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Water Connection: Everyday Religion and Environments in Kathmandu Valley *Case Study*

Mukta S. Tamang

This case study aims to explore the relationship between 'everyday religion' and prospects for urban sustainability in the context of on-going changes -in Kathmandu. It argues that everyday religion plays a role in furnishing the incentive for urban residents to sustainably manage 'culturalized nature' in the city. In particular, I examine water, the practices surrounding its use, and how these practices connect various social realms. I suggest that water in Kathmandu valley plays an important role as a connector encompassing life and death, religion and environment, as well as politics and development.

Keywords: anthropology, cities, environment, everyday religion, social transformation, water, Nepal.

The Vishnu and Garuda who fed on fresh spring water and organic fruits

Now live day by day with sewer water and fast-food Wearing ancient Gajura among the deserted trees Dismayed Dolagiri keeps looking on at the Valley

- Subba (2012)

Introduction

The Himalayan valley of Kathmandu has experienced rapid urbanization over the last few decades. As a result, both religion and the environments of the valley have transformed significantly. This case study explores the relationship between 'everyday religion' and prospects for urban sustainability in Kathmandu in the context of these changes. It argues that everyday religion plays a role in furnishing the incentive for urban residents to sustainably manage 'culturalized nature' in the city. In order to sustain this argument, the paper presents a case study on the practices surrounding the use of water and considers some of the ways in which water connects the larger realm of everyday religion,¹ politics, development agendas, and the natural environment.

In Nepal, water is a vehicle for collective social action. It demands engagement and brings people together for the process of making and maintaining water canals, stone fountains, wells, and the management of the distribution system. At the same time, water links nature and religion. It is a means of purification and cleansing as well as a prime offering to the gods. As Mary Slusser writes in the context of the Kathmandu valley:

Water itself is sacred, as is everything that relates to it—the vessel, the well, the pond that contains it, the fountains from which it issues, or the stream in which it flows. Providing access to water is thought to be especially meritorious...thus century after century of construction by king and commoner... has left no corner of the Valley without a liberal number of water sources. (Slusser 1982: 154, cited in Rademacher 2011)

In the study of water, this research also builds on Anne Rademacher's (2011) insights on urban ecology, in particular, challenges of river decline and efforts towards restoration by various actors in the valley. Rademacher demonstrates how the river system, and by extension water, emerged as one of the central issues that warrant a serious study in the turbulent and urbanizing Kathmandu. Further, as Ben Orlove and Steven Caton (2010) argue, water cannot be reduced to a biological fact but must be understood in its essential character relevant to many domains of society—economic, social, political, religious and leisure. This argument has a lot of traction in the historical and social context of urbanizing Kathmandu. Although urban expansion is threatening to sever the links that have traditionally existed between socio-religious life and natural environments, it could be the case that—if politically mobilized-the people's affective connection to water could furnish the political will for better water management.

Kathmandu Valley: Context and Fieldwork

With the process of globalization, Kathmandu² defies earlier images of the Himalayan region, characterized by presumed isolation, remoteness, vulnerability and other mountain specificities (Jodha 1992), if not perhaps that of 'crisis' (Ives and Messerli 1989). Political upheavals, globalization, migration, urbanization, and, more recently, climate change have made the issues faced by the people in the Himalaya significantly complex. The contemporary Kathmandu Metropolitan City Office not only unsuccessfully tries to regulate uncontrolled construction of modern buildings, but also struggles to deal with the serious problems of sewerage and drainage, contamination of its rivers, solid waste management, air pollution, etc. This process of growth towards 'modernity from tradition' has brought about numerous changes in the socio-cultural, economic and environmental spheres of the city life.

In order to understand the everyday dimensions of social, cultural, and political change, my field research was conducted in separate locations within the city of

Kathmandu. One of the locations was the old Newari settlement of Patan. This settlement is a living witness to the long term process of urbanization, as well as the adoption and transformation of Buddhism, Hinduism and the caste system, religious syncretism, and modernization. The second locale is in the neighborhood surrounding the famous Boudhanath stūpa. The neighborhood was settled by the Tamang people around the 4th century Buddhist shrine, locally known as 'Jyarung Khasyor.' This area receives pilgrims from all over the Himalayan region and attracts a good number of people from the business community as well. Waves of recent immigrations, beginning with shortlived carpet industry boom in the vicinity, have resulted in rapid deterioration of resources in the last two decades. The third location is between these two sites, in the area of Pashupatinath temple, where my fieldwork focus has been relatively less intensive. Pashupatinath is one of the holiest Hindu temples in South Asia. The area is also a meeting point for believers of many religious faiths, including Buddhism, Christianity and the indigenous Kirat religion. My research involved the collection of life histories, interviews, participant observations, and attendance at local public events and festivals.³

