

Interpreting an urban ritual event in terms of improving the capacity to cope with disaster risk: A case study of Kathmandu

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ABSTRACT

This study uses structural ritualization theory to analyze an urban ritual event and interprets its potential role in enhancing the capacity of the community to cope with disaster risks. The case study area is the urban community of Lalitpur, Nepal, which organizes an annual ritual event. The study area is located in a dense metropolitan region that is predicted to be under eminent threats of natural hazards such as earthquakes. An extensive field survey accompanied by interviews was carried out with the local respondents, organizers and authorities involved in the ritual event to study the ritualized symbolic practices during the event. Field observations, experience and understanding of the ritualized symbolic practices in the study area are also elucidated. The relative standing (or rank) of ritualized symbolic practices that are ingrained within the social life of people are considered as the capacity to cope with stress by use of the Structural Ritualization Theory (SRT). Then, the study attempts to interpret the urban ritual in terms of improving social capacity to cope with disaster risks in a pre-disaster context.

Keyword: urban ritual, structural ritualization theory, ritualized symbolic practices, disaster risk, capacity to cope

1. INTRODUCTION

Urban rituals mark the annual calendar of communities within the traditional neighborhoods of Kathmandu Valley. These regularly repeated rituals are an engine for the local inhabitants that drive their social life. The utility of scientifically studying apparently trivial matters such as rituals in disaster can be doubted at first glance but there are conceptual reasons for the study. Cultural representations such as rituals carry widely accessible ideas and practices that give meaning to social life.

In the study of disasters and other extreme events, the concept of coping can be defined as how the individual interprets his or her situation and how he or she behaves in response to a particular stressor (Lazarus and Folkman, 1984). Coping not only includes an individualized process but also interdependence with society in the face of stressful situations. Urban ritual as a dynamic social event provides opportunities for a community system to function and enhance its efficiency while coping with several unpredicted social disruptions. Previous research in disaster affected communities shows that people

adopt various coping strategies such as seeking support from friends and families, engaging in prayer and other religious activities to seek meaning, and self-blaming or avoiding discussion related to the event (Ibanez et al., 2004). In order to cope with, withstand or recover from a disaster or other extreme event people adopt soft measures, both individually and collectively, to address conditions of social vulnerability (Ibanez et al., 2004). Based on preliminary data from a field study of neighborhoods in Kathmandu, this study analyzes the significance of urban ritual practices in building the capacity of people to cope with disaster risks.

2. LITERATURE REVIEW

The term ‘capacity to cope’ has its roots in a range of disciplines and has been conceptualized with a plethora of meanings. Blaike et al. (1994) suggest that coping is the manner in which people act within the limits of existing resources and range of expectations to achieve various ends. They add that coping points towards people’s ability to help them individually and collectively. Adger and Brooks. (2003) refer to capacity development as the process of enhancing adaptive capacity and the adaptation requires the capacity to learn from previous experience and apply these lessons to cope with future surprises. The capacity to cope with stress is related to the social capital of societies and the functioning of the community system rather than maintaining a stable state of its components (Adger, 2000). The capacity of a system represents not only the set of resources available but also the ability of that system to use these resources effectively (Adger and Brooks., 2003). Twigg (1998) refers to coping strategy as the application of indigenous knowledge in the face of hazards and other threats. Smit and Wandel. (2006) refer to coping capability as short term capacity, the ability to just survive, and employ adaptive capacity for longer term sustainable adjustments.

The literature survey shows that various mechanisms are employed to build coping and adaptive capacities at the community level. In this study, the term capacity to cope with disaster risks has been used in respect of a wide range of strategies and processes that are aimed at reducing the impact of disasters. The following key areas have been identified to contribute

towards building the capacity to cope in the case of disaster risks:

- raise awareness of potential risks and vulnerability
- access local knowledge and resources
- motivate and mobilize local community members
- strengthen social networks and support at different levels

