four standard treatises on architecture," and was hopeful of acquiring "some more from different provinces."<sup>78</sup> Ram Raz was able to trace some affinities between definitions

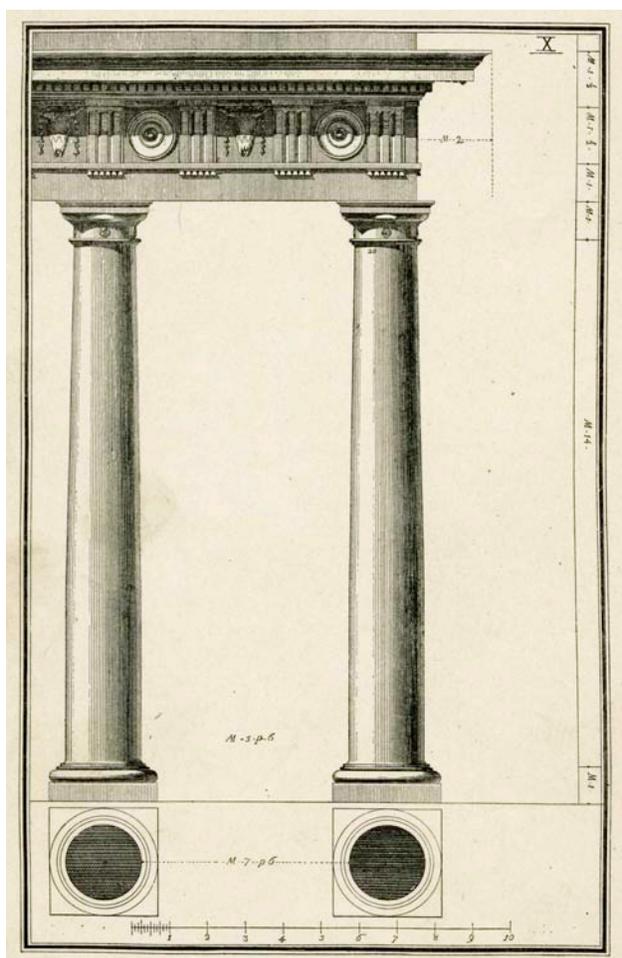
contained in the texts and examples of extant "Hindu" architecture. Ram Raz's experience suggests that masons familiar with Hindu temple architecture from the eleventh century, were rare in the early nineteenth century, since most of them had acquired more relevant skills as they started working for newer Indo-Islamic and colonial patrons.

## Order and Ordonnance

Ram Raz derived his system of ordonnance through a close conversation between texts and observations of extant buildings. Drawing provided a representational bridge since the piecemeal descriptions of components within texts could not provide a comprehensive idea.

While architectural drawings were not new to colonial India—James Prinsep, a contemporary of Ram Raz, observed that masons in the city of Banaras used templates of plans and elevations that they had inherited as family heirlooms—there are no descriptive passages or drawings in the texts that describe for instance, the precise profile of a molding or a composite element such as a *vimāna*.<sup>79</sup> Indeed, it fell to Ram Raz to supplement his analysis with drawings. Illustration and drawing were fundamental to the processes of colonialism. From the early picturesque representations of Hodges and the Daniells to the systematic cartographic and documentation exercises of colonial administrators and military men, drawing was a fundamental mediator in colonial comprehension. Colonial architects and engineers also used drawing as part of their design and construction processes. In addition, architectural prototypes and details were transmitted from their source in England in the form of published drawings. Drawing, therefore, was a way to illustrate and formalize building practices and bring them into the space of modern convention.<sup>80</sup> It was also a means of placing the particulars of Indian building practice within the purview of universally regarded general principles.

The four texts that Ram Raz analyzed contained instructions for building as well as for the consecration of site and structure.<sup>81</sup> Although their authorial attribution and the organization of their contents differed, they shared a number of features, often referencing other texts and drawing on the authority of tradition. From the *Cāsyapa*, Ram Raz extracted descriptions of various components of sacred architecture.<sup>82</sup> The texts on their own, however, provided insufficient material to reconstruct architectural forms. To form a complete picture, Ram Raz oversaw the creation of measured drawings of extant buildings and derived more general typologies from them. Such picturing allowed him to incorporate the particularities of Indian practice within more universal principles.<sup>83</sup> His translation reassessed a system of classification based on



**Figure 13** “Simple Doric intercolumniation,” after Giacomo Barozzi da Vignola, “*The Five Orders of Architecture*,” trans. T. Juglaris and W. Locke (Boston: Berwick & Smith, ca. 1889), plate X (reproduced with the permission of Rare Books and Manuscripts, Special Collections Library, Pennsylvania State University Libraries)

multiple types of each component. Besides the compulsion to find comparable examples within European architecture culture and practice, Ram Raz’s text is influenced by a quest for order and standardization. Significantly, his efforts were guided by the same impulse that drove European theorists such as Giacomo Barozzi da Vignola and Sebastiano Serlio, who wrote and illustrated architectural treatises (Figure 13).<sup>84</sup> This implied that systems of classification described in Indian treatises had to be rearranged to conform to an illustration format devised by Vignola and his contemporaries who were reinterpreting Vitruvius. In addition, a filtered version of the Vignolan illustration format was a model for Ram Raz as he produced plates for his own essay. This tradition provided both a model as well as a source of competition for Ram Raz’s project. Comparisons with the former were

unavoidable in a colonial milieu, and Ram Raz struggled to present Hindu traditions in the most favorable light. Enumerating the “qualifications” of an architect, he stated that these should include “a knowledge of various branches of learning, such as arithmetic, geometry, drawing, sculpture, mythology, astrology, &c. . . . Nor are these qualifications altogether unlike those which Vitruvius and other western architects have described as indispensable to their profession.”<sup>85</sup> Any similarity between the two traditions, in other words, had to be emphasized.

