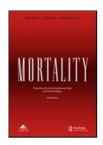
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Establishment of electric crematorium in Nepal: continuity, changes and challenges

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Establishment of electric crematorium in Nepal: continuity, changes and challenges

Abstract:

Traditionally cremations in Nepal are performed with open pyres. These cremations are fluid public events organized and managed by relatives, local communities and ritual specialists. Traditional cremation practices are full of cosmological, eschatological and soteriological significance. The main purpose of the cremation practice is to purify and free the soul from the body of the deceased in order to secure a rebirth in another realm, render the soul a safe journey to heaven, and to turn the soul into a benign ancestor instead of a haunting ghost. On the 24th of January 2016, *Pashupati Area Development Trust* inaugurated the first electric crematorium in Nepal at the traditional cremation site near the *Pashupatinath* temple, at the holy river *Bagmati*, five kilometres northeast of Kathmandu. The main incentive for *Pashupati Area Development Trust* to establish an electric crematorium is to diminish river pollution, carbon dioxide emission and to curb deforestation. How do Hindus in Nepal continue, compromise and adapt their traditional cremation practice in the indoor electric crematorium at the *Pashupati* area? The aim of this article is to explore the continuity, changes and challenges, which occurred during the development and management of the electric crematorium at *Pashupati* area as a legitimate form of disposal.

Keywords: cremation; crematoria; disposal; electric crematorium; Hindu; regulation

Introduction

This article attempts to describe the development and establishment of modern electric cremation as a legitimate form of disposal in Nepal over the last decades. I explore the challenges Hindus face when it comes to performance of their traditional cremation practice in the electric crematorium at *Pashupati* area. In an attempt to explain some of the reasons and rationales behind cremation practice and crematoria regulation at *Pashupati* area, I draw on published literature, legal acts, procedural manuals, official websites, internet media coverage, public official documents, personal communication and observations gained during my habitation and fieldwork in India, Nepal and Norway.

The format of the first section of this article is, first, a presentation of the theoretical approach to mortuary events and cremation practice. Second, a background to cremation in Hindu context and Hindu cremation practice is explained. In the second section of this article, the history of the establishment of electric crematoria in Nepal is given, while some of the challenges connected to Hindu cremation in electric crematoria in Nepal are explained and explored. Finally, a number of changes and challenges concerning electric cremation in South Asia are discussed. The article ends with a short summary and some concluding remarks.

Theoretical approach

Over the last century, anthropologists have underscored that the orchestration of mortuary rituals accompanying death of any member of a certain group or society is closely tied to that person's changing position in that group or society (Cederroth, Corlin & Lindstöm, 1988; Metcalf & Huntington, 1991; Robben, 2004). In his pioneering sociological work first published in 1907, *A Contribution to the Study of the Collective Representation of Death*, the Durkheimian Robert Hertz (1960) paid close attention to the connection between the fate of the body, the mourners and the fate of the soul,² as an illustration of the relationships between

the living mourners and the dead during the gradual transformation of the social person.³
Hertz focuses on the various relationships which develop between the three primary actors after a death has taken place. Through an analysis of what takes place with and between these three actors – the corpse, the soul and the mourners – Hertz's model illuminates the social aspects and consequences of these events. In addition, Hertz model focus on the two major phases of mortuary processes. The first phase deals with separation events tied to the immediate decay of the flesh of the corpse, the so called "wet" phase. The second phase, the so called "dry" phase focus on the incorporation events tied to the dry bones or ashes (Davies, 2005, p. 232). The major purpose of Hertz's model is to illustrate how the material body is treated at significant mortuary events in order to recreate or resurrect the social being, grafted on that body, in another realm and status (Hertz, 1960, p. 77). Hertz's approach is particular apt for an analysis of cremation practices (Davies, 1997).

In this article, I explore how electric cremation in Nepal is dealt with over time. The focus is on interventions (Mol, 2002, p. 152), i.e., actions contributing to different and context-dependent enactments of death and the dead through cremation practice – positioned actors' perspectives on or social constructions of death and the dead during cremation practice. Utilizing insights from actor-network-theory, Mol launched the term *enactment* to describe the multiple "doings" in medical practice, which manifest themselves in relational networks between *actors* and *actants*, human and non-human, such as health care personnel, medical equipment, legal acts, protocols and procedural manuals (Latour, 2005). Mol underlines that, "If practice becomes our entry into the world, ontology is no longer a monist whole. Ontology-in-practice is multiple" (Mol, 2002, p. 157). Following her approach, I argue that death and cremation practice in Nepal is a multiple affair, embedded in the material, social, legal, ethical, aesthetical, environmental and economic practice – at the collective as

well as the individual levels (Hadders, 2009, 2013). My main focus is on rituals and rationales connected to the act of cremation and the handling of ashes.

