

# LÜN-HITIS (GOLDEN SPOUTS) OF BHAKTAPUR

with special focus on Lün-hiti of Bhaktapur Durbar Complex and Taumadhi

In partial fulfillment of the requirements for the degree of Master in Art (MA),

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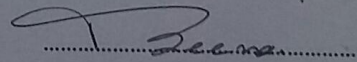
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Letter of Recommendation

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## LETTER OF APPROVAL

This dissertation prepared and submitted by *Mr/ Mrs. Satya Shila Kashajoo* entitled "*LUN-HITIS (GOLDEN SPOTS) OF BHAKTAPUR with special focus on Lun-hiti of Bhaktapur Durbar Complex*" has been accepted as partial fulfillment of the requirement for the Master Degree of Arts in Nepalese History, Culture & Archaeology.

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## Glossary

Adhkari:	Appointed officers by Government
Ashram:	The peaceful place made to by Muni and Rishi to spend their life
Ashwamegh Yagya:	Fire sacrifice in which a horse is offered
<i>Bajra</i> :	traditional binder used in monumental construction.
Bhottabisthi:	tax taken to the people come from the traders of Tibet.
Chowk:	courtyard
<i>Dakshinabhimukh Hiti</i> :	Water conduits with its spout facing towards South.
<i>Dhalape</i> :	Officers appointed for Canal
Dhungedhara:	stone spout (in nepali language)
Dikshya:	Teaching
Gaihridhara:	deep fountain in nepali language
Gangasnan:	holy dip
Gosthi/Guthi:	Trust for the of spout, pond and temples as we as Patis.
<i>Gwankha</i> :	niche
Hiti:	water Spout in newari/fountain
<i>Hitigah</i> :	basin of a water conduit including flooring and basin walls, but not the plinths
<i>Hitimanga</i> :	water spout in the form of the mythological makara
<i>Jahru</i> :	reservoir fountain; spigot fountain (nep.: tutedhara, skt.:jaladroni)
<i>Jala</i> :	water (ritual water)
Jaldaan:	donation of water
Kalash:	water vessel
<i>Kamandali</i> :	water pitcher
<i>Kirti</i> :	fame; merit
<i>Kirtimukha</i> :	'face of glory; a lion's head devouring a pair of snakes depicted on the head of tympanon
Kulo:	Canal
Kuwa:	Dug-well
Lhohahiti:	Stone spout (in newri language)
<i>Lhohiti</i> :	Water spout
Linga:	phallic symbol representing Siva, frequently erected in connection with water conduits.
<i>Lu-hiti</i> :	water conduit with spout covered with gilded gold metal
<i>Luti/Sunpani</i> :	water in which gold is dipped
Makar:	mythical animal, vehicle of goddess Laxmi
Naga:	Snake
<i>Nitya</i> :	Daily
<i>Pashchimabhimukh Hiti</i> :	Water conduits with its spout facing towards west
Purna kalash:	ritual vessel filled with water, one of the eight auspicious symbols known as <i>astamangal</i>
<i>Purnakalash</i> :	filled water pot kept during Pooja, 'vase of plenty'; an auspicious symbol , also found at water conduits and spigot fountains.
<i>Purwabhimukh Hiti</i> :	Water conduits with its spout facing towards east.

Raj Kulo: Royal canal

Ropani: Unit use to measure land

*Snan*: Bath

*Thyasafu*: old books written where one can get old information about religion and old traditions and sketches of god and goddess

Tirtha: Pilgrimage

Tumbi:

*Uttarabhimukh Hiti*: Water conduits with its spout facing towards north.

## CHAPTER I

### I Introduction:

Nepal is the small but still rich country from cultural and artistic aspects. It is located in between two giant countries; India and China. It lies in the northern hemisphere in between latitudes of 20° 22' and 30° 27' north and longitudes of 80°04' and 88°12' east measuring an area of 147.181 sq km. Bhaktapur is one of the ancient cities of Kathmandu valley and one of the beautiful and well conserved ancient cities of Nepal. Bhaktapur, literally means the 'city of devotees' is renowned for its elegant art, fabulous culture, colorful festivals, traditional dances and typical Newari lifestyle. The city was also called by different names in different time frame in the history of Nepal valley such as *Bhatgaun* (literal meaning of *Bhat* is rice and *gaun* is village), *Bhadra Gram* (village of gentle people), *Khwopring* as mentioned in the inscription of Mandev I of Devpatan in 477, later called *Khwopa*, *Makhwopring* as mentioned in the inscription of Shivadeva and Anshuverma in 537 (Khaniya; 2005:1). This conch shaped historic city, Bhaktapur spreading over an area of 19 sqkm and lying at 13km east of Kathmandu, is situated at 133 meter from mean sea level. Because of its art, history and cultural value, the city is also called "Rome of Asia" (Bhaktapur, 2059:9). This city was the capital of Malla kings for almost 315 years till the reign of King Yaksha Malla (Khaniya; 2005:2). So lots of Malla art and architectures are found here as a heritage site. The city is predominantly inhabited by Newars who are considered as aboriginal people of the Kathmandu valley (Becker-Ritterspach; 1995:7).

As we experienced, thirst of water cannot be fulfilled by any other elements. But its importance does not bind till it. On the basis of these beliefs Hinduism institutionalized *Gangasnan* (holy dip) as part of their religion (Amaty; 2003:5). Water is one of the basic needs of human civilization. Without water no life is possible. The life saving qualities of water is illustrated in the Hindu and Buddhist culture in many ways. Without setting up *Kalash* (water vase, filled with water) no one commences any rituals. The *Purna kalash* (filled water pot) is a symbol of abundance (Becker-Ritterspach;1995:1). Even, during the time of someone's arrival and departure to and from his/her house, a *Kalash* is set up on the either side of entrance to welcome or farewell for their safe journey ( Amaty: 2003: 5). Accordingly to Hindu or Buddhist tradition, a *Purnakalash*, (the pot filled with water) is a symbol of abundance (Becker-Ritterspach; 1995:1). So it is believed that there is no other greatest bequeath than *Jaldaan* (offering water) (Amatya: 2003:7). People

migrated from northern India such as Lichchhavis, Shakyas, Mallas, Brijjis etc, to Kathmandu valley settled in the banks of Bagmati and Vishnumati (Dhobikhola and Rudramati) and institutionalized water culture in the ancient time (Amatya;2003:6). Similarly in many Hindu epics like; “*Nepal Mahatmaya*”, “*Pashupati Puran*”, “*Vishnu Dharma Sutra*” etc, the importance and merit of water is mentioned (Amatya: 2003,7)

Water is the most important element for all the creatures, so it is also important to know about the sources of water, from where it comes. There is wide range of sources of water such as Himalays, glaciers and snow fed rivers, lakes, ponds, wells, waterfalls, hot springs and other forms of wet lands. There are around 6000 rivers streams, starts from three different regions. Koshi, Kankai, Kamala, Bagmati, Rapti and Babai originate from Mahabharat Range, third and the last seasonal streams in Terai start at Sivalic Range. All the rivers of Nepal finally mix with the Ganges(Amatya, 2003:1). We can divide the water sources into two groups; namely natural sources and artificial sources of water that mean man made water sources.

One of the manmade water sources prevailed in Kathmandu valley is Water spout, which has a very long history. In Lichchhavi period, stone spout was called “*Pranali*” and “*yiti*” or “*iti*” was called in Malla period (Amatya; 2003:46). One of the most famous legends with respect to the water conduit concerns the Narayan hiti of Kathmandu. The legendary king Dharmadeva (ca AD450), father of king Mandev I (AD 464-05), made his son commit patricide in order to revive the dried-up water conduit. The astrologers had told the king, that the only way to get the conduit functioning would be by sacrifice of a man with thirty two virtues. The only man who fitted this description was the king himself. The king asked his son to kill the first person who slept near the spout the coming night. Unknowingly the son killed his father. The *Maker*-head of the two flanking spouts (the central one is a replacement of the late Malla period) recoil snouts backward in horror (Becker-Ritterspach; 1995:22). The archaeological fragments of stone spout dated 751 AD recovered from archaeological excavated conducted during 1980s near the Satyanarayan temple in Haadigaon, Kathmandu reveals existence of stone water spouts during the Lichchhavi period. Another water spout situated in northeast to Patan Durbar Square build during 570AD is the oldest of all (Amatya;2003:6,7). The range of these structures which can be termed as ‘water architecture’ of ancient Nepal may be found generally as part of urban or village ensembles and include residential and religious buildings, enriched by numerous small scale structure which make the Newar settlements unique (Becker-Ritterspach; 1995:3). Different terms such as *Gahiti* (deep fountain), *Lvahahiti* (stone fountain) or simply *Hiti* (fountain) are use to

denote 'water spout' by the Newars, however the Nepali speaking people choose the terms *Gaihridhara* (deep dountain), *Dhungedhara* (stone fountain) or *Dhara* (fountain). The English term 'water conduit' is applied in accordance with the UNESCO Kathmandu Valley Inventory.(Becker-Ritterspach:1995:7)

## 1.2 Statement of Problem

As Kathmandu valley is known for its artistic beauty and monumental art works whether they are palaces, water spouts or sculptures. Many art pieces are scattered around the valley. Among them Bhaktapur is the one with living art museum with full of Lichchhavi and Malla art works. Bhimdyo hiti, Golmadhi hiti and two chaityas found in Bhimdyo hiti's courtyard are made in Lichchhavi period. There are many other sculptures and chaityas are found in Bhaktapur from Lichchhavi period as well as from Malla period. Lots of sculptures and Thanthu palace (Malla period) are still exist in Bhaktapur. Water spouts were one of the most prevailing sources of drinking water in the past. Being one of the most prevailing sources of water, *Lho-hitis* were assumed as the place of greater importance from spiritual aspect as a place of purity and materialistic aspect as source of life saving element. So it was the most important aspect of the society in that context. In due course of urbanization, drinking water taps supplies have been introduced in a house level. At the same time speeding up urbanization without proper urban planning, keeping due consideration of traditional water sources channel (*kulo* and *Rajkulo*) which were perfecting functioning till few decades ago have been blocked. As a consequence, nowadays most of the water spouts are drained up and many of them have been already buried. When one observes water spouts around Bhaktapur, they are not in good condition. According to the article "Hiti Heritage" written by Ukesh Raj Bhujju, in case of Bhaktapur out of 87, 18 are not working, 33 are naturally functioning, 35 are pipeline and 1 is not existed. Even, drained waterspouts are also not in good condition and sculptures installed over there are slowly disappeared and stolen.