A preliminary survey of the literature shows that there has been little study on rituals associated with disasters. In some studies, rituals are recommended as disaster memories and elements in the process of handling grief and other emotions following a disaster (Eyre, 1999). In order to understand the impact of urban ritual in the community we need some theoretical clarification. Towards this end, Structural Ritualization Theory (SRT) developed by American Sociologist David J. Knottnerus in 1997 is employed to explain the role of ritualized symbolic practices in social behavior. While various studies emphasize the importance of rituals in social life, SRT differs from these as it provides a precise theory on how rituals affect our behavior and facilitates the use of this perspective for empirical research (Knottnerus, 2006). The theory explains the role of ritualized practices in social life. Knottnerus (1997) uses the concept of ritual not only to refer to ceremonial, religious, and sacred behaviors, but in a broader sense to refer to activities such as routinized interaction sequences and social behaviors that occur in all kinds of contexts including secular settings. This approach defines ritual as socially standardized and repetitive symbolic activity. It focuses on ritualized symbolic practices (RSPs), which are defined as action repertoire that are schema driven (Knottnerus, 1997). Schemas are cognitive frameworks. RSPs involve regularly engaging in actions that possess meaning and express symbolic themes. Such practices are found throughout social life in different settings such as periodic family gatherings and celebrations, religious practices, musical performances and other recreational pursuits. RSPs, which comprise much of the activities that are taken for granted in the daily lives of people, rest upon cognitive schemas (Knottnerus, 1997). People may not be conscious about all their actions in everyday lives, but these RSPs are based upon cognitive structures or symbolic frameworks that communicate various thematic meanings (Knottnerus, 1997). The basic assumption underlying this approach is that ritualized practices

play a significant role in providing meaning, focus and a sense of stability to social behavior (Knottnerus, 1997). Also, the ritualized actions performed in a wider social environment acquire significance for actors and then become part of individual cognitive scripts for their immediate world. The theory argues that the ritual practices in which actors engage enable them to cope with disaster events. During disaster events such as hurricanes, floods, earthquakes and fires there is disruption and breakdown of ritualized practices enacted by people in their daily lives. The theory suggests that under such circumstances individuals adapt or cope by reconstituting old or constructing new rituals (Knottnerus et al., 2008). The recreation of ritualized symbolic activities in this type of situation enables people to recreate meaning and focus, and direction in their social behavior (Knottnerus et al., 2008).

Knottnerus (2006) explains how collective ritual events such as rallies, holiday celebrations and religious ceremonies operate and influence actors' emotional states and commitment to a group. Four factors are expected to play a role in the process of generating emotional intensity and building commitment and solidarity within the group. The factors include:

1. **Attention**
2. **Interactional pace / Repetition**
3. **Interdependence**
4. **Resources.**

Attention in a collective event means different symbolic elements, items or logos that intend to draw focus or awareness (Knottnerus, 2006). The interactional pace refers to the degree to which actors are engaged in a sequence of repetitive acts (Knottnerus, 2006). For instance, during collective events we can observe rhythmic behavior such as audiences executing some act in a coordinated manner. Interdependence of actors refers to the degree to which actors may or may not be contributing equally to the ritual performance (Knottnerus, 2006). In some cases, few people may engage in the ritual act while in others all those who are present may equally participate in the ritual performance. Collective events such as rituals may involve multiple practices calling everyone to contribute to the event. Finally resources, both human and non-human are important for enacting ritualized behavior. Human resources include skillful

and knowledgeable members to conduct the practice while non-human resources include equipment, audio visual systems, costumes or food that are also needed to enact the collective activity (Knottnerus, 2006).

Structural ritualization theory also involves the relative standing of ritualized practices or ranking in terms of the four factors mentioned above. According to the theory, rank is a function of these factors [**Rank = F (attention, repetition, interdependence, resources)**] and if RSP ranks high it is repeated often, draws attention, involves encouraging a number of different actors, and resources are available and adequate (Knottnerus, 1997). The higher the rank of the RSPs, the greater is its impact on the behavior of actors at community level and the greater the likelihood that similar RSPs will be reproduced in an embedded group (Knottnerus, 1997). The commitment to ritualized practices also results in strong social ties and relations among group members (Knottnerus, 1997). Although it can be argued that the ritualized practices are not designed consciously for reducing a particular disaster, the ritualized practices managed at the community level are developing social bonds and solidarity, which are important resources that help the community to cope with disasters. In this sense, we can conceptualize ritual as a strategic means to enhance social capacity through the development and maintenance of social relations and mutual support.