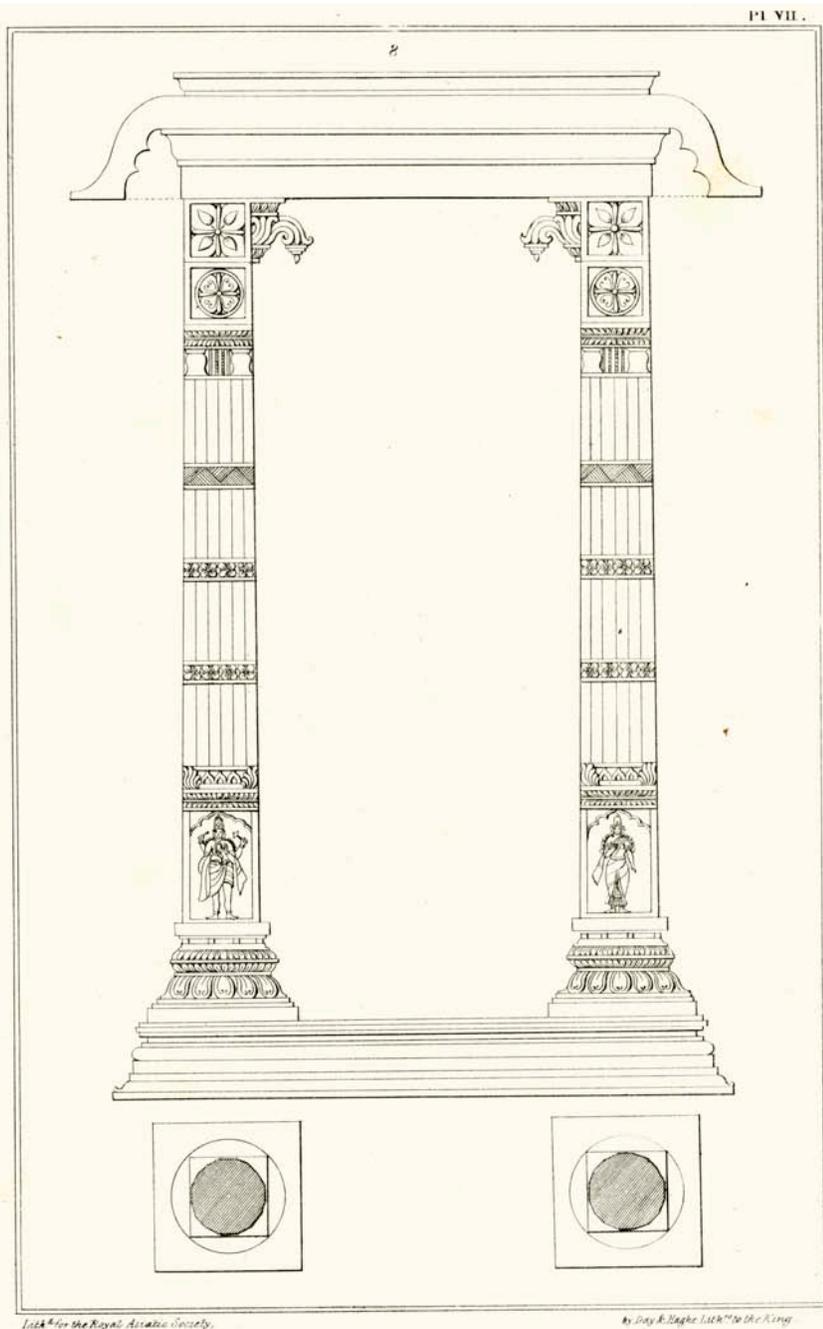
Ram Raz focused on deriving ordonnance from the *śbāstras*, a scheme their original authors had never intended. The authors of these texts organized instructions on building on the basis of individual types or parts and their classification. Vitruvian notions of ordonnance and proportion were the result of that Roman theorist’s efforts at standardizing practice and focusing on architecture as a mathematical art.<sup>86</sup> When his efforts were rediscovered by Alberti in the fifteenth century, they were attached to theories of harmony derived from theories of music, further elevating architecture into the realm of art and philosophy.<sup>87</sup> In Ram Raz’s interpretation, temples from southern India were measured and represented with plans and elevations and within an invented system of ordonnance. This system had very little correspondence to ordonnance as it was understood and described within the Greco-Roman system.<sup>88</sup>

Ram Raz distinguished a set of Hindu “orders,” as being comprised of “four principal parts, namely, *upaṭītha* or pedestal, the *athibhāna* or base, the *sthamba* or pillar, and the *prastāra* or entablature,” and added that “pillars of Indian architecture may, with respect to the dimensions, be divided into seven sorts.”<sup>89</sup> In short, he standardized and consolidated a large number of interchangeable components into a limited number of categories. As he found out, comparisons were often irreconcilable. He discovered that while “Indian orders” were distinguishable on the basis of the “thickness and height of pillars,” they were distinct from the “Greek and Roman orders” since the latter were distinguishable not only by the “dimensions of columns,” but also by “the form of the other parts belonging to them.”<sup>90</sup> The two systems did not quite fit together. Ram Raz had to adjust divisions within Indian architectural elements to fit the Vitruvian scheme. He found that both systems had anthropomorphic elements, though Ram Raz ignored specific European efforts at standardizing these on the basis of absolute measurements rather than proportional ones.<sup>91</sup> He described the “Indian” system, or orders, as divisible into pedestal, base, column and entablature as opposed to the base, shaft and capital of the Western system, but nevertheless proclaimed them to be broadly similar. He noticed that on occasion, in the Indian

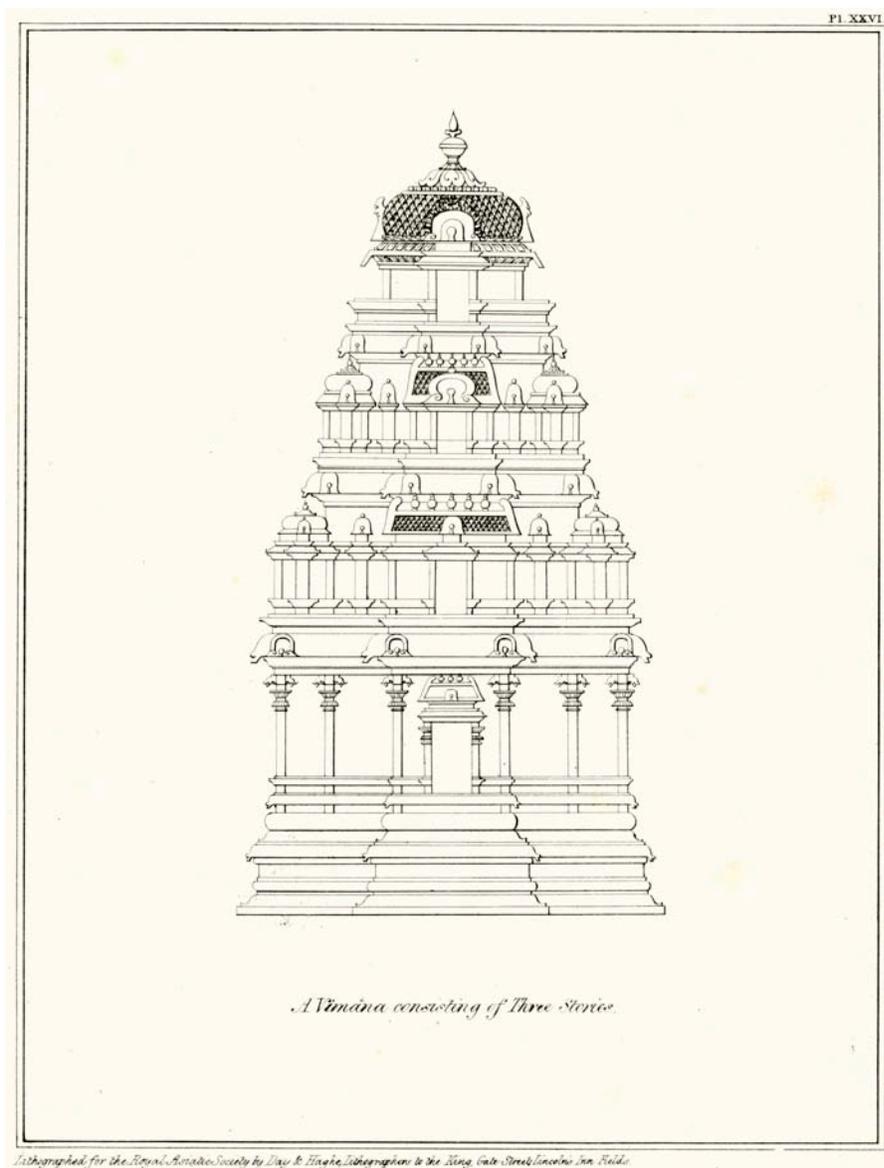
system, the pedestal and base were treated as separate and independent entities, but he made special note of those instances that could find a correspondence with European practice.

