# Chapter 15 Religion as Conceptual Scaffolding for Architecture



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Abstract Religion and Architecture have a long and intimately intertwined relationship in virtually all cultural histories. Through a wide-ranging discussion centring on India and its global diaspora, this chapter considers some of the many ways in which religion continues to be invested in architecture in the world today, and vice versa, broadening and deepening understanding of how religion is literally 'placed' in contemporary life. Architecture, we conclude, sustains at least a part of the project that religion pursued more dominantly and directly, with the aid of architecture, in other times; it constructs and articulates space, both physical and social, as a medium in which individuals and collectives may engage and cohere, and through which the self and its relationship to greater wholes or entities may be defined and realised.

# 15.1 Introduction

Religion and Architecture go hand-in-hand. Indisputable, certainly, is the wealth of inspiration and patronage that religion has lent, historically, to the discipline of architecture. Just consider the countless examples of extraordinary religious buildings that reside in popular imagination. From the sheer monumentality of the pyramids of Giza, to the soaring vaults and luminous Gothic filigree of Notre Dame de Paris, to the iridescent splendour of the tiled domes and arches of Isfahan or the Taj Mahal, the legacy of sublime architectural forms, spaces and textures that human civilisations have bequeathed over previous millennia is inextricably intertwined with the cultural and historical developments of religion. In the contemporary era, however, when global flows of human and economic capital have encouraged more homogeneous secular forms of social and technical organisation to dominate everyday life

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and consciousness, religion would appear to have lost this capacity to inspire new architecture of comparable monumentality and significance. But, as this chapter will attempt to discern, whilst religion as symbolic form may not be so ubiquitously represented in the architecture of today as it once was, it continues to inform architectural conception and production in countless other ways.

Contemplating the case of religious buildings it is apparent that architecture consists, at the very least, in the satisfaction of two essential qualities. On the one hand buildings are 'structural' in the prosaic sense that they physically contain and functionally support particular purposes or practices-the performance of religious rituals, for example-for which they were designed. On the other hand, buildings also tend to be 'meaningful', either as overt icons or symbols of particular ideas or beliefs, or more often simply by association with use or context. It may be argued, however, that the realm of architecture extends beyond these structural and symbolic aspects of form inherent in the building itself, incorporating additional realms or objects of order including notions of place, community and identity, and further still, intentions and personal discovery. It is through an examination of these categories of social and personal existence, and the values and beliefs that motivate them, that we begin to explore the shared realm between architecture and religion in defining our place in the world. Probing deeper we realise that religion also serves as the basis for a range of architecture related activities, from the valuation and transfer of goods and resources, to the motivations for construction and the beliefs that organise human labour. Here religion may be seen to exist as an 'excess' or an 'unacknowledged condition' that drives architecture and provides a conceptual scaffolding for its becoming (Chakrabarty 2008; Giddens 1984) or-to invoke another more general theory of cultural production-as a fundamental and therefore unquestioned set of beliefs or 'doxa' that underpin the interests of the faithful in investing themselves and their resources in the production of religious architectures (Bourdieu 1993; Lipstadt 2003: 397-98).

Considered in this broader sense of human values and motivations, religion is a revealing lens through which architecture may be examined. By looking carefully and critically at some of the ways in which religion is invested in architecture in the world today, and vice versa, this chapter seeks both to broaden and to deepen appreciation of what the idea of architecture might entail. In so doing, we hope this more robust and expansive understanding of the discipline from which we speak may assist, in turn, to better understand how religion is literally 'placed' in contemporary life.

As we embark on this broad-ranging discussion, it may also be salient to note the poly-vocal nature of this chapter in which the distinct life experiences and disciplinary expertise of the three authors offer different insights on the topic. Srivastava spent his childhood in religious education in India before migrating to Australia to study and teach architectural theory. Scriver, who began life and his initial architectural training in Canada, is an historian of architecture and settlement planning whose work focuses on the Indian sub-continent in the colonial and contemporary eras as a test-bed for paradigms of cross-cultural spatial and social development that have been broadly influential in other parts of the world as well. Nash is a linguist and ethnographer whose work extends to environment, place and architecture as conceptual frameworks

for critical inquiry. Over the past two decades he has also been deeply engaged in India through religious pilgrimage and study. We have previously collaborated to think and write about architecture and Indian modernity, architecture and pilgrimage, linguistics and architecture, creative formulations of and in space(s), and the role of cultures and ecologies as conceptual scaffolding in assessing our built and made-up worlds. Beyond beliefs and borders, our individual geographies and academic lives intersect in the ex-colonial city of Adelaide, Australia where the present discussion begins, and in polytheistic India and its global diaspora on which our three-way dialogue will be primarily focused. The aim of the present collaboration has been to bring together our collective repository of migratory, spatial, and introspective insights conjoining religion, the built environment, and the ephemerally presentunpresent in a broader and less-predictable discussion of the designated topic than may have been anticipated, which we hope will be productive.