There are some common patterns and images of religious deities of hindu and buddhist religions found around water spouts. Statue of Vagiratha holding conch is usually found below the water spouts, believing that he brought water in earth from heaven. In case of hindu deities, images of Uma-maheshwor and somewhere Laxminarayan is installed. While talking about Buddhist deities, images of Buddha, lokeshwor and Taras are found and in some cases chaityas are also installed in the courtyard of water spout. Water is flowed from the mouth of *makara*, coz it is believed, water come out from *makara* is always pure since *makara* is the vehicle of

goddess laxmi. People come to water spouts early in the morning to take bath and make themselves fresh and at the same time; they offer water to their religious deities.

Due to many reasons, the religious and cultural significance of water spout and value of sculptures are also going to be forgotten. Despite being a historical monuments and sources of water, the local people do not pay much attention on its deteriorating condition of these monuments. People were not much aware of social, religious and cultural value of these traditional water spouts and artistic values of those sculpture installed there in. Hence the aesthetic value and, religious significance of water spout and sculptures as well as motifs found in water spouts are at a very critical condition. There are many water spouts found in Bhaktapur and they have their specific importance according to their myths, position and contained.

As mentioned above, traditionally water spout are made out of stone. That is why they are called *Lho hiti* in Newari language. *Lü* is the newari term for gold so if the water spout is molded with metal as gold it is called *Lün -hiti*. There are many traditional stone spouts in Bhaktapur. Out of them, two are *Lün -hiti*(Golden Spout) in Bhaktapur, one is the *Lün -hiti* of Taumaddhi tole, at southern lap of Bhairava Temple. It is one of the important traditional water spout which is important for its aesthetic beauty and for the presence of the sculptures of *Navagraha*. It is very rare to find out the water spout with such sculptures of *Navagraha*. Another important *Lün -hiti* is located inside the Durbar complex outside the Taleju temple of Bhaktapur. Both of them are master pieces of Golden spouts of Bhaktapur which are in condition to conserve and challenge to regenerate. Hence the historical, artistic, cultural and religious significances of these two *Lün -hitis* are felt needed to study, so in this proposed study these two specific *Lün -hitis* of Bhaktapur are focused.

Many scholars, culture experts, art historian had written about various water spouts scattered around the valley. Similarly a quite a number of university students from different faculties had studied on this subject matter but till no in depth study has been conducted so far in particularly focusing on two important Golden water spouts of Bhaktapur.

### 1.3 Objective:

This research explores and relates the links and clarify the following aspects of the water spouts in general with example of two *Lu-hitis* of Baktapur ie. *Lün –hiti* of Taumadhi and *Lün –hiti* of Taleju in specific.

- i) The architecture of water spouts;
- ii) The sources of water and water engineering;
- iii) The iconography of the sculptures in and around the *hitis*;
- iv) The religious, cultural and social significances;
- v) Comparative study of two *Lün-hitis* of Bhaktapur

#### 1.4 Justification:

Water spouts are one of the most important monument of Newar societies in Kathmandu Valley from remote past to till now. Its architectonics and scientific way of mechanism make them very useful for human beings. There are many articles published on the topic Water spout. Many scholars from Nepal and Foreign have written on water spout from different aspects, like Raimund O.A. Beecker-Ritterspach, Thomas M.C. Pinhorn, Hari Ram Joshi, Sukra Sagar Shrestha, Lila Bhakta Munankarmi, Saphalya Amatya, Om Dhaubadel (Researcher) are the few to mention. Students from different university and faculties like Environmental Science, Nepalese History, Culture and Archaeology and Engineering have conducted studies and prepared dissertations focusing on different aspect of *Dhunge dharas*. Similarly many NGOs preformed researches on the topic Water spout and some books are published as well but there is not any single study so far conducted focusing on these two *Lün -hitis* of Bhaktapur. So researcher explored two water spouts including the sculptures found in the surrounding as possible as the resource of the water (*kulo/Rajkulo*) and their religious and social relations.

#### 1.5 Methodology:

The study was primarily based on primary sources of information collected through field observation, intensive interviews of concerned authorities and scholars on the subject matter. Besides that secondary information such as published and

unpublished books, documents reports those brought out from different organizations are consulted.

In order to acquire first hand information following information/data collection methods were applied:

- Observation
- Interview
- Questionnaires
- Maps and photographs
- Drawings

#### 1.6 Observation:

The study area was observed keenly to record every detail for art and architectural elements of the subject matter and their contents.

#### 1.7 Interview:

Intensive interviews were conducted with cultural experts, concerned government authorities, local peoples (stakeholders), preferably elders ones to acquire wide range of information about traditional water spouts such as usage, religious, cultural and social significances, changing pattern of water culture within local society, what they heard about water spouts.

#### 1.8 Questionnaires:

Sets structured and unstructured set questionnaires were developed and administered in other to conduct interviews with different sets of informants.

#### 1.8 Maps and Photographs:

To add more information in text based verbal information, visual materials related with the topic were collected from different sources as much as possible.

### 1.9 Limitation

There are so many *Lün -hitis* in the Kathmandu valley and even in the Bhaktapur municipality. During research, researcher found two *Lün -hitis* in each city. In all three palaces of Malla period, one *Lün -hiti* installed with the purpose of Royal bath and with some ritual purposes. In Kathmandu there is a *Lün -hiti* inside the Hanumandhoka durbar at Mohan chowk(fig-1) as royal bath and one is at Sundhara(fig-2) near to Dharahara. At Patan also one artistic golden spout named Tushahiti(fig-3) is installed at Sundarichowk of Royal palace and three golden spouts are at Sundhara(fig-4) of Patan. But this proposed study is focused only on the two *Lün -hitis* of Bhaktapur, one from Thanthu Durbar(fig-5) and second is from Taumaddhi tole(fig-6). However in due course of study some other *hitis* are observed to acquire further reference

### 1.10 Literature Review:

Becker-Ritterspach, Raimund O.A. "Water Conduits in the Kathmandu Valley" This book is focused on the functions and architecture of water conduits of the Kathmandu valley. The subject is studied from the urban point of view, as well as from the detailed evaluation of selected water conduits, which are mainly located in the three major cities of the valley.

Mikma Tamang (Moktan), in her article entitled Aitihāsik Shahar Bhaktapur ka Dhungedharaharuko Bisheshata elaborates the legends of Water spouts of Bhaktapur. Some those water spouts are located where the festivals are organized. She also mentioned the list of water spouts facing west, facing east and facing towards south.

Hamro Sampada, National Monthly (Yr-6, Unit-10, 2063Falgun)

Lila Bhakta Munankarmi, in his article Bhaktapur ka Dhunge Dhara ko Bikash byabastha published in Ancient Nepal No.135, (October-November 1993), mentioned some inscriptions related to water systems of Bhaktapur and elaborates how the King Jitmitra Malla built Maha Dev pond by gathering many small flows of water and the way of purifying the water and irrigation. But there are no details of these two *hitis*.

Ukesh Bhuju in his article "Hiti Heritage" gives an account of number of *Dhungedhara* in the Kathmandu valley. The information presented in a table form shows the total number of *hitis* which are functioning along with the ones that are

no more exist. The water engineering of the traditional water spouts, along with diagram of water filtration system in Swastika pattern before it released from *hitis*. It focuses on ancient civilization and tangible and intangible cultural values of *hitis*. It concludes that it would be appropriate to improve the *hiti* environment so that its water would be hygienic and potable. At the same time its sources must be conserved for continuous flow of water. The article focuses on scientific research on the *hitis* so that Nepal's traditional knowledge and skill would be enhanced along with cultural heritage.

Binod Kafle (M.A.) in his article 'Ancient Water Spout' mentioned about the importance of water from prehistoric period to modern eras. In *vedic* period, people used to worship *Barun* deity as '*Mitra Barun*' which later on people used water for the creation and controlling power of *Jiva* (life). As mentioned in *Shiva Puran* and other *Puranas*, the use of water in ancient period of Nepal was a continuation of religious work. The source of water used to worship and managed them according to the situation and circumstances. The author mentioned that management of water was controlled by a *Guthi* named; "*Punya Guthi*" and in villages, "*Lanjgval Panchalika*" (water managing committee) would manage the difficulties of water division in ancient period. In Lichchhavi and Malla periods, people named their localities on the bases of *hitis* like Chyasal *hiti*- Chyasal *tole* (many names of *toles* are derived from the *hitis* of the localities). Actually Shaha period was guided from the neoclassical architecture which had given less importance to the ancient monument in the traditional architectural style. During Shah and Rana period, the foundations of newly constructed huge buildings and other constructions blocked traditional water sources and its drainage systems which led the ancient water spouts in the miserable conditions. The author expresses worries for the vanishing water spouts in the womb of earth. So he emphasizes the necessity for preservation and conservation of these sites as the historical and cultural monuments.