All the facets of Robert Hertz's analysis of mortuary events, mentioned above, can be of help as we explore and disentangle the multiple ontologies of cremation practice at *Pashupati* in Nepal. However, it is important to point out that the view of society advocated in my analysis is not of the reified kind that Hertz described, emphasising "collective representations", in line with the Durkheimian school of thought. Rather, in opposition to a reified homogenous and static unchanging view of Hindu society and traditional cremation practice, I aspire to reflect the plurality of specific cases of cremation practice and illuminate the continuity, changes, re-invention, utilizing insights from actor-network-theory.

Cremation in the Hindu context

The belief in transmigration and reincarnation plays a central part in the cosmology of the boarder religious traditions in India. This belief is tied to cyclical rebirth, known as *samsara*, and moral ideals for righteous living, known as *dharma*. Further, tied to these concepts is the idea of *karma*, the belief that every action has an effect, closely tied to merit, sin and atonement, determining future rebirths. The ultimate goal is salvation and release from the cycle of rebirths. *Samsara*, *dharma*, *and karma*, salvation are connected to a wider cosmology through various notions of cosmogony, eschatology and soteriology. These cosmological notions have developed over thousands of years and are seminal in Hinduism, Buddhism, Jainism and Sikhism and have far-reaching consequences for mortuary practice and cremation. Cremation is the main form of disposal practiced within all these Indian faiths (Davies, 1997, p. 82-83; Filippi, 1996; Flood, 1996; Parry, 1994; Michaels 2016). In what follows I shall focus solely on Hindu mortuary practice common in North India and Nepal.

Before I proceed with a brief exposition of Hindu mortuary practice, it is apt to make a few comments about the vast conglomerate of traditions, beliefs and ritual practices known as Hinduism. Hinduism contains several main traditional strains. One unifying fundament is the Veda scriptures, which have evolved out of the Vedic religious tradition established during 1750 – 500 BC. These scriptures consist of a large body of canonical literature, divided in four major parts, composed in Sanskrit, the sacred language of Hinduism. Another is the *Purana* traditions (Jacobsen, 2004). These sources contain the revelation of *dharma*; ideas of "truth", "duty", "ethics", "law" which uphold society and cosmos and make up the rules for virtuous conduct and righteous life. Flood comments that "The nineteenth-century Hindu reformers speak of Hinduism as the eternal religion or law (*santana dharma*), a common idea among modern Hindus today in their self-description" (Flood, 1996, pp. 11-12). A second aspect of Hindu tradition is that it contains a great number of sects or organisations (*sampradaya*). Most of these traditions share an idea of a sacred societal order known as *varna-asrama-dharma*; "duties, ethics and law tied to class, society and life stages" (Jacobsen, 2004, p. 21).

Most Hindus are cremated and the funerary ash is scattered in running water in order for the self or soul to be reborn in another realm and form (Jacobsen, 2004, p. 30). This way of disposal sounds quiet simple and straight forward. However, the Hindu cremation practice is extremely complex and cannot be isolated from the wider multifaceted eschatological and soteriological context of Hindu cosmology. It is also important to keep in mind that in Hindu tradition, there are many parallel ideologies, ideas, and beliefs about the destiny of the "life principle" or a soul, and afterlife in general. For instance, the seemingly contradictory belief in transmigration, reincarnation, and cyclical rebirth of the soul, *samsara*, *found* alongside the aspiration for salvation of the soul in heaven, *swarga*. One of the reasons for the plurality of beliefs and practices is the wealth of textual sources, as well as an abundance of ideas from

different periods of time in regards to...... Klostermaier underscores that "Here, as in most other cases, Hindu practice and belief does not simply follow from a logical extension of one basic idea but of a plurality of basic notions from which, quite logically but not always in mutually compatible fashion, specific beliefs and practices flow." (Klostermaier, 1989, p.162).

Cremation purifies various impurities through fire, *agni*. Cremation is also the last significant life cycle ritual and sacrament for Hindus, known as *dah sanskar*, "sacrament of fire" or *antyesti* "last sacrifice" (Filippi, 1996; Parry, 1994, p. 178). In other words, the logic inherent in cremation is the same as the logic inherent in sacrifice; something has to be destroyed, and sacrificed in order for something else to be purified, re-created and reborn. Through the process of cremation practice, the soul can be re-integrated within the five elements, efficiently (Oestigaard 2005, p. 11).⁶ Prior to cremation the corpse is treated as sacred and is worshiped in the same manner as a sacrificial victim or a deity. Parry and Das (1982) emphasises that there are precise parallels between cremation and sacrificial procedures tied to fire worship within the Hindu Vedic and *Purana* traditions (Parry, 1994, p. 178).

Thus the site of cremation is prepared in exactly the same manner as in fire-sacrifice, i.e. the prescriptive use of ritual pure wood, the purification of the site, its consecration with holy water, and the establishment of Agni [god of fire] with the use of proper *mantra* [Sanskrit recitation from sacred texts]. (Das, 1982, pp. 122-123; quoted in Parry, 1994, p. 178).