Columns and their categories and classifications provided a legible point of departure for Ram Raz, since the Western system of ordonnance was essentially column-centric. He consulted the fifteenth chapter of the *Mānasāra* as well as the ninth section of the *Casyapa* to arrive at a system of classification for columns (Figure 14).<sup>92</sup> He described a

column in terms of proportion and ornament but classified it on the basis of the number of sides that made up its shaft, underlining an essential difference between the Western and Indian systems of classification. For instance, a square column was described in the texts as *brahmacānta*, an octagonal one as *visbnuḥcānta*, and a sixteen-sided or even circular one was described as *rudracānta*. Ram Raz further observed that each of the texts also provided detailed information regarding the ornamental parts of columns, but that “an accurate idea” could only be formed through “ocular observation of



**Figure 14** “Indian” orders (from Ram Raz, *Essay on the Architecture of the Hindus* [London: Royal Asiatic Society of Great Britain and Ireland, 1834], plate VII)



**Figure 15** “A Vimana consisting of three stories,” (from Ram Raz, *Essay on the Architecture of the Hindus* [London: Royal Asiatic Society of Great Britain and Ireland, 1834], plate XXVI)

these decorations.” Ordonnance however, was more readily derived on the basis of orthogonal geometry and the texts alone were never adequate. Within the illustrations, line was privileged over curve and an imagined frame overrode all ornament.

While Ram Raz determined that columns could be arranged and organized into some semblance of ordonnance, the *vimānas* (temple towers) and *gopuras* (gateways) of the Tamil regions of southern India presented a different challenge (Figure 15). Ram Raz proposed a system of description and classification nevertheless, and once again, drawing became a powerful rhetorical tool. The *vimānas* and their division on the basis of a system of proportions within texts made them eligible for inclusion within a broader

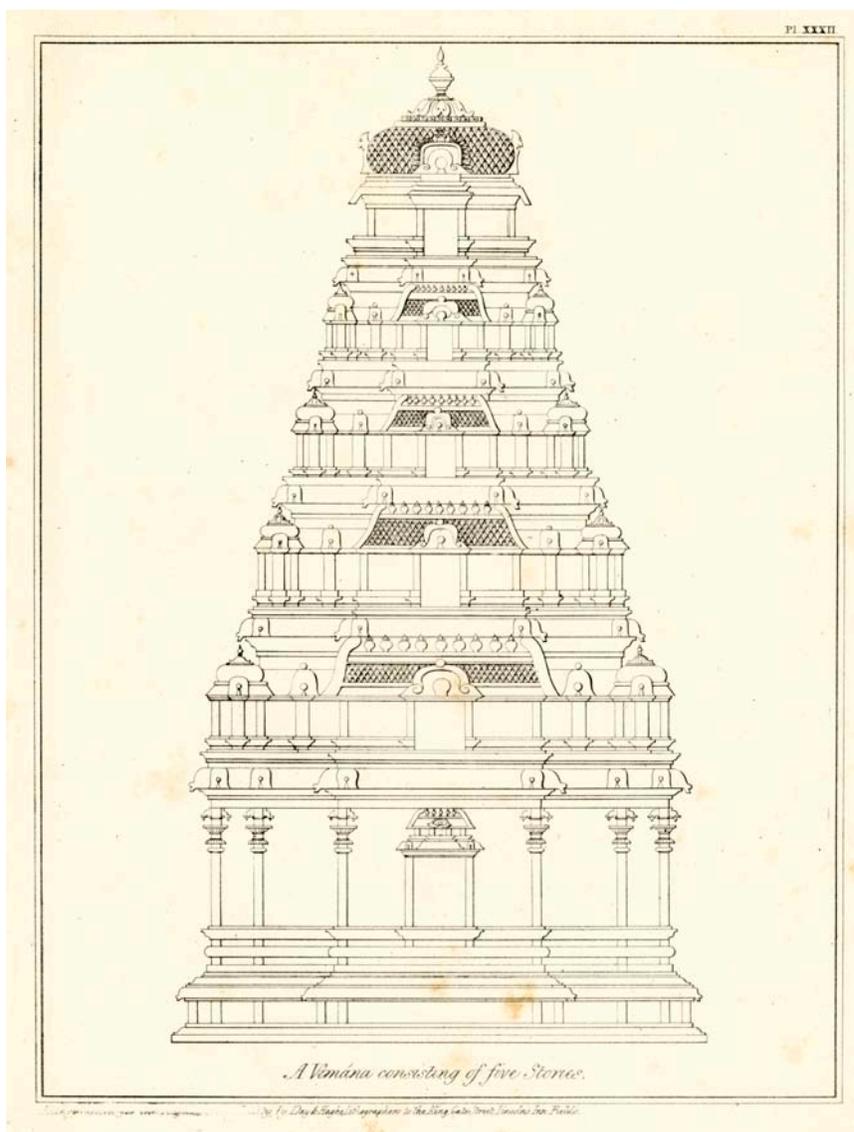
definition of ordonnance. Ram Raz also compared descriptions of *vimānas* found within texts, to extant temples in the Tamil country. The temples illustrated by Ram Raz were often living shrines, built, renovated, and reconsecrated by several successive dynasties seeking political legitimacy through patronage of potent, localized cults. These include, besides the Nayaka-period Subramaniam shrine within the precinct of the Chola-period Rajarajeshwara temple at Tanjore; the Nayaka-, Chola-, and Pallava-period Tyagarajaswami temple at Tiruvarur; the Pallava-period Vaikunthaperumal temple at Kanchipuram; and the Nayaka-, Vijayanagara-, and Pandya-period Srirangana temple complex.<sup>93</sup> Ram Raz conflated their distinct architectural histories into an overarching category termed “Hindu” (Figures 16, 17).