Environments and Water Connections

Kathmandu is highly dependent on external sources of water. Kathmandu's water demand is estimated to be 120 liters per capita per day for urban Kathmandu and 80 liters for rural areas (Pandey, Shrestha et al. 2012). The valley requires 27.2 million liters per day (MLD). Kathmandu Upatyaka Khanepani Limited (KUKL), the organization responsible for water supply in the valley, can only supply 70 percent of the demand during rainy season and 40 percent at most in the dry season. This supply estimate includes both surface and ground water, as well as water provided through tanker services. Because of this deficit, several water supply agencies and businesses that pump ground water have emerged since the 1980s. Estimates show that ground water extraction today has reached 21.56 million cubic meters per year (MCM/year), which exceeds the recharge rate of 14.6 MCM/year. The valley's aquifer reserves are expected to deplete in less than 100 years (Cresswell, Bauld et al. 2001).

A survey by the Kathmandu Urban Development Project in 1982 enumerated a total of 500 water fountains in Kathmandu valley. These were built between the 13th and 18th century. Due to the increase of construction in the city, almost all of them have dried up and some remaining fountains flow only during the monsoon. Lalitpur municipality had 40 water fountains and 52 ponds for livestock, washing, and bathing (Amatya 2060 B.S.). Almost 90 percent of these have dried up or have been encroached for building construction. Boudhanath also faces a similar situation. During field survey in 2012 there were spots of 35 water fountains, eleven wells and five ponds. But a quarter of them are totally dry with the rest only getting some water during the monsoon. All the traditional wells are more-or-less non-functional. Only one pond, because of its historical and religious link with Boudhanath *stūpa*, is preserved by the local *guthi* (community institution). While these water sources have vanished, more deeper bore wells have been dug by private houses, hotels and industries. By 2001, there were 249 wells of this kind enumerated (Pandey, Shrestha et al. 2012).

Surface water discharge is gradually drying, perhaps compounded by climate change. Three major rivers—the Bagmati, Bisnumati and Manohara—along with smaller tributaries—the Tukucha, Dhobikhola, Balkhu, and Nakkhu—supply and drain water in the valley. They originate in the Shivapuri hill or within the northern parts of the valley. The Bagmati is the major river, and Kathmandu is referred to as the Bagmati Civilization (Rademacher 2011). Today, however, there are also prognostications about the 'death of the Bagmati civilization' in part because the river is simply an open sewage drain of black liquid that barely flows. The loss of the Bagmati's power to wash away pollution and sins perplexes people (Haberman 2000).

Until about 30 years ago, everyday life in Kathmandu valley had close links with nature. Agriculture, forests, livestock and irrigation were important elements of daily practice, and these anchored seasons, festivals, pilgrimages, rituals and many aspects of social life. Until 1984, records show that about 75 percent of the land in the valley was agricultural and forested. Both in Boudhanath and Patan, the older generation remember the seasons of ploughing, planting, harvesting and winnowing in the streets with a deep sense of belonging connected to the place where they live. These activities linked the families involved in agriculture directly with livestock, forests and water. Kapali, one of the respondents, used a local proverb to summarize the relationship: Khet ko pet ma, pet ko khet *ma*—"from the field to the stomach and from the stomach to the field".

Mountains, hills, rivers, river confluences, ponds and even pastures are places of worship for ordinary people in the Himalaya. These places are part of the social geography and cosmology. People gather in these places at specific times of the year and make offerings to their living environments. The existence and continuity of such environments for the production and reproduction of culture is as important as the health of the environment itself.

The people of the valley worship four major hills that are considered protectors of the territory: Phulchowki in the southeast, Chandragiri/Champa Devi in the southwest, Shivapuri in the northwest, and Nagarkot in the northeast. The river confluences at Kumbheshwor, Gokarna, Godavari, Sundarijal, and Shovabhagabati are the other places where people gather during different months of the year for celebration. The ritual specialist begins with an offering of holy water, incense and drinks for the territorial deities, and then invokes the names of all the deities in their respective locations for the success of the event. It is evident that people foster their well-being within these larger environments and that sustainability of this requires the sustenance and reproduction of this religious geography.

The symbiotic relationship between agriculture, waste, and water is clear in the life of one of our informants from the Deula community, Haku.⁴ When Haku was young, the Deula community farmed fish in their pond on the outskirts of Patan city. They collected human waste from the city and pile it around the pond. When the waste decomposed, they would sell it as manure to farmers, as well as eat and partly sell the pond's fish in the market.