## **15.2** Community, Place and Identity

If religion is no longer pre-eminent in defining the larger socio-political realm in many contemporary societies, let us begin by considering how the 'placing' and embeddedness of religion in everyday life may still provide a base or centre for communal identity and cohesion. Again, this may be self-evident when we think of the place that a historic temple or church may define within the fabric of an old town. The contemporary poignancy of the point may be more apparent, however, if we consider what such religiously defined places of community may provide for migrant or displaced groups whose sense of social security and empowerment is conditioned by self-consciousness of minority or marginal status relative to the dominant culture. Religious markedness and top-down or self-imposed minoritymaking can craft required energy dispersion and even micro cultural insurgency; distinction and dissimilitude can generate both fashionable and unwanted outcomes.

Adelaide, the South Australian capital city from which Scriver and Srivastava write (Nash is from Adelaide and currently writes from Aarhus, Denmark), offers some salient examples as a point of departure. For well over a century after its establishment in 1836 as the capital of the new settler colony of South Australia, Adelaide was known as 'the city of churches' (Whitehead 1986). This label reflected a conspicuous preponderance of religious buildings, some grand but many more of which were decidedly humble houses of worship almost domestic in scale that had vied from the start with ordinary dwelling houses and Adelaide's earliest commercial and industrial enterprises to populate and give substantive form to the abstract surveyor's grid of the new town. Despite the ostensible conservatism that this architectural panoply of religiosity might have connoted, the early settlement history of the colony reveals a more plural if not radical outlook. The city's nickname actually underscored the catholicity of the new colony in which religious freedom had been enshrined constitutionally as a fundamental right by the social reformers and religious 'dissenters' who were its promoters and founders (Whitelock 2000: 5, 26). Not only was there no favoured state church—a reformist challenge to the dominion that the Church of England was generally afforded throughout the rest of the British colonial Empire (Bremner 2013)—there was to be no favour or restriction applied to any religious group. The nascent settlement could just as well have been nicknamed 'the city of refuge' as Presbyterians, Baptists, and Congregationalists, who were the first off the boat, were soon followed by English Quakers and Jews, as well as German-speaking Lutherans.

Little more than a generation after the foundation of the colony, Islam was also being practised in South Australia and as early as 1889 Adelaide could boast its first "Muslim Chapel" (A Mosque in Adelaide 1890). Indeed, as later claims for its cultural significance and local heritage protection (Government of South Australia 1979) and further historical research have established, it was not only the first permanent purpose-designed mosque to be built in the Australian colonies, but possibly anywhere else in the British Empire as well, outside the traditional Islamic world (The Open University 2019). The mosque was commissioned by migrant camel handlers of South Asian and Afghan origin, thousands of whom were recruited to the Australian colonies between the 1860s and the early 20th century to open-up and supply the continent's harsh interior. Tucked away on a small residential street in the southwest corner of the new colonial city, the solid but relatively unremarkable stone building provided an inconspicuous place of worship and community for this far-flung brotherhood to congregate. But the addition in 1903 of four monumental brick minarets was to transform the humble structure into a place of unmistakably visible and distinctive religious and cultural identity. This was material evidence of the economic capacity and entrepreneurial ambition of the small but growing Islamic community in Australia. Built shortly after the federation of the Australian Commonwealth in 1901, however, the minarets were also indicative of a growing need to define and defend this minority community's place in the context of the self-consciously 'post-colonial' new state and society, in which a newly legislated immigration restriction policy was already disenfranchising this and other ostensibly 'alien' migrant groups of previous rights and privileges. Ironically, this resort to a more monumental scale and symbolic form of religious architecture-an apparent celebration of difference-signalled the erosion of tolerance and the very right to be different that the original South Australian colonial project had sought to embody (Bartsch 2015: Scriver et al. 2016).

Fast-forwarding to the early twenty-first century, the constantly growing community of the faithful who pray at the Adelaide Mosque today now struggle against the functional strictures and costs of maintaining the distinctive architecture of the original building and its minarets, which—irony redoubled—heritage listing now compels them to conserve for the sake of collective cultural memory (Scriver 2004). Meanwhile, few of Adelaide's other surviving churches still host their original congregations if they serve any religious function at all. Yet new faith communities continue to emerge or to arrive from elsewhere, re-colonising the built fabric of the city. While a Mandarin speaking congregation co-shares the buildings of a dwindling Uniting Church congregation, as one example, a fast-growing new evangelical church has adapted a disused inner-city cinema into an auditorium better suited to its charismatic style of music making and worship, and a newly established Hindu temple has set-up a provisional shrine in a rented shop-space in a suburban mall. Generally, these are the provisional and pragmatic architectural tactics of new faith communities that are only just establishing an economic foothold with which to begin defining their place in the cultural fabric of the city. Novel surrounds, fresh viewpoints and possibilities.

