

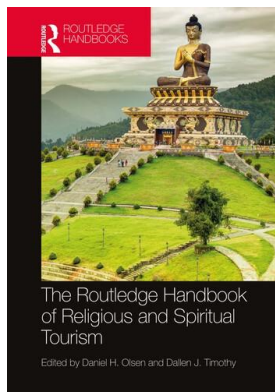
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THE ENVIRONMENTAL IMPACTS OF RELIGIOUS AND SPIRITUAL TOURISM

Kiran A. Shinde

Introduction

No matter what the form of religious tourism, the influx of pilgrims, religious tourists, and other visitors exacts significant environmental impacts in religious tourism destinations and at sacred sites of all religions and faiths. It is important to recognise that the term ‘environment’ in the context of sacred places is much more than physical and natural, and its use crosses over to the social, cultural, and religious spheres (Lochtefeld 2010; Shinde 2011; Terzidou, Styliadis & Szivas 2008). Hence, it is unsurprising that many studies have examined impacts from social, cultural, economic, and religious dimensions, as well as physical and natural environment (Bleie 2003; Choe & Hitchcock 2018; Della Dora 2012; Hung, Yang, Wassler, Wang, Lin & Liu 2017; Shinde 2012b, 2018). In recent years, there have been more focused investigations into the environmental impacts of religious tourism (Ahammad, Sreekrishnan, Hands, Knapp & Graham 2014; Alipour, Olya & Forouzan 2017; Aminian 2012; Hanandeh 2013; Henderson 2011; Malodia & Singla 2017; Qurashi 2020; Sati 2015; Shinde 2007). This chapter provides a critical review of the emerging literature that focuses on the physicality of sacred place and the impacts of visitation on the physical elements of the sacred environment.

From the extant literature on the environmental impacts of religious and spiritual tourism, it is possible to discern four themes: differences and commonalities of impacts across different sacrosanct environmental settings; the peculiarities of environmental behaviour in religious tourism that influence impacts on sacred sites; the nature of environmental management in religious tourism; and the distinguishing characteristics of spiritual tourism–environment interactions. The last theme requires a separate treatment because “spirituality and religiosity are not synonymous” (Timothy 2013: 36) and the practice of spiritual tourism intersects quite differently with sacred sites. While these themes provide the organising structure of this chapter, the concluding section suggests a future research agenda.

Environmental setting and impacts

Natural sacred sites

Natural formations such as mountain peaks, rocks, caves, lakes, and rivers, are often attributed a sacred value. Their sanctity is incorporated into religious and spiritual belief systems that

offer ways of expressing reverence to such formations (Kiernan 2015). In organised religions and indigenous faiths, the natural landscape and its elements have long been revered and visited by human beings (Farra-Haddad 2020b; Olsen 2020). To reinforce their divine connections, natural landscapes are often featured in stories and mythologies of divine apparitions and deified presences in those landscapes. Nolan and Nolan (1989: 303) note that “between 33 and 42 percent of Europe’s current shrines are associated with environmental features accorded a certain aura of sanctity”. Natural sacred sites, which Timothy (2013: 33) calls “sacrosanct environments”, present some unique challenges with respect to visitor influxes.

Mountains

Visiting mountains is one of the earliest expressions of pilgrimage and a deliberate way of “becoming closer to the spirits” (Cochrane 2009: 110) because pilgrims believed that the gods resided in the mountains. Mountain worship derived from a fear of the unknown and the need to appease the mountain-gods. Many popular pilgrimage places and sites of ascetic practices across different faiths are nestled within mountain ranges (Guichard-Anguis 2011; Timothy 2013, 2021b).

The fragile ecosystems of mountains are especially vulnerable to the impacts of visitors. Most mountainous regions are characterised by small settlements (often around monastic life) from which people traditionally walked into the mountains to worship (Nepal et al. 2020). As such, barring a few bare necessities, there traditionally was little development in mountains. However, in recent years, many formerly isolated mountainous regions have become accessible by road. Several pilgrimage studies in the Himalayas show that with the increasing influx of visitors, these settlements are expanding into dangerous zones of increased landslides and tectonic activity, and their built environment is becoming denser, stressing the mountain ecosystem’s carrying capacity (Lochtefeld 2010; Pinkney 2013; Sati 2015; Singh 2004, 2005). In a study of the famous Hindu pilgrimage sites of *char-dham* in the Garhwal Himalayas, Sati (2015: 177) observes that “this region is highly prone to debris flow, flashfloods, landslides and mass movements” and that the situation is exacerbated due to “large-scale soil erosion” caused by the construction of settlements and roads while pollution is worsened by the “dumping of waste and litter in the open spaces and in the waterbodies”.