It goes without saying that there is great local variation within all the various sects, settings and traditions known as Hinduism. Nugteren comment on the many domestic variations often overlooked by scholars; "Seen from a textual perspective, we notice a wide

range of religious action 'outside the book', in the form of substituted embodied practices, artistic creativity, omissions or short-cuts, material mediation and fusion" (Nugteren, 2016, p. 125). Today alternatives to open pyre cremation, such as; electrical, gas powered and various "green" modern crematoria are becoming increasingly common in urban India and among Hindus in diaspora. These developments, along with many other factors, influences and changes current Hindu cremation practice in several ways (Caixeiro, 2005; Firth, 1997; Firth, 2003; Hadders, 2013; Nugteren, 2016; Parry, 1994, pp. 67 - 69; Singh 2016; Oestigaard 2005, p. 284). In what follows I shall restrict my exposition to a general sketch of the most common Hindu mortuary cremation practice in North India and Nepal which are connected to the act of open pyre cremation and the dispersal of ashes in running water in the *Pashupati* area.

Hindu cremation practice

Cremation preferably takes place within 24 hours of death. After the time of biological death, the corpse is; placed on the ground (element earth), washed, anointed, decorated, undressed by relatives of same-sex as the deceased, and dressed in special new white and orange cloths that have been dipped in holy water. The face of the deceased is uncovered and family, friends and community view the deceased (*darsan*) and pay a last homage. Barefooted male mourners carry the deceased to the cremation ground in a public procession, on a newly constructed bier, made of green bamboo tied together with ropes. At the riverbank, on the staircases descending to the river known as *ghat* ("landing place"), the deceased is fully, or partly, immersed in water. Relatives collect water from the adjacent river and offer it in the deceased mouth. When the mourners arrive with the deceased at the ghats of Pashupati it is common practice to place the deceased below the *Brahmanal* "pond" at *Aryaghat* next to the Pashupatinath temple on a long slanting stone slab called *Tarkeshwor Mahadev*. This practice is of great significance and considered very auspicious to assist the soul of the deceased.

Tarkeshwor Mahadev is the divinity who takes care of the deceased, cleanses the person's sins and brings him to heaven (Oestigaard 2005, p. 11). The *Brahmanal* "pond" is a small rectangular basin entrenched in the staircase (*ghat*). There is a small Shiva *linga* placed below the basin. The *Brahmanal* "pond" is connected to the main large Shiva *linga*, inside the Pashupati temple through a newly restored pipe system, which drains the holy water and milk offered to the main *linga*, to the small square pond placed above the stone slab. A few drops of this auspicious liquid is trickled into the mouth of the deceased. *Brahmanal* (lit. "Brahma's navel") stone slabs are common at many traditional cremation ghats in Nepal. However, the "pond" arrangement and drainage system is unique to *Aryaghat*. At *Aryaghat*, those who are dying are also placed on the *Brahmanal* stone slab, ideally with their feet touching the holy water of the Bagmati River, for an auspicious death (Michaels, 2008).

The funeral pyre is ideally constructed of 32 wooden logs piled in five layers, representing the five elements that constitute the human body. This amounts to approximately 300 kg of wood and the pyre is less the two meters long and about 0,75 meter in height (Østigård, 2007, p. 19 – 20). Before the deceased is placed on the pyre the mourners circle around the pyre with the body on the bier, in order to confuse evil spirits who can afflict the deceased soul. After circumambulating the pyre with the corpse, the corpse is placed on the cremation pyre with the feet facing southwards towards the realm of the god of death (*Yama*), and the head facing north towards the realm of the god of wealth (*Kubera*). The funeral pyre is ideally lit with fire from the domestic hearth by the chief mourner (*jajaman*) and legal heir; the eldest surviving son, or the nearest available male relative. In a modern urban setting female relatives sometimes perform this role. Ideally, the pyre consists of treasured and auspicious sandalwood. However, it is common that only a small amount of the costly sandalwood is symbolically placed below the deceases mouth, as well as added to the pyre for fragrance. Prior to igniting the funeral fire the chief mourner will circumambulates the pyre

several times, occasionally with a pot of water and finally thrice with a burning tinder. The chief mourner then ignites the pyre at the mouth of the deceased (mukhagni). The cremation normally takes three to five hours. Sometime during the latter part of the cremation, the skull is usually broken by the chief mourner or a cremation attendant with a bamboo pole. This act is known as kapal kriva (literally "skull action"), In short, this is done to release the soul or life principle, *dhananjaya yayu* or *prana*, from the corpse and constitutes a ritually decisive enactment of death (Filippi, 1996; p. 140-141; Firth, 1997, p. 78; Michaels 2016; Parry, 1994, p. 179). Once the body is fully burned the remains of the pyre is cooled with offerings of river water to relive the torment of the deceased (Michaels, 2016, p. 202). As a last gesture, the cremation attendant burn a sheaf of straw to enact the release of the soul of the deceased, and toss the burning sheaf into the river. Before these final acts some ritually significant bones and ashes of the deceased, known as astu, are usually collected and dispersed in running water soon after the cremation, or sometime later, at some other time and location (1983; Filippi, 1996; Flood, 1996, p. 207; Parry, 1994, p. 181; Oestigaard 2005, pp. 19). When cremation does not take place on the banks of a river, ashes are stored outside the house in a clay pot until they can be brought to a river for ritual immersion (Parry, 1994, p. 187).