Where a new faith group has more financial and cultural capital, however, the architectural tactics of colonisation can be more forthright. In McLaren Vale, an idyllic wine-growing valley bounding Adelaide's southern suburbs, for instance, a monumental stone figure recently erected high on the valley's slope heralds the imminent construction of a new Buddhist temple and meditation retreat—Nan Hai Pu Tuo Temple, Sellicks Beach (Jones 2015). Committed to an architectural design in traditional Chinese temple style, the economically established diasporic faith community in this case has no need to compromise their vision with heuristic half-measures and is also intent on building it with authentic Chinese methods. It is noteworthy, nevertheless, that the project remains on hold at the time of writing pending agreement with the local construction-workers' union to allow skilled Chinese craftsmen to assemble and finish the largely pre-fabricated temple on site (Giannone 2019).

The preceding South Australian examples nicely muddy the religion and architecture water. The relevance of architectural symbols for displaced individuals to find a community identity in this case cannot be overstated. These buildings provide shelter and the sense of place that connects individuals in alien landscapes and provides them with the essential social connection to allow for their ongoing survival. For many such communities, imagining their lives outside of these architectural touchstones would be impossible, and there are numerous instances where communities fight to save such artefacts beyond reasonable grounds as they attach greater and greater emotional value to them through daily ritualistic practice.

Beyond the sheltering and structuring functions that these buildings serve, however, and the social bonding within a local community that this enables, they also serve as symbols of the power struggles of the displaced community. Through the architectural project of church, mosque or temple-building, faith groups not only define and construct the symbolic identities of their communities but may actively build the strength and resources of the community itself. Seen in contrast to other local communities, these acts of building also allow these faith groups to mediate their relations with other larger global communities with which they may be culturally or contextually contiguous. In that sense, the symbolic language of the architecture associated with these sites does not emerge from the local community or from the sacred aspects of their religious belief but is often borrowed from another place and another community to signal a diasporic connection to a centre located elsewhere.

In order to unpack these dynamics, we now depart Australia, first to England and then to another more central part of the former British Empire, India.

One of the more extraordinary religious architectural projects of recent times was the design and construction, between 1991 and 1995, of a large and elaborate stone temple for the Swaminarayan sect of Hinduism in the inner north London suburb of Neasden. Not unlike the Buddhist temple example in McLaren Vale, this was the outcome of a diasporic community that had substantial financial and cultural capital to build what was at the time the largest Hindu temple to be constructed anywhere in the world outside of India, and substantially financed through the donations and fund-raising initiatives of its own devotees (Mathur 1995; BAPS Swaminarayan Sanstha 2019). As the first purpose-built traditional Hindu temple in Europe, its elaborate marble architecture with countless symbolic carvings, and intricately sculpted *shikharas* or spires, or the 10 m high segmental cantilevered dome with 2.5 tonne keystones, were all architectural features that aimed to establish a powerful presence for the Hindu community in Europe. But to further ensure the diasporic connection to the cultural centre in India, the temple was conceived and built according to the ancient Hindu scriptures of *Shilpa Shastra*, a Vedic text on traditional architecture, by religious leaders in India.

This desire to connect back to a cultural centre located elsewhere does not only manifest itself in architectural structures in foreign lands that are increasingly influenced by the language and symbolism at the perceived centre. The diasporic community further impacts the outcome back at the centre, where projects for new architectural edifices now rely on the prosperity of this diasporic community to achieve monumental outcomes. Shortly following the construction of the temple in Neasden, the Swaminarayan sect was also able to use the funding support of its diasporic community to help construct the Akshardham temple in New Delhi. Further developing on the experience in Neasden, the Akshardham temple in Delhi was a spectacular example of the contemporary application of traditional Hindu temple building practices based on ancient Hindu scriptures of *Panchratra Shastra*, and conceived by religious leaders and the traditional caste of temple architects. Only this time, measuring 356 feet long, 316 feet wide and 141 feet high, it won the accolade of being the "world's largest comprehensive Hindu temple." (Khandekar 2007).

The above discussion clearly demonstrates how faith-based creed and conviction and architecture-as-product inculcate messy and sticky tropes like community, identity, and diaspora. But it is also important to recognise how separated and evolved communities might develop and even mature around religious architectural fabrication in locations far from the autochthonous homes of these ideals. The actual process of conceiving and constructing religious buildings and mobilising the resources to do so, is a further obvious but significant dimension of engagement between organised religion and architecture. And this is where we turn to next.

# 15.3 Religion, Mobility and Construction

The discussion of the Swaminarayan temple at Neasden and the Akshardham temple in New Delhi reveal the specific agency of the religious diaspora in the architectural production of these edifices. But the role of religion in these cases is not limited to architectural patronage, and a deeper analysis of the construction of such buildings further reveals the impact of religion on the global networks of the related construction industry. The construction of the Neasden temple for instance can be used to track how the global transfer of expertise and the industrialisation of the production process are deeply tied to religious values and motivations.