Because of their physiographic characteristics, mountains are prone to natural calamities, which are accentuated by human activities, including pilgrimage and other forms of tourism. For instance, on June 16–17, 2013, in the Himalayan towns of Badrinath and Kedarnath, a “cloudburst [was] followed by debris-flow and flashfloods [which] killed more than 10,000 pilgrims and the local people” (Sati 2015: 177). In the Nepalese Himalayas, Bleie (2003) discusses the negative impacts of the opening of a cable car facility to enable access to the Manakamana Temple. Although the problems of “drinking water, energy, and timber crisis” were acute and the demand for “hotel facilities, hot food, and imported goods” led to problems of waste accumulation and management, more significant was the levelling of mountain slopes, which “destroyed the old drainage corridor there and caused the flooding and erosion” (Bleie 2003: 182). As sacred places in mountains are converted into “coveted recreational space” for tourists, vulnerable landforms become increasingly vulnerable (Singh 2005: 221).

Because of their challenging topography, mountains, to some extent, are still able to deter large numbers of visitors. In her study of Mount Athos, Greece, which is accessible only by ferry boat, Della Dora (2012: 960) argues that the limited numbers of monasteries strictly regulate access to Mount Athos where “a maximum of 120 Orthodox Christian visitors

are allowed per day, whereas foreigners of other religious affiliations are limited to 10 per day (excluding pilgrims invited directly by the monasteries)". There are no hotels on the mountain peninsula. Instead, monasteries host visitors for a limited time and instruct them to follow the monastic routine during their visit. Thus, mountainscapes can impose certain forced patterns of visitation, which may have fewer negative impacts. This is something that Jimura (2016) also observed in the case of the Kii Mountains in Japan.

Caves

While caves are revered as sacred spaces in many faiths, mainly indigenous ones, Kiernan (2015: 187) argues, "they are perhaps less obvious targets for veneration" because of their "hidden" nature and poor visibility. A few studies have noted that when a temple or shrine is built near a cave, there is proliferation of religious activities (Cochrane 2009; Farra-Haddad 2020a; Kasim 2011; Paniandi, Albattat, Bijami, Alexander & Balekrisnan 2018). Kasim (2011) found that the celebration of the festival of Thaipusam attracted considerable religious tourism to Batu Caves in Malaysia. This festival involves a three-day procession where the "statue of Lord Muruga from the Sri Maha Mariamman temple is taken to the Caves". During this procession, devotees indulge in "masochistic acts of self-mutilation, body piercing, and heavy kavadi dragging [which] is seen as very cleansing to their soul" (Kasim 2011: 447). The natural setting of the caves seems to contribute heavily to the devotees being in "the state of being in a trance" (Kasim 2011: 447). While Kasim does not discuss the impacts on the setting, he refers to his informants being disturbed by the presence of non-adherent tourists. Similar findings were reported by Cochrane (2009) in a study of the volcanic crater, Mount Bromo in Java. She found that during the annual Tenggerese festival of the Kasodo, thousands of devotees walk in a procession from the temple at the foothill to the crater and offer "flowers, rice, and meat...to appease its resident spirits" (Cochrane 2009: 113). In this context, the main impacts were the noise and fumes from tourists' vehicles.

Waterbodies and wells

Water holds great ritualistic and religious significance in all faiths. It is believed to be purificatory, being able to wash away impurities and sins. For instance, Hindu pilgrimage thrives on the symbolic idea that crossing a ford of water is equivalent to crossing over from this world to heaven. Similarly, in some belief systems, bathing in a river is an important religious ritual.

In Christian sites such as Lourdes, holy water is believed to have miraculous powers. Across faiths, water-related rituals are central to pilgrimage practice. In India, the life-giving quality of water draws hordes of pilgrims to river sources in places like Yamunotri (headwaters of the Yamuna River), Gangotri (the origin of the Ganges River), and so on (Alley 2002; Eck 1981; Feldhaus 1995; Haberman 2006). Waterbodies are susceptible to the considerable negative impacts of pilgrimage, the most prominent being pollution from materials used in ritual offerings. Sites on riverbanks are used for funerary rites, such as burning dead bodies, which also causes severe pollution (Alley 2002). In developing countries, where sanitation is lacking, less-educated pilgrims from rural areas often resort to open defecation near riverbanks. A study of river pollution during the pilgrimage season (May–June) in Rishikesh–Haridwar, India, found that "500,000 additional visitors cause 20 times more pollution in the upper Ganges River compared to the rest of the year" (Ahammad, Sreekrishnan, Hands, Knapp & Graham 2014, cited in Hussein, Shahid, Basim & Chelliapan 2016: 3). The influx of pilgrims also generates considerable waste that finds its way into the sewers and eventually into the river.