As mentioned earlier, one of the main purposes of cremation practice and Hindu mortuary rituals is to purify and free the soul from the body of the deceased in order to secure a rebirth in another realm, render the soul a safe journey to heaven, and to turn the soul into a benign ancestor instead of a haunting ghost. During the mortuary rituals following cremation, the deceased, known as *preta* (literally a "departed one" who left the body), is in limbo and needs to be ritually cared for and properly escorted to reach the other world (Michaels 2016, p. 201). Death causes considerable contagion and is fraught with potential danger for mourners, as well as for the Hindu community at large. Therefore, mourners have to observe a number regulations and ritual rules to avoid polluting themselves and others. Performance of

various mortuary rituals by ritual specialists is crucial for mourners in order to regain ritual purity and to be re-integrated in Hindu community (Hertz, 1960; van Gennep, 1960; Parry, 1994; Michaels 2016).⁹

Traditional cremation at Pashupati area

Since the seventeenth century or earlier, Pashupati (lit. lord of the animals) has been a tutelary deity of Nepalese Licchavi, Malla and Shaha kings, and there has been a temple for Pashupatinath at *Pashupati* area since that time (Michaels 2011, p. 125). The divinity *Pashupati*, a form of Shiva, is regarded as a protective deity of Nepal and his main temple is one of the largest and most popular shrines Nepal, a sacred national monument for most Nepalese people (Michaels 2008; 2011). The current Pashupatinath temple, located on the western banks of the Bagmati River, was built in the 17th century and is one of the holy places (*dhams*) which a Hindu pilgrim aspire to visit during a lifetime. There is historic evidence that the Pashupatinath temple and surrounding area has been a prominent pilgrimage since the 16-17th centuries and that the area south of the temple has been considered favourable for cremation. To die in the premises of the Pashupainath temple at the bank of Bagmati is considered highly auspicious, like other Hindu pilgrimage sites such as Banaras in India (Michaels 2008, p. 215).

Pashupati Area Development Trust

The foundation for the *Pashupati Area Development Trust* evolved in the 1970s because "some politicians and influential businessmen of Nepal felt that population pressure had created a situation in the *Pashupati* area that threatened the authenticity, appearance, and

dignity of the site and its vicinity" (Michaels 2011, p. 127). The group developed an agenda in order to improve the site and proposed their plan to His Majesty's Government with a plea to protect, conserve and develop the *Pashupati* area accordingly. In 1979, at the Third world conference of the World Heritage Committee, UNESCO accepted *Pashupati* monument zone for inscription in the UNESCO world heritage monument list, as a part of Kathmandu Valley World Heritage Site, along with six other sites in Kathmandu valley (Michaels 2008, p. 210). Soon thereafter, the late king Birendra Bir Bikram Shah Dev responded to the group with various measures and demanded the development of a Master Plan, that is, a detailed outline for implementation. Some years later, King Birendra established the *Pashupati Area Development Trust* (PADT) through a "Special Act" as an autonomous body (Michaels 2011, p. 128).

According to the *Pashupati Area Development Trust Act* (1987) some of the main objectives of PADT, relevant to this article, are:

- To safeguard, maintain and develop the *Pashupati* area in a planned manner, in conformity with the ideals, glory and importance of the Lord *Pashupatinath*.
- To make arrangements for the performance of cultural feasts and festivals, and social
 and benevolent activities and worships in accordance with traditional religious rites
 and rituals in temples of all Gods and Goddesses.
- To make improvements in this holy site of pilgrimage as practicable in a planned manner and develop it as a site of international pilgrimage for the convenience of all Hindu devotees within and outside the country, and of tourists.
- To protect and maintain, in a well-managed manner, yards, funeral grounds/pyres, watercourses and rivers, river substances, sand etc., within the *Pashupati* area.

• To prepare necessary standards to avoid pollution and maintain clean environment within the *Pashupati* area (H.M.G., 1987; 2044)

PADT has provide various services and managed cremation practice at *Pashupati* area via some offices and bodies since the PADT was established in 1987. *Ghat Sewa Kendra* is the managing body of Bhasmeshvar Ghat, the main cremation site at *Pashupati* area, which is open 24 hours a day. Prior to the funeral, a dead body is registered at this office and a registration fee of 200 Nepalese rupees is charged. *Kriyaputri Sewa Subidha Kendra* arranges residential facilities for post-cremation rites performed by immediate family members of the deceased (*kriya putri*) up to the thirteenth day of death. The residential facility is located right beside *Bhasmeshvar Ghat*, north of the electric crematorium. There are currently forty-two rooms, twelve toilets, three bathrooms, and stone taps for washing, within the residential premises.