**Figure 16** Subramaniam shrine, Tanjore, Tamil Nadu, India, ca. seventeenth century (photographed in 1869 by Samuel Bourne. British Library)



**Figure 17** Gopura of Ranganatha temple, Srirangam, Tamil Nadu, India, ca. thirteenth–seventeenth century (photographed in 1884 by H. H. Cole for Nicholas and Company, British Library)



**Figure 18** "A Vimana consisting of five stories," (from Ram Raz, *Essay on the Architecture of the Hindus* [London: Royal Asiatic Society of Great Britain and Ireland, 1834], plate XXXII)

The comparison between texts and buildings was often constructed on shaky ground. For instance, Ram Raz described and illustrated "a vimana consisting of five stories" (Figure 18).<sup>94</sup> The accompanying illustration (plate XXXII) represented a five storied tower, the aforementioned seventeenth-century Subramaniam shrine, though it did not display the proportional system that Ram Raz described on the basis of texts. Chapter twenty-three of the *Mānasāra* does contain a description of a five-story structure, although the text does not specify it as either a *vimāna* or a *gopura*.<sup>95</sup> In addition, this description includes a prescription for various kinds of ornament that is to be applied to the structure. This recommendation is overlooked in the drawings that accompanied the *Essay*. It was drawing, with its roots in colonial documentary practices, that provided a bridge between

piecemeal descriptions contained in texts and an overall scheme of architectural relationships and proportions.

### Texts and Technologies

The drawings that accompanied Ram Raz's *Essay*, were created by draftsmen in the employ of the East India Company. The format of these drawings was based on the conventions established by creators of their neoclassical counterparts, in particular, those established by sixteenth-century European architectural theorists such as Vignola and Serlio. In all these cases, the draftsmen tried to establish a relationship between figure and frame, the language of European architectural theory since at least the early modern period. Ram Raz and his illustrators first had to visualize such elements and their

mutual relationship within Indian architecture. Further, in keeping with Ram Raz's preoccupations, to derive architectural order from extant buildings, the frame was privileged over figure. In other words, buildings elements such as pillars were conceptualized in terms of an overall system of proportions that could conform to a European classical format of base, shaft, and capital, rather than paying attention to their sculptural character. Sculpture, the main focus of the authors of texts such as the *Mānasāra*, was deliberately diminished, and consequently receded as ornamental elements placed within an overarching and ordering architectural frame.

The application of technologies of architectural drawing and printing implied that facsimiles of unique objects could be prepared and utilized to draw more general conclusions. In compiling his *Essay*, Ram Raz used contemporary technologies and media to interpret texts that were originally conceived without drawings. He attached his efforts to a European classical legacy that was in its turn built on creating standardized images of components that had been conceived of as unique.<sup>96</sup> His interpretations and the accompanying drawings were meant to be seen and reproduced together, thus presenting this information in a mode determined through the intelligent use of a contemporary technology.<sup>97</sup> In contrast, the manuscript in South Asia had been "a deeply personal medium," that supplemented the oral preservation and progression of knowledge between successive generations of teachers and students.<sup>98</sup> Manuscripts were either precious personal property or housed in libraries and collections that were closely guarded. Colonial scholarship and the printed medium introduced the notion that a "standardized," "error-free," and easily circulated copy of a particular text could now be produced.<sup>99</sup> Alina Payne has remarked on the ways in which the technology of printing established a new and direct link between the text and the practice of architecture during the Italian Renaissance.<sup>100</sup> She also suggests that ornament and its canonization in that context, signified a direct connection to antiquity.<sup>101</sup> It was with a similar goal, to arrive at a condition where text could supersede practice that drove Ram Raz's quest and scholarship.<sup>102</sup> By changing their order, and placing text before practice, the latter could be elevated into the realm of the intellect. For all his efforts, however, the numerous types and variations in ornamentation on southern Indian temples defied easy canonization.

### Chronologies and Colonial Scholarship

Cognizant of his patrons' scholarly interests and opinions, Ram Raz nevertheless carved an independent niche for his *Essay*. William Jones had suggested that there were texts

on "sixty-four different arts and manufacturers."<sup>103</sup> Drawing on more exhaustive investigations, Ram Raz disagreed with Jones. He pointed out that although there were a large number of texts (and he was skeptical about the existence of sixty-four or even thirty-two texts), their contents were often similar, indicating that authors of texts often incorporated the contents of older ones into their own.<sup>104</sup> In affixing a date for the creation of these texts, Ram Raz attempted to place their mythical chronology within a secular and historical timeline. At the same time, he insisted on the antiquity of myths and used mythological references in texts along with more historical considerations, to establish their ancient origins.

Establishing chronologies was a preoccupation of several eighteenth- and nineteenth-century scholars, including the orientalist Francis Wilford, who presented the lecture "Chronology of the Hindus" to the Asiatic Society in 1796, and Ram Raz had to contend with new temporalities that he did not entirely endorse.<sup>105</sup> In discussing the text *Sacalādbicāra* and its authorship, he also directly disagreed with the orientalist Horace Hayman Wilson's chronology for the Pandya and Chola dynasties of southern India.<sup>106</sup> Wilson had consulted the *purānas*, Sanskrit texts that were compilations of histories, genealogies, and myths. The *purānas*, were compositions with multiple authors and recensions and their forms were contrary to Enlightenment expectations of linear chronologies and discrete narratives. The Sanskrit scholars that orientalists employed to translate the *purānas* also operated with a different register of values, opportunities and objectives.<sup>107</sup> Passages were often overlooked in translation and sometimes recreated, and yet these texts were exhaustively examined and indices and translations produced and chronologies derived.<sup>108</sup> Wilson established a chronology for the Chola, Chera, Pandya, and Vijayanagara kingdoms through reference to the Mackenzie collection, though he remained aware of several inconsistencies in his genealogies.<sup>109</sup> For Ram Raz, the *Sacalādbicāra* was datable through the various *yugas* described within its puranic chronology.<sup>110</sup> On the basis of his own reading of Wilson, Ram Raz concluded that the former had dated these kingdoms to "three or four centuries before the Christian era."<sup>111</sup> Ram Raz countered Wilson's opinion: "but the various accounts which are obtainable of these ancient monarchies, though they usually commence with the earliest ages, and are blended with marvelous and extravagant fictions, would still afford ample historical proofs of the establishment of these principalities at an earlier period than what has been hitherto assigned them by Western antiquarians."<sup>112</sup>

For Ram Raz, the puranic timeline remained both significant and relevant, and he dated texts according to a

chronology based on a system of *yugas*. Deliberately conflating a cyclical temporality with linear chronologies, he declared, for instance, that where the *Sacalādhicāra* text was concerned, it was “generally believed to have been composed by Agastya, under the auspices of the founder of the Pandya government, a circumstance which if admitted, would give to this work a very high antiquity.”<sup>113</sup> But Ram Raz was convinced that the texts were much older, and his evidence hinged on the assumption that the epic *Mabābhārata*, compiled as it was at the beginning of the “Caliyug,” mentioned the Pandya and Chola governments.<sup>114</sup> Indigenous and colonial chronologies came together and the former prevailed to produce a timeline for an ancient and by implication, glorious Hindu past in Ram Raz’s interpretation.