Pilgrimage and religious tourism also damage the natural ecosystem of waterbodies. Riverbank erosion due to excessive crowding, presents imminent danger of severe flooding during the monsoon season. Sati (2015: 166) describes several instances where the rivers in places like Haridwar and Rishikesh “flow above danger marks [and] that lead to occurrences of severe disasters”. In a study of Vrindavan, Shinde (2012b) notes that the use of riverbanks for recreational activities during fairs and festivals causes severe environmental degradation. The damage is exacerbated when boating services for tourists are present within the same river (Doron 2005). Like mountains, rivers also attract adventure activities (Malodia & Singla 2017). Many river-rafting spots have developed near popular pilgrimage sites, which is likely to worsen the ecological damage (Cooper 2009).

Landscapes

In pilgrimages, entire landscapes are considered sacred as miracle stories of deities and gods are imprinted throughout a given landscape. For instance, in north India, religious scriptures devoted to worshipping the Hindu god Krishna eulogise Braj as Krishna’s playground, including the Yamuna River, Govardhan Mountain, 12 forests and numerous lakes and hamlets; each place is imbued with stories of his miracles (Entwistle 1987; Shinde 2012b). Pilgrimage landscapes—pilgrimagescapes—developed around stories of the divine and are found in all religions and faiths. For Christians, the Holy Land is a landscape infused with the life of Christ and the spread of Christianity, including many sites of immensely sacred miracles (Fleischer 2000; Liutikas 2015; Ron & Timothy 2019). Liutikas (2015: 16) observes that since the fifteenth century, “copies of the route that Christ had taken, started to appear in areas where natural features such as hills, valleys and streams resembled the relief of Jerusalem”. He explains how this landscape was symbolised in Lithuania through various ‘cavalries’. Similarly, a Buddhist pilgrimagescape developed around the places in Nepal and India where Gautam Buddha lived and laboured (Geary & Mason 2016).

The trails and routes that provide access to, and linkages between, these sacred places within and outside their sacrosanct landscape not only serve as physical representations of the boundaries of such sacred landscapes but also render sacred meaning through the performance of pilgrimage (Auckland 2017; Guichard-Anguis 2011; Jimura 2016). Frequently, the *terra sancta* of pilgrimage landscapes is defined by the very circumambulatory religious journeying that takes place within these landscapes.

Studies of spiritual landscapes suggest that the historical descriptions found in religious texts may not match their current status for several reasons. Some places become more popular than others and develop as centres of pilgrimage activities on their own because of certain social-spatial relations, while others struggle to maintain their identities (Haberman 1994). The practicalities of access and travel favour the developed centres over the natural sites, and over time, many natural sites almost disappear from popular itineraries or lose their naturalness through urbanisation and physical development. For instance, in the case of Braj, Shinde (2012b) found that the pilgrimagescape covered an area of about 2,500 km² and a 300-km long circuitous journey, but the sites continued to reduce over time. The eighteenth-century Vaishnava literature described hundreds of sites including forests, lakes, ponds, *kunds* and shrines. In 1885, there were 133 known sites, and the Braj circuit in the 1980s involved visits to 73 sacred places including 12 main forests and 36 *kunds* (waterbodies). The itinerary that Shinde participated in 2005 was limited to the sites most accessible by car, which included 25 sacred sites (5 forests, 3 *kunds*, and 17 temples).

Sacred groves

Sacred groves have been studied for their role in protecting biodiversity and conservation (Apffel-Marglin & Parajuli 2000; Chandran & Hughes 1997), but studies that discuss them as independent objects of pilgrimage are limited (Olsen 2020). Believed to be the abode of spirits or localities of angelic manifestations, such groves are often located outside villages and settlements and are mainly used for shamanistic practices. As such, these involve significant esoteric rituals and are usually visited only on certain occasions. Often these accessible only to those who live in the area or who adhere to the faith and thus have controlled visitor flows (Cochrane 2009; Pfaffenberger 1983). This means the temporality, scale, and nature of visitation may be why visitor impacts are less distinguishable on sacred groves.

From the above review, it is obvious that most natural sacred sites have a shrine, temple, or other commemorative structure, however small, which serves to demarcate and commemorate their sacred value. This tangible manifestation of sanctity eventually becomes the object of veneration and stimulates the growth of pilgrimage and other forms of religious tourism. However, a locality's remoteness and terrain typically determine the possibility of developing infrastructure for pilgrimage. With significant improvements in infrastructure technology recently, things are likely to change in the near future as places become more accessible to spiritual tourists.