Along with these and other activities PADT also utilize the internet to promote themselves. On 19th of May 2003, they launched the first version of their website (http://www.pashupati.org.np/), which was inaugurated by Queen Komal Rajya Laxmi Devi Shah (Michaels 2008, p. 214). The current version of this homepage (PADT 2009) is written in Nepali and contains various information about the history of Pashupatinath temple, the aim and history of PADT, listings and photographs of council members and employees, various information and notices, as well as some photographs and maps of the area.

Historic background to the establishment of electric crematorium in Nepal

The construction of an electric crematorium at *Pashupati* area was an important part of the Master Plan from the start. The initial plan was first conceived by The Lions Club of

Pahuspatinath. In the 1980s the Lions Club, PADT and Kathmandu Metropolitan City Office cooperated and conducted a survey among 5000 participants in Kathmandu valley to access their opinion about the establishment of an electric cremation. According to this survey, 93 percent supported the instalment of an electric crematorium (Sharma 2013, p. 183). The first attempt to establish an electric crematorium in Nepal was undertaken by Kathmandu Metropolitan City Office in order to reduce environment pollution and decrease dependency on firewood. In 1987, Kathmandu Metropolitan City Office started to implement their plan for an electric crematorium with equipment from Bombay (Sharma & Bajracharya, 1988, p. 7). The crematorium oven was supposed to be installed at *Teku ghat*, at the confluence of the rivers Bagmati and Bisnunumati, one of several traditional cremation sites in Kathmandu. However, soon after the establishment this project failed and was abolished, primarily because the Kathmandu Metropolitan City Office was unable to get the machinery to function properly. Therefore, it is rusting in a dilapidated warehouse at *Teku* and it has not been put to use since. 11 In addition, other sources report that there were strong religious local opposition against the establishment of an electric crematorium at this time, which put an abrupt end to the establishment of this electric crematorium.¹²

A report published by the *Regional wood energy development program in Asia* (1998) contains a case study about firewood sales for cremation by *The timber corporation of Nepal* through *Pashupati* depot (Dhakal 1998, p. 73 – 74). This case study states that in the year of 1997 approximately 4500 dead bodies were cremated at *Pashupati*, approximately twelve dead bodies per day. The case study claims that it takes about 300 kg of firewood to cremate one dead body. The case study documents a considerable annual increase in firewood sales for cremation from 460300 kilo in the fiscal year of 1988/89 to 1379200 kilo in the fiscal year of 1997/98. The case study underscore that if an alternative way of cremating is not adopted the temple area, and the Bagmati River, will be very badly polluted, and the excessive use of

firewood will lead to continual pressure on natural forest. With this background, the case study recommends an introduction of incinerators for cremating dead bodies at *Pashupati* (Dhakal 1998, p. 74).

In 2009 PADT took on the demanding task to establish an electric crematorium at *Pashupati*. The current director of PADT at that time, Shyam Shekhar Jha, reported in an interview to the BBC that PADT expected to launch the electric crematorium in 2011.¹³

However, it was not until 10th of March 2011, more than twenty-five years after the idea of an electric crematorium was conceived, that the process of establishing the crematorium gained momentum when the bidding deadline expired at 12 noon, and fifteen firms had applied to build the crematorium at *Pashupati* Aryaghat. An India-based company, *Indomen Engineering Service* of Kolkata, won the tender for supplying the machinery. On the 13th of May 2011 PADT conducted a formal ceremony at *Pashupati*, were the Minister for Federal Affairs, Constituent Assembly, Parliamentary Affairs and Culture, Khagendra Prasad Prasai laid the foundation stone of the electric crematorium. However, another bidding process for building the premises of the crematorium had not been finalized at this time.¹⁴ Due to further hurdles and delays PADT was unable to conduct the first two trial cremations until the 5th of September 2015, five years later than initially planned.

Electric crematorium at Pashupati area

On the 24th of January 2016, the first electric crematorium in Nepal was finally launched by PADT and inaugurated formally by Minister for Culture, Tourism and Civil Aviation Ananda, Prasad Pokharel. The indoor electric crematorium is situated at *Pingalasthan*, south of the traditional cremation area and the rest houses for mourners (*Kriyaputri Bhawan*), on the western bank of the river Bagmati. The new facilities are open around the clock for all religious creeds, and consist of a large separate community hall with ceremonial facilities for

gatherings and mourners, and the main crematorium building. The two-storied main crematorium building has two incinerators with the space for a third one. The approximate cost of the electric crematorium was 110 million Nepalese rupees, which was primarily financed by the Nepalese government. An agreement has been made with Nepal Electricity Authorities for 24-hour supply of electricity. This is an important step as daily extended spells of power cut is commonplace.