While relating the key areas of capacity building with the Structural Ritualization Theory (SRT) we can understand more about how ritual practices contribute in enhancing the capacity to cope with disaster risks (see Fig. 1).

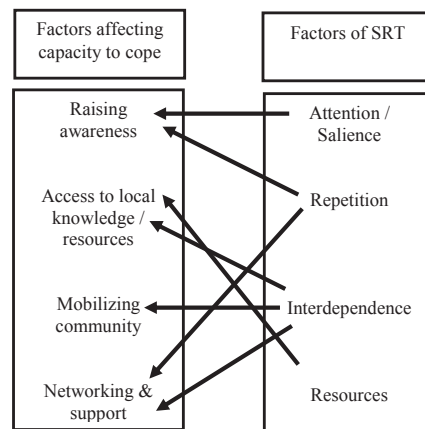


Fig.1 Interrelationship between factors of structural ritualization theory and capacity to cope with disaster risk

The composite theoretical framework conceptualized in Fig. 1 explains how the four factors of SRT overlap with the capacity to cope with disaster risks in the following ways:

- Ritual as a symbolic activity reminds audiences about a past event and helps to build memory about the event. Being an important event in social life, it draws a lot of attention and generates awareness. Several symbolic elements such as logo, flags and banners are used in the ritual event carrying various messages to the audience.
- The regularity of a ritual event over time and in specified urban spaces can be conceptualized as a medium to convey the ritual message among people of the same generation and over different generations. Ritual mishap can help to build memory of disaster and regularly activate the capacity of people to cope on every ritual occasion.
- Rituals are participatory events providing an opportunity for people from different backgrounds, age groups and social hierarchies to cooperate in order to achieve the ritual goals. It is not only a fun event but also teaches community values to the younger generation and develops relationships among people within and outside the community. These networks develop social bonds that can act as channels for information flows to mobilize the community and build mutual support.
- Ritual occasion provides an opportunity to strategically utilize both human and non-human resources to successfully operate different functions that can help to enhance the capacity of the community.
- Indigenous knowledge and skill related to reducing disaster risks can be demonstrated in ritualized practices. People become involved unconsciously in these practices and build their capacity to cope with risks.

On the basis of this theoretical framework, the study analyzes some preliminary evidence of an urban ritual event in the study area in Kathmandu.

3. METHODOLOGY OF THE STUDY

An ethnographic account of a ritual event at Kathmandu was collected during a ritual in the year 2009. The study primarily involved participant obser-

vation, such as taking part in ritual preparation and discussions on the subject matters of the ritual with the local respondents. Over the course of one and a half months of field research, we interacted with local people, ritual organizers, local priests, experts from university, disaster professionals and government officials in order to gather information about the ritual and community participation in Lalitpur in Kathmandu Valley. Our familiarity with the local culture and environment facilitated the research work. In order to obtain complete information about the activities, many long hours of observations were followed up by long discussions and interviews with key informants. The most helpful informants were senior men. In their capacity as shopkeepers and farmers, they were not only able to tell us what was going on but they also engaged in friendly discourse with their acquaintances in the neighborhood to provide rich evidence and facts about the ritual. Apart from them, members of the ritual event organizing committee and local government representatives were consulted at their respective offices to inquire about the ritual event. However, the study largely lacks the perspective that women would give the subject. The interaction with women was constrained due to local cultural practices that impede women from interacting with strangers. Furthermore, we had little interaction with low-caste members of Lalitpur society. For the most part then, information came from personal observation and interviews with local residents in their shops and out on the streets.

The study also utilized secondary information sources such as ritual manuscripts, articles and books. Content analysis was performed to compare and verify the ethnographic evidence collected during the participant observation. Traditional urban communities in Lalitpur, Kathmandu Valley were used as case study areas because of the good repository of cultural heritage such as rituals and their experience of natural disasters such as earthquakes. Interviews were also carried out to grasp the local respondents' perceptions of the ritual event. Those who participated were mostly senior men whom we met at their residences, shops and public rest houses. They gave more interesting insights into the potential use of the ritual event in enhancing the capacity of the community to cope with social disruptions and disasters.