Pilgrim towns

Pilgrim towns are settlements that evolve around sacred places and landscapes and have peculiar environmental characteristics. At their core is the material manifestation of the sacred embodying the 'spirit of the place'. This can be a natural sacred site, a site dedicated to a god or deity, or saints and eulogised through mythological legends and religious scriptures. The physical form and appearance of this core may change to accommodate the needs of people wanting to see, touch, and feel the source of holiness. Around this core, places of worship such as temples, tombs, and shrines are erected to venerate the sacred. Outside the core, religious infrastructure for devotees and others includes lodging and boarding services, food services, and souvenir vendors (Joseph 1994; Rinschede 1995; Shinde 2017). Cosmological and religious considerations are paramount in constructing a religious infrastructure that is built in devotion to deity and to satisfy the pious needs of pilgrims (Fraser 2015; Heitzman 1987; Mack 2002; Petrillo 2003). As such, most buildings employ the best materials, methods, and design principles, yielding rich tapestries with elaborate ornamentation (Fraser 2015; Garcia-Fuentes 2020; Shinde 2012a). Opulent religious buildings are some of the world's best known and most visited heritage attractions (Fernandes, Coelho & Brázio 2015; Nolan & Nolan 1992; Olsen 2019; Shackley 2001a; Timothy 2021a). The built environment in pilgrim towns often reflects the nature of the patronage at sacrosanct locales (Rinschede 1995; Shinde 2012a).

Several studies have documented the urban growth of pilgrim towns into popular religious tourism destinations (Alipour, Olya & Forouzan 2017; Ambrósio 2003; Aminian 2012; Hung et al. 2017; Rinschede 1986, 1995; Rodriguez 2017; Shinde 2012a, 2017). From these, three distinct processes in pilgrim town urbanisation can be identified. First is the conventional process of building temples and other faith-oriented infrastructure by religious institutions mainly for the purpose of providing services for devotees and pilgrims. These are dedicated to piety and divine services and include nunneries, old-age homes, convents,

ashrams, hospices, and health services. Other supporting services and infrastructure, such as shops, residences for service providers, and transport facilities, follow in transforming the natural landscape into an urbanscape, generating concentric rings of development, usually radiating from the spiritual core (Rinschede 1986). The second process is driven by the desire of wealthy and resourceful devotees to have a second home in the vicinity of the object of their veneration (Jha 2007; Shinde 2012a; Shukla 2008). In the past, this saw the construction of mansions with beautiful architecture. Its contemporary manifestation involves more banal homes that correspond to the economic standing of patrons and take the form of real estate developments. What emerges is a housing development in an ordinary town but with a unique difference: absentee ownership and sporadic occupancy. The third process emanates from the other two. Corresponding to contemporary patterns of religious tourism, this process is distinctly characterised by increased demand for tourism infrastructure and support services including hotels, service stations, parking, shopping areas, and recreational facilities (Alipour et al. 2017; Lochtefeld 2010; Shinde 2017).

These processes have created distinct sacred and profane spaces in religious tourism destinations (Joseph 1994; Rinschede 1986; Ron & Timothy 2019). However, such a distinction may be unnecessary because in most pilgrimage towns, the boundary between the sacred and the profane is blurred, and these processes all lead to significant environmental changes that accompany the transformation of natural landscapes (e.g. forests and pastoral lands) into urban areas. For example, land-use changes sometimes occur with conventional agriculture being replaced by horticulture types (e.g. flowers and other products) for use in pilgrimage rituals (Ghosal & Maity 2010). Likewise, the addition of newer buildings and urbanisation threaten the built religious heritage. Thus, the very nature of religious activities inherent in pilgrimage and religious tourism may cause significant indirect impacts that are gradual over an extended timeframe in pilgrimage destinations.

In pilgrim towns, the most visible impacts derive directly from the influx of visitors. These are readily quantifiable and most visible in the form of traffic congestion, crowding, pollution, and solid-waste accumulation (Haberman 2006; Henderson 2011; Hussein et al. 2016; Sati 2015; Shackley 2001a). Tourism growth also stresses environmental services, such as water supplies, drainage and sanitation management, which not only pose challenges to carrying capacities but also lead to their physical deterioration.