The crematorium buildings are designed to mimic the local temple architectural style in order to blend in with the surrounding premises at *Pashupati* area. However, at one point during the construction of the crematorium UNESCO expressed their concerns about the conspicuous appearance of new large buildings in the near vicinity of the traditional Pashupatinath temple. A special cause of disagreement between UNESCO and PADT was the 25 meter tall chimney and smoke emission (Shreshta, 2013). This issue was resolved as PADT modified the design of the chimney and managed to reassure UNESCO that the chimney would be discrete, and that smoke emissions would be diverted, cleaned and made invisible. The interior of the crematorium has an open and airy appearance. The tall ceiling, whitewashed walls and transparent dividing glass screens allow the light from the many windows to permeate the building. This airy and aesthetical approach avoids a functional and gloomy appearance, which is common in many of the modern crematoria that have been constructed in the cities in South Asia over the last decades. ¹⁵ Auspicious Hindu symbols and artwork are abundantly used for decorating the buildings. For instance; a water fountain with an idol of *Pashupati linga* found in front of the ceremonial building, auspicious symbols painted on the front side of the furnaces, and entrance doors with elaborate woodcarvings of auspicious Hindu symbols. The main entrance door to the crematorium appropriately has a carving of the God of fire, Agni. Outside the crematorium building there are three traditional

waterspouts, for the purpose of ritual purification for mourners, attached to a sheltering wall decorated with bricks in different shades.

Currently, the crematorium works on a first-come-first-serve basis, which can sometimes result in long delays for mourners. PADT is working on a system to allocate timeslots for mourners in order to cut down on waiting time. Since the start, the two existing incinerators have been operating alternatively due to initial technical adjustments. PADT is planning the instalment of an additional third oven to strengthen cremation capacity as soon as possible. 16 The electric crematorium building has facilities for cold storage in a mortuary chamber that has a capacity for thirty bodies. This is a valuable option for relatives who live at distant places or abroad, in order to give them ample time to travel to Nepal to participate in cremations. In addition, there are separate facilities for cornea donation located in the electric crematorium building. The cornea donation program is organized and serviced by *Tilganga* Institute of Ophthalmology and the Nepal Eye Bank. Tilganga Institute of Ophthalmology and PADT has been cooperating with cornea donation since 1997 at the traditional cremation places in *Pashupati* area, after the establishment of Nepal Eye Bank in 1996 (Heiden, 2002). The Nepal Eye Bank is located in the Eye Hospital at Tilganga, near Pashupati area on the western side of river Bagmati. Tilganga Eye Hospital was partly built on land donated by PADT in the 1990s. 17

On 10th of June 2016, PADT reported that 1657 dead bodies have been cremated at the electric crematorium since the start in January. This amounts to an average of at least fifteen cremations per day. This number of cremations at electric crematorium amounts to approximate half of all the cremations at *Pashupati* during this period. Since the launching of the electric crematorium, on the 24th of January and up until the 20th of June, forty-two corneas have been donated at the premises. Cornea donation still continues at the places of traditional cremation.¹⁸

Hindu cremations at electric crematoria at Pashupati

From what I have described above it is evident that there are some challenges and limitations for Hindus when it comes to the performance of their traditional cremation practice at the indoor electric crematorium at *Pashupati* area. Some objections against indoor crematoria in closed ovens are based on the limitations to perform various traditional cremation practice and other arguments relates to the limitations to the integration of the deceased within the five elements (Nugteren, 2016, p. 135). Nevertheless, unlike the difficult situation for Hindus in diaspora in Norway with various regulation and limitations (Hadders, 2013), the situation for Hindus in Nepal is comparatively favourable. Since PADT conceived the idea of an electric crematorium, they have tried to accommodate religious sentiments, values, and needs of Hindus as much as possible during the establishment and management of the indoor electric crematorium. PADT has made an effort to involve Hindu religious stakeholders during the establishment of the crematorium. Bidur Poudal, Vice Chancellor of Nepal Sanskrit University, who advised PADT during the establishment underscored; "We constituted a large committee of scholars, religious experts and pandits and took everyone on board. Religion and science shouldn't go in separate directions. We have to adapt our rituals and customs to progress in technology" (Khan, 2016 p. 23). The underlying goal of PADT is that relatives shall be able to perform most of their traditional rituals at the electric crematorium. In an interview 25 April 2016, with the member secretary of PADT, Govinda Tandon emphasized several advantages with electric cremation; "Using the electric crematorium costs only Nepali rupees 3,200 while a traditional cremation requires Nepali rupees 12,000. It also saves wood, and there is considerably less pollution ... You have to keep evolving, there shouldn't be rigidity. Otherwise, time will overthrow your culture," (Khan, 2016 p. 23). Further, PADT

authorities underscore the time factor; electric cremation takes approximately 45 minutes, whereas an open pyre cremation takes between three to five hours.