4. CASE STUDY AT LALITPUR, KATHMANDU

Lalitpur, one of the old cities within Kathmandu Valley, is a dense urban area. The total area of Lalitpur municipality is 15.4 square kilometers and constitutes a total of 22 wards. The population density varies from around 540 people per hectare (pph) in the core area up to 46 pph in the outlying areas of new urban development (LSMC, 2008). The present study focuses on densely inhabited areas of Ward 16 and 18 of Lalitpur City with total households of 989 and 1,287 respectively. Past records show that there were regular occurrences of huge earthquakes at intervals of every 75 years in Kathmandu (NSET and GHI, 1998). At the same time, a recent report on earthquake vulnerability analysis in these inner city areas shows that they are liable to be severely affected by earthquake hazards. The indigenous people are living with seismic risks. In this context, the present study on a ritual event is relevant in terms of enhancing the inbuilt capacity of the local community system to cope with social adversities.

4.1 Brief Introduction of Urban Ritual

Traditional urban communities in Kathmandu Valley conduct various urban rituals, each marking some special social moment within the society. There are several ritual processions connecting different open spaces within the city. The configuration of the procession routes is shown in Fig. 2.

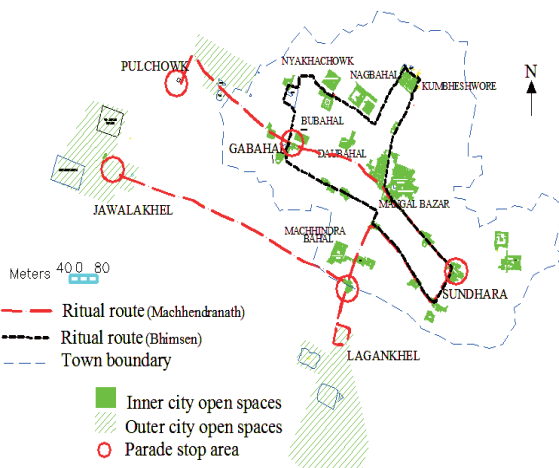


Fig 2 Ritual routes and open spaces in Lalitpur, Nepal (Base map Source: KVMP, 2001)

Among the rituals, *Machhendranath rath jatra* or chariot ritual (see Figs. 3 and 4) is a magnificent

one witnessed by more than fifty thousand people. It is carried out for more than one month beginning from March/April each year. All the participating neighborhoods pay their homage to a shrine kept on a built-in throne on a sixty feet tall chariot, made mainly of wood. The chariot is an honor to the deity, a manifestation of his royalty and power. Participating in the ritual procession is a gala moment when everyone likes to be blessed by touching the god physically. In a stratified manner, the chariot is pulled by men, women and children then general public along the streets. People believe that pulling the chariot brings them good luck. They wish to serve the deity by making arduous efforts pulling the gigantic chariot. Mythologies exist among the local farming community that the deity brings rain and good harvests. The timing of the festival before the monsoon also focuses on farming systems in Kathmandu, so we see wholehearted participation by the population regardless of caste, ethnic background and religious beliefs. Occasionally the smooth chariot procession is punctuated by chariot stops, wailing crowds on the streets and on the roof tops of surrounding houses. Everyone assembles around their neighborhoods for the grand arrival of the city deity, which is a symbol of sanctity bringing harmony in their daily lives. Whenever the ritual procession is disrupted due to a chariot mishap everyone takes it as a bad omen. Some people blame the ⁽¹⁾ *Guthi*, the ritual based-organization for bad management and building a weak chariot, while others show their anxiety about the misfortune that is bound to occur. People remind themselves about the



Fig .3 Chariot pulling along city streets

sequences of bad events in the country followed by ritual mishap such as political instability, death of the King and even natural disasters. Among the misfortunes to which people often relate are the royal massacre of 2001 A.D. and the catastrophic earthquake of 1934 A.D.

The ritual event is also an occasion for thousands of people to get away from their hard labor of daily tasks and enjoy family get-togethers and entertain themselves. During the festival, one can witness young people from the villages gathering in small groups, singing and dancing largely unaware of the festival they have come to attend. Similar to other rituals in the community, people have feasting and communal eating. Guests, especially family relatives are invited to join the feast. After attending the ritual, people eat together to celebrate the auspicious visit made by the city deity in their locality. And then, the deity is expected to bless the people and solve their hardships in life.



