RELIGION, RAINFALL AND RICE: SOCIAL-ECOLOGICAL INTERPRETATION OF FESTIVALS IN KATHMANDU VALLEY, NEPAL

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ABSTRACT

The Newa: (or Newar in Nepali dialect) culture of Kathmandu Valley is home to a number of mythical stories associated with gods and demons. Such stories embody the spirituality of the people on the one hand, and symbolize the socio-ecological systems of the Valley on the other. This paper presents narratives of the cultural festivals of Newar communities in relation to the agricultural-ecological system, particularly rice farming, they have traditionally adopted for their livelihood. The meanings of the festivals celebrated by the Newar communities are presented with reference to the process of celebration, the items included in the offerings for gods, and the varieties of foods eaten during family festivities. The festivals chosen for this study range from those of the pre-monsoon (preparation for paddy seedling) to those of the post-monsoon (the rice harvest). The lives and livelihoods of the multi-cultural communities of the Kathmandu Valley have traditionally been linked to the spirituality, socio-cultural practices and ecosystem of the Valley. However, these practices are facing constant pressure because of modernization, changed livelihood systems, contradictions in the government's religious/cultural policies and practices, and changes in global systems.¹ The Newar communities of Kathmandu Valley are struggling to maintain sustainable celebration of their festivals because of changes in the Valley's agro-ecological landscape. At the same time, Kathmandu Valley is establishing its identity as a multicultural area, which, to some degree, affords hope for continuing the religious legacy. The Valley is being preserved as a "sacred place," because people from other castes/ethnicities are now also supporting these festivals.

Introduction

The Asian continent has many rich religious-cultural traditions. The androcentric interpretations of Asian cultural norms are that these are emotional, hard-working, receptive, and stratified. Although such notions cannot be rejected, the richness of Asian cultural traditions cannot be understood through just these few lenses. Asian cultures extend across a wide range of geographic or environmental areas. This means that Asian cultures are as diverse as the geography of Asia itself. This diverse geography has proven a fertile ground for the development and flourishing of rich cultural traditions. Nepal, a country located in the Himalayas, itself represents

¹ On the one hand, there is a tradition by the Head of State (the President), of formally observing many of these festivals. On the other hand, the Constitution of Nepal (*Constitution of Nepal* 2015) is secular, and does not wish to emphasize only Hindu festivals. The Government's local development plans are also not geared towards protecting cultural heritage, since many ancient monuments have either been demolished or transformed into modern buildings.



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rich geographical diversity in a small spatial unit, and the country is correspondingly rich in cultural practices.

The tiny Himalayan kingdom of Nepal covers only 0.03 percent of the global land surface, but houses about 40 percent of all two hundred global ecological regions, thus representing around a quarter of the world's biodiversity (in terms of species variety) (Sharma and Tsering 2009). Such natural richness is possible here because of a varied climate that ranges from near-equatorial to polar. The socio-cultural heritage of Nepal is also distinctive, since the country has more than 125 caste/ethnic groups, each with their own language and cultural traditions, and following one of ten different religious faiths (CBS 2012).² These factors mean Nepal is a country where spirituality and nature interact very closely.

Research Problem and Research Gap

Overlapping religious and cultural practices have made Nepal a syncretistic country. The people of Nepal consider God a companion in times of both sadness and joy. From early childhood they are taught about God, and they learn to pray for a better future. In different studies, Pandey (2016; 2008; 2004) has noted that when people's adaptive strategies fail and they suffer from misfortune, they tend to surrender to God and pray for "no further bad days." The observations of this author during his academic journey indicate that most Nepali people have a strong attachment to God and that their concept of "God" is directly or indirectly linked to nature and the environmental systems where they live. The study of the socio-ecological narratives of spirituality thus becomes an interesting theme here.

Food is an important part of life's systems and it comes primarily from ecosystem services. The types of food people use in everyday life are often determined by religious and socio-cultural practices, as well as by the environmental circumstances where they live. Rice is a staple food for the majority of the population of Nepal and therefore production of rice is at the centre of the agricultural system. Praying for rainfall to make the rice harvest abundant and ensure food security, (which is one of the 17 Sustainable Development Goals or SDGs), therefore becomes an obvious thing to do.

As a multi-religious and multi-cultural country, Nepal gives a variety of social understandings and ecological meanings to food. Yet Nepali culture is sometimes also referred to as a "rice culture" that emphasizes the production and consumption of rice. In this context, this paper investigates the interaction between religion, rain and rice in Nepal, with reference to the festivals celebrated and the food offered to the gods in Kathmandu Valley.

Interactions to form networks and establish and strengthen relationships are a fundamental part of religious-cultural celebrations. Consistent to Orsi (2003), the people of Kathmandu have adopted religions as local strategies to craft their lives through the use of religious idioms, values, symbols, and practices. However, there is insufficient documented, rigorous research into the connections between the religious-cultural traditions and their ecological background. A literature search for a systematic review of these connections reveals formal publications are extremely rare. A rich scholarly work on religion and culture in Asia also fails to document references to the ecological dimensions of spirituality (NCSRCA 2014). Even more surprising is that Knott (2010), a scholar who has designed a complex framework to conceptualize religion, has also missed the connection with ecological traditions.

While the scarcity of literature in the field initially increased the reluctance of this researcher to conduct this present study, at the same time, such a lack also fueled the desire to contribute to

² Hinduism is followed by 81.3 percent of the population, Buddhism 9.0 percent, Islam 4.4 percent, Kirat 3.1 percent, Christianity 1.4 percent, and Prakriti 0.5 percent, together with a few thousand who follow Bon, Jainist, Bahai and Sikh religions.

the field. This paper is therefore an outcome of determination, despite the work having many limitations.

Among the few available studies, Löwdin (1986) has attempted to explore the relationship between food, ritual and social organization of the Newar communities of Kathmandu Valley. This work does not attempt to explore the spiritual and ecological aspects of food served at various feasts or for particular deities, however. Khatry (1996) studied the process of celebrating *Matsyandranath Jatra* (a festival/carnival of praying to *Matsyandranath God*) in Kathmandu. That paper also talks only a little about the socio-ecological attributes of the festival, such as describing people's emphasis on praying for rain during the pre-monsoon period. Yet the author does not answer questions about why the people of Kathmandu might ask for rain.

Religion has been seen as a part of daily negotiations of power and identity, highlighting ambiguities and creativity in the production of sacred worlds (Primiano 2012). Socio-ecological perspectives on spiritual beliefs and faiths in relation to the celebration of religious festivals, or to the practice of seeking to please a "god" to ensure a better weather pattern and hence an abundant harvest of rice, say, creates an interesting research issue here. This paper therefore aims to explain the social-ecological connections between the religious and cultural practices of Kathmandu, Nepal, and the rice culture of the Valley.