Either mourners arrive directly from their home with the deceased or they bring the deceased directly from the hospital. When a death takes place in the hospital setting, a physician routinely medically and legally certifies it, a medico-juridical enactment of death (Hadders, 2009). However, most deaths in Nepal occur outside of a hospital and are rarely certified medically or legally, by a physician. In these cases, a death certificate is either issued by the Village development comity (VDC) or by a municipality office (Mahrajan et al., 2015). It is obligatory for mourners to present a death certificate to PADT authorities prior to cremation. After they have cleared formalities, registered with the PADT office, and paid the registration fee, they can purchase some of the materials used during the cremation at the store operated by PADT. Mourners can perform some of the preliminary rituals at the river ghat prior to electric cremation. Either at the Brahmanal "pond" at Aryaghat next to the Pashupatinath temple (as described above), or at the newly constructed *Brahmanal* and ghat beside the electric crematorium. However, as Aryaghat is situated a distance from the electric crematorium few relatives opt for this opportunity. PADT report that so far few mourners have avail the new *Brahmanal* facilities beside the electric crematorium so far. ¹⁹ In the outer area of the electric crematorium, there are platforms and designated places where mourners can place the bier with the deceases and perform rituals, as they wait for their turn to cremate. When it is their turn, relatives carry the deceased body to the inner area of the crematorium, inside the glass walls, and place the deceased on the floor, on top of the lowered mechanical lift located in front of the electric oven. Circumambulating the pyre (e.g. the oven) with the corpse is not possible due to lack of space at the back of the oven. Occasionally, at this moment, mourners disperse auspicious red coloured powder over the body (sindur) and place

small camphor balls on the dead body. Incense are lighted, as final words and prayers are said. Immediately prior to insertion of the dead body in the furnace, the chief mourner circle around the corpse thrice with a fire brand in hand, and finally ignite the body by placing the firebrand at the mouth of the deceased (mukhagni). Relatives and cremation employee adjust the dead body's position on the mechanical lift before it is inserted into the cremator. Finally, relatives stand back from the oven and the crematorium employee elevates the mechanical lift with the dead body, while a second employee operates the crematorium switch to open the oven door and the body is swiftly inserted into the oven. As the cremator door is closed the entire body quickly catches fire, due to excessive heat in the furnace, (Media Np TV, 2016). The kapal kriya or "skull action" ritual is impossible to perform in the electric crematorium, and it is therefore omitted.²⁰ However, the cracking of the skull is enacted sometime during the cremation by the excessive heat in the oven, and thus release the soul. The electric cremation takes approximately 45 - 55 minutes. When the cremation is over the crematorium employee, collect some of the ashes and bones of the deceased (astu), via a small metal door below the floor on the backside of the oven. The relatives usually disperse of these bones and ashes in the Bagmati River soon after the cremation, or sometime later at an auspicious time and location.

Discussion

In her recent publication *Wood, Water and Waste: Material Aspects of Mortuary Practice in South Asia,* Indologist Albertina Nugteren explores the contemporary "insurmountable contradiction: a traditional transmitted reverence for trees – many of which are still considered sacred, and the object of deeply felt devotion – coupled with an almost ruthless exploitation of wood in disposal rites". Nugteren starts her exploration of the material aspects of mortuary practice in South Asia with the rhetoric question "Why not use electric, gas-

fuelled or even solar-powered crematoria instead?" (Nugteren, 2016, pp. 119 - 120). What are the reasons for the reluctance among Hindus in South Asia to accept modern cremation and crematoria?

Robert Hertz's model of mortuary events illuminates the various rationales of cremation practice and focus on the relationships between the living mourners and the dead during the gradual transformation and incorporation of the social person in an afterlife. The most common purpose given for the observance of cremation practice amongst Hindus are to free the soul of the deceased from the corpse, remove impurities to ensure auspicious rebirth, heed religious and social duties, such as, that of the son towards his father, and the duties towards the ancestors. Nugteren emphasizes that "Failure to perform these [rituals] may negatively affect not only one's own status, but also that of the dead relative" (Nugteren, 2016, p. 121). Mourners' insistence to perpetuate traditional ways of disposal is linked to strong social ties and obligations to perform traditional cremation practices. The belief in spirits and the fear of potentially malignant ghosts also might motivate mourners to undertake rituals, and to comply with demands posed by ritual specialist. Finally, the mourners believe that welfare and the prosperity of the family partly depend upon the blessing of the manes (Michaels, 2016).

As we have seen above there are plenty of calls for alternatives to traditional cremation practice in South Asia. Nugteren underscore that these calls are divided in two categories. First there are "those voices which plead for simplified, shortened, accessible and more individualized procedures", in the wake of modernization and in diaspora, and second there are "those which plead for greener solutions" in South Asia (Nugteren 2016, pp. 131 – 132). The first category represents a change of worldview, belief and lifestyle among the urbanized and the communities in diaspora. The second one is based on environmental arguments in a general or by specific calls for saving the holy rivers Ganges and Bagmati.