Fig. 4 Chariot mishap along the ritual route

Machhendranath rath Jatra as a local festival is part of local life and occupies a significant place in the local calendar, as well as in individual and collective memories. Several studies mention the symbolic meaning of ritual in representing strong local character and community religious beliefs. This study attempts to explore a new dimension of ritual event in terms of its symbolic role in activating social memory of disasters and enhancing the efficiency of community systems to overcome social stress during dynamic socio-cultural events such as rituals.

5. FINDINGS AND DISCUSSION

Analyzing the findings from the field study in

the light of Structural Ritualization Theory reveals that the ritual event contributes towards enhancing the capacity of the community to cope with disaster risks. The explanation below illustrates the four factors mentioned in structural ritualization theory and their relationship with enhancing the capacity of the community in the context of Kathmandu.

5.1 Four factors of structural ritualization theory

5.1.1 Attention / Awareness

The chariot ritual, as an annual event takes the shape of an anniversary celebrated in the memory of a tragic past event. Some people relate this event to a severe drought in the past while others remind themselves of the catastrophic earthquake of 1934 A.D. that occurred after the festive mishap. This event has a strong psychological and emotional impact upon individuals and groups. Such events powerfully evoke and activate the disaster experience as they are remembered and periodically revisited forming a collective memory. As a ritualized symbolic practice the ritual event is able to draw sufficient human attention and while sharing experience in the collective memory people are expected to activate their capacity to cope with the risks.

5.1.2 Repetition

The ritual event is organized annually at different locations within the city area. It continues for more than one month and people revealed that the ritual experience lasts them throughout the year. The ritual dates back to 299 A.D. and the memory of the event and the community values it holds have been passed down through generations. The scenario of the chariot mishap and danger associated with the event remain in the memory of people. It can help to build awareness and activate the social capacity to cope with risks.

5.1.3 Interdependence

The local community system named *Guthi*, which is hierarchically structured according to age and corresponding functions is proactive in preparations and organization of the ritual event. The city of Lalitpur consists of fifteen different *Guthis* responsible for carrying out various activities in rituals such as building a movable shrine, collecting different

items to conduct various rites and organizing large feasts for community people. In the process of realizing enjoyable and accident free festive goals, local residents are compelled to act in a spirit of mutual aid, interdependence, teach civility to the local youth and take care of local neighborhoods. Features in the procession include, neighborhood elders directing the procession and crowd, local volunteers ensuring the safety of ritual participants from possible chariot accidents, chariot pulling in groups, young adults exhibiting musical performance and participants chanting prayers in unison. The event features a slower paced parade in which small children get a chance to pull a small chariot. On a special occasion organized during the later part of the festival, women also join in and pull the chariot. In this way, the festival incorporates people from every sector of society and most importantly children are acculturated to and participate in the event from an early age. Since roles in the festival are defined by age hierarchy, it also works as a rite of passage providing community members a sense of maturity and manhood. Thus the festival and its supporting organization can be seen to both embody and transmit social values in the process of continuing a local tradition.

The ritual function itself mirrors the organization of society. Rules and regulations are passed down through a hierarchy with the community administration at the top and individual residents at the bottom. This structure is duplicated in daily life as well, and being able to operate effectively in a festive atmosphere contributes in enhancing the efficiency of the system. Residents, through the process of preparation, presentation and celebration, spend a considerable amount of time in close contact and are highly interdependent. The resulting kinship is very important since it represents emotional ties of common understanding developed through the process of shared experience. Residents belong to many types and levels of groups throughout their social lives but the emotional ties they develop through this type of close contact remain some of the strongest. The community consciousness and cooperation that are engendered in local people become extremely helpful in disaster situations. These community systems also play a vital role in solving local problems and managing the local life of people apart from conducting annual festive events.