We have already discussed the aesthetic grandeur of the temple in Neasden, whose intricately carved Bulgarian limestone and Italian Carrara marble exterior is composed of seven sculpted *shikharas* and five ribbed domes, soaring up to 70 feet in height. But the project was equally remarkable from the perspective of its construction process and logistics. Following the sacred Indian building design principles of *Vastu Shastra*, the temple was to use the sophisticated stereotomic techniques that traditional Indian temple builders of the *Sompura* caste had developed over many centuries. However, achieving this goal required large numbers of skilled artisans who could only be procured and engaged in India. Nearly 5000 tonnes of stone sourced from different European quarries for suitability to the local English building conditions were therefore transported to India to be cut and carved there before being returned to the UK for assembly on the temple site in Neasden. At the peak of this 3 year-long outsourcing process, a total of 1,526 stone-carvers were engaged at 14 different sites across the Indian states of Gujarat and Rajasthan, producing a total of 26,300 individually shaped and carved pieces. Shipped back incrementally to England, over 6,300 miles away, in a series of 40 consignments, the structure was then assembled between 1993 and 1995 by a further team of 80 skilled masons assisted by over a thousand full and part-time volunteers (BAPS Swaminarayan Sanstha 2019).

This massive feat of just-in-time construction logistics entailing the global transfer of ship-loads of stone back and forth between India and Europe as well as the transnational exchange of expertise and knowledge would not have been possible without the role played by religion in organising the labour force. It would be easy to dismiss such religious agency by treating this process as an outcome of the industrialisation of labour and the practice of capital in the contemporary world. But architectural historian Megha Chand Inglis offers a closer reading of the production process of such structures (Inglis 2015, 2016).

First it must be acknowledged how the construction of such temple structures is managed by the *sompuras* as a special religious caste of master builders in India. But as Inglis argues, merely recognising them as bearers of traditional knowledge obscures the diversity of their architectural and construction practice, and the way these traditional forms of knowledge intersect with contemporary construction processes needs to be understood. Traditionally *sompuras* were master builders who would train and organise a team of sculptors and carpenters and other craftspeople on the building site using religious castes and kinship as the basis of the organisational structure. But the demand for temples from the global diaspora has now shifted this process to the factory environment and human work is supplemented with appropriate machinery. In this new production context *sompuras* focus on the preparation of layered drawings and paper-based management routine while the production work is left to a class of craftspeople known as *karigars*. There is an extended discussion of the *karigar* class available from Inglis, but here we focus on the work of a specific class defined as *adivasi karigars*.

In understanding the role of the *adivasi karigars*, Inglis mentions that there are several aspects of the carving work such as *ubhar* (rising), *golai* (roundness) and

*gehrai* (depth) that can be translated and taught. In this case the *adivasi karigars* are overseen by supervising craftspeople or *mistris* and the workflow is divided into simplified aspects of production to achieve the final forms for the carved pieces of stone. But it would be wrong to consider the contribution of these *adivasi karigars* in terms of industrial production serving as mute cogs in a large machinery. Here Inglis discusses the specialised works of the subcategories of *roop kaam karigar* and *nakshi kaam karigar*. These *karigars* are responsible to draw out the correct mood of the figures being carved and deal with the *mudra* or emotional expression. This form of work cannot be done mechanically and is based on the subjectivity of the *karigar*. This is what Inglis, following Chakrabarty (2008), refers to as "an 'excess' that capital needs but can never truly domesticate." (Inglis 2015: 306).

It is our argument that it is in this place of 'excess', or the 'unacknowledged condition' of production that religion provides a conceptual scaffolding for the becoming of architecture. The values and motivations that govern the action of individuals within this transnational network of the construction industry are often determined by religious frameworks. In certain instances such as the work of the adivasi karigars this may be difficult to determine unless we look at the conditions of production more closely. But in other areas it is merely a recognition of the fact that the beliefs of the field or the 'doxa' that allow people to contribute to logistical exercises of structuring the labour are significantly based on the religious moral and ethical frameworks. The instrumental engagement of religious caste systems to engage sompuras or the further application of these caste systems in the organisation of labour on the construction site or the factory is evident in the above discussion. But also, the labour force of thousands of volunteers-primarily members of the temple congregation itselfthat eventually allowed for the Neasden temple to be assembled in the UK show the ongoing contribution of the religious frameworks to the construction industry and the production of architecture.