Nevertheless, many modern green crematoriums in South Asia have struggled with poor reputation due to mismanagement. These crematoriums are often also shunned due to their association with low-casts, beggars, criminals and unclaimed corpses (Caixeiro, 2005; Nugteren, 2016; Parry, 1994, pp. 67 - 69; Singh 2016; Oestigaard 2005).

Initially there seem to be an apparent conflict between the ritually cleansing open pyre cremation practice, and the environmentally clean electric cremation. However, as I have showed above Hindus in Nepal are willing to accept electric cremations and adapt their rituals in *Pashupati* area. The establishment of an electric crematorium at *Pashupati* area is a promising proof of an alternative path for the future.

Concluding remarks

In this paper, I have explored the multiple ontologies contributing to different and context-dependent enactments of death and the dead through cremation practice at *Pashupati* area (Mol, 2002). As I have shown above, various stakeholders, actors and actants (Latour, 2005) influence regulation and management of the electric crematoria and cremation practices. However, over the last decades PADT has been the major supplier of premises for funerals and cremation practice at *Pashupati* area. Since the establishment of the electric crematorium in January 2016, approximately half of all the cremations at *Pashupati* area have taken place in the electric crematorium. Planning, coordinating and policing cremation practice, traditional open pyre as well as modern electric cremation, is managed mainly by PADT. Through their strong mandate, mercantile advantage and organization PADT has been able to device comprehensive and overreaching policies for cremation practice at *Pashupati* area and create strong incentives for mourners to comply with cremation practices within the electric crematorium. Robert Hertz's model of mortuary events illuminates the powerful ideology,

behind the traditional cremation practice. However, I underscore that in opposition to Hertz's reified homogenous and static unchanging view of society, I have aspired to reflect the plurality of specific cases of cremation practice and illuminate the continuity, changes, reinvention, while utilizing insights from actor-network-theory.

In Nepal more detailed ethnographic research is needed to better understand how Hindus reason, compromise, and re-invent their cremation events in the electric crematorium context (Firth, 1997; Firth; 2003; Garrey, 2003; Laungani, 1996). More research is also needed to investigate how various social groups (castes) and religious groups accept to be cremated at the same premises, and the on-going acceptation of cremation as an alternative form of disposal for Christians in Nepal (Sharma 2013).

¹ Also known as *Pashupatikshetra*, "the field of Pashupati", or *Deopatan* "the city of Gods" (Michaels 2008). In this area, there are some 700 sacred sites. The *Pashupati* area occupies approximately 264 hectares and there are about 235 temples in the area from different ages and styles. The main temple at *Pashupati* area is devoted to the divinity *Pashupatinath*, which has given the name to the area (Michaels and Tandan 1994; quoted in Oestigaard 2005, p. 11).

² The soul is an imprecise term, inadequate to cover the many nuances concerning mind, vital essence, animation or life principles dealt with in connection with the topic discussed here. However, for the sake of convenience I still use this term as a denomination for a larger eschatological field.

³ For a detailed discussion of "the category of the person", see Carrithers *et al.* 1985.

⁴ Any further detail about this large body of literature and tradition falls outside the scope of this paper (see Firth 1997; Flood, 1996).

⁵ Ascetics, some low castes and very young children are usually buried. In some cases of disease water burial is practiced to avoid contagion (Filippi, 1996, pp. 171-176; Flood, 1996, p. 207; Parry, 1994, pp. 184-5).

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⁶ Earth (*bhumi*), water, fire (*agni*), air (*vayu*) and ether.

⁷ There are several ghats along the Bagmati at *Pashupati* area. The most prestigious and important ghat is *Aryaghat* placed adjacent to Pashupatinath temple.

⁸ Phallus symbol, an attribute of Shiva.

⁹ Any further elaboration of these ritual cycles are outside the scope and aim of this paper.

¹⁰ Personal communication with Dr Govinda Tandon, member secretary of PADT June 2016.

¹¹ http://thehimalayantimes.com/business/crematorium-gathering-dust-since-decades/

¹² http://nepalitimes.com/article/nation/delayed-electric-crematorium-nepal,1802,

¹³ http://news.bbc.co.uk/2/hi/south asia/8189660.stm

¹⁴ https://ankitadhikari.wordpress.com/2011/05/19/electric-crematorium-to-see-light-of-day/

¹⁵ However, this trend is slowly changing. For instance, see promising exception prize winning designed crematorium Ashwinkumar in Surat, India (http://architexturez.net/doc/az-cf-20472).

¹⁶ http://nepalitimes.com/article/nation/changing-traditions,2977

¹⁷ http://www.tilganga.org/index.php/eye-banks

¹⁸ Personal communication with Dr Govinda Tandon, member secretary of PADT June 2016.

¹⁹ Personal communication with Dr Govinda Tandon, member secretary of PADT July 2016.

²⁰ In some modern gas crematoria in Kerala and in Punjab, the furnace has a small door through which a metal rod is inserted sometime during the cremation process in order to perform "kapal kriya".