Rationale of the Research

Sustainable development has been the main motto of development for the last half a century. It is debatable whether sustainable development is just a *mantra* (a sacred text to recite) (Escobar 1995) or whether it requires important policy interventions, such as Agenda 21, Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs) and the UN Framework Conventions on Climate Change (UNFCCC). Some scholars, such as Vandana Shiva (1992), accuse economists of hijacking and misusing the term. According to Shiva, the term sustainability refers to "harmony with nature," yet it has been used to mean "sustain-able" or to refer to fulfilling present needs without compromising the needs of future generations (WCED 1987). This "long-lasting" definition focuses on the economic dimensions of development and rejects the meaning of harmony. In fact, sustainable development requires development that follows the "rhythm" of nature. Yet since modernization has already reached its climax, and has created an at-risk society (Beck 1992), there is a real threat to sustainability and the modern materialistic lifestyle of human beings. Sustainability is therefore possible only through practicing a simple lifestyle.

Hindu and Buddhist spirituality emphasize a simple lifestyle, and living in harmony with nature. In this context, it is important to search for the linkage between environmental sustainability and the religious and cultural practices of a people as they follow their faith. The findings could produce indicators from a spiritual perspective that can then be incorporated into the measures of development. This spiritual/religious perspective on the environment could also provide valuable feedback for policy reforms aimed at environmental sustainability. Understanding religion in relation to the social-ecological system, and incorporating those insights into political ecology, might thus be an important task. This study therefore explores the social-ecological linkage between religion-culture and nature through the study of interactions between religion, rainfall and rice cultivation in the Kathmandu Valley of Nepal.

The Structure of the Paper

This paper is structured into six sections. Firstly, I will introduce the research theme, formulates the research problem, and designs the objectives of the research. Secondly, a conceptual foundation will be constructed for a theological study of a social-ecological system. Thirdly, the methodology adopted in this research will be presented. The fourth analyses the data in detail, and

finally I will discuss the results in relation to the existing literature and the theoretical foundation developed in the second part.

The Conceptual and Theoretical Underpinnings

In this section I create a fusion between the spiritual and physical landscapes of Kathmandu, with reference to the celebration of religious festivals. I define the concepts of spirituality and of a social-ecosystem, and outline the geographic (spatial) methodology for understanding such humanenvironmental interaction.

Spirituality, Religion, Place and Space

Spirituality can be defined as the beliefs and faith of a person in behaving or practicing as a social organism. Human beings are instructed by social processes and institutions, and religion has strong role in framing social behaviors. A religion is a community, an extended form of spirituality, where people hold a similar faith in a super-power that is beyond the human and who controls the social and natural world. A religious community can be organized formally or informally, and interacts for the common good (Durkheim [1915] 1964; Frazer 1922; Koenig, King, & Carson 2012). There are many definitions of religion. Durkheim defines religion as a unified system of beliefs and practices about sacred things that unites its members into a single moral community (Adler n.d.). Such a community validates the different norms, values and actions found in traditional mythical and ritual practices. Schleiermacher (1768–1834) stipulated that the "essence of religion consists in the feeling of absolute dependence" (as cited in Harrison 2006) while Frazer's (1922) understanding of religion is that it is propitiation or conciliation of powers that are superior to humanity.

Beliefs and faiths have spatial characteristics and are associated with theories of environmental determinism. Some geographers have worked in the area of the spatial perspective on religion: e.g., Tuan (1977), Foucault (1986), Lefebvre ([1974] 1991), Harvey (1993), Knot (2005, 2010). However, the discipline of theology has not incorporated the values of space, place or bio-environmental elements in its construction, deconstruction and reconstruction of spirituality, faith and religion. Poor communication between the discipline of theology and society over the theoretical progress made over time has contributed to this negligence, which has in turn detached theology from its interdisciplinary nature.

Religion produces and reproduces social space and so has an inherently socio-spatial attribute (Knott 2005). The concept of "socio-spatial" refers to more than geometric space, and represents also physical, mental and social dimensions, including the materials or resources of the socio-political arena of a place (Lefebvre [1974] 1991, 410-411). A mental or conceptual notion of space is a social construction that is produced and reproduced by human action and interaction (Fitzsimmons 1989; Greider and Garkovich 1994; Jasanoff 2010; Sauer 1925). Geography, therefore, plays an important role in constructing religion in a space, and hence spatial theory and method are, and should be, important components of theological research (Knot 2005).

A Social-ecological System from a Theological Standpoint

A social-ecological system is an integrated system of interactions between human society and the biophysical world (Berkes and Folke 1998). Human society comprises spiritual beliefs and faiths, religious and cultural norms, and social values and practices. The interactions between these elements form a broader social system. The biophysical system, on the other hand, includes the life system of the earth and its interactions with both living and non-living things. The concept of a socio-ecological system thus denotes a system that is integrated into a complex web of interaction between social and ecological systems. Proponents of a socio-ecological system advocate the transformation of mainstream anti-ecological economic development and consumption practices, socio-political and economic institutions, and technologies, into reconstructive, ecological, communitarian and ethical societies (Adger 2006; Beck 2009; Bookchin 1995). The nature-earth has the ability to sustain life through self-regulating and self-organizing systems. However, societal actions against the harmony of nature lead to a society at risk (Beck 1992). Many religions, such as Hinduism and Buddhism, advocate simple living. As spirituality and religion play an influential role in founding a culture, human-environmental interaction provides an ample foundation for studying social ecosystems from a spiritual perspective.

Societies are interlocked human ecosystems, which operate on the basis of individual initiatives and actions, embodied in aggregate institutional structures and community behaviour (Butzer 1990, 685). The cybernetics between humans as a society (religion, culture, economy, politics) and environment (the natural/physical world), are holistically understood as a social-ecological system, which is produced through the interaction between nature and society (Adger 2006). Although Thrift (2002) emphasizes the idea of "nature" having its own powers, a social-ecosystem is a product of different forms of human-ecological interactions across places, peoples and time (Pandey 2016).

The discipline of theology has separated society from nature by ignoring the interactions among the fundamental parameters of the bio-geographic environment, such as body, location, space and place (Knott 2005). A social-ecological model can thus constitute an important approach to theological study since it can incorporate those elements. However, there is an immense challenge because space and the bio-physical environment are symbolic entities. In the context of the present study, an interesting research question could be: How are the Newar people of Kathmandu producing sacred space within the environment (nature) so as to acquire material prosperity (higher farm-output)? The answer to this question is developed through an analysis of the ritual process of the place (Kathmandu) where festivals are celebrated to worship the divine power and to discard the devils and demons. This is just one possible method among others, because there is no single universally accepted way of formulating the linkages between human beings, their religious/cultural practices, and their natural systems. The spatial or "location specific" method (Pandey and Bardsley 2015) or the "locality based approach" (Knott 2009) also provides ample ground for integrating theological research with the social-ecological model, which is why it is adopted here.

Linkage of Nepali Spirituality and Ecology

Nepal is a multi-religious and multi-cultural country where the majority of people follow a form of Hinduism closely interlinked with Buddhism. The *Gayatri Mantra* – the prime or powerful sacred text of the Hindus (Box 1) is recited several times a day, while adherents honor the *bhu* (the earth), *bhuvah* (the atmosphere), and the *sva* (the sky). There are different gods in Hinduism, representing different environmental elements: *Ap* (water), *Agni* (fire and heat), and the *Vayu* (wind). The *Pancha mahabhuta* (five great elements) in Hinduism are: *prithvi* (earth), *jal* (water), *tejas* (fire), *vayu* (air), and *akas* (space/sky). Since these five natural powers are worshipped daily by Hindu communities, the existing social-ecological systems of Nepal inherently incorporate spirituality.