5.1.4 Resources

Finally, both human and non-human resources are extensively utilized during the ritual event. There is reorientation of space during rituals. Streets and open spaces are cleared out for free movement of the shrine. Residents participate at all levels of planning and execution. In doing so, the residents must assume proactive roles as members of society, interacting with each other. A number of services deemed essential to a successful event are provided such as first aid, fire safety courses or hiring technical advisors to provide training of these kinds. As uncertainties are part and parcel of the event, local organizers are kept alert throughout the event. In some instances, attendees' burst into drunken revelry and police need to be called in to make arrests. While overcoming these uncertainties on festive occasions, local community systems build functioning capability that can be useful for coping with unforeseen circumstances during disasters.

Based on findings about the ritual event in Kathmandu, the ritual practice contributes in enhancing group commitment of actors in overcoming local level problems during the festive occasion. In terms of the findings on four factors of structural ritualization theory, we suggest that the ritualized practice is dominant within the community. The ritualized practice shows a high degree of attention, repetition, interdependence among actors and use of both human and non-human resources. On this basis we can claim that the ritual practice ranks high. Also, according to the theoretical framework of this study we can conclude that the dominant standing of this ritualized practice indicates its higher potential in enhancing the capacity to cope with disaster risks. The proactive community system during ritual functions is building a capacity that is useful in the wake of catastrophic events and disasters. However, everything is latent in the present context of a non-disaster situation.

The local perceptions of people regarding the ritual event provide some insight in the impact of such practices in the social life of residents and enhancing their capacity to cope with social stresses such as disasters.

5.2 Local perceptions about ritual

The local passion for festival is so strong that various neighborhood *Guthis* begin preparations sev-

eral months before the event. Festival is central in the lives of residents so they do not attend work or plan other major events during this time. When asked the question; “What do you think about the festival as a resident of Lalitpur?” a local shopkeeper aged fifty-five responded that it is like a party and is an important event for the residents. He went on to explain that the festival is important in his life because it was something he participated in when he was younger and something in which his father and brothers still participate. Many residents perceive the festival as a well deserved break from the monotonous normal life and an opportunity to renew friendships with neighbors and visit public spaces in their surroundings. While some residents perceive benefit in participating, whether they see it as an opportunity to socialize or simply because it is fun, there are some who perceive festivities as too hectic and bothersome. The latter group of residents argues that rituals look more chaotic and unorganized and even cause human casualties because of weak preparation and planning. Most of these respondents were young job holders and housewives who did not like public gatherings and were not willing to socialize with strangers. At the same time, it should be noted that on several occasions, residents who make such remarks attend and actively participate in the ritual as they are tied to their local custom and an immense social pressure and fear of social exclusion prevails among them. Many participate in the ritual event for these compelling societal reasons.

Most of the residents are not conscious about the strategic use of ritual functions in developing the capacity of the community to cope with disaster risks. People adopt their respective roles within the community system to successfully conduct the ritual without any casualties. But many of them are familiar about the chariot mishap, which is dramatic and threatening to life and property. People also show their concern about human injuries and crime during the ritual occasion, and mention that they are becoming more conscious to increase the level of safety each year. Local organizers are more alert and seek support from local police, the Red Cross, and emergency centers at hospital to ensure the safety of participants during ritual occasions. Community volunteers from *Guthis* are mobilized throughout the procession route to minimize any rioting and help any participants who

have minor injuries. Another interesting feature of the chariot festival is the general belief that if it goes awry, it forebodes some disaster in the city. Among the evidence referred to here by local respondents is the massive earthquake of 1934 A.D., which occurred in the same year that the chariot suddenly collapsed during the procession. Through this it can be realized that the ritual event has been remarkable in contributing to the creation of memory and awareness about the disaster event.

An interesting perception at the local level about the ritual procession is that it brings sanctity within city spaces and ensures safety by driving away evil spirits. The rationale behind this local belief can be interpreted in terms of visual surveillance that ritual procession provides in urban areas. Regular movement of residents around city spaces symbolizes a monitoring activity to check the status of open spaces and their use. In this sense, ritual procession is vital in keeping the widely distributed open spaces intact and helping to avoid private encroachments on public spaces. Open spaces located within densely built urban housing are the breathing areas during normal times and evacuation spaces during disasters such as earthquake. In this manner, the ritual function resembles community disaster risk reduction practices, which can be explored in much detail by a closer look at the various facets of urban ritual.