Pilgrim trails

On pilgrim trails, the route, the landscape, and the journey are often of more paramount importance than the destination (Murray & Graham 1997; Olsen & Trono 2018; Wilkinson 2018). Places on the route derive sacred meaning and identity because of the route (Kim et al. 2019; Olsen & Wilkinson 2016; Timothy & Olsen 2018). Because of their scale, spatial and temporal characteristics, the impacts of pilgrimage on trails vary considerably (Bambi & Barbari 2015; Mason & Chung 2018; Rodríguez et al. 2018; Trombino & Trono 2018). Where trails attract individual spiritual seekers, the impacts tend to be negligible (Geary & Mason 2016). However, in situations where pilgrim trails have become mass attractions, the impacts are more notable. Large processions on pilgrim routes resemble ‘moving sacred towns’ and significant impacts occur for the duration the pilgrimage (Shinde 2018). Shinde (2018) describes a walking pilgrimage called Palkhi in western India where pilgrims walk 210 kilometres with overnight stays at 14 places in towns and villages along the way. Although they erect tents for temporary accommodation, the entourage itself is comprised of trucks, bullock-carts, mobile shops, and clusters of latrines—all contributing

to heavy traffic congestion and increased stress on the local infrastructure and environment. However, their impacts typically do not last more than two days, as the pilgrim mass moves on to its next destination.

More significant impacts on pilgrimage trails seem to result from increasing touristification and the presence of tourism activities (Mason & Chung 2018; Reader 2007). The development of accommodation facilities and tourism enterprises changes the socio-spatial fabric of some places en route that experienced only limited visitor numbers (Riguccio et al. 2015; Rodríguez et al. 2018; Trombino & Trono 2018).

Festivals

During festivals, heavy influxes and intense activities of visitors have direct impacts that are concentrated over time and space (Gupta & Basak 2018; Ruback et al. 2008). The impacts of festivals have historically been dealt with using event management approaches (Maclean 2003; Raj & Griffin 2015; Shinde 2010). For instance, the Kumbh Mela, a Hindu festival that takes place every 12 years at one of the four holy sites in India, is attended by more than 20 million visitors. The state government provides more than 2,000 campsites for religious organisations for nearly two months and all facilities for the pilgrims are provided (Buzinde et al. 2014).

Smaller-scale annual or periodic festivals pose more significant challenges to the design and development of resilient environmental services in water supply, sanitation and solid waste management that can absorb strenuous impacts of fluctuating demands and scale of visitation. For instance, Hussien et al. (2016: 8) note the challenges in modelling the sewerage system in the holy city of Karbala in Iran as heavy sewer overflows during pilgrimage times, pose “a potential threat to the ecological and public health of the waterways that receive these overflows”.

However, some festivals have positive benefits for the environment, particularly in indigenous faiths, where opportunities are provided for participants to maintain, upkeep, and rejuvenate the sacred natural landscapes (Cochrane 2009; Suntikul & Dorji 2016).

Religious tourism and environmental behaviour

The environmental behaviour of visitors in sacred places is highly contested. Several studies reinforce the stereotype of pilgrims as religiously motivated travellers who value the sacredness of the place and therefore behave in a manner that causes few impacts (Buzinde et al. 2014; Damari & Mansfeld 2016; Della Dora 2012; Guichard-Anguis 2011; Gupta & Basak 2018; Jimura 2016; Liutikas 2015; Moufahim & Lichrou 2019; Nepal et al. 2020; Olsen 2010; Pinkney & Whalen-Bridge 2018; Raj 2015; Terzidou et al. 2017; Wilkinson 2018). Their religious worldviews, attitudes and expressions of reverence through rituals seem to make them less responsible for the negative impacts to which they contribute (Bleie 2003; Shinde 2011). Non-pilgrim tourists, on the other hand, are censured for their hedonistic behaviour in sacred destinations. This is summed up succinctly by Singh (2004: 59) in the context of Himalayan pilgrimages: “Where pilgrims were quite happy drinking water from natural springs, streams and rivers, tourists and some modern pilgrims now expect or demand bottled water”. The dissonance between worshippers and sightseers is discussed by Cochrane (2009: 116) at length in the Javanese case. In Tinos, Greece, Terzidou et al. (2008: 123) note that “residents’ support of religious tourists is influenced by the respect they feel towards the pilgrims’ spirituality and religiosity,

whereas some irritations attributed to religious tourists arise from congestion, traffic and pollution that are characteristics of mass tourism". Several studies of Hindu sacred places have unequivocally found that tourists are blamed for all negative impacts and are seen as a threat, whereas pilgrims are hailed as innocent devotees who are necessary for a pilgrim town to survive (Aukland 2018; Lochtefeld 2010; Shinde 2011), despite the mounds of ritual litter left behind, the polluted water, and the inadequate sewerage systems that are overtaxed by their visits (Qurashi 2020; Timothy 2021a).