There are various social and religious meanings given to the biodiversity of both flora and fauna in Hinduism. Trees are powerful symbols of abundance; rivers are the goddess; the mountains are the places of Lord Shiva; while the seas and oceans are the place of Lord Vishnu. Therefore, contaminating forests, rivers, mountains and oceans is considered sinful. Different animals are also worshipped by recognizing their draft power. For example, Lord Shiva travels on a Bull, a Lion carries Goddess Durga, a Peacock carries Kumar Kartikeya, while Ganesh (the god who is



worshipped first in Hinduism, and who is a son of Lord Shiva), travels on a mouse. Lord Vishnu sleeps on snakes (serpents) and Saraswati goddess sails on a swan. All of these animals are worshipped in Hinduism. In addition to these. cows are considered to be the Mother Laxmi. There are different animals. consistent with the evolution of the biological system, that are referred to as the God's Avatar (evolution) during

Figure 1 Box 1: Gayatri Mantra and Gayatri Devi (Goddess Gayatri)

different epochs of evolution in Hinduism. These include: *Matsya* (Fish), *Kurmo* (Crab), *Barah* (Boar), *Nara-singha* (Human-lion), *Baman* (dwarf, Early-Human/Neanderthal?), *Parashuram* (Human/Cro-Magnon?), *Ram* (Human), *Krishna* (Human), *Buddha* (Human), and *Kalki* (Super-Human). Furthermore, the concept of *ahimsa* (do not kill) indicates a way of valuing lives in the biosphere. In the same manner, Buddhism, which is not clearly separable from Hinduism in Nepal, is also a form of environmentalism. White hemispherical mounds are common in *Stupas* (Buddhist Shrines), with a shiny *Gajur* above the four-sided cubicle, and eyes painted thereon. The hemispherical mound of the *Stupa* represents the four elements: earth, fire, air, and water. Therefore, practicing Hinduism and Buddhism in Nepal can be regarded as an approach to social-ecological sustainability. Nevertheless, only a few writings promote spirituality as part of nature-culture harmony (Dwivedi 1993; Dhiman 2016; Kumar 2017; Ulluwishewa and Kumarsinghe 2014) and there is chronic scarcity of literature investigating connections between spirituality and social-ecological sustainability. This is not only true in the case of Nepal, but also globally. This paper is therefore an effort to fill this research gap.

Conceptual Framework

Human-environmental interaction is the central theme of any geographic research. Yet the geography of religious studies is limited to spaces and sacred places and their spheres of influence and spatial distribution. This study attempts to assess human-environmental interactions from a theological perspective, one that considers religion a community practice for obtaining better rainfall for prosperity through an abundant harvest in the Kathmandu Valley. In devising a range of conceptual tools and models for this study, a "spatial" methodology of interaction with the "social-ecosystem" is adopted. Knott (2005) notes a serious lack of research dealing with religion in relation to space, particularly by scholars from outside the discipline of geography. Yet incorporation of a social-ecological model even in such geographical studies is rare. The importance and value of studying religion from a local perspective cannot be underestimated, as a locality-based approach seeks to reconnect religion with other social and cultural fields (Knott 2009). This

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study therefore applies a social-ecosystem model on a local scale (Figure 2), or adopts the "locality-based" approach of Knott.

The term "locality" is a condition of a place that is near-at-hand, and its "local particularity" is defined by its physical character and social relations (Jenkins 1999, 17).

The study of religious festivals using a "locality" approach is a method of analyzing religion with reference to a local social, economic, political and ecological context. This research therefore

develops an understanding of celebrations of religious festivals in socialthe ecological context of Kathmandu and assesses the relevance of such celebrations in a dynamic world. As shown in Figure 2, spirituality (such as desire for better rainfall, respect for biodiversity, defining the power of the divine and demons/devils etc.) maintains social-cultural interactions. that in turn sustain festivals and



Figure 2: Conceptual framework of the Spiritual, Social and Ecological Model of Sustainability

celebrations, while respect for nature contributes to promoting biodiversity and improving ecosystem services. A better ecosystem funds food security, and the ultimate outcome of these interactions is a contribution to social-ecological sustainability.

Research Methodology

In the theological study of spirituality, a methodology is more than a set of practical methods. A methodology here refers to a system of principles, practices, and procedures applied to collecting, analyzing and interpreting data (Knott 2005). This study is based on a spatial methodology that incorporates a sum of the components, relations, interpretations and representations of a place and space. It integrates the dynamism of an object or place (the way festivals are celebrated in Kathmandu), the means and the processes of production and reproduction of space (the sacred spaces of Kathmandu), and the properties of these sacred spaces in relation to their dynamic interconnections with the social-ecosystem over time dynamism (Lefebvre [1974] 1991, 38-40; Knott 2005, 35-58). Fitzgerald (2007), for example, re-engages theological research in a locality using a context-specific method. This present research binds together various threads of humanenvironmental interactions to inspire further research into spirituality and social-ecological sustainability. Therefore this research applies a qualitative (narrative) method and is based on both secondary and primary data. Data collection methods in qualitative research are primarily made up of an ethnographic review of documents and participant observations, as well as interviews and group discussions. This work uses a document review (published and grey literature) and interviews.

Nature and Source of Data

The texts of the published and unpublished works related to the celebration of festivals, rainfall patterns, and rice cultivation in Kathmandu were first sorted and reviewed to create social-ecological narratives. The bibliographical search was performed using key phrases, such as social/ecological attributes/meanings of festivals in Kathmandu/food for the gods of

Kathmandu/offerings for the gods of Kathmandu/the process of worshiping gods in Kathmandu, and so on. Both the Google search engine and the library search engine of the Chinese University of Hong Kong were applied in locating literature. Since very limited formal literature is available, grey works were also reviewed to identify the ecological connections of festivals and to construct ecological meanings through viewing the processes of festivals, the food items and offerings made to gods, and the seasons of celebration, as well as assumptions about the role of the god being worshipped as per the religious-cultural beliefs.

There are limitations to obtaining authentic information from grey literature. Therefore, senior citizens and *Guthi* members (the religious/cultural committees of specific festivals) were also consulted to verify the information obtained from the grey literature, and also for the purpose of obtaining additional data. The collected data were then supplemented with secondary data. Many of the festivals celebrated in Kathmandu have mythical stories which vary with the story-teller. To sort out such limitations, data were also verified through a discussion with a small group of the members of specific Guthis (festival committees). The author used professional and social networks to identify the key informants consulted. Therefore the snow-ball method of identifying informants was adopted. The author is a Nepali national and has been living in Kathmandu for the last three decades. As he has observed many such celebrations and has interacted with people participating in these celebrations, information from the fragmented memories of the author are also incorporated in the interpretation. Altogether fifty informants were targeted initially for the collection of information. However, only twenty-seven individuals provided information, and for different festivals. While only eight Guthi members from different Guthis could be communicated with over a short period of time (mid-June to mid-July, 2018), the majority of the data and stories discussed here are the opinions of those eight informants.