5.3 Possible usage of urban ritual in disaster risk reduction practices

Local inhabitants within the traditional urban settlement in Lalitpur are under eminent threat of seismic risks as the area is regularly obliterated by a catastrophic earthquake of 8.4 Richter scale every 75 years. In this context, it is relevant to highlight the utility of local cultural practices such as ritual in disaster preparedness and risk reduction in order to cope with real emergency situations. For instance, one of the findings shows that ritual procession serves as a town watching practice that helps local people become familiar with open spaces and the routes linking these spaces. It has been confirmed by a participatory mapping exercise and focused group discussion organized by the study with respect to open spaces and evacuation routes among a group of local people and members of a community disaster management committee in Ward 16 and 18 of Lalitpur. While mapping

the access to the identified evacuation spaces in the neighborhoods, most of the participants chose a route from their place of stay overlapping part of the ritual route in the city. The selected open spaces by local residents as evacuation areas during participatory mapping were also agreed upon by scientific experts who included a disaster expert from a local NGO (Non Government Organization) and a city planner from the municipal office. The experts mentioned that the selected evacuation spaces were suitable for disasters like earthquakes in terms of the availability of infrastructure such as wider roads, public shelters, public water supply, larger size and proximity from households. Thus, it is found that ritual practices are crucial in enhancing awareness about urban open spaces, which are important infrastructure for evacuation in case of disasters. This can contribute in saving the lives of people living with seismic risks in the dense and fragile built fabric of old city areas in Lalitpur.

Rituals conducted in various urban open spaces are solely local initiatives and the traditional social institution named *Guthi* plays a proactive role in leading the event. Local people with different ethnic backgrounds, gender, age groups, occupational groups and educational backgrounds gather together and in this process renew and rebuild their relationships with each other. Several old aged and disabled people in the neighborhoods who are prone to becoming victims during disaster are expected to be recognized with the active involvement of household members in various ritualized practices. However, this fact needs to be verified with a closer study in the field.

The artifacts and social skills people exhibit during ritual practices are the most viable social resources that can be useful during disasters. For instance, the equipment such as large hammers, ropes and large cooking utensils for ritual feasts can serve people during disaster rescue and recovery. Also, a community building named ⁽²⁾ *Chapa* in the local language, is located an accessible distance from neighborhood households where all the public equipment is stored. Mostly these public store houses are located beside open spaces within every neighborhood. There is a possibility of utilizing these public houses as community disaster centers where first aid boxes and other essential items can be stored for compelling immediate needs of people during urgent response efforts in disasters. Support from local NGOs, INGOs (Interna-

tional Non Government Organization) or government organizations is necessary to establish these centers. Along with this, open spaces at various locations of traditional settlements can serve as convergence points after initial evacuation, and also provide space for medical assistance and disaster rescue. Coincidentally, these open spaces are nodal points where neighbors come together during the ritual activities. Apart from this, local people possess indigenous construction skills for building the ritual chariot and traditional buildings, which are useful during disaster recovery and quick resettlement of disaster victims.

NGOs and INGOs such as the National Society for Earthquake Technology (NSET, Nepal), National Centre for Disaster Management (NCDM), OXFAM and Action Aid Nepal are concerned about natural disaster risk management activities in Kathmandu Valley. A separate institutional body in the government under the home ministry is the central authority in charge of mostly post-disaster management activities in the country. NGOs have been proactive in disseminating earthquake and fire risk information and reduction measures within the urban communities of Kathmandu. The NGO activities are crucial for pre-disaster awareness building and disaster preparedness. In the mean time, significant achievements in this sector can be made by employing the disaster related socio-cultural practices at the community level that have long played important roles in the social lives of local people.

Ritual scenarios can be used strategically as an apparent disaster preparedness exercise to train local people and activate their capacity to cope with disaster risks. For instance, the sixty feet tall chariot that swings sideways when people pull it along the city streets gives the impression of mansions that may swing similarly during severe seismic vibrations. Occasionally, the chariot collapses (see Fig. 4) symbolizing failure of tall and weak structures during random shaking. An analogy can be built between ⁽³⁾ *shake-table* demonstrations carried out for earthquake disaster awareness and the swinging chariot. More proactive roles of disaster professionals and facilitators are required to convey disaster related messages from spectacular ritual events. Various agencies are involved in ritual events in order to ensure the safety of large numbers of participants. Local authorities such as police, volunteers, fire agencies and hospital

are kept alert for timely response in case of casualties. In this process, community authorities are mobilized and trained to cope with sudden threats, which are similar to disaster simulations conducted for enhancing community preparedness.