### Global Comparisons

Constituted through colonial encounters, cultural and scientific knowledge since the late eighteenth century was intimately connected to racial theories and theories of human origins and migration.<sup>115</sup> This conversation had clear implications within nineteenth-century colonial politics, with Indian subjects making deliberate choices regarding their own origins. This could involve aligning oneself with the “Indo-Europeans” and rejecting affinity with the “Egyptians,” or even a choice between being “Indo-Aryan” or “Turanian/Dravidian” that could imply affinity or distance from the politically ascendant and yet ritually “out-caste” English.<sup>116</sup>

While he was willing to accept a resemblance between Indian architecture and ancient Greek and Roman architecture, Ram Raz denied any significant correlation between Indian and Egyptian traditions.<sup>117</sup> In an age when a grid of global cultures was being laid down, Ram Raz struggled to appropriate a desirable set of coordinates. In an intellectual environment where the production of colonial knowledge involved comparisons between Indian art and architecture and its Greek and Roman counterparts, Ram Raz was alive to the political implications of such formulations. Eighteenth-century European scholars had speculated about possible affinities between buildings in ancient Egypt and ancient “Hindu” India.<sup>118</sup> Egypt remained a source of both antiquity as well as a site for the origin of all cultures.<sup>119</sup> The *Description de l’Egypte*, a colossal Napoleonic project of documentation and classification was dispersed to various parts of the world, including Britain and its colonies, and became a source of comparison as well as consternation.<sup>120</sup> The illustrations of Vivant Denon, who accompanied Napoleon’s expedition, are a case in point.<sup>121</sup> In an era of global travel and comparative speculation, it was not unusual

for orientalists to assign foreign origins to the South Asian artifacts that they investigated. As histories of world architecture were compiled, and given the nineteenth-century predilection for broad classification, ancient Indian and Egyptian buildings were often clubbed together.<sup>122</sup> Goldingham, who speculated on the origins of the Elephanta caves, worked hard to discount the widely held opinion that their sources might be of “Egyptian, Jewish or Greek origin” (Figures 19, 20).<sup>123</sup>

Ram Raz’s efforts were directed toward proving the comparative antiquity, independent origins and ultimately, the superiority of “Hindu” architecture. He argued passionately against the opinion that Indian building in stone bore any affinities to its Egyptian counterpart. For Indians, a comparison with Egypt remained contrary to their own sense of their past and origins. While it was one thing to compare oneself to Europeans whose star was on the ascendant, it was another matter to be aligned with other unconnected nationalities and races. Ram Raz aligned the “orders of India” with those of Greece and Rome, in an attempt to claim parity with a much-admired Greco-Roman tradition while effectively maintaining a distinction between his own interpretation of Indian tradition and that of the colonizers.<sup>124</sup>

In some cases, Ram Raz made distinct claims for the superiority of the Hindu artisan over his Greek and Roman counterpart.<sup>125</sup> Any similarities linking the internal organization of the “Indian” and “Greek” systems were emphasized. In one instance, Ram Raz latched onto the idea of intercolumniation as a shared feature of the two traditions, though he conceded that ancient Hindus and the Greeks had rendered this idea in vastly different ways. He was nonetheless relieved to find a lack of similarity between the ancient Hindu and ancient Egyptian systems. The same was true for the plans of columns in the two systems as well as in their ornaments. If the fluting of Egyptian columns was similar to that of the Greeks, the Hindu system, he safely concluded, resembled neither. An exception seemed apparent in the columns of the cave temple of Elephanta, but Ram Raz dismissed this as a unique case in northern India or “Hindustan.”<sup>126</sup>

Ultimately, Ram Raz’s study placed the temple architecture of southern India, the Sanskrit texts that he dated to a timeless “Hindu” antiquity, and interpretations of the ancient architecture of Greece and Rome within a shared arena of comparisons. His intention was to claim for Hindu architecture the merit of organization, as well as an ancient and, more significantly, superior lineage. In order to achieve this aim he relied on a European classical model of scholarship that privileged an abstracted system of proportions over



**Figure 19** Fragments of Egyptian architecture, from Vivant Denon, *Egypt: A Series of One Hundred and Ten Engravings Exhibiting the Antiquities, Architecture, Inhabitants, Costume, Hieroglyphics, Animals, Scenery, &c of that Country* ([London: Charles and Taylor, 1816], plate XLVI. Reproduced with the permission of Rare Books and Manuscripts, Special Collections Library, Pennsylvania State University Libraries)



**Figure 20** Shiva temple, Elephanta, Mumbai, Maharashtra, ca. sixth century. Watercolor, 1794, James Wales (British Library)

ornament. Ram Raz's engagement with architectural treatises proved durable in its influence on later Indian scholarship, and scholars such as Rajendralal Mitra and Prasanna Kumar Acharya continued to refer to his work and, to an extent, emulate his methods. While his discovery of texts and the notion of their association with a pristine Hindu past endured, later generations of scholars did not pursue a similar attempt at the canonization of Hindu architecture through the invention of ordonnance. The methodological questions raised by Ram Raz, particularly the relation between buildings and texts, however, would continue to enliven the debates on Indian architecture into the twentieth century.<sup>127</sup>