Perhaps due to the expansion of agriculture, deforestation in the valley started early. Colonial writing from the late 19th century reported that Kathmandu city had very little forest left. The expansion of agriculture to support the growing urbanization perhaps required forests to be cleared (Hamilton 1819). Within the valley, forests with religious significance—Pashupati, Gokarna, Shivapuri, Nagarjun, Surya Binayak and others—were consciously preserved. Another of our informants, Mhendo,⁵ recalls going with her friends as part of the early morning caravan to Shivapuri forest in order to collect firewood for the monsoon. They had a reciprocal relationship with the locals of Shivapuri, and in return for their help in collecting forest produce they would host the locals when they came to Kathmandu for their Boudhanath pilgrimage. The notional sharing of territory protected by common gods made such relations possible.

Exchange between people of the valley and other parts of the Himalaya was also linked with natural seasons and the pilgrimage calendar. Another of our informants, Mheme,⁶ recalled that the cycle of pilgrimage revolved with the seasons, which was integrated with the routines of the people inside and outside the valley. For example, pilgrims of nomadic groups from Kyirung used to arrive in Boudhanath in November, where they would put up tents in the empty agricultural fields. They came with families, their dogs, and other animals. They brought with them Himalayan herbs and other produce which they sold in the Boudhanath market. The local people believed that they possessed mysterious kinds of magical powers and could cast spells if they were angered. But nonetheless, the locals treated them well because they believed that nomads brought prosperity to the area. About the same time, Tibetan pilgrims also arrived. They would stay for a few days before going to Buddhist sites in India. During this time, merchants and artisans from Patan would come to Boudhanath to sell their wares. Patan Newars would rent space to set up their shops. During winter, people would gather around Boudhanath for business, dharma practice, and leisure. Just before the monsoon, when the planting season commenced, the outsiders would leave and local farmers would begin their work.

This led to the sale and purchase of land in and around the Boudhanath areas, particularly for rentier purposes. Agricultural land was converted into commercial real estate. Old, settled families sold land and moved out and new families moved in. New professions took the place of old vocations. According to Mheme, by 2000, only about five percent of the families in the area still cultivated rice and vegetables on small plots. This reflects a general trend. Agricultural land in the valley decreased from 409.5 sq. km in 1984 to 275 sq. km in 2000 and is estimated to have come down to a third of this in 2010.⁷ Along with the decrease in agriculture, community life associated with cultivation, and participation in seasonal rituals and festivals dwindled. As an example, community exchange through field work and the collection of forest produce no longer exists. Mhendo says that "life has become physically very comfortable but its rhythms have altered substantially." Today, firewood is being replaced by LPG gas. Ploughs have been replaced by tractors and milk is available in polythene packets. All of this has reduced the scale of social relationships of exchange. Mhendo says that people now seldom meet their neighbors. Even with such changes and scarcity, it is the water and use of it that keeps the connection with the people, deities and the nature.

Water, apart from sustaining material life, also has other essential meanings for people in Kathmandu and for the connection of different social realms. For all of the people we interviewed during our research, irrespective of their religious affiliation, the day begins with the cleansing or purification of their body with water. It is beyond personal hygiene and health. The softness of the water, the source of the water, its temperature and how it is discharged are all important. All of the life histories collected as part of this research attest to the fact that ordinary people attach meaning to water in multiple ways. All of them, in one form or another, offer water to their respective gods and goddesses in the morning. Early in her life, Putalibeganto offer fresh water or *chokho pani* to Buddha, along with flowers, incense and butter lamps in her small shrine. She regards flowing water from rivers, spring water from fountains, and chokho pani or 'sacred / pure water' the best to offer to the gods. But it has become increasingly difficult for her to get fresh water early in the morning, as the water sources are drying up. Thus, she has resorted to using piped water supplied by the municipality. For some years, she has only been able to get water in the evening. This compels her to use water stored in a tank. By normal standards, this would be considered stale water, or basipani, unfit for offering. However, change of circumstances has forced her to compromise, leading to a sense of loss.

For almost all of our respondents, water bears the power of blessing and purification. A newborn baby is cleaned by a *lama* (Buddhist priest) with water poured from a sacred vase called a *bumpa*. At a boy's initiation ceremony, the maternal uncle pours water to cleanse the child. In Hindu cosmology, rivers are considered to be powerful goddesses who possesses the power to cleanse dirt and sins. Bagmati river in Kathmandu, as a tributary to the holy Ganga, is traditionally believed to have such power. Bathing in the river is believed to wash away the pollution and inauspiciousness of the human body. Water is also offered to the dead on the pyre as a way of final farewell.