In a developing country such as Nepal, the government has low capacity to invest in disaster risk reduction measures and resources to respond to upcoming disasters. Self-organized community practices are the most efficient ways to train local people about possible disaster risks and the various means to cope with them. At the same time, inbuilt community systems such as *Guthi* will be the first to assist victims after catastrophic disasters. So, disaster risk reduction efforts that are locally calibrated to meet the needs of a community under threat can be better realized with the joint collaboration of disaster professionals (NGO's or government sector) and local *Guthi*.

6. CONCLUSION

There has been little study on socio cultural practices such as rituals in pre-disaster planning and building the social capacity of communities. This study focuses on the roles rituals play in solving local problems and enhancing the capacity of communities in pre-disaster situations. It uses the concept of structural ritualization theory to explain how ritual practices help in building the capacity of communities to cope with disaster risk. Based on a case study of ritual practices in neighborhoods of Kathmandu, the behaviors of local residents are identified that can help them to cope with uncertainties during festive occasions. Similarly, symbolic practices are identified during the ritual event that influence the emotional state of the actors and build their commitment to the group. Local people's perceptions examined in this study strongly suggest that rituals activate the social memory of people about past disasters and contribute in building awareness. The preliminary data presented here shows that the ritualized practice of parading raises the awareness of community people regarding their surrounding open spaces, which is useful during disasters for evacuation. One practical implication of this study is that more attention should be paid to urban ritual as a memorial event to enhance awareness about disasters. In the context of Kathmandu, the role of the indigenous community system named *Guthis* is

vital for successful organization of ritual events. However, due to modernization and increasing population of migrant communities the traditional social values that had sustained the community system are slowly degrading. It is important for the local government to introduce appropriate policy measures to save these local social systems without which the social functions cannot be sustained, which would subsequently reduce the social capacity built through these systems. Through this study, it can be realized that ritual activities are crucial in keeping the local people proactive and obedient to their roles within the social system, which helps the community to cope with adversity.

This study investigated a ritual event that was not designed to manage a particular disaster as such and may sound irrelevant at first. However, although the urban ritual may not be designed as a risk reduction medium intentionally, there are good reasons to hypothesize that the traditionally repeated voluntary involvement of city residents annually in various city spaces over a long period of time makes it an effective platform for social marketing of disaster-related risk reduction measures, particularly effective for rare event disasters, for which common people may not be able to maintain their coping capacity against risks. Collaborative efforts between ritual organizations and community based disaster risk management organizations are important for sustaining risk reduction efforts in the study area. Initiatives are taken by local NGOs in raising awareness about earthquakes and conducting disaster drills in the community. These can be further enhanced by strategically using the *Guthi* or ritual based organizations so that an effective community outreach program in disaster risk reduction can be designed to realize the desired impact in the community.

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- (1) The residential neighborhoods or various social groups within it, form a social trust called ‘Guthi’, collectively owning a large parcel of land, known as Guthi land. Such land, which exists within the settlement and around it, is used for farming as well as for carrying out various socio-religious practices within the community. Guthis are inbuilt social systems based on familial and non-familial relations and play vital roles in people’s social lives for instance, carrying out rituals, funerals and solving problems at the local level.
 - (2) Every neighborhood within indigenous settlements of Lalitpur consists of public amenities such as stone water conduits, rest houses and a community building named *Chapa*. A *Chapa* is a public store house where necessary items for community gatherings such as festivals and feasts are stored. All these items are publicly owned by indigenous social institutions i.e. Guthi and used during rituals, marriages and other social events.
 - (3) Shake tables are hands-on experiment for students or trainees to investigate the seismic behavior of buildings to better understand the way in which building structures respond to earthquakes. In earthquake disaster awareness programs small scale building models are erected on tables that are subjected to artificial vibration in order to demonstrate how such structures behave during earthquakes.