Environmental behaviour is driven by motivations. Visitors motivated by sightseeing and leisure may be more likely to consume the sacredscape in damaging ways, whereas pilgrims who seek the numinous are probably more willing to act according to instructions by clergy and the religious authorities who look after the object of veneration. Della Dora (2012: 971) found this distinction in her study of Meteora, Greece. She cites responses from a Greek monk and an Egyptian Coptic priest: "We are not here for the landscape; tourists are after landscape! We are here for the saints" and "[P]ilgrims are not bothered by other pilgrims. But tourists are by other tourists". Consternation is not only caused by tourists but also by pilgrims who behave like tourists. For instance, at Manakamana Temple in Nepal, Bleie (2003) notes that pilgrims who used the cable car to get to the main temple instead of the traditional pedestrian trail were violating religious norms. By patronising the cable car, they were party to the negative impacts on the fragile mountainscape. As noted above, often host communities believe that pilgrims are believers and followers of their own faith and therefore no different from themselves, so how can they be responsible for negatively impacting the environment (Alipour et al. 2017; Terzidou et al. 2008). Some studies have found that residents point to the scale of visitation as the culprit rather than individual pilgrim behaviours (Shinde 2011; Suntikul & Dorji 2016).

Environmental behaviour also depends on the value placed on environmental resources in a sacred place. Water, mountains, land, soil, and vegetation are all imbued with sacredness and are worshiped by pilgrims and residents. For their divine quality, these resources are widely used in purification and healing rituals. For instance, after visiting pilgrimage places on the banks of the Ganges River, Hindu pilgrims carry home some of its holy water bottles and jars as souvenirs. Pilgrims see the river as "a purifying goddess and an object of worship" and thus find it extremely difficult to see the pollution in the river even though ecologically it is "often filled with contaminants and pollution" (Lochtefeld 2010: 4). Similarly, pilgrims in Vrindavan collect soil and apply it to their foreheads as a blessing from Krishna (Shinde 2012b). Devotees believe that every physical element of sacrosanct places is a manifestation of the divine and should therefore be accepted, regardless of its condition; the environmental behaviour of visitors and residents in a sacred place is largely governed by their religious frame of reference.

Not all environmental behaviours of visitors in sacred places lead to negative impacts. Jimura (2016) argues that visitors appreciate the inscription of the Kii Mountains on UNESCO's World Heritage List, which has inspired increased efforts to protect the sacred environment of the mountains. The sacredness of a place also seems to inspire a conscious response to environmental problems (Lafortune-Bernard et al. 2020). There are several instances where pilgrim groups volunteer to mitigate problems as a "divine calling" (Singh 2005: 222). Singh (2004: 62) argues that the "traditional concepts of religious travel had sustainability built into it" but with infiltration of touristic characteristics in such travel, the behaviour of pilgrims and tourists are likely to change and lead to more complex outcomes with regard to environmental management.

Environmental management for religious tourism

The literature on sacred site management has focused primarily on visitor management and the challenges facing managers as they try to balance pilgrims' needs with those of the normative tourist gaze (Fadare & Benson 2015; Jimura 2016; Olsen 2019; Petrillo 2003; Presti & Petrillo 2010; Raj & Griffin 2015; Shackley 2001b; Timothy & Olsen 2006; Wong et al. 2016). Environmental management is one of the least researched topics in religious tourism studies, with only a handful of studies inquiring into the subject (González & Medina 2003; Henderson 2011; Shinde 2011). Studies dedicated exclusively to environmental management in sacred places localities note the complexities in addressing environmental problems that derive from pilgrimage and religious tourism (Shinde & Olsen 2020). At the heart of the issue is identifying who and what causes these impacts. As suggested above, individual visitors alone do not appear to be the crux of the problem but rather the masses of people who visit at the same time. Residents tend to be more concerned with the socio-cultural impacts than they are with the physical impacts. As a first step, the causes and nature of environmental impacts need to be clearly recognised and articulated for action. The next question is who responds and who should respond.

Historically, pilgrimage events encompassed large congregations of worshippers through which infectious diseases could easily spread and, as such, managers focused on ensuring hygienic conditions and maintaining law and order. Presently, a diverse range of institutional arrangements exists for managing sacred places (González & Medina 2003; Henderson 2011; Shackley 2001a). These can be seen on a spectrum (Shinde 2017) with one end being occupied by religious institutions that act as custodians of the sacred centre, which is the focus of the pilgrimage. These exist in many forms, including individual gurus, priests, owners of religious establishments, churches and faith organisations, clergy, ashrams, monasteries, charitable trusts, and faith societies that are directly involved in organising pilgrimage activities. Some of these may respond to the impacts of visitors, but their involvement is limited to their jurisdictions and restricted to providing services to pilgrims. Matters outside of their realms of reasonability are left for the government to manage (Alipour et al. 2017; Shinde 2011, 2017). The other end of the spectrum is anchored around the state authority that has the mandate to govern and administer the place (e.g. Mecca and the Hajj) (Henderson 2011; Raj 2015).