Through 19th century until the 1960s, Nepali law used water as means for making and enforcing social categories. Following an orthodox Hindu caste scheme in 1854, Jang Bahadur promulgated law that classified society into five broad layers. At the bottom were those classified as *paninachalne*, literally 'non-water sharers' for social groups from whom water cannot be accepted because of their caste impurity. Water still plays a role in social classification and boundary making as well as the politics of recognition.

Water in Kathmandu today is not only about everyday living and religion. It is also about class distinctions. In the relatively more affluent neighborhoods, the tap water supply runs longer, or there are more deep bored wells or roof water tanks that can be stocked with spring water from Godavari. Access to water symbolizes class status in today's Kathmandu. In contrast, the poor have to stand in long queues to collect water for cooking. Differential access to water breaks out into occasional conflict. One respondent told us of an incident one summer when the water supply stopped for a couple of days. People from poorer households swarmed into the compound of a rich family with a private well and destroyed it in anger, demanding to know whether water had turned into private property to be bought and sold in the market.

The traditional water taps, ponds, wells, and management of water sources in Kathmandu valley are very distinctive aspects of a Himalayan civilization. Each major water source provides not only water for physical survival but also the space for social exchange, mostly between women. Collective management and preservation of water sources enables the satisfaction of individual needs. In addition, each water source also has a patron deity, and therefore is a place of worship and a place to be worshiped to ensure social wellbeing. *Naga*, serpent gods, are associated with such wellbeing and hence have to be propitiated. Now that many of the water sources have dried up, been abandoned, or destroyed for the construction of modern buildings, peoples' access to gods for requesting help and blessings has been severely restricted.

Conclusion

This research began with the question of what everyday religion is, and its relationship with sustainable environments in the Himalaya. Our approach has considered everyday religion as distinct from institutionalized or official religions, which is also different than so-called 'popular' religion. We looked at religion as practiced by people, contextualized in space and time, changing in dynamic ways through life's stream (Neitz 2011).

The themes emerging out of the research offer interesting insights, both theoretical and practical. Ordinary people in Kathmandu practice their religion within both the conditions of their individual life circumstance and the given historical context of social living. It is about following prescribed ways of living, as in the social dynamics of caste, yet also changing them through time. Additionally, everyday religion is about deploying religion for the practical needs and contingencies of life (Devine and Deneulin 2011). People's lived religion transcends the boundary between the sacred and mundane, as well as the boundaries created by "high religions" (Gellner 2005). Moreover, everyday religion sustains social relations and religious geography or culturalized nature, including mountains, rivers, forests, groves and rocks, as the context in which people can live and aspire for their well-being.

This leads to the question of sustainability. The understanding of sustainability as "development that meets the needs of the present without compromising the needs of future generations to meet their own needs" (Brundtland 1987: 43) may be expanded to include the sustainability of social relations and people's capacity to produce their culture and religion (Shaharir 2012) through everyday practices. People in the Kathmandu valley regard the deterioration of their physical environment as proceeding in tandem with the deterioration of the social and religious environments, and therefore all of them need to be considered together.

Preliminary themes emerging out of this field work also indicate that future research could focus on understanding sustainability in broader ways, which include the natural and physical environments in tandem with sustainability of sociality, and the capacity to produce culture and religiosity in the Himalayan landscape. The relevant question to ask may be how each sphere of the physical and social environments is conceived and acted upon by people in everyday life. Urban expansion increasingly detaches people from direct links and interactions with natural environments. Such detachment seems to gradually alienate people from a sense of responsibility and from the role of ensuring better conduct with regard to sustainability, and transforms them into mere efficient consumers, waste producers, and tax payers. Comparisons with rural areas, where direct interaction between people and their natural environment and spiritual space are still explicit, could serve as useful pointers for the study of connections between the social, religious and natural environments. Our life histories show that people respond to critical situations collectively. Amidst the helplessness induced by urbanization, the sense of water, the aesthetics of water, the spirituality of water, and the significance of water as a natural substance essential for existence stir human desires to act, and cannot be overlooked in debates of environmental sustainability as it provides incentive for preserving culturized nature.