Whilst comparative archaeological studies of the architectures of the ancient world have offered a variety of 'thermodynamic' and 'Darwinian' explanations for the symbolic behaviours and power embodied in the construction of monumental religious architectures (Trigger 1990; Joye and Verpooten 2013), the place of religion in the matrix of such putative material and psychological motives for architectural monumentality is evidently undiminished in the contemporary era. Within the globally integrated Hindu religious world today other examples abound of such large-scale construction activities motivated by religious patronage and desire, and constructed through religiously organised labour forces, but where the flows of material and capital do not necessarily reflect identical logics. The construction of the Prem Mandir (Temple of Divine Love) by the Kripalu Maharaj Organisation (Parishat) in Vrindavan, India, for instance, epitomised much the same material mobility, engineering brilliance, and hyper religious capitalism that were manifested in the Neasden temple project. In this case, however, thousands of tonnes of top-grade marble were shipped from Italy to supersede India's own venerable local marbles, whilst the \$20 million plus funds to build the monumental structure on its 54-acre site have largely been raised from the donations of poor Indian devotees (Kumar 2019).

We will have more to say about Vrindavan below, but it is clear that global frameworks of mobility of goods and service and the construction geographies that they define are deeply entwined with religious desires and motivations. But beyond the mobility of materials, we now turn to the mobility of people and the role religion and architecture play in orchestrating this.

#### 15.4 Pilgrimage, Narratives and Science

We now shift the discussion from architectural objects created for religious purposes and the impact of religion on their production process to the agents and agencies that are involved in these processes. Just as the desire to connect with larger global communities results in the mobility of materials and knowledge, it also prompts the mobility of people as part of religious tourism and pilgrimage. This not only results in the continuous shift of people from perceived peripheries to locations considered religious centres, but also in the creation of new religious centres and the management of growing mobilities to established historical centres. This creation of new narratives and development of these perceived centres as destinations for religious tourism and pilgrimage engages an understanding of place-making and architecture that is deeply connected with religious beliefs.

Let us consider the case of the Kumbh Mela, which is the largest religious gathering in the world and with an estimated attendance exceeding 120 million people in 2013 had the distinction of being the world's largest temporary settlement or 'ephemeral megacity'. The Kumbh Mela is a Hindu religious gathering that is held on a 3 year cycle and has its most sacred iteration every 12 years when it is held in the city of Allahabad at the confluence of the Ganges and Yamuna rivers allowing for ritual bathing in the holy rivers. In 2013, when this gathering was last held, a team from Harvard University led by Rahul Mehrotra decided to study the impact of the event on the design of the temporary infrastructure that emerges to accommodate this gathering of people. Indeed an entire megacity is planned and constructed in a matter of months, and the co-existence of religious frameworks with the planning process demonstrates the inter-reliance of the two realms of knowledge (Mehrotra and Vera 2015).

The floodplains of the river Ganges where the gathering takes place is an area of about 24 km<sup>2</sup> that remains under water until 6 months before the festival. And once the water recedes, the ground is levelled and roads marked out to set out a grid that will define an entire city infrastructure in a matter of weeks. The organisation of this ephemeral megacity includes intangible planning processes like general spatial zoning, electricity grids, and water distribution, but also the design of actual gathering spaces and social events, and the construction of massive urban infrastructure. For instance, the seventeen pontoon bridges that connect both sides of the river offer a design challenge in terms of construction and are the first pieces of infrastructure to be built when the water starts to recede. Following this, and only 3 months before the festival, construction starts across the settlement and a city of fabric clad over

bamboo emerges within a few weeks to house tens of millions of people. Equally interesting is the fact that the entire city is dismantled within few weeks of the festival and parts put in storage for the next massive event.

This cycle of design and construction extends well beyond the few weeks or months that the festival is in effect and the conception of housing the world's largest human gathering launches efforts in architecture and planning that seemingly continue in an eternal cycle. As in the logistical management of goods and services in the narrative of transnational construction activities that we have discussed in the case of Neasden, it would be folly to consider this merely from a logistical management point of view. As the Harvard study noted, the organisation of this event is marked at every stage by a level of uncertainty and ephemerality that is central to the festival itself. Those familiar with the values and beliefs of the Hindu religion will recognise that these are not just outcomes of planning a massive event, but are values and principles espoused by the religion itself. The frameworks of uncertainty and ephemerality are not seen here as problems within an industrial field aiming to achieve greater efficiency, but an opportunity to embrace what is defined as the central basis of such an act of pilgrimage. Importantly, as the researchers discern, the design and planning process of the ephemeral city is based on "implementation of resilience redundancy, instead of optimization." (Mehrotra and Vera 2015: 77).

The design of such temporary megacities shows us how the mobility of people motivated by religious beliefs intersects with the realm of architecture. The scale of this event is important to consider, as this is not merely a case of regular human mobility where a small number of visitors are accommodated by large infrastructures like cities while maintaining their existing sense of architecture and place. Here, the entire city is constructed for the sake of the mobility of these individuals. And in that sense, the place-making activities and the narratives that surround it are specially designed for the religious pilgrims. Having considered this at the large scale of the Kumbh Mela, it becomes easier to acknowledge that similar types of place-making and spatial narratives emerge from more general and diffuse forms of religious tourism as well. These tourists are not merely accommodated in the urban infrastructure but new place-making strategies are adopted to ensure that the religious motivations of such purpose-bound tourists are captured in the architectural projects that come to serve as the destination of their journeys.