The challenges for environmental management in religious destinations are compounded for many reasons: the unique pattern of urbanisation driven by religious tourism; difficulties in assessing infrastructure needs due to fluctuating visitor demand; the informal economy of religious tourism driven by faith institutions operating outside the state domain, and other situations (Shinde & Olsen 2020). Based on their social and religious authority, religious actors use environmental resources to their benefit but hardly engage with wider debates about environmental protection, which they believe to be the responsibility of the state. Because religious institutions are driven by sacred mandates and state agencies operate within a secular framework, there are differences in the ways they articulate their environmental responsibility and participate (or not) in the mitigation of environmental impacts (Lafortune-Bernard et al. 2020; McGee 2000; Shinde 2011). This may not be the situation where religious authorities heavily influence state functions, such as in case of the Hajj (Hanandeh 2013; Henderson 2011; Qurashi 2020) and Chinese Buddhist sites (Wang et al. 2016; Wong et al. 2016). However, the exclusive focus on visitor needs may lead to a “spatial divide” that has serious implications for intensifying impacts. For instance, in the case of

Mashadad, Alipour et al. (2017: 177–178) note that “a form of dualism has developed because authorities have a spatial bias that manifests itself in the allocation of efforts toward areas near the shrine, to the detriment of the rest of the city” and “the further you are from the shrine, the fewer the resources that are devoted to environmental improvement”.

Following the ethical-moral stand and inherent teachings of many religious traditions towards respect for nature, there are instances where religious institutions have begun to emphasise environmental stewardship and address environmental degradation in sacred places (Apffel-Marglin & Parajuli 2000; de Jong & Grit 2019; Guichard-Anguis 2011; Jimura 2016; Kiernan 2015; Sullivan 1998; Timothy 2013). The same ethic is also driving cooperation between religious institutions and state agencies towards environmental protection. One example is the Vrindavan Conservation Project in India. Vrindavan is a pilgrim town dedicated to the Hindu god Krishna and is believed to be Krishna’s recreational playground. As part of this project, religious gurus have taken the lead to restore the forests in the name of Krishna and encourage other stakeholders to be more environmentally responsible (Nash 2012).

The institutions involved in managing natural sacred sites are structurally different from those in urban areas. Many natural sites come under the ambit of natural resource agencies and are faced with issues such as biodiversity conservation and community livelihoods as they intersect with tourism impacts (Bleie 2003; Sati 2015; Singh 2004, 2005). Since traditional systems of governance continue to be practiced in these areas, pilgrimage activities should be managed in ways that minimise impacts (Choe & Hitchcock 2018; Cochrane 2009).

Environmental management is a political activity and its success or failure depends on the worldviews, mandates, vested interests, and engagement of stakeholders (Tanner & Mitchell 2002). Based on a study of six pilgrimage sites in India, Shinde (2020) suggests a conceptual model for a holistic understanding of environmental management related to religious tourism. This model comprises three analytical categories: environmental processes, institutional responsibility, and place attachment. Environmental processes are contingent upon factors such as scale, scope, the geography of the place (its resilience) and influx of visitors. Institutional responsibility refers to the “collective ways of articulating and defining environmental problems and addressing them through moral, ethical, and legal authority” by different actors, both religious and non-religious. How different actors respond depends on place attachment, which is fostered through the framework of religious practices involved in pilgrimage.

Spiritual tourism and environmental impacts

Although spirituality is a “close relative” of religion (Kraft 2007: 234), the intersections between spiritual tourism and the environment are somewhat different compared to the interaction with normative religious tourism and pilgrimage from the perspective of spiritual tourists’ motivations and behaviours and the scale of their visitation (Timothy 2013). In spiritual tourism, the focus is on self-actualisation and individual quests to discover one’s existential place in the world. While spirituality can be accessed through many different means (Di Giovine & Choe 2019), religious sites and sacred places provide ideal conditions for spirit seekers (Huang et al. 2020; Timothy 2013). Spiritual experiences encompass emotions such as restorative energy, spiritual nourishment and renewal, reflectivity and reflexivity, finding meaning in life, enlightenment, universal solidarity, reverence for the earth, expressing gratitude, and a general oneness with nature (Bond et al. 2015; Moufahim & Lichrou 2019; Moufakkir & Selmi 2018; Norman 2011; Sharpley 2009; Singleton 2017). Due to its connotations with human–nature and human–earth connectivity, spiritual tourism is more likely to generate sympathetic environmental behaviour.