Source: (<http://www.everestnews.com/stories2006/one03022006.htm>)

Shaphalya Amatya, "Water & Culture" describes the necessity of water for all creatures for their survival. Country's economic, social and cultural value are depends on water. Sources of water are drying and becoming less due to deforestation, expanding settlements in wetlands and establishing industries near the water sources. Wetlands are getting buried due to deforestation, growth of water grass and other plants, not preventing landslide. Two major rivers of Kathmandu valley namely, Bagmati and Vishnumati except for few months of rainy season, it flows as a sawage for eight to ten months. Water of stone spout, hot water

pond and waterfalls should be used as an alternative power and should be properly tapped. The author seems to be worried about future of Kathmandu valley not to be remained its name in word only.

Ganesh Khaniya, “Traditional Water Management Practices: A Case Study Of Bhaktapur City” in this study researcher comprises the detailed case documentation of five stone spouts and four ponds within Bhaktapur city to understand the traditional modes of water management in the city. With the installation of modern piped system during the reign of Rana Premier Bir Shamsheer, water was available at every corner of the city, if not at the every courtyard of the city denizens. Consequently, the earlier sources have been left redundant.

Kashinath Tamot, in his article “Nepali Janajivan ma Dhungedhara” writes about the importance of traditional spout in the context of social lifestyle of valley. He describes a brief history of water spouts including myths. Water spouts as the center for both artistic display as well as religion. He describes the filtration process in ancient spouts and water spouts might protect the landslide in hilly region.

In the article “Hitis- An alternative source of water” writer wrote a brief history of water spouts, in three cities of Kathmandu valley, their related *Rajulo* and ponds. He mentioned about the legendary tale how the valley became the place for settlement from a lake. Both in Hindu and Buddhist religion, the importance of *Hitis are mentioned*. How the water spout functions and filters water and the waste water for irrigation goes. His main concept is if the *Hitis* could be cured, maintained and redistributed then they can be the alternative water source of three cities; Bhaktapur, Kathmandu and Patan. The remained water spouts in these cities could yield about 18-20 million liters’ per day which will be enough to feed about 300,000 people living mainly in the core area of the three cities.

Om Dhaubadel, in his article *Jala Sanrachana Utkristhta Vastu – Dhungedhara* writes about the importance of *Hiti* in religious as well as social aspect. Water spouts are made from the natural sources of water. The ritual ceremony and festival of human life of Bhaktapur is related with two rivers; Khasyangkhusung and Hanumante. It is believed that these two rivers protect the Bhaktapur city. He gave some name of waterspout including the names of related kings and dates. He mentioned some waterspout run with tantric techniques. He gave the name list of waterspouts from Bhaktapur facing towards west, south and east.

### 1.11 Scope and Limitation of the study

There are many water spouts in Nepal from ancient period to till the date. In some water spouts have inscriptions and some have not. There are wide ranges of water spouts which show different style and dates of they were made. The proposed study confines the specific two Golden Water Spouts of Bhaktapur. One is from the Thanthu Durbar of Bhaktapur Durbar square and another is from the Taumadhi left side of Bhairab temple.

### 1.12 Conclusion:

One of the ancient city of Nepal, Bhaktapur which remained as the capital city for almost 315 years in Malla period is still rich with its heritage scenariao. Here the most essential element; water is supplied by the local newars for survival and civilization by making Water spouts from ancient time. Many water spouts are still existed and adding glory in present. Though many of them are already drained. The importance of water is showed in both Hinduism as well as Buddhism through different stories and myths. The icons and patterns made in spouts symbolize values of purity and merit. Study of the published and unpublished articles about Stone gives different facts, views and help to do research.

## CHAPTER II

### Water spouts of Bhaktapur

#### 2.1 Bhaktapur

Bhaktapur one of the ancient cities of Nepal located at Kathmandu valley. The meaning of the name of 'Bhaktapur' is "town of the pilgrims". It is a city which all the stones have a story to tell history impregnated with love and devotion, the victory of good over evil. At each artistic object has a religious meaning and the scenes of daily life represented all have a cultural value. (NEPAL moments of life, Rupa. Co. p-47). As one walks through the city then he/she can see many artistic manmade monuments like Malla palaces, water spouts, temples, *satals* and *patils* with lots of sculptures spreading around which showed its rich and artistic value of past and still standing as jewelry of the nation. It is like an open museum where past and present is connected with culture and rich tradition.

While we study the history of Bhaktapur, Malla kings reigned here for a long period and made many artistic monuments. Many monuments are not existed till the date but some which are existed, still represent the beauty of highly skilled craftsmanship and artistic impression of past. Many visitors did appreciate Bhaktapur for its artistic palaces and for traditional beauty. E. Alexander Powell, an American tourist who had been to various Asian countries, was so impressed and excited by the Newari art, architecture and sculpture that he had written much about them "From the standpoints of the architect and the artist, Bhatgaon is a cave of Aladdin. It is a jumble of architectural fantasies, a vast storehouse of the treasures of Newar art. In the Darbar square alone are enough carvings and statues to fill a score of great museums to overflowing. For here, in this forgotten valley, artists- priests and master craftsmen have been at work unceasingly for generation beyond reckoning. There the architectures of two great religions meet and mingle. Here have been concentrated the artistic energies of the nation" (Shrestha: 2002,117)

Bhaktapur is an olden city of Nepal. This conch shaped historic city, Bhaktapur spreading over an area of 19 sqkm and lying at 13km east of Kathmandu, is situated at 133 meter from mean sea level. Because of its art, history and cultural value, the city is also called "Rome of Asia" (Bhaktapur, 2059:9). Bhaktapur, Kantipur and Lalitpur used to be three competitors countries during Malla period. However Bhaktapur was the capital city of Nepal till the reign period of Yakshya Malla. From this point of view, it is clear that Bhaktapur is oldest city among three. Although King Yakshya Malla divided Bhaktapur into three small countries, three kings from Bhaktapur, Kantipur and Lalitpur were eager to construct art and never left their attitude to create best art works. They tried to make their places best among three. So

one can see three Royal palaces and Durbar squares similar as well as competitive. In these palaces the sculptures are also made and installed in competition point of view. Being the capital city, Bhaktapur was developed in different aspect.

Water is the most important element for living beings. While we study about the legends of creation of Nepal *Mandala*, it also mentioned about how the valley was covered by water. Not only in Hinduism but also in Buddhism, the same thing mentioned that valley was covered with water as a lake. In Swayambhu Puran the total surface of the valley covered by the lake Taodhanahrada and surrounded by mountains and dense forests. The area is a holy place for all Buddhas and Boddhisattvas and is governed by the serpent king Karkotaka Nagaraja. After Manjusri had worshipped Swayambhu dharmadhatu (the "lotus hill" of Swayambhu caitya) he drained the valley but the *Nagas* were severely disturbed. After some dispute their dwelling places had to be relocated, in harmony with the *Tirtha* cosmography of Nepal valley and linked to the Holy rivers of the North Indian plains: Ganga, Yamuna and Saraswati(Becke.r-Ritterspach; 1995:1).

## 2.2 Historical Backgroud of Water Spout:

In case of Nepal, Stone spout is one of the ancient forms of water supplying system for society. It is highly developed form of *Hitis* which was developed in Lichchhavi and Malla period. Around the Kathmandu valley, one can sees many water spouts which were made in different periods. Some of them have inscriptions to verify date and some of them do not have any evidences and some evidences have spoiled or disappeared already. Many of them are vanished under the soil and remained are also not in good conditions, so it is really confusing to categorize them according to date.

While searching the history of making water spouts in Kathmandu valley, it is very difficult to say from when it was started. There are many waterspout found around the three historical cities of Kathmandu valley from Lichchhavi and Malla periods. The presence of sculpture of Gajalaxmi at the Chasyal hiti shows its dates back to the 1<sup>st</sup> A.D. century (fig-7). So the *Hiti* might be the same date of sculpture or before the date. It is difficult to find out the exact date, when the water spouts were started to build up and who developed the mechanism. The water spouts existed at present are not in their initial phase. Like Bhimsen *Hiti*(fig-8) of Bhaktapur and Alko, Manga *hiti*(fig-9) from Patan which shows their highly developed form of *Hiti* construction. So one can assume that *Hiti* traditions were not only started from Lichchhavi period. Ancient people might make many simpler form and structure of *Hitis* before. By the flow of time and practice, the present forms of water spout were discovered. But unfortunately none of water spouts earlier than Lichchhavi period are

existed at present. Natural disaster like earthquake spoiled many manmade monuments and buried inside the soil which is really bad luck for all civilization. Many monuments changed and disappeared and many cultures were forgotten in such disaster from its originality.

In the Kathmandu valley many names of places are kept in the name of water spouts located over there. For examples Bhotahiti (Bhota+hiti), Thanhiti, Kohiti, Gairidhara in Kathmandu, Alkohiti in Patan and in case of Bhaktapur Gahiti etc. These names are still in use although in some cases the *Hitis* are buried and not existed at present. One example of such case is Bhotahiti. The water spout of Bhotahiti is not existed coz the *Hiti* was already buried during the time of making underground subway. After so long time, still this place is known with name 'Bhotahiti'. The word Bhotahiti is assumed to come from the word '*Bhottabishti*' *Kar* (Tax) which was the tax taken to the people come from the traders of Tibet. Many *hitis* were found at the time of excavation and the east facing *Hiti* is assumed as the Lichchhavi *Hiti* because of inscribed Lichchhavi inscription. (Rajabanshi: Ancient Nepal\_82\_06)

Chyasal Hiti is also one of the historical *Hiti* of Patan because of presence of oldest sculpture of Gajalaxmi(fig-7) which is dated 1<sup>st</sup>A.D. Century by Lain Singh Wangdel. This shows the time of the *Hiti* which might be made at the same phase or before. The presence of the sculptures at the area of *Hiti* shows the trend of making religious sculpture was started very early.