## Notes

1. I would like to extend my sincere thanks to Swati Chattopadhyay for her insightful comments. Thanks also to Stephen Tobriner, Brian Curran, Robin Thomas, and Opher Mansour. This essay is published with support from the George Dewey and Mary J. Krumrine Endowment.
2. Bernard Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton: Princeton University Press, 1996).
3. Partha Chatterjee, *The Nation and its Fragments: Colonial and Postcolonial Histories* (Princeton: Princeton University Press, 1993), 98.
4. The term *orientalist* here refers to the work of scholars engaged in endeavors to study the culture, history and law of the "Orient" with an emphasis on linguistic accomplishments. Following the publication of Edward Said's seminal work *Orientalism* (New York: Vintage, 1979), the term has been deservedly subjected to critiques and to further elucidations of the connections between such scholarly endeavors and the quest for European colonial domination in the eighteenth and nineteenth centuries. I use the term with due cognizance of the relationship between knowledge making and the quest for power. For more on the "Indological" aspects of Orientalism, see Ronald Inden, *Imagining India* (Bloomington: Indiana University Press, 1990).
5. Cohn, *Colonialism and Its Forms of Knowledge*.
6. Brajadulal Chattopadhyay, *Representing the Other? Sanskrit Sources and the Muslims* (New Delhi: Manohar Publishers, 1998); Romila Thapar, "The Image of the Barbarian in Early India," in *Comparative Studies in Society and History* 13 (1971), 408–36; Cynthia Talbot, "Inscribing the Other, Inscripting the Self: Hindu-Muslim Identities in Pre-Colonial India," *Comparative Studies in Society and History* 37, no. 4 (Oct. 1995), 692–722. As these three scholars point out, distinctive ethnic and religious identities were maintained within fluid definitions in pre-colonial South Asia.
7. Richard Eaton has written on the cosmopolitan lives of Hindu and Muslim courtiers in fourteenth and fifteenth century Southern India. See for instance, Richard Eaton, "Rama Raya (1484–1565): Elite Mobility in a Persianized World," in *A Social History of the Deccan 1300–1761: Eight Indian Lives* (Cambridge: Cambridge University Press, 2005), 78–104.
8. I use the term *Indo-Islamic* to refer to events and architecture that can be dated after the late twelfth century, the beginning of a substantial Islamic polity in the Indian subcontinent. Although the term is colonial in origin, it describes a distinct departure in South Asia's religious and cultural patterns.
9. Nicholas Dirks, "Colin Mackenzie: Autobiography of an Archive," in *The Madras School of Orientalism: Producing Knowledge in Colonial South India*, ed. Thomas R. Trautmann (New Delhi: Oxford University Press), 29–47. Despite such dependence, Mackenzie maintained social and racial hierarchies in the tasks that he assigned to his Eurasian and Indian assistants. See Matthew Edney, *Mapping an Empire: The Geographical Construction of British India, 1765–1843* (Chicago and London: University of Chicago Press, 1990), 306–7.
10. Jennifer Howes, *Illustrating India: The Early Colonial Investigations of Colin Mackenzie (1784–1821)* (New Delhi: Oxford University Press, 2010).
11. The first complete edition of the *Mānasāra* was produced by Prasanna Kumar Acharya in 1934. See Prasanna Kumar Acharya, *Mānasāra on Architecture and Sculpture: Sanskrit Text with Critical Notes* (1934; rpt., Delhi: Low Price Publications, 2001).
12. For an interpretation of Ram Raz's role as a "native informant," see Tapati Guha-Thakurta, *Monuments, Objects, Histories: Institutions of Art in Colonial and Postcolonial India* (Delhi: Permanent Black, 2004), 94–95. I suggest, however, that Ram Raz's essay and status as a corresponding member of the Royal Asiatic Society in 1828 facilitated his entry into a scholarly realm. He also wrote "Trial by Jury," *Journal of the Royal Asiatic Society* 3, o.s. (1836), 244–57.
13. Ram Raz, *Essay on the Architecture of the Hindus* (London: Royal Asiatic Society, 1834). Also see Raymond Head, *Catalogue of Paintings, Drawings, Engravings and Busts in the Collection of the Royal Asiatic Society* (London: Royal Asiatic Society, 1991), 100.
14. See Susan L. Huntington, *The Art of Ancient India: Buddhist, Hindu, Jain* (1985; rpt., Boston: Weatherhill, 2001), 597.
15. George Michell, "Royal Architecture and Imperial Style at Vijayanagara," in *The Powers of Art: Patronage in Indian Culture*, ed. Barbara Stoler Miller (Delhi: Oxford University Press, 1992), 168–82.
16. Ram Raz, *Essay on the Architecture of the Hindus*, 3.
17. Bruno Dagens, *Mayamata: An Indian Treatise on Housing, Architecture and Iconography* (New Delhi: Sitaram Bhartiya Institute of Scientific Research, 1985), ii. Dagens concludes that since the *Mayamata* and the *Mānasāra* are identical, the composition of the latter must coincide with the pinnacle of Chola building efforts in the eleventh century CE.
18. Acharya, *Mānasāra on Architecture and Sculpture*, ix–xvi.
19. See, for instance, Shailaja Pandey, *Sbrisutradbāramandanaviracitam Rājvallabhamandanam* (Varanasi: Chaukhambha Surbharati Prakashan, 2001). This text was produced at the "Hindu" court of Rana Kumbha, within a wider Indo-Islamic context.
20. Thomas R. Metcalf, *An Imperial Vision: Indian Architecture and Britain's Raj* (New Delhi: Oxford University Press, 2002), 28–49; James Fergusson, *History of Indian and Eastern Architecture, Volumes I and II* (New York: Dodd, Mead and Company, 1891).
21. William Hodges, who accompanied Cook's expedition around the world, catalogued people on the basis of racial affinities. See William Hodges, *Travels to India during the Years 1780, 1781, 1782 and 1783* (2nd ed., London: Printed for the Author and sold by J. Edwards, Pall Mall, 1794), 10.
22. Hodges, *Travels to India*, 11. Hodges illustrated the temple of Tanjore on the basis of a drawing made "by Mr. Topping, an ingenious friend of mine, now on a survey of the coast of Coromandel for the Hon. East-India Company, and will serve to give the reader a general idea of these efforts of Indian architecture." Observations on the characteristics of Indian architecture were closely connected to early company efforts at surveying and classifying the Indian social and physical landscape. The Great Chola temple of Tanjore was completed ca. 1003–10 CE during the reign of Rajaraja I. See Huntington, *The Art of Ancient India*, 522–28.
23. Hodges, *Travels to India*, 64.
24. *Ibid.*
25. Fergusson, *History of Indian and Eastern Architecture, Volumes I and II*. Also see Rajendralal Mitra, *The Antiquities of Orissa, Volumes I and II* (1875 and 1880; rpt., Calcutta: Indian Studies Past and Present, 1961–63). Mitra

accepted Fergusson's religious and racial divisions, even as he argued vociferously against some of the latter's conclusions.

26. Nicholas B. Dirks, *Castes of Mind: Colonialism and the Making of Modern India* (Princeton: Princeton University Press, 2001).

27. Ibid.

28. O. P. Kejariwal, *The Asiatic Society of Bengal and the Discovery of India's Past 1784–1838* (Delhi: Oxford University Press, 1988).

29. Henry Thomas Colebrooke, "Enumeration of Indian Classes," in *Asiatic Researches* 5 (1799), 53–67. Also see Kejariwal, *The Asiatic Society of Bengal*, 79.

30. Sonit Bafna, "On the Idea of the Mandala as a Governing Device in Indian Architectural Tradition," *JSAH* 59, no. 1 (March 2000), 26–27.

31. Dagens, "Introduction," in *Mayamata*, ii.

32. Ram Raz, *Essay on the Architecture of the Hindus*, xi.

33. Rima Hooja, "Of Buildings and Books: The Theory and Practice of the Architect Mandan," in *Stones in the Sand: The Architecture of Rajasthan*, ed. Giles Tillotson (Mumbai: Marg Publications, 2001), 12–27.

34. Bafna, "On the Idea of the Mandala as a Governing Device in Indian Architectural Tradition."

35. Enugula Veeraswamy, *Kasiyātrā Charitra (Enugula Veeraswamy's Journal)*, ed. and trans. P. Sitapati and V. Purushottam (Hyderabad: Andhra Pradesh Government Oriental Manuscripts Library and Research Institute), 53. Veeraswamy describes the ease with which pilgrimage became possible once the East India Company had instituted its administration in northern and eastern India.