The environmental impacts of spiritual tourism can be better understood by grouping spiritual tourists into two categories. One is those who believe in some of the teachings of oriental religions and participate in some spiritual ‘products’ (in the sense that spirituality can be bought) through traditional practices such as meditation, yoga and chanting with gurus in religious centres to achieve enlightenment (Kraft 2007). These kinds of spiritual tourist dabble in, or ‘check out’ certain spiritual philosophies and practices are often foreigners experimenting with elements of other faith traditions. They stay longer in the spiritual destination, but they do not become permanent members or followers (Kraft 2007; Sharpley & Sundaram 2005). Kraft (2007) argues that such seekers are fewer in number and frequently travel as backpackers on frugal budgets. Because of their low numbers, spiritual tourists are thought to cause far fewer impacts on the environment, although the prolonged presence of foreigners at religious sites may have notable impacts on the local socio-cultural fabric. For instance, some foreigners who first came to Vrindavan to immerse themselves in Krishna worship, began buying real estate and opening shops to cater to foreign visitors (Shinde 2012a).

The other category is comprised of New Age spiritual followers. These self-professed pilgrims travel to ‘spirit centres’ such as Glastonbury, England, and Sedona, USA (Reader 2007: 213), as well as to other places held sacrosanct by indigenous people, in search of spiritual enlightenment. Although New Agers may align with environmental paradigms such as “deep ecology, ecofeminism, environmental conservation and nature adulation”, their “movement is one of the most environmentally controversial” (Timothy 2013: 39). Timothy (2013) argues that since there are no original sites dedicated solely for New Age worship, these seekers venerate the sacred spaces of others, including indigenous people and other religions. They are frequently blamed for cultural appropriation, misbehaviour, and violating the sanctity of other people’s sacred as by discarding ‘ritual litter’, taking away objects as souvenirs, and vandalising local natural and cultural heritage (Timothy 2013: 39).

Conclusion

Religious and spiritual tourism scholars have grappled with defining pilgrimage, religious tourism and spiritual tourism, as well as understanding religious tourists’ motivations, questions of authenticity, phenomenological experiences, and to some extent management challenges. Given the enormous scale of global religious tourism today, it is prudent to expand our understanding of environmental concerns related to this massive phenomenon. This chapter takes us that direction and presents an overview of the intersection between spirituality, religion, and tourism from an environmental impact perspective.

The review has revealed some common impacts of religious tourism on sacred environments, including congestion, depletion of resources, strains on services, and an overall deterioration of the physical and socio-cultural environment. However, these impacts depend on many factors such as the geography of the place, the intensity and frequency of visitor influxes, the types and extent of infrastructure *in situ*, and resilience of the locality. Because of their environmental settings, the four types of religious destinations described here, namely natural sacred sites, pilgrim towns, pilgrimage trails, and festivals, exhibited certain differences in the impacts they experience. The current literature is rich in observations of environmental impacts, but more rigorous measurements are necessary.

A few areas for further research can be identified. The equating of nature with the divine inspires spiritually inclined visitors, but the evidence is not conclusive on whether and how such inspiration translates into action towards protecting biodiversity and other elements of the environment. Similarly, it seems that because most religions advocate

environmental stewardship (however implicit that may be), it would motivate religious leadership and believers to be more conscious of their actions and actively participate in mitigating and managing environmental impacts. Again, some studies report that this is not always the case. It would be worthwhile to investigate the reasons why “believers have often failed fully to follow out such concepts of stewardship” (Tanner & Mitchell 2002: 208) in sacred destinations.

Another area for exploration is environmental governance, which is much more than the simpler notion of management. Here, studies need to explore decision-making in highly charged environments where religious sanctions, social acceptance, and moral authorities divide and polarise action between and across religious and non-religious actors and institutions. Scholars need to investigate factors that affect actions or inactions and how they generate discourses about environmental protection and conservation and the overall sustainability of sacred sites.

The ‘spirit of the place’ must also be addressed. The physicality of a sacred site is anchored in its geography and landscape, so how can authenticity be ensured given that religious tourism tends to alter the very landscape it is meant to venerate? Cochrane (2009: 117) frames this problem with an example: “if a focal point – a cave, an ancient temple – is so restored or developed that it loses its historical connection or special atmosphere, will visitors be able to access the spiritual gratification which they seek?”. There are also concepts in tourism-environment research, namely carrying capacity and the Tourism Area Life Cycle, which can be further developed in the context of sacrosanct destinations.

Finally, it is important to note that not all impacts are negative. Religious tourism may also influence positive change in environmental conditions. For instance, as the value of religious heritage is realised, more organisations and institutions may come together to preserve it. More examples and case studies are required to demonstrate that religion, religious travel, and spiritual pilgrimages indeed can be sustainable.

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