In case of history of water spout of Bhaktapur, no one knows who made the first water spout in this ancient city. It is found that in *Kirantis* systemize the Bhaktapur city with the water flow from Glaciers, spring, river and well. But there are lack of evidences (Munankarmi: 1993,17). There is a belief that the legendary queen Tula Rani, first built a *Rajkulo* and then *Hitis* at a rate one *Hiti* per Tole (neighbourhood) within her kingdom of Tumhaco (area bounded at present by Kamalbinayal in east, Navadurga Temple in the west, Muldhoka in the north and Chyamasingh in the south) (space magazine: March-April 2008). The mythical queen Tula Maharani, who is believed to have weighed a mere 11 grams and who could walk across ponds by stepping on lotus leaves. The discovery of inscriptions dating back to the Lichchhavi period in several *hitis* of Bhaktapur suggests that the *Rajkulo* was probably built by Tula Maharani, since she belonged to that period in time. King Jitamitra Malla probably expanded the canal system during his reign. (kapil Bisht, Renovating Kathmandu's ancient canals, ECS Media, August 2011). Dr. Purushottam Lochan Shrestha puts his opinion that the queen Tula Rani was the same queen Gangadevi who was the wife of King Vishwo Malla from 14<sup>th</sup> century. She made many spouts and pond around Bhaktapur. She is credited for her pious deed of making pond, water spouts and it can

assume that she might developed *Kulo* (Canal system) before. That is why all water supplying system were became possible to make through different forms.

There is always a high demand of all the supplies in cities with compare to villages. Cities can only sustained with their facilities which make life easier than in villages. So people migrate from villages to cities in search of facilities and easy life. Bhatgaun was one of the village of Malla periods which turns into 'Makhwopring' as developed city. After becoming city, a problem of scarcity of water was appeared because of population growth. So the both King and citizen realized the necessity of water supplies. So at reign period of King Yakshya Malla, while Bhaktapur was the capital city of Nepal, in Nepal Sambat 573, he made walls on his capital city and made many water spouts inside and outside the Bhaktapur. He put many inscriptions in *Hitis* like; Inscription on the Bhairav Temple at Taumadhi dated Nepal Sambat 560(fig-4), Tripursundari's Talako, inscription dated Nepal Sambat 571 at the stairs of Layaku Chaardham temple another one is from the stair of Kedarnaath temple and etc (Munankarmi: 1993,17). Presence of these Lichchhavi and early Malla period water spouts around Bhaktapur city shows existence of canal system at that period which might not be in proper manner. But it cannot be possible without the water supplying canals, though the sources were managed from nearby natural water sources. So there were more chances to have water supplying canal system in Bhaktapur before King Jitamitra Malla.

It is already mentioned that there were 87 water spouts in Bhaktapur and among them one is lost. According to the book "Lichchhavi Kalka Abhilekh" by Dhanabajra Bajracharya, there are were no inscriptions are found in the *Hitis* from Lichchhavi period but one can found Lichchhavi *Hitis* in Bhaktapur area like Bhimdyo *Hiti*(fig-8) which is located at Duttatraya just behind the Bhimsen temple. There are two Lichchhavi Chaityas at the courtyard of Bhimsen *hiti* and the simplicity of the spout also shows its Lichchhavi impact like simple patterns and spout. Another Lichchhavi water spout is there at Bageshwori village of Bhaktapur with the fish shaped spout and Lichchhavi inscription (Tamot: 6-12).

There are many water spouts still existed in Bhaktapur although most of them are drained. Some of them have inscriptions mentioning who and when the water spouts were made and in some cases the evidences are disappeared. While talking about the famous water spouts of Bhaktapur there are some like Bhimsen Hiti, Tulutulu Hiti, Bulubulu Hiti. They are famous because of their special features.

## 2.3 Water spouts of Bhaktapur:

List of name and location of Water spouts of Bhaktapur

S.N.	Name or Location of Dhunge Dhara	Nos.	Toles and Ward
1.	Wakupati Narayn	1	Taulanchhe-1
2.	Across the road at the north of Chyamhasinh	1	Taulanchhe-1
3.	Near the pati at Big chaity	1	Taulanchhe-1
4.	Behind the Suryamadhi Dabu (towards east	1	Taulanchhe-1
5.	North of Chyamhasingha pond	1	Taulanchhe-1
6.	Near Degana	1	Taulanchhe-1
7.	Near Bramhayani Pitha (inside the bridge)	1	Taulanchhe-1
8.	Near the Pati at Nawadurga, Dhauchhen	1	Ganchhe-2
9.	In front of Karunamaya image	1	Ganchhe-2
10.	Pond area	1	Kwathandau-3
11.	Outside the Dharmakirti Vihar (Jonbahal)	1	Kwathandau-3
12.	Near the Pati at the north of Math	1	Kwathandau-3
13.	Near the Pati in front of School	1	Kwathandau-3
14.	East of Lamgal Pond	1	Kwathandau-3
15.	North of Lamgal Pond	1	Kwathandau-3
16.	Left of Pitch road ( On the way to Nagarkot from Mahakali)	1	Kwathandau-3
17.	Left of the east of Pitch road (On the way to Nagarkot from Mahakali)	1	Kwathandau-3
18.	On the left of upper part of Muldhoka	1	Kwathandau-3
19.	Near Bhadra Art Studio, Muldhoka	1	Kwathandau-3
20.	North corner of the Pond	1	Thalanchhe-4
21.	In front of Mahalaxmi temple (to the right)	1	Thalanchhe-4
22.	In front of Dattatraya temple (to the left)	1	Tachapal-4
23.	Opposite to Bhimsen temple (Purwabhimukh)	2	Tachapal-4
24.	At the north corner of Salaganesh Pond	1	Tachapal-4
25.	Behind the Salaganesh (in the rightside0	1	Tachapal-4
26.	Patinga (There is a stone inscription of Nepal Sambat 624)	2	Inacho-4
27.	Wanchutwa (at the down slope)	1	Inacho-4
28.	On the way to Chorcha fromThalanchhe (at right side)	1	Inacho-4
29.	Near Maheshwori Pith (near the small bridge)	1	Inacho-4
30.	Near Maheshwori Pith (near the bridge at the west)	1	Inacho-4
31.	Palikhya	1	Golmadhi-7
32.	Gahiti	2	Golmadhi-7
33.	At the downward slope of Yata (at right side)	1	Golmadhi-7
34.	On the way to Hanumanghat at Yata (Before reaching the Mosque)	1	Golmadhi-7
35.	Right of Tripurasundari Pith (Purwavimukh)	1	Tulanchnen-8

36.	At the chowk of Karmacharya family (Purwawimukh)	1	Tulanchhen-8
37.	At the left side of Balakhu Ganesh (in front of wall)	1	Tulanchhen-8
38.	At the left side while going to east downward from Jagannath temple (Purwawimukh)	1	Tibukchhen-8
39.	Behind the Bhui Sahu's house at the chowk (Purwawimukh)	1	Tibukchhen-8
40.	Right of Chandeshwori temple, Chasukhya	1	Tibukchhen-8
41.	Left of Chandeshwori temple (a bit below)	1	Tibukchhen-8
42.	Near the Pitched road (from Hanumante river to Arniko Highway)	1	Wasikacha-10
43.	To the west of Pitched road (from Hanumante river to Arniko Highway)/ Chupinghat	1	Bhelukhel-10
44.	While descending to Damlacha	1	Yanchhen-8
45.	Near the residence of Sanjus, Lalanchhen	1	Yanchhen-8
46.	Behind the Chhuma Ganesh temple	1	Chonchhen-8
47.	Near the Stone Steps of Mahakali Pith	1	Byasi-7
48.	At the west side of Mahakali Pith	1	Byasi-7
49.	East of small industry area	1	Byasi-7
50.	At the northern West corner of Small Industry Pith	1	Byasi-7
51.	On the way while entering to Indrayani Pith	1	Khauma-12
52.	Just in front of Indrayani pith	1	Khauma-12
53.	Behind the Indrayani Pith	1	Khauma-12
54.	On the right side wall of Balakhu Ganesh	1	Durbar Square-13
55.	Near the school gate (south) of Balakhu Ganesh	1	Durbar Square-13
56.	Near Chyansin Dega	1	Durbar Square-13
57.	Lu Hiti (with the water tank (Jaran) of golden mouth)	1	Durbar Square-13
58.	Kumari Chowk	1	Durbar Square-13
59.	Behind Taleju temple at Jaran Chowk	1	Durbar Square-13
60.	At Malati Chowk (Art Museum)	1	Durbar Square-13
61.	On the eastern wall of Tarachhen Baha (Inscription of Bajra)	1	Sakoth-8
62.	Left of Bhairavnath temple (Lu Hiti)	2	Taumadhi-8
63.	Ga Hiti	1	Taumadhi-8
64.	Across the bridge at Ram temple (Now, in front of furniture enterprise)	1	Bolanchhen-14
65.	Bulbul Hiti	1	Bolanchhen-14
66.	Near Dawali (at main road)	1	Nasamana-14
67.	In the upland area of Indra Prasad Sahu (Purwabhimukh)	1	Nasamana-14
68.	Left of Barahi Dhyochhen	1	Tekhacho-15
69.	In the left while climbing up towards the Gate	1	Bharwacho-17
70.	South of Gate (Beneath Bansghari at damaged)	1	Bharwacho-17