36. Vincent Smith, "The Vakataka Dynasty of Berar in the Fourth and Fifth Centuries A.C.," *Journal of the Royal Asiatic Society of Great Britain and Ireland*, April 1914, 317–38. The age of these temples was established through archaeological investigations undertaken over the course of the nineteenth century, well after Veeraswamy's visit. Their age and provenance was fairly well-established when Smith published his essay. Also see Hans Bakker, "The Ramtek Inscriptions," *School of Oriental and African Studies* 52, no. 3 (1989), 467–96.

37. Veeraswamy, *Kasiyātrā Charitra*, 125. The term "shāstra" can mean a Sanskrit text that contains knowledge or instructions. It can also refer to a tradition with a textual basis or reference.

38. Fergusson, *History of Indian and Eastern Architecture, Volume I and II*; Mitra, *The Antiquities of Orissa, Volume I and II*.

39. Hodges, *Travels to India*, 63.

40. Ibid., 10.

41. James Prinsep, *Benares Illustrated in a Series of Drawings* (Calcutta: Baptist Mission Press, 1831, rpt., Varanasi: Pilgrims Publishing, 2009), 64.

42. In recent years, scholars have focused on the historical trend of Hindus and Muslims building within a shared language with regional rather than religious undertones. See Alka Patel, *Building Communities in Gujarat: Architecture and Society during the Twelfth through Fifteenth Centuries* (Leiden: Brill, 2004). Also see Finbarr Barry Flood, *Objects of Translation: Material Culture and Medieval "Hindu-Muslim" Encounter* (Princeton: Princeton University Press), and Michael W. Meister, "The 'Two-and-a-half-day' Mosque," in *Piety and Politics in the Early Indian Mosque* (1972; rpt., New Delhi: Oxford University Press, 2008), 225–30.

43. *The Baburnāma*, trans., ed., and annotated by Wheeler M. Thackston (New York: The Modern Library, 2002), 416.

44. Carl W. Ernst, "Admiring the Work of the Ancients: The Ellora Temples as Viewed by Indo-Muslim Authors," in *Beyond Turk and Hindu*, ed. David Gilmartin and Bruce B. Lawrence (Gainesville: University Press of Florida), 99. I rely on Ernst's translation of this text.

45. Ibid., 101.

46. Ibid., 103.

47. Ibid.

48. Ibid. Yet, observations regarding social and cultural differences and their link to religious affinity, were not completely unknown. For instance,

the Mughal emperor Jahangir observed spatial and stylistic distinctions between Mughal and Rajput buildings, although these were based on a shared Indo-Islamic architectural vocabulary. He concluded that the differences were a result of varying tastes and preferences. As the emperor classified the latter as "Hindu," he also implied that they were "non-modern." See *The Tuzuk-i-Jahāngīri or Memoirs of Jahangir, from the Thirteenth to the Beginning of the Nineteenth Year of His Reign, Volume Second*, trans. Alexander Rogers and ed. Henry Beveridge (1914, rpt., New Delhi: Munshiram Manoharlal Publishers, 2003), 59.

49. Ibid.

50. For more on the *puranas* as history, see Kumkum Chatterjee, *The Cultures of History in Early Modern India: Persianization and Mughal Culture in Bengal* (New Delhi: Oxford University Press, 2009). Also see Velcheru Narayana Rao, "Purana as Brahminic Ideology," in *Purana Perennis: Reciprocity and Transformation in Hindu and Jaina Texts*, ed. Wendy Doniger (Albany: State University of New York Press, 1993), 85–100.

51. Architectural texts from western India also contained instructions for the building of a "Rahmanaprasad" or mosque. See Patel, *Building Communities in Gujarat*, 123.

52. Kamalakant Shukla, "Granthakar Ka Jiwan Vritta," in *Sbrietodaramalavirachitam Vāstusaukhyam*. Varanasi: Sampurnananda Sanskrit Vishwavidyalaya, 1999, p. 7. Also see *Sbreetodarānandantargatam Vāstusaukhyam*, ed. and trans. Shailaja Pandey (New Delhi: Rashtriya Sanskrit Sansthanam, 1996). Knowledge of Sanskrit was a social marker for a level of erudition, and Todar Mal, who worked in Persian as an official of the Mughal empire, may have sponsored a ghostwriter to compile the *Todarānanda*.

53. Hooja, "Of Buildings and Books," 12–27.

54. In the eighteenth century the Maharaja of Banaras commissioned a copy of a text titled the *Vāstusāstra* for his library.

55. In recent years, historians of South Asia have given increased attention to the role of indigenous scholars and their role in the creation of colonial knowledge. See Bhavani Raman, "Tamil Munshis and Kacceri Tamil under the Company's Document Raj in Early Nineteenth-century Madras," in *The Madras School of Orientalism*, 209–32.

56. Ram Raz, *Essay on the Architecture of the Hindus*, viii.

57. Head, *Catalogue of Paintings, Drawings, Engravings and Busts in the Collection of the Royal Asiatic Society*, 100.

58. Ram Raz, *Essay on the Architecture of the Hindus*, x.

59. Vasudha Dalmia, *The Nationalization of Hindu Traditions: Bharatendu Harishchandra and Nineteenth-Century Banaras* (Delhi: Oxford University Press, 1997).

60. Head, *Catalogue of Paintings, Drawings, Engravings and Busts in the Collection of the Royal Asiatic Society*, 101.

61. Ibid., 101.

62. Ram Raz, *Essay on the Architecture of the Hindus*, vi.

63. Philip B. Wagoner, "'Sultan among Hindu Kings': Dress, Titles, and the Islamicization of Hindu Culture at Vijayanagara," *Journal of Asian Studies* 55, no. 4 (Nov. 1996), 851–80.

64. Richard Eaton, "Rama Raya (1484–1565): Elite Mobility in a Persianized World."

65. For more on Nayaka period patronage in Southern India, see Jennifer Howes, *The Courts of Pre-colonial South India: Material Culture and Kingship* (London: Routledge, 2003).