Selection of Festivals

Hindu and Newar religious and cultural festivals are innumerable. There is some sort of festival available each day, and people to celebrate them. However, not all the festivals are directly related to rainfall and rice cultivation. It is therefore appropriate to focus only on a few festivals. Considering the theme of this research: "religion for rain and rice," the festivals sampled for study range from the pre-monsoon to the post-monsoon season, the typical season for rice cultivation in Kathmandu. The selected festivals are: *Matsyendranath Jatra* (carnival for the god of rain and requests for more rain after prolonged drought); *Siti Nakha* (local environment day/cleaning of water spouts, birthday of Lord Kumar/festival on sixth-day); *Gathan-Muga* (discarding the devils and demons symbolically by burning effigies); *Gunhu Punhi* (feeding frogs/Holy-thread full moon to Lord Krishna's Birthday); and *Yanya Punhi* (*Indra Jatra* (carnival of the king of heaven and request for less rain in winter). The detailed narratives of these festivals are richer than a single paper can provide. For the present purpose, only those sections of stories directly associated with worship of gods in order to obtain better rainfall for the abundance of rice production, are selected and interpreted.

Method of Interpretation

Some of the ways of extracting the social-ecological attributes of festivals are by looking at the calendar and knowing the season or month of celebration; the role the god/goddess being worshipped is meant to play according to Hindu religious texts or local beliefs; and the food and offering items presented to the gods and served at the feasts. Particular emphasis is thus given to finding the answers to the following questions, while reviewing the literature and consulting key informants:

• What is the name of the Festival? In which *Tithi* (lunar month and day) is it celebrated?

- Who is the god/goddess worshipped? What is the process of worshipping? What role are they meant to play?
- What are the food and offering items presented to the god/goddess or to those served in the feast?
- Are the food and offering items available locally during the period/season of celebration? If not, how are they arranged?
- Are there activities performed during the celebration that are directly related to nature/the ecological system?
- What sort of social and ecological meanings have people developed in relation to celebrating that particular festival?

Limitations of The Work

The author expected to use a systematic review for this research, i.e., an appraisal synthesizing primary research papers, following a rigorous and clearly documented methodology in both the search strategy and the selection of studies, in order to minimize bias in the results. However, the lack of formally documented literature affected the use of this method. Consequently, a multimethod of exploration and documentation was used, including literature review, interviews, group discussion and personal observation. The research therefore followed a quasi-systematic approach. In addition, the research was conducted and the paper prepared over a short period of time (part-time for five months with intensive work only for a month, between May and September 2018), and thus there are a number of limitations associated with the research process, analysis and discussion.

Presentation of Data and Narratives

This section presents data on the celebration of religious festivals for rainfall and a better rice harvest in Kathmandu. The Newar are the dominant inhabitants of the Valley and have been multicultural since prehistoric time. A brief introduction to the Newar communities follows, in order to contextualize their religion for rainfall and rice harvest. Afterwards, narratives are developed for each of the selected festivals.

Nepali Multiculturalism and the Newar of Kathmandu Valley

The Newar culture is unique, with its own specific customs, rituals and practices, having existed for more than 2000 years in the Kathmandu Valley. The Newar proudly preserve their traditions, despite a range of pressures for change. Many studies highlight the richness of the Newar cultural heritage (Löwdin 1986; Khatry 1996; Shrestha 2006), although none investigate the linkage between the religious-cultural assets of the Newar and the social-ecological systems of the Kathmandu Valley. Newar practice both Hinduism and Buddhism and enjoy the cultural assimilation of being located in the capital city. Therefore Newar communities of Kathmandu Valley are the best example of Nepali multiculturalism.

Newari Food Culture of Kathmandu

Nepali people greet each other before communication and interaction by asking if the other has had their meal, particularly the rice. In Newar culture, communication with a neighbor thus starts with the phrase *Ja naye dwuno la?* (Have you had your rice?) As the community has rich religious and cultural traditions, the processions of gods and goddesses, feasts and fasts, and religious pilgrimages are important components of Newar culture (Shrestha 2006). Newar spend a remarkable share of their income on feasting, which helps them preserve their rituals and traditions. However, this spending is often connoted negatively by the saying–*Newa: bigryo bhojle* (Newar are ruined because of extravagant feasting). Equally important is the fact the religious festivals are

often named after food. A few examples are: *Ghyöcaku sanlu* (first-day of the month of Magh, which falls in mid-January, is celebrated by eating ghee, sweets made of molasses and sesame seeds); *Yomari punhi* (the full moon in December when steamed cake of rice-floor is eaten); and *Bya ja nakégu* (the day to feed frogs boiled rice). Each of these festivals has specified worship procedures and celebrations, which are documented in a book, *Nepalvarsa Kriya Nakhahcakhah Pustakam* (a manual). These festivals named after food represent the seasonality of particular food availability in the Valley. After the daily/regular meals, there are specific meals for the festivals called *bhoye*, which contain many items, although they are specific to the feast and the god/goddess being worshipped. Nevertheless, the primary cereal served is the bitten rice (rice flake) known as *baji*. In most of the feasts, *samaybaji* (which includes up to eighty-four types of food items on a pile of rice flake) is served. The feast meal involves separating and offering *dyo chaye* (God's share) before eating one's own. This practice is intended to "feed" and "please" the god.



Figure 3 Samay Baji, a traditional dish prepared with a mixture of 84 different foods offered to gods of Kathmandu

It is believed that the different foods in *Samay Baji* represents good luck, prosperity, fortune, health, and longevity. *Samay Baji* is one of the main attractions of Nepali/Newari cuisine at special festivals.

Religious Festivals for Abundant Rice Harvest in Kathmandu Valley

Kathmandu is located at an elevation of 1450 m.a.s.l. The Valley floor is immensely fertile as it was once a lake, which was drained after a fluvial deposit of fertile soil from surrounding hills. A mythical story behind the origin of the valley depicts Manjushree, the god of knowledge in Buddhism, draining the lake-water out of the valley by cutting a hill at Chobhar (a narrow gorge at the Bagmati River, which is only the outlet for the watershed of the Valley). The Valley is located in the monsoon climate regime, and thus experiences a long dry season of over eight months and two heavily wet months (July and August) with annual rainfall exceeding 250 cm. Therefore, rainfall for winter and for the pre-monsoon crops, and management of water sources, particularly during the pre-monsoon, are important components of the social-ecosystem of the valley. Additionally, the culture of producing wet rice in the rain-fed farms of Kathmandu Valley increases the importance of rainfall, and so people make every effort to please the gods and thus receive sufficient rainfall and a prosperous rice harvest in turn.