	Pati)(Purwavimukh)		
71.	North of Gate (East of Bhaktapur M. Campus)(Purwavimukh)	1	Bharwacho-17
72.	East of Gate (In the downward slope in front of Ganesh Primary School) (Purwavimukh)	1	Bharwacho-17
73.	North east of Ganesh / East of Ganesh temple (Purwavimukh)	1	Bharwacho-17
74.	In the intersection between new and old road linking Bhaktapur with Kathmandu	1	Sallaghari-17
75.	Chwanga Ganesh	1	Sallaghari-17
76.	Neat the Barrack on the way to Muldhoka Khramati	1	Sallaghari-17
77.	Chardham Dhungedhara (Balmandir/ Durbar square premise)	4	Layaku-13
78.	In the left side of Sallahari-Nagarkot road	1	Sallaghari-17
79.	At the south of Byasi (Dhunge Dhara in which piped water supply is running now)	1	Byasi-7
80.	Dekoy (First turning left of Changu Pitched road)	1	
81.	Near the quadra-section while going to Mahakali Pith from Bholanchhen	1	Bholanchhen-14
82.	At the left side of Byasi to Jhaukhel	1	Byasi-7
83.	Near the pilgrim spot (inside the bridge) while going to Jhaukhel from Byasi	1	Byasi-7
Total		87	

Source: 'Bhaktapur' monthly, Mangsir, 2051 Bikram Era (1994), Issue1

#### 2.4 Water spouts of Bhaktapur and their Present condition:

SN	Name & Address	Ward No.	No. of Hiti	Condition	Facing	Photo No.
1.	Thuguchhu, Mangalachhen	14	1	P	S	1
2.	Barahi Pith	16	1	P	W	2
3.	At the slope of Bharwacho	17	1	N	E	3
4.	Right side of Ganesh S.S., Bharwacho	17	1	N-	E	4
5.	Infront of Hanumante Pati, Banshagopal	17	1	D	W	5
6.	Infront of Shahid Smriti Park	15	1	N	W	6
7.	Behind Indrayani Pith, Byasi	15	1	N	W	7
8.	Infront of Indrayani Pith	15	1	N	W	8

9.	Sano Byasi	10	1	N	W	9
10.	On the road of Byasi	10	1	P	W	10
11.	At Thulo Byasi	10	1	N	W	11
12.	On the way from Byasi to Kalighat	10	1	N	W	12
13.	Kalighat, Byasi	10	1	P	W	13
14.	Byasi (Inside Byasi Gate)	10	3	N(EB)	W	14
15.	Byasi (Pond corner)	10	1	P	W	15
16.	ThuloByasi	10	1	N	W	16
17.	Side of Indrayani Dyochhen,Khauma	15	1	P	W	17
18.	Bulucha	12	1	D	W	18
19.	Taumadhi	11	1	D	W	19
20.	Side of Chyasingh Dega, Durbar Square	11	1	D	W	20
21.	Side of Vidhyarthi Niketan School, Balakhu	8	1	D	S	21
22.	Side of Sharada S.S., Yalachen	10	1	P	W	22
23.	Baha Hiti, Chochhen	9	1	P	W	23
24.	Side of Chhuma Ganesh	9	1	P	W	24
25.	Tripura Sundari, Tulachhen	8	1	P	E	25
26.	Karmacharya Chowk, Tulachhen	8	1	D	E	26
27.	Golmadhi	7	1+2	EB	W/ E	27
28.	Palikhel	7	1	P	S	28
29.	Inacho	6	1	N	E	29
30.	Duttaraya	3	1	N	E	30
31.	Side of SalaGanesh(Pond area)	3	1	D	S	31
32.	Ganesh Pokhari(Pond Area)	3	1	D	S	32
33.	Gachhen	3	1	P	W	33
34.	Navadurgasthan, Gachhen	3	1	P	S	34
35.	Kwakhandu, Pond area	4	1	P	S	35
36.	Kwakhandu	4	1	N	S	36
37.	Prashannashil Mahabihar	4	1	P	W	37
38.	Naganchha	4	1	P	S	38
39.	Lamgal, Infront of School	3	1	D	W	39
40.	Bramhayani Pith	1	1	D	E	40
41.	Degaena	1	1	N	S	41
42.	Chyamhasingh	1	1	P	S	42
43.	Near Hanumante River	17	0	R	E	43
44.	Mini Market, Ravi Vawan, Sakotha	8	1	D	E	44
45.	Sukuldhoka, Tibukchhen	8	1	D	E	45
46.	Kamalvinayak (on the road)	4	1	P	W	46
47.	Mooldhoka	4	1	D	S	47
48.	Mahalaxmi(on the road near by pati)	4	1	D	W	48
49.	Near Mahalaxmi Temple, Thalachhen	4	1	P	S	49
50.	Nagpokhari, Thalachhen	4	1	D	S	50

51.	Chorcha	6	1	P	S	51
52.	Yachhen	5	1	P	W	52
53.	Lalachhen	5	1	P	W	53
54.	Gapali	12	1	B	-	54
55.	Bhimsensthan, Siddhismriti	11	1	B	W	55
56.	Dhaobhari Hiti, Aadarsha	11	1	N	N	56
57.	Wasikacha, Jagati	7	1	D	W	57
58.	Golmadhi	7	1	N	S	58
59.	Inacho, on the way to Maheswori	6	1	N	W	59
60.	Wakupati Narayan	1	1	P	S	60
61.	Suryamadhi (left side)	1	1	P	S	61
62.	Suryamadhi (Right side)	1	1	N	W	62
63.	Side of Mahakali, Khyapukhu	5	1	B	W	63
64.	Matchhyenarayan, Khyapukhu	5	1	P	N	64
65.	Down of Mahakali Pith	5	1	B	W	65
66.	Bholachhen	5	1	D	W	66
67.	Nasamana	14	1	P	E	67
68.	Mangal kunda, Nasamana	14	1	D	S	68
69.	Near Bhagwati temple, Taumadhi	11	1	D	E	69
70.	Velukhel	11	1	N	E	70
71.	On the way to Suryabinayak	S-2	1	P	W	71
72.	Near the stairs of Suryavinayak	S-6	1	P	W	72
73.	Suryavinayak temple	S-6	1	P	E	73
74.	Suryavinayak ( Army Camp)	S-5	3	P	E	74
75.	Gundu	A-14	3(-1)	N	S	75
76.	Peepalbot, Gundu	A-14	1	D	S	76
77.	Near Suvarneswhwor L.S.S.	S-4	1	P	P	77
78.	Tindhara, Katunje	S-4	3	N	N	78
79.	Sallaghari	17	1	N	S	79
80.	Etapako, Sallaghari	15	1	N	W	80
81.	Hakufwa Hiti, Kalopati	17	1	N	W	81
82.	Near to Yatu Mahadev	M-2	1	P	W	82
83.	At premises of Dwarika Temple at Durbarsquare	11	1	D	N	83
84.	Lu-hiti, Thanthu Durbar	11	1	D	W	84
85.	Bhatedhikur	S-9	1	D	W	85

86.	Gahiti, Taumadhi	12	1	L	-	-
87.	Chyamhasigha	1	1	L	-	-

\*Note:

Facing:

N-North

S-South

E-East

W-West

Condition:

EB-Water Exit blockage

N- Naturally working

P- Pipeline

D- Dry

R- Ruin

B- Blockage

L- Lost

Ward no:

Bhaktapur Municipality

M- Manjushree Municipality

S- Shippadol Municipality

A- Anantalingeshwor Municipality

2.5 Art and Architecture of Water spouts:

Art is the subject which deals with beautification and aesthetic values. While creating art works it reflect the time of that period. The art works of certain community and country shows the schooling, their skill and the philosophy, they follow. Architecture is the subject which combines art with science and make the product usable with artistic way. As mentioned above water spouts which are manmade form for supplying water are found around Kathmandu valley. It was the need of human civilization that ancestors innovated to make water spouts to supply water easily.

The water engineering of Kathmandu valley seemed to be well developed from ancient times. It was flourished further in medieval period that was evident from the techniques of building irrigation channel enable them to construct water reservoirs and channels both for irrigation and fresh drinking water as well as drainage for settlements. However this was not long last as soon after taking over the Kathmandu valley, Prithvinarayan Shah ordered to destroy waterspouts and drainage system seen with a power potentiality of the Newar artisan (Scheibler, 1988:10). A recent study recorded that there are 400 stone spouts in the Kathmandu valley. Most of them are located in the core of the historic settlement serving for source of drinking and domestic consumption including washing clothes, taking bath, etc. These spouts are indispensable parts of the architectural ensembles of Kathmandu valley (Becker-Ritterspach, 1990:3).

As we observe, most of the water spouts are made in depth and stairs are made to go down. There is an internal water supply mechanism is made. The nature of water is flowing from top to bottom. That is the reason; water spouts were made in depth from the road level. There are lots of examples of such water spouts; in case of Bhaktapur; Bhimdyo hiti, Golmadhi hiti, Lün –hiti etc. In Kathmamandu valley, architecture of water spouts is designed almost in similar way but the shapes are different. In some are designed in rectangular shape, some in square and some in oval shapes.