Beyond the logistical and infrastructural ingenuity generated, the mobilisation of religious groups and individuals also engenders the exchange of ideas and knowledge. Pilgrims generate new narratives of their journeys that travel across space to inform the imagination and techno-scientific frameworks in which the architectures of other places may then be defined. The movement of religious agents, such as Christian medical missionaries and the networks of hospitals they built across parts of Asia and Africa in the 19th and early 20th centuries, is another example of mobility and knowledge transfer played by religion that has contributed significantly to the global diffusion and development of architectural technology (Ebrahimi 2019). And this concept is not bound to specific religious frameworks either. For instance, the over 2 million Muslims who head to Mecca in Saudi Arabia every year for the Islamic pilgrimage of *Haj* bring with them narratives from their respective cultural centres

and the spread of ideas affects both religious narratives and architectural outcomes in those centres in the coming year.

The diffusion of Hindu temple building forms and conventions from India to the farthest reaches of South East Asia in the centuries prior to the arrival of Islam is another salient historical example of such transfer. In a methodologically innovative study by Sambit Datta and David Beynon, for example, an array of digital tools including photogrammetric surveys, 3D virtual modelling and physical rapidprototyping enabled a process of parametric extrapolation, comparison and analysis through which archaeologically observed artefacts of historic temple design practices in South East Asia could be correlated methodically with cognate Indian building traditions and theoretical canons (Datta and Beynon 2014). Enhancing and supplementing the more schematic visual methods of a previous generation of art historical scholarship on the Indian temple, this parametric approach articulates the archetypal nature of religious architecture as an embodiment of underlying abstract values, revealing how cultural diffusion is a deeper phenomenon than mere formal mimicry. While technical knowledge may seem to be objectively exchangeable, the evidence suggests that the cultural knowledge that gives theory and meaning to built form is never transferable as such, but can only be translated. It is evident through the complex reading of context offered by such studies that the religious frameworks that have underpinned understanding of the world historically within different civilizational world-views, have been crucial in translating cultural values across space and time, as well as the techno-scientific knowledges through which these values have been given architectural form.

The religio-architectural examples we have outlined demonstrate how perspectives of praxis transfer and praxis in action can develop vis-à-vis architecture production. Religious tourism, religious architecture, conservative and established planning, neoliberal mandates, and modern hyper-mobility converge and create the sites, the buildings, the literal and existential pathways, and the cultural ideas we have considered. Such constructions, city and social planning, and associated social and religious activities embody and exude at least some of the requests of the hyper displacement borne out of a quintessentially modern world. With present-day hyper mobility, an almost manic transfer of possible ideas in an incessantly changing contemporary world, and the role of religious tourism to and from the sacred roots of venerated pilgrimage centres, the perception and reality of a legitimised regional identity as represented abstractly as core belief and concretely as religious architecture is brought to bear. It is these self-focused and pilgrimage directed moves to which we now turn.

#### 15.5 Otherness, Discovery, and Self

In the previous section we have been discussing the religiously motivated mobility of people and knowledge, focusing primarily on ritualised journeys to centres of pilgrimage, and the impact of these travellers both on the development of these religious centres as well as the transfer of knowledge from these centres to the peripheries. In the case of diasporic communities oriented to their perceived centres of religious beliefs, these forms of mobility are still considered from the perspective of organised religion and the cultural identity that can be assumed by choosing to perform such ritualised journeys as a member of this larger global community. As such the symbolic centres that pilgrims travel to are designed in a manner so as to provide temporary exchange and motivation to the visitors who will eventually return to the peripheries. The functional instrumentality of the architecture and its place-making purposes tend to be entangled symbolically with the religious order and teachings that need to be spread through the spatial and temporal opportunity of pilgrimage for narrative exchange.

We now shift our gaze towards another form of religious travel, distinct from the ritualised communality of organised pilgrimage; that is, the spiritual yearnings and experimentation of travellers on journeys of self-discovery. Here 'other' (i.e. culturally distant) faiths often have a special attraction, and from a secular startingpoint even religion itself as it may be re-appreciated in the context of such quests. Consciously embracing unfamiliar religious ideas and practices as (new) 'ways' of life is a means to experience and get close to the unknown, that which is not ours, and thereby transcend habitual practices, beliefs and values. Religion as a static-dynamic (s)coping mechanism offers one of several processes and conduits through which seekers may find and even willfully lose their own 'self' through engagement with the other. This focus of belief in 'otherness' as a source of religious wisdom also has its own distinctive manifestations in the contemporary production and interpretation of architecture.