The festivals related to pleasing the god of rain start with the celebration of *Matsyendranath Jatra* (the onset of the pre-monsoon rain in May), followed by those maintaining the ecosystem during the rainy season (*Sithi Nakha:, Gatha: Muga:* and *Gunhu Punhi*), and end with *Indra Jatra* (retreat of the summer monsoon) in September. The spiritual and social-ecological attributes of each of these festivals are narrated below in brief.

Machhendra Nath Jatra (May-June):

Matsyendranath Jatra (carnival for the god of rain) is a month-long worship of the "god of rain." There are two *Matsyendranaths*: Rato (*Bunga dyah* - the god living at Bungmati, a small village in southern corner of the valley – in Lalitpur district) and Seto (*Jana Baha: dyah* - the god living at Jana Baha: in Kathmandu). The former is observed in Lalitpur, while the latter is observed

in Kathmandu. There are certain deities that need to be connected *en-route* to the carnival.

Box 2: Myth about Rato Matsyendranath Jatra

Kathmandu Valley had experienced severe drought and famine for twelve years, but the then king and people were unaware of its cause. With the help of a saint, the king learned that Lord Gorakhnath had held back the rains because he had been angered by the Nags (*Karkotak*) when he visited Kathmandu. Lord Gorakhnath had capturedd the Nags through his *tantras*. There was no-one who could free the Nags from Gorakhnath, so on the advice of a saint, they brought Machhendranath (father of Goraknath) to Kathmandu (Patan) from Eastern India in a cart. The Nags were freed from Gorakhnath's captivity after he was appeased by people pulling the chariot of *Matsyendranath*. When the *Karkotak* were freed, it started to rain. Since then the people of Kathmandu Valley have been pleasing the god (Gorakhnath) by pulling Rato *Matsyendranath*'s chariot, to ensure rain in the pre-monsoon season.

Rato Matsyendranath (*Bunga dyah*) **Jatra:** *Rato Matsyendranath Jatra* (Box 2) starts after the red-faced idol from the temple at Kumaripati is paraded in a sixty-five foot-high chariot. As the god lives at Bungamati village for the rest of time, so is also known as *Bunga Dhya*:. The socialecological attribute of the celebration concerns the fact that a black velvet jeweled *bhoto* (vest), which is displayed in the ceremony, was given to a farmer by *Karkotak Nag* (a holy snake) as a reward for curing the eye disease of the wife of the serpent. However, the vest was then stolen from the farmer by a demon. When the farmer was attending the *Matsyendranath* festival at Jawalakhel, he saw someone (the demon in human form) wearing the vest. A fight between the farmer and the demon occurred, but *Karkotak Nag* settled the fight by taking the vest back. He then submitted the *bhoto* to *Matsyendranath* for safekeeping until its original owner was identified. From that time, every year the *bhoto* is shown to the general public, and they are asked if anyone owns it. As no one claims the *bhoto*, it is kept safe for another year to display again in case the owner comes and claims it (Figure 4).



Figure 4: Rato Matsyendranath Jatra Kathmandu (Lalitpur), Officials displaying the vest or "Bhoto" (Photo: onlinekhabar.com)

Box 3: The Myth behind the Seto Matsyendranath Jatra

Historically, Kantipuri (Kathmandu) was a divine place. Every morning people would bathe in the holy river Bagmati and visit Swayambhunath. Such holy works secured the people's place in heaven after their death. Once the god of death, Yamaraj, realized that none of the dead from Kantipuri went to hell, he investigated the reason. His finding was that the divine power of Swayambhunath made this possible, so he set himself to visit Kantipuri and paid homage to the sacred god Swayambhunath. However, King Yakshya Malla, along with his *tantric* guru, then captured Yamaraj and asked him to grant the King immortality. However, as Yamaraj himself was mortal, he could not give such a blessing. Despite that fact, the King did not let him go back, so Yamaraj prayed to Arya Awalokiteshwor (the incarnation of Lord Shiva) and requested he free him. The Lord appeared with a white colored body and eyes half closed and said that a temple needed to be built at the confluence of the Kalmati and Bagmati (Rivers), and that those who paid Lord Shiva a visit would always be prosperous and would live long. Lord Shiva told the King to organize a Ratha Yatra (chariot possession) every year for three days, starting from "Chaitra Sukla Astami," so that he could travel to the houses of those people who could not move or who were disabled, so they might also be blessed with happiness and long life.

Seto Matsyendranath (Jana Baha: dhya:) Jatra: Jana Baha: Dhya: (Figure 5), celebration of the *Bodhisattva* or compassion for Buddhists and god of rain for Hindus begins on the eighth day of the bright fortnight of *Chaulā* (Chaitra Sukla Astami (April) and lasts for three days as the idol of the god is taken on a fifty foot tall chariot and paraded in the city of Kathmandu. The god is stationed at *Jana Baha*: so it is also known as *Jana Baha*: Dhya:.



Figure 5: Seto Matsyendranath Jatra, Kathmandu

The *Matsyendranath* is the god of rain for the dry period. The pre-monsoon period in Kathmandu Valley is very dry, but the time for rice seedling is approaching, so people pray for rain. The treatment of an injured snake by a farmer symbolizes the ecological concerns of the farmer, while the confluence of rivers is symbolic of the importance of water resources. The god's visit (chariots parading around the city) to peoples' homes to ensure the prosperity of those who are physically, mentally or economically challenged, encourages social justice and the economic equity of people. This practice indicates that the spirituality of Kathmandu Valley is attached to the livelihood of the inhabitants.

Sithi Nakha:

Jestha Shukla Shasthi (the sixth day of the bright lunar fortnight in June) is the day when Lord Kumar is born. Kartikeya Kumar (known as *Sithi Dhya:* or the god born on the sixth day) is a son of Lord Shiva, although his mother is not Parwati. Instead, six women, the wives of six Rishis (reverends) are said to be his mothers. Being born from six mothers, Kumar had six mouths, each representing one mother. Kumar is also worshipped with six types of foods (pan cakes) made from six types of lentils and beans. These lentils contain high amounts of protein, which might be needed for the farming community to get ready for hard farm-labour, since the rainy season is approaching and farmers will engage in rice transplantation. The farmland is worshipped to secure better rice paddies. It is believed that the rulers of water i.e., the *Nags* (Serpents) leave the wells and water spouts for other destinations because of reduced water levels caused by the prolonged dry period. It is also the time for the mating of snakes, so they wander around in search of a mate. It is therefore less risky to clean water spouts at this time, so people do this on *Sithi nakha*:. Spiritually, the water sources are recognized as the symbol of the Holy River Ganga, the mother of Kumar, so they are cleaned and worshipped (Box 4).