Art is the form which adds beauty in wherever it applied. Art and architecture are both inter related with each other. Water spouts can be taken as the combined form of art and architecture with scientific mechanism. The mechanism is very powerful that the water is flowing from the source through the natural source and the water after passing from the spout still goes to another spout through underground filtration system which is still the subject of research and in some cases it reserves which is still used for irrigation for agriculture.

Some people still believe that the water flow from ancient *Hitis* are working with mysteriously with the power of Tantrism. People are still afraid to open the canal system

because of their belief that the water spouts are functioning with the reason of Tantric power. While cleaning and excavating the water spouts, people do not go further being afraid that there might be any bad things may happen if people dig further. One of the culture expert Mr. Om Dhaubadel also shared his experience that people stop digging when they saw the sign of hands or one pala closing with another pala are kept to symbolize to stop digging.

## 2.6 Material used

Water spout is called 'Dhunge dhara' in Nepali language and 'Lho hiti' in Newari languages. Both Dhunga and Lho give the meaning of stone. So water spouts are mostly called stone water spouts. According to the name it is also clear that the water spouts are mostly made out of stone. Including stones, other materials are also used to make water spouts. In cases of golden spouts the stone spouts are wrapped with molded gold plated metal sheets. In Nepali language, the golden spout is called 'Sundhara' and in Newari language it is called 'Lü-hiti'. According to the local people' saying many other types of clay were used to filter water.

### Brick:

In some of the water spouts bricks are also used to make the wall of the water spouts. There are many types of bricks are used in Hitis. Fired bricks have different shapes and designs. In some cases the bricks are carved with different patterns and images. In many of the Malla Hitis decorated bricks are used in all sides.

### Stone/Rock:

Stone is the element which is naturally found. People used this natural object in many aspects in their life. In case of water spouts, stones are used for many purposes. The spigot is almost in all water spouts are made of stone which is carved with different patterns and designs. The *Makara* is always made out of stone. In some cases, the entire spout courtyard is made out of stones. Mostly in Lichchhavi Water Spouts stones are used to make entire parts of the water spouts. The sculptures found around the water spout are made out of stone. They cut the natural stone as per they needed for wall and floor and carved them for sculptures as they desired. Different types of stones are found in water spouts.

Clay:

Clay is the natural material which is found everywhere. But in case of water spout different type of clay is used to do filtration.

Bajra:

Bajra is a material which is made by mixing many elements and use as the binder of rocks and stones. The bonding capacity of the Bajra is very high. This used to apply in monumental construction like palaces and temples. One can see the use of Bajra in most of existing monuments from Malla period. In water spouts also Bajra is used to join the rocks and bricks.

Gold:

Gold is one of the costly and very precious metals. In some water spouts, gold or gold plated plates are used in the spigot. Such water spouts are called Lün -hiti(Golden Spout). Mostly such water spouts are made inside the palace area. In all three palces of Bhaktapur, Kathmandu and Lalitpur, Lün-hitis are made. It is believed gold as very pious metal and the water coming from the golden spout is also considered very pious.

Cement:

This is a modern construction material which is used in making houses and bridges. But in some water spouts, it is used during conservation time. But this material was not used in past.

## 2.7 Development of Water Spout (according to date in case of Nepal)

As we are using the water spouts from last many generations. Till the date we do not have any authentic date from when our ancestors used water spouts. But some inscriptions gave the proof of using water spouts. Like in Lichchhavi period, stone spout was called "*Pranali*" and "*Yiti*" "*Iti*" was called in Malla period (Amatya;2003:46). These words for water spouts found in some inscription which are also mentioned in 'Lichchhavi kaliln Abhilekh' shows the existence of water spout from the Lichchhavi era. Might be the existence was here before the Lichchhavi era because the water spouts from Lichchhavi period was very developed and maintained structure. People from that period might had done more practices before that is why they were capable to make the water spouts in well manner. Archaeological

fragments of stone spout dated 751 AD recovered from archaeological excavated conducted during 1980s near the Satyanarayan temple in Haadigaon, Kathmandu reveals existence of stone water spouts during the Lichchhavi period. Another water spout situated in northeast to Patan Durbar Square build during 570AD is the oldest of all (Amatya: 6,7). In case of Bhaktapur any Lichchhavi inscription about water spout are not found though some lichchhavi Hitis are still existed.

## 2.8 Water, Myths and the legends

While finding out/exploring the ancient history, the inscriptions, *Thyasafus* and existing monuments gives much information. Some oral information's also plays vital role to know the past. The oral information might be stories, myths or legends. In such information, they have many things like some story of their ancestors, sometime religious myths and legends take place. They are not hundred percent trusts worthy but they might carry some essence of the history.

As mentioned above water is the basic need of human civilization. In the world water takes same importance in every country and culture, religion and civilization. Its importance and necessity cannot be replaced by any other thing. From the epical period to ancient civilization and till now, water is the most essential elements for human and for all creatures. So it is impossible to think life without water. That is why in every religion, importance of water is mentioned. There is a proverb "never under estimate three things; fire, enemy and water". Because water has life giving capacity as well as life taking too. Since as everyone know that human civilization was started at the edges of river side whether the civilization is of Mesopotamia or in Greek. In both Hinduism and Buddhism, water has its own importance. In the beginning of earth, it is assumed that was covered with water and both religions have their own legend how the watery earth became the place for human settlement. The life giving quality of water is illustrated in the Hindu and Buddhist culture in many ways. The filled water pot (*Purnakalasha*) is a symbol of abundance. The presence of *Nagas* is considered to be another symbol which safeguards the provision of water and fertility in general. (BeckerRitterspach;1995:1)

In Hinduism:

According to Hindu myth, lord Vishnu is sleeping in the slumber of creation resting on *Ananta /sesa*, the endless Naga amidst the cosmic ocean. Lord Vishnu, Ananta and the water are one, the water itself. (Becker-Ritterspach; 1995:1)

According to the legend, Bhagirath had meditated to give salvation to his generations of ancestor (thousands sons of King Sagar) from the curse of Kapil sage and he brought Ganges down. So to obviate this danger, Shiva had blocked the current of Ganga with his *Jata* (dishelmed hair) and then only Ganga came to the earth in the form of different tributaries. Among the different tributaries Bhagirath had brought main tributary and gave salvation to his dead ancestors. Because of his courageous deed, he is always remembered and give the example to show the dedication towards own goals saying "*Bhagirath Prayas*" (person very dedicated, determined and never tiring until achieving the goal). So in most of the water spouts the image of Bhagirath is kept below to show his determination.

According to Rigveda there was no water in the earth for human settlement. It illustrated that Brittashur (enemy of god Indra) had blocked the Ganga in heaven. After defeating Brittashur on battle, God sent the Ganga in the earth without delaying.

There is one other legend related with Hindus' God Vishnu and Bramha. According to this legend when God Vishnu tried to cover the heaven with his third step to crashed king Bali (philanthropist) at the same time small hole appeared by the step of Vishnu. So Ganges fell down over the Meru peaks of the earth. Then Ganga divided in two parts flowing in the four continent of the earth. Likewise next story illustrated that Bramha had kept Ganga inside his "*Kamandalu*". Once Bramha offered the Ganges on the foot of Vishnu and she spread all over the heaven. In this way, Ganges is originated from the *Jata* of Shiva, the foot of Vishnu, Kamandalu of Bramha. So it is always sacred, pure, able to remedy of sin, cure the disease, divine power and providing maternal care to the creatures. Therefore she remains adorable and superior. "*Agni purana*" says that path of river are always pure and clean (Amatya:2003:12).

In Buddhism:

The Swayambhu-Purana, a mythological record of the Buddhist population of Kathmandu Valley, tell us of creation of the Valley proper, i.e., the total surface of the valley covered by the lake Taodhanahrada and surrounded by mountains and dense forests. The area is the holy place for all Buddhas and Bodhisattvas and is governed by the serpent king Karkotaka Nagaraja. After Manjusri (Visnu) had worshipped *Swayambhu dharmadhatu* (the 'lotus hill' of Swayambhu caitya) he drained the valley but the *Nagas* were severely disturbed. After some dispute their dwelling places had to be relocated, in harmony with the *Tirtha* cosmography of the North-Indian plains: Ganga, Yamuna and Saraswati.

One of the most famous legends with respect to the water conduit concerns the Narayan hiti of Kathmandu. The legendary king Dharmadeva (ca AD450), father of king Mandev I (AD 464-05), made his son committed patricide in order to revive the dried-up water conduit. The astrologers had told the king, that the only way to get the conduit functioning would be by sacrifice of a man with thirty two virtues. The only man who fitted with this description was the king himself. The king asked his son to kill the first person whoever slept near the spout the coming night. Unknowingly the son killed his father. The Makara-head of the two flanking spouts (the central one is a replacement of the late Malla period) recoil snouts backward in horror (Becker-Ritterspach; 1995:22).

Still in Hindu families there is a tradition to make the impure things pure by spreading *Gangajala* or *sunpani*. Whenever girls suffer from the menstruation problem, they are supposed as impure and not allowed to touch any religious deities and kitchen in those four days. After four days they take bath and used to spray *Luti/Sunpani* (water in which gold is dipped) for purification. In all the big *Puja* like *Saptaha*, *Nawah*, the water plays vital role. A *Purna Kalash* is always installed before to start any rituals. Whenever any members from the family died the rest of the family members supposed to impure and became pure after taking the bath in rivers. In hindu families male members go to river to take bath and female members take bath at home and in Buddhist families both men and women members go to river to take bath.

## 2.9 Study area

In this section the researcher will discuss about history and present condition of the water spouts of Bhaktapur but the study is being more focused on two golden spouts of Bhaktapur.