India has long served as a source of counter cultural ideas and practices in the West, a quintessential 'other' font of wisdom in the face of the global hegemony of the modern world system. As is well known, by the late 1960s, after The Beatles' fateful encounter with South India's gurus, backpacking 'hippies' were flocking to India in their thousands. It is in this context that the utopian settlement of Auroville was established in the former French colonial enclave of Pondicherry in Southern India. At the time of India's Independence, the former freedom fighter-turned-mystic, Sri Aurobindo, had proposed that Pondicherry be declared an 'international city' in which Indian spiritual philosophy could nurture a new post-national form of global community. But it was only some years after his death that his spiritual successor, the Mother, had been able to take this idea forward and inaugurate the building of a futuristic new-town where her followers could pursue their material and spiritual experimentation. Auroville was intended as a place where people could live 'away from national rivalries, social conventions, self-contradictory moralities and contending religions' and seek a 'direct relation to the divine' (Namakkal 2012: 65, 70). However, this was not about ascetic detachment from the world, but rather, as the Mother had prescribed, a 'transformation of the material into a divine world ... that has been really concretely born.' (Namakkal 2012: 68) To fulfil this vision, Roger Anger, the French architect and devotee who had been commissioned to produce the designs, conceived a radical new type of city plan and architectural language that would allow virtual 'Lines of Force' to define the core of this city, shaping its

'orientation, facilities, and inner direction' and formulating the utopian ideals of how future urban structure and dynamism could be materialised (Kundoo 2009: 73–74).

Over the decades since its founding, whilst very little of the architect's megastructural vision for the city has actually been realised, the settlement has slowly grown and evolved to reflect an alternative more plural mode of development seemingly closer to the idea set out in its original charter. This had proclaimed a future city that was to be a "site of material and spiritual researches" (Auroville Charter 1968) and it is notable that a number of other talented architects, in addition to Anger, were influential members of the initial community of pioneering settler-builders. Joined in due course by other creative makers, Auroville subsequently became widely recognised in India and beyond as a centre of hands-on experimentation with innovative alternative building materials and processes such as rammed earth and fire-stabilised mud construction, where the practice of such ecologically and socially sustainable building and dwelling principles tended to reinforce if not effectively replace the religious practices and observances of a more ritualised spiritual life and search. Architecture remains a primary community-building tool of Auroville's designers and planners today, particularly in the design of schools where the act of sensitive building and environmental design is closely connected to the moral scaffolding of the next generation of the project's faithful devotees (Scriver and Srivastava 2015, 2016).

If Auroville illustrates a somewhat abstracted conception of a quest for religious consciousness articulated into complementary concerns for spiritual harmony and ecological balance, it is also an uncommonly concrete example of an approach to a spiritually engaged way of life practiced in and through architecture. However, here we recognise Architecture not as the design of monumental objects of awe, but rather as a diffuse and holistic attention to environmental design and the spatial installation of meaning.

Recent neuroscientific research has offered compelling physiological explanations for many conceptual phenomena, including religious faith, that posit potentially fundamental challenges to previous theories of consciousness. However, equally compelling findings of this research are also indicating how dynamic, fluid and extensible the human mind appears to be in its integral relationship not only with the body but the environments in which it is immersed. For architectural historians and theorists who have lamented the disenchantment of the world as it has become framed in the architectures that emerged and evolved from the rationalist theories and technologies of 'Enlightenment Modernism', the implications of this new brain and cognitive science for re-appraising our very understanding of architecture, past and future, are potentially profound (Robinson and Pallasmaa 2015; Goldhagen 2017; Varela et al. 1992). Re-'atuning' the embodied mind in its sentient outreach to the environments it crafts around it and in which it inscribes meaning, promises not only a more holistic appreciation of the architectural vocation and the significance of its work for enabling human well-being, but a clearer and potentially deeper understanding of what has previously been referred to as the 'spiritual' in architecture. It helps us understand how experiments in holistic living such as Auroville, where architectural integration with the environment has been an integral part of the process, may be recognised and appreciated as spatial installations of [religious] meaning.

The Isha Yoga Centre near Coimbatore is another more recently established example in the mould of Auroville. It was set up primarily to facilitate the teaching of vogic practices, new forms of Hatha and Kriva voga that are now synonymous with holistic living practices around the world, but the accommodation of over 2000 volunteers that help run the spiritual retreat has led to the development of a range of infrastructure including residential quarters, community kitchens, and even small school facilities. Residents describe it as a "model village, where the central binding force is one of spiritual longing." (Brookes 2019). But in many ways this is unlike a village or a settlement elsewhere, where building facilities are designed for establishing a sense of settlement and permanence. Contrary to such a format of settlement, Sadhguru, the spiritual leader of Isha Yoga Centre, describes the place as a 'living organism' designed to "practice living homeless," where people reside in transient accommodation and an aura of impermanence and experimentation abounds. It is valuable to note that when Sadhguru Jaggi Vasudev wanted a domed structure to be built to house the sacred Dhyanalinga, he asked the Auroville Earth Institute to build that 22 m dome without any modern material like steel reinforcement and it was constructed with a volunteer labour force of over 200 people (Auroville Earth Institute 2019).