Ecologically, it is important to clean-up water spouts before the start of the monsoon to prevent water-borne diseases on the one hand, and to increase the outflow of water to irrigate the rice paddies on the other. This festival is also celebrated as "local water day," and so has ecological significance. The day is also said to be daughters' day. This might be because daughters are the

primary members of households to fetch water for domestic use. Hence cleaning water sources can be seen as a way of helping daughters to fetch water. In particular, married daughters and the sons-in-law

Box 4: The myth behind the birth of Kumar

Lord Shiva was making love, but *Agnidev*, following the request of all the gods who suffered from the attacks of demons, could not wait, and so, seeking help, disturbed the Lord Shiva. Immediately Lord Shiva handed *Agnidev* his powerful sperm as a solution to the problem. When *Agnidev* could not handle it, he passed it to the earth. Again the earth could not handle it, so the earth passed it to the river Ganga. Ganga too, could not handle it, and lay it on the bank. The brightness of the sperm was so strong that the wives of six Rishis who came upon the flame while returning from the Ganga after a morning bath fell pregnant immediately. Since they were the wives of Rishis, they afraid of being labeled as "unfaithful women," so they discarded the fetus. However, the fetus became a baby, Lord Kumar, with six mouths.

are sent an invitation to the rice transplantation. Such an invitation indicates the arrival of the transplantation season and the requirement for more farm laborers. The festival is also the day when farmers apply fertilizer in their fields. The activities of this festival are clearly attached to rainfall for rice farming as part of the application of religious beliefs.



Figure 6: Sithi Nakha: Cleaning of Water Sources in Nepal (Photo by Abhishek Bajracharya)

In the *Sithi Nakha*:, houses are decorated with sculptures, or the feather of a peacock. It is an honor to have a peacock since it is the mode of travel (vehicle) of Lord Kumar. People offer *Samaybaji*, including the eighty-four food items to Kumar, and the same is also served at the family feast. *Samaybaji* indicates the rich agro-biodiversity and abundance of food in Kathmandu Valley. The major ingredient of *Samaybaji* is rice flakes, followed by cooked beans, legumes, and varieties of meats. Many of the beans are cultivated on the edge of rice-paddies through inter-cropping. The difference between Newar and Brahmins both worshipping the same god/goddess, is that the Newar include garlic, meat, eggs, and liquor in their offering, which Brahmins do not, because these warm foods are not meant to be eaten by Brahmins. This variation indicates the acculturalization of the gods.

Gathan Muga: (Ghanta Karna)

The *Gathan Muga:* festival is celebrated on the fourteenth day of the dark fortnight in Srawan (*Srawan Krishan Chaturdasi*), generally in August. God Bhairav (an incarnation of Lord Shiva) is worshipped in this festival, while an effigy of a devil, *Ghanta Karna* (a devil with a bell in his ear) is dragged away from the settlements and burnt. This is the day for expelling the ghost, a mythical demon "*Ghanta Karna*" (Shrestha 2006). According to the myth, the demon wore bell earrings to drown out the name of the Lord Shiva (Bhairav) with their jingling. However, as the demon carried out robberies, murders, and kidnapping of children, people knew that such acts were not committed by the Lord Shiva (Bhairav), but by *Gathan Muga*. The people then captured him, dragged him away from the settlement and burnt him. This festival is celebrated after completion of the rice transplantation.



Figure 7: Gathan Muga: (Ghanta Karna), A Devil of Farms in Kathmandu

The celebration of Gathan Muga: has several social and ecological meanings. Since the farmers of the Valley are busy with farm-work until rice transplantation is complete, they may not have enough time to clean their houses, and take care of their children. At the same

time, the task of rice transplantation is over, but time for weeding has not yet arrived. In this period relatively free from farm work, people clean houses, chop bushes and unwanted plants that have grown around the homestead, and collect all rodents and garbage. As every corner of a house is cleaned (which is symbolic of searching for demons), the collection of rodents and garbage together (disease vectors), are dragged in the form of the *Ghanta Karna* effigy. The effigy is burnt to kill the symbolic demons (insects and vectors). Most important is that as farmers have transplanted the rice, they now wish for a better harvest. Demons like *Ghanta Karna* are supposed to harm rice paddies and farm output. Therefore, the burning of the effigy of a demon is symbolic. The worship of Bhairav, the angriest form of Lord Shiva, indicates that a "god-like character" cannot fight against a demon's power.

Gunhu Punhi (August-September)

Gunhu Punhi (Rakshya Bandhan) is one of the most significant festivals of Hindus, and is celebrated on the day of full moon in August (*Srawan Shukla Purnima*). High caste Hindus wear *Janai* or *Yajnyopabit* (holy thread), as a cross-garland, and *Rakshya Bandhan* (tied on one's wrist). These holy threads protect the wearer from devils and misfortunes. These threads are treated with special *mantras* (by reciting sacred texts). A single rope of sacred thread contains nine threads and represents *Omkar, Agni* (deity of fire), *Nag* (serpent), *Som* (moon), *Pitar* (ancestors), *Prajapati* (deity of procreation), *Vayu* (air), *Yama* (deity of death) and *Vishvadevata* (deity of the universe). Wearing such a holy thread unifies the elements of the universe and one's own self.

Gunhu Punhi continues for the next nine days, from the full moon to the birthday of Lord Krishna. On the first day, farmers offer food for frogs on the farms known as *Byanja Nakegu*. It is believed that when frogs sing or croak, fireflies dance in the night. These exciting and appealing nights make *Indra*, the god of rain, happy so he sends rain that the rice field might flourish.

The food served during this festival is mostly the soup of several types of germinated beans and other cereals (broth). It is believed that having this warm and nutritious meal cures health problems such as the colds caused by working in wet-paddies for many days on rice transplantation.

The Saparu (Gai Jatra – Cow-like festival) is celebrated in memory of departed family members. Family members, particularly the son of the departed one, dress- up as a cow and parade in the town, while other family members and *Guthiyar* (members of the same community), as well as other people, provide alms. The cow is an important domestic animal in farming households since it utilizes agricultural residues and provides dung for farm-manure and dairy products for consumption. It is the mother of calves, and the draft power of the farm, and is thus important.



Figure 8: Gai Jatra, People offering food and drink to those who marches in the cow costume

The third day is the *Ropain* Jatra, literally meaning "the day for rice transplantation." Between the third and the eighth day, relatives and members of the extended family are invited for a family feast. The last day of *Gunhu Punhi* is *Krishnastami*, the birth anniversary of Lord Krishna, an incarnation of Lord

Vishnu. Krishna's association with rainfall is that he can save his followers from rain-induced disasters when torrential rain and cloudbursts occur in the monsoon season. This association reflects people's concern about water/rainfall-induced disasters in the summer.

Yanya Punhi - Indra Jatra (September)

Ye means "Kathmandu" and Ya means "celebration," and so together mean celebration in Kathmandu, or the *Indra Jatra*. The festival consists of two events, the *Indra Jatra* and *Kumari Jatra*, with worship of Lord Ganesh as a side event. The main feature of this festival in Kathmandu is a week-long display of a gigantic mask of *Aakash Bhairav*, one of Lord Shiva's twelve

manifestations as Bhairav. The chariot procession of Kumari, the living goddess,³ and of the Lord Ganesh also takes place. A week-long festival begins after the erection of Yosin, (a ceremonial pole or *Lingo* from which a banner of Indra is unfurled) in Kathmandu Durbar Square. The *Jatra* starts on the twelfth day of the bright fortnight and lasts till the fourth day of the dark fortnight of *Yanlā* (Bhadra Shukla Dwadashi). The pole, a tree shorn of its branches and stripped of its bark, is obtained from a forest near Nālā, a small town some 30km to the east of Kathmandu, and is dragged by men pulling ropes.