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Endnotes

1. Everyday religion is a complex concept, especially in the lived experiences of the Kathmandu valley. In contemporary Nepal and South Asia, 'religion' is generally translated by the term 'dharma'. The meanings invested in and practices generated by the term can differ, sometimes dramatically, across the social groups (Pandian and Ali 2010). For the purposes of this paper, I follow Geertz's definition of religion as "(1) a system of symbols which acts to (2) establish powerful, pervasive, and longlasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic" (Geertz 1985:4). Since such systems of symbols, including notions of sacredness, become meaningful for producing moods and motivation in specific context, I believe that everyday religion should be studied in its physical, historical and contextual specificity. These practices must be viewed in relation to social processes including that of state formation, class, caste and ethnic boundaries as well as a sort of moral horizon framed by legal codes, religious doctrines and cross-border exchange of practices, along with urbanization and climate change.

2. The Kathmandu valley covers 667 square kilometers and is divided into one metropolis (Kathmandu), one submetropolis (Lalitpur), three municipalities (Bhaktapur, Kirtipur and Thimi) and 99 Village Development Committees (VDC) of three districts. The metropolis and municipalities constitute the core of the urban area, estimated, in 2000, to be about 97.5 square km. During the last decade, significant migration has taken place from all over the country to the valley, contributing to the sprawl of suburban areas between the rural and the urban core. As a result, the area covered by urban settlement and nonagriculture uses increased from 10 percent in 1984 to over 40 percent of the total land in the valley by 2010 (Muzzini and Aparicio 2011). In 1994, the estimated urban area in the valley was 8,378 hectares. Since then, urbanization has increased dramatically; more than 50 percent of the best agricultural land is presumed to have been lost in this process by 2010. The population of the valley is estimated to have reached about 2.5 million now, up from a mere 55,000 in 1950. Population density has increased from 2,739 per sq. km in 2001 to 4,416 per sq. km in 2011 in Kathmandu district (CBS 2012). Squatter settlements rose from 17 in 1985 to 33 in 1994 and by 2003 it is reported to have reached 64, mostly along the Bagmati, Bishnumati and Manohara river banks (LUMANTI 2003). With these come immense changes in social and natural environments.

3. Of the fifteen life histories collected, seven are from Patan - three women and four men, six are from Boudhanath- two women and four men, and two are from Pashupatinath - both men in their 60s. The three women from Patan have three distinct life trajectories. The first woman, Lili, recently joined the Bhramakumari sect of Hinduism to find solace from the misfortunes she has suffered. The second, Ita, is a single woman who lives as a Hindu widow. The third, Nhuchhe, is a Buddhist woman in her 70s, belonging to a Buddhist Newar family, who is engaged in distributing drinking water in one of the baha (neighborhoods). Of the men, while Harsha is a high caste Hindu Newar who has immersed himself in Buddhism and vipasana meditation. The third man from Patan, Hari, has been a daily wage laborer since he arrived in Kathmandu and has recently become Christian. The second woman, Putali, is now a nun in the Buddhist monastery. She too has had a life of ups and downs. At the age of fourteen, she was sent to work as a servant in one of the palaces, where she was required to sing religious hymns, or *bhajan*, and follow strict rules of commensality. After the death of her royal mistress, she married a man who also worked in a similar job. Two years ago she decided to become a nun. One of the men, Vajra, on the other hand, is a relatively rich man who has learned Buddhist rituals to become a priest to the local community. Two of the others are young men of critical outlook who see the contradictions in the present situation and aspire to realign the community spirit in line with modern values. Of the two men are from Pashupati. The first, Kapali, is the descendant of an immigrant to the

area from the eastern hills some three generation ago, and made connections to the Kathmandu rulers through his ability to decipher stone inscriptions in the temple area. The other, Pathak, is a Brahmin who had unfulfilled aspirations of becoming a priest at the temple and has definite views on religion and politics, particularly on the recent transformation of Nepal as a secular country from being "the only Hindu kingdom of the World". Our insights on everyday religion and sustainable environments are derived from the conversations with these people over a series of interviews.

4. Haku belongs to the Pode community (Deula) which is at the bottom of Newar caste hierarchy.

5. Mhendo, an elderly woman, originally from a farming community in a village in northwest Nepal, came to Boudhanath after her marriage. Her life is a long saga of struggle and pain. Personal tragedies have led her to faith and devotion to *dharma*.

6. Mheme is another male respondent who, though from a humble background, acquired considerable status as an orator and wise man in his community.

7. Agriculture today is limited to the rural corners of the valley. Since the early 1980s, Kathmandu began attracting large numbers migrants from Nepal seeking upward mobility and modern life. Land prices began escalating and a construction boom ensued, which in turn brought more wage laborers into the valley.

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