## 2.10 Conclusion:

Water is the most important element for all living creatures of this earth. It is essential element to spend life since the birth of a person to the death. The essential of water is never became less from ancient time to till the date. Both Hinduism and Buddhism explain the importance of water in their epics through myths and the rituals processes. Human settlements always need water in an easy aspect. So in past, water started to supply in different mediums. Among them water spout was the one which was not only innovated but also systemized and decorated with artistic way. It is very unfortunates that water spouts of beginning phase are not existed till the date. One can assumes the development of water spout by seeing the present waterspouts. It might take a long way to become existing developed water spouts' structure. The water spouts used to make by the natural resources

like stone and clay in Lichchhavi period. Whole construction of water spout was made out of these natural resources in case of Malla period including natural elements fired bricks were also used to make the walls and floor of water spouts. But the history of water spout is not clear enough. The three Malla kings's competition to make best in the field of art and architecture help to construct many *Lho Hitis* as well as. Many water spouts were made in Bhaktapur with special features which cure *Lün hitis* some diseases and some are famous for its unique features.

## Chapter III

### Water Spouts and their Iconography

All the Hindu and Buddhist ritual places like temples, *Vihars* are made out of many representational symbols. Every patterns and deities has their own meaning and distinct form. According to philosophy same as one can see the body but not the spirit, in a same way one can see the deity with their different weapons. Their weapons have different value and philosophical meaning. It is cleared that water spouts were made because of social as well as religious purposes. So it is obvious that during the construction time, they tried to make many religious deities kept over there to make *Hitis* more pious as well as decorative too.

#### 3.1 Introductions

The symbolic representation of some kind of visual form is called icon, it might be patterns, or weapon, posture or direction. Viewer can only see the image but religious philosophy interpret it differently. For example Buddha's *Dhyan mudra* touching the land gives the meaning that he made the evidence to land for his enlightenment.

Icon means the things which denote something far beyond not what it appeared. Icons are the symbols which have its own value and in case of religion, they play a vital role. It might be symbols, image or representation of something else. Sometime such icons can be direct or some time it can be abstract. So the study deals with such subject are called iconography. Religion is a very vague subject which binds many cults under it. The religious cults have their own beliefs and culture. To follow this culture they made many traditions and to symbolize the tradition and religious cult they made their own symbols. In all the cults, they have their different symbols to show their spiritual power, identity of gods and goddesses.

For example Lotus flower symbolizes the purity in Hindu as well as Buddhist religion. Many iconic symbols are used to show the power and identity of different god, goddess and mythical creatures. The face of elephant and human body symbolize god Ganesh. Hindu religion is full of symbol. Some symbolic meanings are open to everyone and some are in hidden. In case of Tantric Hinduism as well as Buddhism, meaning of the symbols is kept in secret and only the people who had took *Dikshya* could talk about it. The symbolic meaning and Mantra are not allowed to talk in public. There is religious and philosophical meaning of installing the image of any deity. The Shiva *Linga* is always installed by facing its *Jalahari*

north direction. So the position of image can help to recognize the direction. Same in Buddhism, the placement of deities are always fixed. The *Makara* is the symbol of pious because it is the vehicle of pious goddess Ganga. So in most of the water spouts mouth of *Makar* is kept to denote the pure water flow. Same as the presence of *Naga* symbolize the water since *nagas* are the water animal. Sometime patterns also became representational, so they also can be considered as icon.

### 3.2 Elements of Water Spouts

As mentioned above water spouts are the places of religious as well as social place made with scientific mechanism and decorated with artistic way. All the things kept there have meaning at the same time aesthetic value. Many elements are kept to make water spouts. They have their own function and name:

#### **1. *Hitidha*:**

*Hitidha* is a newari word. *Hitidha* is the spigot which is made out of stone and ejected from the wall. And through this water passes through. This part is coming out from the mouth of *makara*. The centre upper part is little bit carved to make the way to water.

#### **2. *Hitimanga*:**

The water disposing part of the water spout is called *Hitimanga*. In most of the cases *Hitimanga* is in the shape of *Makara*. *Makara* is an ethical creature which is assumed as the vehicle of Devi Ganga. So it is always supposed to pious. In most of the water spouts, water is disposed from the mouth of *Makar*.

#### **3. *Hitipusa*:**

It is like a cap for spout that keeps water cleaned from outer dust. *Pusa* is a newari word for cap. The upper part of spout is called *Hitipusa*. It covers the spout as the cap. In this part some animal figure like; frog, *Malah* (religious animal) are kept or in some cases left empty.

#### **4. *Naga*:**

*Naga* is always related with water in Hindu religion. There might be many reasons to make *Naga*. One might be to show the habitat and to make continuous water flow. In water spouts, in many ways *Nagas* are used with religious purposes. Somewhere it is kept for the sake of decoration and somewhere with philosophical intentions. It is believed that if *Nagas* are kept in *Hitis*, water will never be drained.

#### **5. *Gwakha*:**

*Gwakha* is the newari word for niches. It is the niches where religious deities are kept. In water spouts also different types of niches are made to put the images of deities. Niches are made in different shapes.

#### **6. Sculpture of Bhagirath:**

A legendary king Bhagiirath of Ayodhya is credited for his great deed bringing water to earth and guiding the goddess Ganges from heaven to the earth. In Kathmandu valley he is also called *Pode deuta*. The image of Bhagiratha is kept just beneath the water spout to show his determination and contribution to bring water in earth. In most water spouts, Bhagirath is made in *Namaste Mudra* or blowing the conch posture. Bhagirath is known as the determined, brave person, who is the grand grand son of King Sagar and son of king Dilip. While explaining to Yudhisthir about the good character of Kings by Lomas *Muni*, he mentioned from the greatness of Sagar to till how Bhagirath succeed to bring Ganga in the Earth. King Sagar had two wives named Vaidarbhi and Shaibya. With the blessing of Shiva queen Vaidharbhi gave birth one Tumbi. Seeds of that were kept in different pots and from the sixty thousand of pots with filled with ghee gave birth sixty thousands of sons. These sons of Samar were very dangerous in character and rude in nature, they disturbed the heaven with their bad deeds. King Sagar decided to do *Ashwamegh Yagya* but the horse kept for it was lost. So king Sagar sent his sons to find the horse. They saw the horse near by the *Ashram* of Kapil *muni*. They ran to catch the horse paying disrespect to the *Muni*. With anger, Kapil *muni* burned all of them. Narat *muni* got all the information about the accident and told to King Sagar. Then King sent his grandson Anshuman (from the side of queen Shabya) to Kapil muni. He made the Kapil Muni happy and gave back the horse to King Sagar. He ruled the country for short period and handover the kingdom to his son Dilip. King Dilip also handover country to his son Bhagirath and he went to Jungle. King Bhairath is very much appreciated in "Mahabharat". When he knew about the death of his ancestor by burning, he gave his authority to his Prime minister and went to peak of mountain to do hard and long meditation. Goddess Ganga became very happy with his hard dedication and became ready to go to earth on his request. Ganga told him that only god Shiva can control her speed of flow. So with the hard meditation he also made Shiva pleased and became ready to hold Ganga. So finally King Bhagirath succeeded in his attempt. While Goddess

Ganga asked him to guide the path he walked ahead to guide Ganga and he went through the way where the fossils of his ancestors were. In this way he gave salvation to his own ancestors. With the great attempt, Bhagirath got succeed to bring water in earth and serve all creatures. For this great deed, his sculpture is kept in all the hitis. There are three names of spouts found in Hindu epics and they are; Swargaganga(Mandakini), Bhuganga(Bhagirathi) and Patalganga(Bhogbati). (Poudyal:2067:118-211).

### **7. Sculpture of other deities:**

Many sculptures of different religions are kept in *Hitis*. One reason is to give the respect to the own religious deity of the king whoever made the *Hiti* and another one is many other *Data* (donors) donate to get religious merit. The sculpture of Ganga is also kept in some sculptures with Uma-maheshwor. Ganga is very much appreciated in holy epic "Gita". It is believed that some special thing is mixed from Himalaya because of which the water of Ganga never gets dirty. None of the water is found similar as the water of Ganga, so it is assumed that the special characteristic of Ganga which cleans all the demerit of mankind. The vehicle of Ganga is *Gohi* (Crocodile) so Ganga is portrays as the beautiful lady riding or sitting on the *makara*. The all credits goes to Bhagirath for bringing Ganga in the earth (Poudyal:2067:11-15).

### **8. Jahrao hiti (Jaladroni):**

Jahrao *hiti* is a newari word and Jaldroni is sanskrit word. Most of the *Hiti* and also in some cases on the way also *Jaldroni* are installed at the walls. It functions as modern tanker. Water must supply by human or in some cases it is directly connected with water source. The reason to put *Jaldroni* is to supply water to thirsty people. In case of *Hitsi*, *Jaldronis* are kept to relief the mass of water consumer. It is believed that making such *Jaladroni* is also a kind of merit.

### **9. Hitipata:**

Two sides of the *hiti* are called *Hitipata*. *Hitipatas* are decorated with different patterns in some cases they are left plain stone.

### **10. Stairs:**

Because of the entire traditional water spout from ancient to medieval period are made lower level than the road level. It is very necessary to make staircase to go down till the place of spout. The number of stairs is depends on the depth of water spout from road level.

This stairs are found in all the water spouts according to the depth. In some cases, a pair of stairs is made and some where only one according to the depth.

*Hitigah:*

It is the depth where the water goes flowing after the spout. This is just below the water spout where the water pots are kept to fill. In this place water is dispatch after flow from the *Hitidha*.