The festival is celebrated in honor of Lord Indra, the Hindu king of heaven, who is also responsible for the wellbeing and prosperity of the people in regulating rainfall and facilitating abundant harvests. This festival is generally celebrated at the time of the retreat of the summer monsoon, a time when the rice-paddies are blooming. Heavy rain during this period is considered harmful for blooming rice. Therefore, through the celebration of *Indra Jatra*, people ask for a regulated weather pattern, with neither heavy rain nor dry spells.

There is an exotic myth behind the celebration of *Indra Jatra*. It is believed that the Lord Indra himself, disguised as a farmer, descended to earth (Kathmandu) in search of *parijat*, a white flower (Night Jasmine) for his mother Basundhara. As he was plucking the flowers at Maruhiti, a sunken water spout at Maru in Kathmandu, people caught him, suspecting he was a thief. It is a common Nepali tradition that the flowers of Night Jasmine are not to be plucked, and that doing so is sin. This act of Indra was against the common social norms, something only an outsider or a thief will do. Indra was thus put on display in the town square of Maru so that the urbanites could see the thief (Figure 9).



Figure 9: Indra, the King of Heaven, on display in Kathmandu

The mother of Indra was worried about his extended absence, so she also came to Kathmandu and wandered around looking for him. This event is commemorated by the procession of *Dagin* through the city. *Pulu Kisi* (alternate name $T\bar{a}n\bar{a}$ *Kisi*), a wicker representation of an elephant, also runs around town reenacting Indra's elephant, who is searching frantically for Lord Indra (Hoek 2004). After seeing such happenings in the city, people realize that they have captured Indra

³ The Kumari, young girls, are worshipped as the goddess Kumari in various contexts by followers of several religious paths (*marga*) – Buddha *marga*, Shiva *marga*, and Shakti *marga* are the identity of multi-religious faiths, particularly the co-existence of Buddhism and Hinduism in Nepal.

himself, so they appeal and immediately release him. Out of appreciation for his release, the mother of Indra promises to provide enough dew throughout the winter to ensure a better harvest. This mythical story represents the environmental condition of Kathmandu Valley when it is covered by a thick, cotton-like fog on winter mornings.

Discussion

The mythical stories presented above have many meanings, spiritually, socially and ecologically. However, modernization has had consequences for these valuable cultural traditions of Kathmandu Valley. Newar communities of Kathmandu Valley have maintained traditional ecological practices for millennia despite various ups and downs. Kathmandu Valley is the capital city of Nepal, and has experienced rapid urbanization of over 6 percent population growth per year. This sort of increase is pressuring for change. The urban concentration of the Valley has grown by 412 percent in the last three decades (1989-2009-2016) causing the loss of 31 percent of agricultural land (Ishtiaque, Shrestha, and Chhetri 2017). Global climate change has also seriously impacted the weather pattern of Kathmandu Valley, so farmers are facing problems adjusting the crop calendar. The changing weather pattern casts in doubt the relevance of celebrating festivals as the outcomes of these celebrations may not be noticeably positive. The representative festivals presented above uncover the underlying connections between spirituality and sustainability in Kathmandu. Jonathan Z. Smith, in his work To Take Place (1987), refers to "place" as both a noun and verb, as well as indicating something that is both physical and social (quoted in Knott 2009, 156). It is interesting to explore how religion is situated in Kathmandu and how it has related to social, cultural, economic and political forces, and to the ecological conditions of the Valley and formed relationships among them.

The spiritual beliefs of both Buddhists and Hindus concerning *Matsyendranath* are a unique combination of the place and people. *Matsyendranath Jatra* is celebrated to end the dry period and start the summer monsoon. By its name, the festival integrates *Matsya* (fish) *Indra* (god of rain), and the *Nath* (incarnation of Lord Shiva). Nepal, in general, now experiences a reduced number of annual rainy days without notable changes in total annual rainfall amount (Pandey 2016). This indicates increased extreme rainfall events. In the same way, despite the expectation of moderate rainfall after *Indra Jatra*, Kathmandu often experiences either prolonged dry winters or heavy rain. Thick, bright cotton-like fog, together with accompanying cool mornings, have already become rare in Kathmandu Valley due to pollution and changing weather patterns. Socio-economic and environmental dynamics in the valley are challenging the rationale for celebrating festivals, including *Indra Jatra*, since the outcomes are different from those expected.

The socio-ecological narratives of *Gunu Punhi*—the worship of frogs in lush-green rice fields with flowers, sandal wood-pest, dry rice and offering of cooked rice, and nine varieties of legume seeds—indicate the ecological importance of frogs and other biodiversity for an abundant farm harvest. Another meaning is that many small arthropods, fish and Amphibia, the food of frogs of paddy-farms, may have died as a result of the farm-work. The frogs themselves might have been injured and rendered unable to hunt their food. It is thus symbolic to repair the farm-ecosystem, particularly the paddy fields, after completing the rice transplantation. This event is important for the rice culture of Nepal.

There are many social and ecological meanings to the celebration of *Indra Jatra* as well. This festival is particularly focused on regulating the weather of Kathmandu Valley. The need for dew, but not heavy rain, is important to ensure an abundant rice harvest and timely sowing of winter crops. Similarly, bringing the *Yosin* from the distant forest, and pulling it all the way to Kathmandu, indicates the importance of a forest in a distant location and the way people work together for religious-cultural celebration. Another event on the first day of *Indra Jatra* is *Upāku Wanegu* when participants visit shrines holding lighted incense to honor deceased family members. They also

place small butter lamps on the way. It is obviously important to keep livestock, such as cows, in order to obtain butter for *Upāku Wanegu*. There is a specified route for parading Indra's *Yosin* that connects the major deities of the historic settlements of Kathmandu, thereby indicating the harmonization of different powers.

A new issue that the Kathmandu Valley is facing is the search for a rationale for asking the god for rain. Why urbanities would require rain when rain causes the sewers to flood, when they do not have a plot of land upon which to cultivate rice, and where they have no need to clean their traditional water spouts or hitis, since these have already been demolished by the municipal authorities in the name of urban management and planning, are the pertinent questions. These questions are not easy to answer. Yet the rich spiritual, social and ecological heritage of Kathmandu is facing challenges to its existence. The Newar communities are continuing their traditions though there are questions that are not easily answered, such as, what is the meaning of celebrating such festivals when there is no environment remaining for which such celebrations are meant? In addition, the rice flakes used in Kathmandu are made with a special variety of rice named taichin, which is an oval-shaped rice flake. This rice flake has a special flavor and is considered the best of all the kinds of rice in Nepal. Although it is possible to produce such rice outside of Kathmandu Valley, it would definitely lose its original flavor, and also increase the dependency of Kathmandu Valley. In such a context, it is possible to conclude that although the ecological meaning of spirituality and celebration in Kathmandu Valley is surviving, it is on the verge of collapse. Therefore, it must be noted that the "sustain-able" (economically speaking) celebration of festivals is possible, yet since the term "sustainable" (meaning in harmony with nature) has already been hijacked, the sustainability of such celebrations is questionable.