As we approach the end of this chapter it is timely again to consider the polyvocal nature of this authorship. India has been a key to the personal and intellectual development of all three authors but most relevant to the discussion of architecture and religion in the context of individual journeys of self-discovery is the experience of Nash. As a linguist, ethnographer, and ecologist, his immersive relationship with the holy city of Vrindavan over more than two decades has inspired an enduring commitment to think and write about Indian ecology and spirituality (Nash 2012). Although an outsider, Nash's fieldwork and original time in Vrindavan meant that his embedded standing enabled shifts from outsider to insider to outsider status, shuttling between identities of tourist, pilgrim, and ethnographer. His extended experiments on Indian ecology and spirituality were largely conducted between 2003 and 2008 when he stayed at Lata Bhavan, also known as Tehriwala Bagicha, the garden home of revered local Vrindavan ecologist, Shri Hitkinkar Sevak Sharan. Since around 1980 Sevakji and his wife Mataji have welcomed pilgrims, seekers, and friends to this beautifully remediated garden grove, which holds an ancient temple, as part of their work into conserving and preserving Vrindavan's natural and cultural environment. Nash's work examines the role of the architectural history of the temple on the property in terms of its sampradayic connection, i.e. to the Ram Vyasi sampradaya and the Radha Vallabh sampradaya. This ontological basis is built on with respect to a more detailed understanding of the role of the temple and the garden surrounds in Lata Bhavan in helping to create a specific genius loci. This concept is then used to explicate several key tenets in the philosophical background into the conservation of the modern town of Vrindavan. In a conversation in 2006 Sevak Sharan explains the architecture of Lata Bhavan: "The intention of additions to this structure is not on

decoration and overt adornment. Nature and the people who inhabit this construction ornament, enhance and enrich the nakedness of the architecture." (Sharan 2006). Here personal journeying and approaching both the ineffable and the natural is mediated by the built. This prompted Nash to write about the history of the Vrindavan ecological movement and the philosophy and practice of the sadhana (spiritual practice) which arose out of this system of thought (Nash 2015). Similar to the case of Auroville, among others to which we have referred, Lata Bhavan exemplifies how history, religion, and ontology, in this case Krishna philosophy with an ecological focus, can be brought to bear on an embodiment of personal pilgrimage and architectural interaction.

#### 15.6 Conclusion

Whilst the relationship between architecture and religion may seem to be intuitively obvious, the writing of this chapter has been an opportunity to challenge and extend the scope of conventional conceptions and delimitations in ways we hope have lent insight to both disciplines. We began by considering how religious persons or groups may apprehend the material and semiotic objectivity of actual built edifices, or what we might regard as architecture in monumental form, as symbols of identity and the substantive fabric of community. But we then sought to complicate that understanding by exploring some of the ways in which the making of religious buildings and complexes of increasingly extensive yet diffuse and even ephemeral nature could be just as much a 'means' to instil and mobilise religious faith as an end in themselves. In the final section we sought to extend our gaze further still from the role of architecture in the production and performance of collective religious identities and their rituals, to the practices of the individual spiritual seeker. Here we considered the possibility of apprehending the architecture and the ecology of the designed environment as a whole as a site of self-development and emancipation in which the quest for the spiritual serves as the conceptual scaffolding.

Throughout this openly speculative essay we have also attempted to engage relevant insights from other scholarship and research across a broad spectrum of different fields ranging from archaeology, to psychology, human cognition and neuroscience. These furnish a comparably diverse range of scientifically grounded explanations for this perennial relationship between religion and architecture that underscore the potential significance of some of the additional, and perhaps less obvious, dimensions of such spiritual and material entanglements today that we have attempted to articulate here. If we have succeeded, at least to some degree, in expanding understanding of how the 'architecture of religion' may be explained, however, can we not also reflect on what might be called the 'religion of architecture' from what we have observed above?

Beyond the external monumental manifestations of built form, we have pointed to the internal cognitive dimensions of order and agency through which human beings apprehend and construct their worlds, and the enduring conceptual scaffolding that ultimately governs human behaviour. Looking at the place of religion in a contemporary age defined by secular materialism through this cognitive conception of architecture, it may be arguable to conclude that architecture sustains at least a part of the project that religion pursued more dominantly and directly, with the aid of architecture, in other times; that is, it constructs and articulates space, both physical and social, as a medium in which individuals and collectives may engage and cohere, and through which the self and its relationship to greater wholes or entities may be defined and realised. In this sense it may not be too presumptuous to propose that both architecture and religion are comparable expressions of the propensity of human consciousness to construct worlds in which meaning, belief and hope are all essential and abiding values.

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