66. Burton Stein, *Vijayanagara* (Cambridge: Cambridge University Press, 1989), 67.

67. Ibid.; and Michell, "Royal Architecture and Imperial Style at Vijayanagara."

68. Ibid.

69. Henry Harkness, "Preface," in Ram Raz, *Essay on the Architecture of the Hindus*, v.

70. Thomas R. Trautmann, "Introduction," in *The Madras School of Orientalism*, 5.

71. Ram Raz, *Essay on the Architecture of the Hindus*, iv.
72. Thomas R. Trautmann, "Introduction," in *The Madras School of Orientalism*, 5.
73. Ram Raz, *Essay on the Architecture of the Hindus*, x.
74. *Ibid.*, xii.
75. Acharya, *Mānasāra on Architecture and Sculpture*.
76. Mitra, *The Antiquities of Orissa, Volume I*, 24.
77. Ram Raz, *Essay on the Architecture of the Hindus*, xii.
78. *Ibid.*, xi.
79. Also craftsmen's manuals in the nineteenth century incorporated illustrations and instructions for the layout and construction of foliated Mughal arches as well as *vāstu* diagrams.
80. Beth Fowkes Tobin, *Picturing Imperial Power: Colonial Subjects in Eighteenth-century British Painting* (Durham: Duke University Press), 188–213. As Fowkes Tobin points out, the act of drawing made exotic objects legible, and paved the way for their placement within a universalizing system of categories through controlled alteration.
81. Ram Raz, *Essay on the Architecture of the Hindus*, 5.
82. *Ibid.*, 7.
83. Tobin, *Picturing Imperial Power*, 188–213.
84. Mario Carpo, *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory*, trans. Sarah Benson (Boston: MIT Press, 2001). Vignola's treatise and illustrations have been widely translated and reproduced. See, for example, Giacomo Barozzi da Vignola, "The Five Orders of Architecture," trans. T. Juglaris and W. Locke (Boston: Berwick & Smith, ca. 1889).
85. Ram Raz, *Essay on the Architecture of the Hindus*, 15.
86. John Onians, *Bearers of Meaning: The Classical Orders in Antiquity, the Middle Ages, and the Renaissance* (Princeton: Princeton University Press), 33.
87. Hanno-Walter Kruft, *A History of Architectural Theory from Vitruvius to the Present* Ronald Taylor, Elsie Callander and Antony Wood, trans. (Princeton: Princeton Architectural Press, 1994).
88. Ram Raz was introduced to this European classical tradition through its eighteenth- and early nineteenth-century interpretations. Architectural pattern books were easily available in colonial cities like Madras and may have been a direct source of inspiration for Ram Raz.
89. Ram Raz, *Essay on the Architecture of the Hindus*, 22, 29.
90. *Ibid.*, 37, 38.
91. Carpo, *Architecture in the Age of Printing*.
92. Ram Raz, *Essay on the Architecture of the Hindus*, 28.
93. For more on the temples at Kanchipuram and Tiruvarur, see *Encyclopedia of Indian Temple Architecture: South India: Lower Dravidadesa 200 B.C.–1324 A.D.*, ed. Michael Meister and coord. M. A. Dhaky (Philadelphia: American Institute of Indian Studies and University of Pennsylvania Press, 1983), 23–79, 191. For Sriranganatha see Huntington, *The Art of Ancient India*, 597–99. Also see George Michell, *Architecture and Art of Southern India* (Cambridge: Cambridge University Press, 1995). For more on the Subramaniam shrine at Tanjore see Huntington, *The Art of Ancient India*, 588–89.
94. Ram Raz, *Essay on the Architecture of the Hindus*, 56.
95. Acharya, *Mānasāra on Architecture and Sculpture*, 165–66.
96. Carpo, *Architecture in the Age of Printing*, 6–7.
97. *Ibid.*
98. Sascha Ebeling, "The College of Fort St. George and the Transformation of Tamil Philology during the Nineteenth Century," in *The Madras School of Orientalism*, 238.
99. *Ibid.*, 239.
100. Alina Payne, *The Architectural Treatise in the Italian Renaissance* (Cambridge: Cambridge University Press, 1999), 6.
101. *Ibid.*
102. Ebeling, "The College of Fort St. George and the Transformation of Tamil Philology during the Nineteenth Century," 238–39.
103. Ram Raz, *Essay on the Architecture of the Hindus*, 1.
104. *Ibid.*, 1–2.
105. Wilford's thesis was published as an essay three years later. See Francis Wilford, "On the Chronology of the Hindus," in *Asiatic Researches* 5 (1799), 241–95.
106. Ram Raz, *Essay on the Architecture of the Hindus*, 10.
107. Kejariwal, *The Asiatic Society of Bengal*, 143.
108. *Ibid.*, 143–46.
109. *Ibid.*, 143. Also see Jennifer Howes, "Colin Mackenzie, the Madras School of Orientalism, and Investigations at Mahabalipuram," in *The Madras School of Orientalism*, 75–109.
110. In Hindu belief, time is measured within a system of cyclical epochs, known as a *yuga*. There are four *yugas*, called *Satya yuga*, *Tretā yuga*, *Dwāpār yuga* and *Kali yuga*. The world goes through continuous cycles of these epochs in this given order. The puranic past was conceived in term of *yugas*. Although the colonials tended to dismiss this concept of the past, and developed their own chronologies, Ram Raz tried to derive historical dates for the texts that he was studying on the basis of these epochs, thereby claiming greater antiquity for them.
111. Ram Raz, *Essay on the Architecture of the Hindus*, 10. Horace Hayman Wilson was an antiquarian, linguist, and philologist who compiled an extensive catalogue of the Mackenzie collection. In assigning dates to the objects in the collection, Wilson drew on mythologies as well as inscriptions, the most reliable sources being the inscriptions of the Imperial Cholas. Wilson then worked backward in time from these twelfth-century inscriptions.
112. Ram Raz, *Essay on the Architecture of the Hindus*, 11.
113. *Ibid.*, 10.
114. *Ibid.*, 11.
115. Hodges, *Travels to India*.
116. See Thomas R. Trautmann, *Aryans and British India* (Berkeley: University of California Press, 1997) and Tony Ballantyne, *Orientalism and Race: Aryanism in the British Empire* (New York: Palgrave Macmillan, 2006). As Tapan Raychaudhuri notes, Indians maintained ritual boundaries and distinctions even at the height of colonial rule. See Tapan Raychaudhuri, *Europe Reconsidered: Perceptions of the West in Nineteenth Century Bengal* (Delhi: Oxford University Press, 1988).
117. Ram Raz, "To Richard Clarke, Esq., Madras, 13th January 1828," in Ram Raz, *Essay on the Architecture of the Hindus*, xiii.
118. Partha Mitter, *Much Maligned Monsters: A History of European Reactions to Indian Art* (1977; Chicago: University of Chicago Press, 1992), 119–20.
119. Andrew Bednarski, *Holding Egypt: Tracing the Reception of the Description de l'Égypte in Nineteenth-century Britain* (London: Golden House Publications, 2005).
120. *Ibid.* Also, for a discussion on theories of common origins of Indian and Egyptian architecture, see Mitter, *Much Maligned Monsters*.
121. Vivant Denon, *Egypt: A Series of One Hundred and Ten Engravings Exhibiting the Antiquities, Architecture, Inhabitants, Costume, Hieroglyphics, Animals, Scenery, & c of that Country* (London: Charles and Taylor, 1816).
122. Hodges, *Travels to India*.
123. Kejariwal, *The Asiatic Society of Bengal*, 81.
124. Ram Raz, *Essay on the Architecture of the Hindus*, 38.
125. *Ibid.*, 39.
126. *Ibid.*
127. For example, the debate between Mitra and Fergusson in the late nineteenth century. See also Nirmal Kumar Bose, *Orissan Temple Architecture* (rpt., Delhi: Bharatiya Kala Prakashan, 2001).