The sustainability of festivals in Kathmandu Valley, in terms of both the participation of people and funding for essentials is thus going to become challenging shortly. The Kathmandu Valley used to be an agro-ecological city; inhabitants had time to celebrate festival during the off-farm season. However, as farmland has already become built-up and the agricultural dependency of the majority of people has already shifted towards entrepreneurship or formal employment, the devotees of *Jatras* may become fewer. Pulling the chariots and parading around the city for as much as a month at a time requires the engagement of a huge number of people. The lunar calendar, which does not coincide with official holidays, could be another problem in the course of time. Nevertheless, multiculturalism has already become the new identity of Kathmandu Valley, which may be of some benefit. Now volunteers from other caste groups and religions now engage in pulling the chariots around the city. One specific day is assigned for women-only volunteer pullers. The multi-ethnic and multicultural nature of festivals in Kathmandu demonstrate a sense of place for everyone (Massey 1993, 65), and scope for the sustainability of celebrations.

The festivals and celebrations in Kathmandu are also facing constraints due to contradictory policies of the Government of Nepal. There are traditions where the presence of the Head of State (the President) is compulsory at some festivals, particularly *Indra Jatra, Matsyendranath Jatra (Bhoto Jatra)*, and *Kumari Jatra*. Retaining the rich tradition of the Kathmandu Valley would be extremely helpful for both heritage conservation and tourism. However, the government's policies and the inappropriate plans of local councils are emphasizing modernization of this heritage city. Such policies are challenging the sustainability of these festivals. In addition, the Constitution of Nepal (2015) is secular, so people following different faiths are questioning the government's support of and engagement in Hindu festivals. This raises the question of whether the festivals of Kathmandu Valley have taken on a multicultural shape.

Kathmandu is the most heterogeneous place in Nepal from a social and economic perspective. Of the total population of Kathmandu, Newar make up 30 percent of the population, Janajati 25 percent, the Brahmins 20 percent, and Chettris 18.5 percent (World Population Review 2018). In such a context, people who are critical of these celebrations might be looking for a "space of representation" themselves, one which is distinct from those conducted directly through lived and associated images and symbols of festivals (Lefebvre [1974] 1991, 39). The festivals and

celebrations in Kathmandu are not limited only to Hindus, so are understood as a cultural rather than a religious practice. Nevertheless, it cannot be ignored that the Kathmandu Valley needs a reconfiguration of its religious identity, and it needs to extend its boundaries, in line with the changing social and economic roles of urbanities in the modern context and the contemporary ecological crises and disorder (DeNapoli 2017).

Social and cultural theorists have reconceived "space" as dynamic, in terms of its relationship to power, history and time (Knott 2005). In such a context, the new generation of Kathmandu may seek for shorter ways of celebrating festivals without losing working days. Similarly, the government body i.e. *Guthi Sansthan*, provides some support for the continuation of various traditional festivals. *Guthis* also own some land and by leasing that land, they collect rent and cover the cost of the celebrations. However, corruption in government mechanisms is serious and executive members and officials are frequently blamed for misuse of the major part of *Guthi* property. Media reports say 90 percent of *Guthi* land has been encroached upon in collusion with *mahantas* (prayers of particular *Guthi*), local political leaders, police chiefs and government officials (The Kathmandu Post 2011). At the same time, there is an ownership crisis over *Guthi* land, since most of the land has been entitled to local people for cultivation (Aryal 2010). The Land Reform Act allows transfer of ownership of parts of the land after it has been cultivated for a certain number of years. The other funding source for religious *Guthi* is crowd funding (devotees' offerings), which is also reported as misused by the various priests in many temples. All these circumstances are causing financial problems for *Guthis*.

The Kathmandu Valley contains its history within itself as an ever-present "etymology of location" (Lefebvre [1974] 1991, 37). In particular, places such as the routes for parading different *Jatras*, and the places where the gods, goddesses, and even the demons are kept and worshipped, all contain the social, spiritual, physical and ecological attributes. This containing facilitates the elements instrumentally engaging with one another along the way, and creates ideologies of multiculturalism between Hinduism and Buddhism. Both of these religions are conventional and are influenced by tantrism. The culture of Kathmandu Valley also incorporates animism and shamanism. However, the narratives discussed above indicate that the spiritual and social heritage that has promoted social-ecological sustainability for centuries in Kathmandu Valley is increasingly vulnerable.

Conclusions

Although religious and cultural traditions have gone through imaginative experimentation and reconstruction globally, Hindu and Buddhist *dharmas* (religion) have been underrepresented in Asian theological scholarship (DeNapoli 2017). This study has contributed in this area by exploring some of the mysterious connections between rice, rainfall and religion in Kathmandu Valley. It is not the intention of this paper, nor would it be ethical, to impose upon the people an opinion about whether they should continue, leave, or modify the ways the festivals are celebrated in Kathmandu Valley. However, the people—at least the new generation—are confronting the baffling phenomenon of cultural and religious beliefs facing rapid changes in the physical environment and ecosystem of Kathmandu. Globalization and modernization have affected the lives of the people in every respect and bring with them their own worldview on religion. The spiritual and religious communities of Kathmandu Valley, whose cultural practices are particularly associated with invoking rain for rice production, are confronted by challenges of sustainability. Nevertheless, the Kathmandu Valley is continuing its religious traditions of earlier periods. Neither can government policies persuade people to defy the material world and reverse their way of living in harmony with nature.

It is interesting to understand the geography of a sacred place through the study of its social ecological narratives of spirituality. In Jonathan Z. Smith's *To Take Place* (1987), he argues that

human beings are not "placed," they bring place into being through ritual and a meaningful world of inhabitants (quoted in Knott 2005, 171). The cultural and religious practices of the Kathmandu Valley have made this natural bowl a sacred space that honors the mother goddess for its ecological sustainability, despite experiencing various challenges. This "sacredness" in conventional places of worship, according to Sophie Gilliat-Ray's article on "Sacralising Sacred Space in Public Institutions: A Case Study of the Prayer Space at the Millennium Dome" (2005), is a consequence of shared rituals and acts of prayer (quoted in Knott 2005, 173-174). However, that "cannot so easily occur" anymore, because of a lack of progressive consensus about the long-term significance of the practices. Lefebvre ([1974] 1991) speaks of a "spatial practice," referring to the way in which space is generated, used and perceived by people in everyday life. The people of Kathmandu Valley apply their perceptions of space with different meanings, and continue in their rituals, such as curing dryness-induced eye-problems of snakes, placing demons at cross-roads (dangerous places) and assigning temples for deities such as Kumari. The people also maintain the tradition of not plucking flowers in the night. They clean water spouts and allocate them for reptiles. Maintaining rice fields for arthropods, fish and amphibians, and growing trees in distant forests, are all actions with ecological importance. Places such as the confluence of rivers are also given religious meaning. All of these examples indicate that the spiritual, social and ecological perceptions and conceptions of the people in the Kathmandu valley are connected in the creation of a sacred place.

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