Two Lu-hitis of Bhaktapur:

In the Sundhara of Taumadhi all the elements are made in artistic way. *Hitipata* is also made with nice carvings. *Jaladroni* is very artistic and above the *Jaladroni* nine images of *Navagraha* are carved with highly skilled craftsmanship. Five steps stair is in front of *Hitidha* to reach the ground level of hiti.

In case of Sudhara of Thanthu Hiti:

In case of *Lun-hiti* of Thanthu durbar all the parts of *hiti* are decorated with highly skilled craftsmanship. The image of Bhagiratha is very decorative (fig-10). The physical body, details of the images and patterns will be explained later in next chapter.

### 3.3 Patterns used in Water Spouts

In case of Malla art and architecture, decorations play a vital role. Every small and big thing is decorated with patterns. From miniature to monumental art works patterns are used to give decoration. In case of image of *naga*, texture of snake is carved very lively which shows the skill and craftsmanship of that period. The floral patterns are also made in many cases

Sundhara of Taumadh

In this water spout very simple design called '*kasimo*' (fig-11) are carved on the wall. The *Hitipata* are carved with very nice designs. The carving on these *Hitipata* is distinct and clear on the metal covering also till the date. This carvings show the high skill of craftsmanship of early Mall period.

## Sudhara of Thanthu Hiti

In this water spout, floral patterns are used to decorate the niches. On the walls also different pattern are carved to make balance and aesthetic value. Stones are carved very nicely. The bodies of *Nagas* are carved with lively effect of snake in the hard medium like stone as well as in wood.

### 3.4 Sculptures found around Water spouts

As mentioned above water spouts are religious place. Many deities are installed in the area of water spouts. The king or the donor kept the sculptures of their own religious cult at *Hiti* area. Especially they kept their cult's god or goddesses just above the *hitimanga* in a decorative niche. One can identify the donor's religious cult by seeing the deity above the *Hitimanga*. Not only above the *Hitimanga*, are images of religious deities kept in other places as well. Mostly Shivaling is also kept in the area of water spouts. In most of the cases image of Bhagirath is carved below the *Jaladronis*.

#### 3.4.1 Sundhara of Taumadh:

##### a) *Navagraha* sculptures:

*Navagraha*(fig-12) means the nine planets. The *navagraha* are considered as nine different planets and these nine planets have their own importance in the science of astrology. People believed that movement and position of them make difference in human life. Since every person has a zodiac sign and the signs are given according to the movement of those nine planets. If the planets are in good position one can gets success but the breakdown of the movement in planets make bad effects.

Names of Navagraha: (From left to right respectively)

##### 1) Surya :

This is the first image installed above the Jaladroni. This deity is in sitting position and holding two flowers in two hands. Holding flower in his both hands as usual in other Surya's posture. Surya is the main member of solar system and also the deity of of the day '*Ravibar*'(Sunday). He is wearing crown on head but the head part seemed as if it is cut with sword or with some sharp knife. (fig-13)

## 2) Som :

This is the second image known as Som or Chandra next to the image of Surya. This deity is also sitting position same as Surya. This deity is also holding flowers in his both hands. Head of this deity is also in damaged condition. Som is moon the satellite of earth and also the deity of second day of the week '*Sombar*' (Monday). The images of Surya and Som look very similar. (fig-14)

## 3)Mangal:

This is the third image in the row after the image of Som (fig-10). Position of this image is little bit strange, though the posture is in sitting position the left knee is lifted up ward. Right hand is in Avaya mudra and left hand is holding a kind of sword. Mangal is the planet Mars and also the deity of the day '*Mangalbar*' (Tuesday). (fig-15)

## 4) Buddha:

This is the fourth image in the row after the image of Mangal. Buddha is the planet Mercury and also the deity of the day '*Buddhabar*' means Wednesday. He is holding a weapon on his left hand and right hand is in the posture of ..... he is also in sitting position. (fig-16)

## 5) Brihaspati:

This is the fifth image of the row after the image of Buddha. Brihaspati is the planet Jupiter and also the deity of day '*Gurubar/ Bihibar*' means Thursday. He is also in the sitting position. (fig-17)

## 6) Shukra:

Sukra is the planet Venus and also the deity of the day '*Sukrabar*' Friday. He is also in sitting position (fig-18)

## 7) Shani:

Shani is the planet Saturn and the owner deity of the day '*Shanibar*' means Saturday. He is also in sitting position (fig-19)

#### 8) Rahu:

Rahu is the planet Pluto. He is only half body from head to chest. His both hands are holding some fruit like shapes and held till the chest level. (fig-20)

#### 9) ketu :

Ketu is the planet Neptune. His right hand is holding Tarawar till the head level. He is also in sitting position.(fig-21)

#### b) Bhagiratha:

As in other water spouts, image of Bhagirath is installed below the *Hitidha*. In this water spout, the Bhagirath is not so common with compares to others. The image of Bhagirath is neither in *Namaste mudra* nor in conch blowing posture. He is in very difficult position; his right hand is on right knee which is folded and left hand is on the floor, left leg is twisted upward which seems very unnatural. Head is also slanted and he is wearing crown. In two sides of two similar kind of patterns are carved. (fig-22)

#### c) Shiva Parvati:

This image is just above the *hiti* which shows the cult deity of the donor. Since this *Lün-hiti* was made by king Yakshya Malla, who was the great worshiper of Shiva. He made Yakshyaswor temple to show his respect toward his *Istadevata* Shiva. So it might be the same reason that he kept the god Shiva with his consort Parvati. But present sculpture of Shivaparvati/Umamaheswor is not the original one which king Yakshya Malla kept since the deities are not fitted on the niche. It is very small with compare to niche and now joined with the use of cement. So one can easily noticed that the present image was replaced there very later. The original one might be stolen or lost from there. (fig-23)

#### 3.4.2 Sudhara of Thanthu Hiti:

##### a) Shiva Linga:

This shivalinga is kept south direction on the plinth. It is the only Statue of Shiva *linga* in this spout.(fig-24)

b) Sculpture of Bhagirath:

This is highly decorated sculpture, carved with high craftsmanship. Bhagirath is blowing conch with his right hand, right leg is folded and left hand is holding flower, left leg is stepping on the floor. Bhagirath is wearing ornaments like crown on his curly hair, necklace, bangles, *kali* and can see the scarf blowing on the background. Edges are decorated with leaves, dragon, birds images and on the top, image of goddess is in flying position and the two *Nagakanyas* are below on the two sides. (fig-10)

c) Pote Devata –

Below the two Jaladronis two images of deity are placed. It seems like ladies figure but it looks the representation of Bhagirath. They are called Pote Devata. These images are also decorated like the image of Bhagirath. They are holding *Kalash* in downward position with their right hand and with left hand holding branches. (fig-24a, 24b)

d) Golden *Naga* – 2

Two *naga* are erected by facing each other. Both *Nagas* are molded with gold plated metal with the texture of snake skin. (fig-25A,25B)

e) Small models of temples.

Just above the *Hitidha*, in five small decorated niches, five miniature temples made out of stone are kept as the sample of different temples. There are temples with Pagoda style, Shikhar style and dom style. (fig-26)

f) Niches-26

On the arch shaped wall niches are made and they are decorated with patterns of leaves. Making the water spout centre, niches are placed thirteen in each side altogether twenty six in number. (fig-27)

3.5 History of Lühi of Taumadhi:

This water spout seems made for the worship of two god and goddess Siddhi Laxmi and Bhairav. The temples of these deities are located at the same place that is at Taumadhi square. But it is not true since the water spout was earlier than these temples. This golden spout was made at the reign period of Malla king Yakshya Malla. He installed one big stone inscription at left side of the water spout and

mentioned the purpose of making this water (fig-28). The inscription is inscribed in Newari language in 'Ranjana lipi'. The names of festival like Bisket jatra, Indrajatra etc are mentioned there. So it can be assumed that the spout was made to serve water to pilgrims during the festival time.

During the interview with Mr Binod Raj Sharma, he said that this particular water spout was related with the Shiva called Mampati Mahadev (Mampao Mahadyo) which is located at the kwanchhen tole at present just inside the Goodwill Finance. According to him this water spout is also related with a Lalitmaheshwor, which is inside the main entrance door of Bhairav temple.

### 3.6 History of Luhiti of Thanthu Hiti:

According to the story, while constructing Thanthu palace to the east of Tulaja temple, one night Goddess Taleju appeared in the dream of Jitamitra Malla, king of Bhaktapur. Goddess instructed him to make a provision for bringing water from the Mahadeva River of Nagarkot to carry out worship of Taleju in the palace through the *Rajkulo*. This work was initiated in 1678 (798 Nepal Sambat) and in 1683 (803 Nepal Sambat), construction of Sundhara along with the pond was completed. (Khaniya:14)

This Water spout is one of the important water spouts of Bhaktapur. It is a good example of Malla craftsmanship. On Nepal Sambat 798 Aashadh Shukla Dashami, King Sumati Jitamitra Malla installed the water spout with the help of his minister Bhagiram. They conducted water from *Rajakulo* to his palace and make many other outlets too around the city. By installing a gold plated snake on the eastern side from the temple of Tulaja Bhawani, King Jitamitra Malla made very artistic golden water spout and did a great *Yagya* and started a culture to perform daily bath of Goddess Tulaja Bhawani with its water. At that inauguration time a pair of white ducks was offered to flow through this *Hiti*. That ducks went from the spout and disappeared going till the source. It is said that ducks were seen swimming in the pond. This process of appearing and disappearing of these ducks could be observed till some generations of Malla Period. (Page no-168, Nepalko Sankritik Tatha Aitihāsik Dīgdarshan, Publisher: Mrs Bhawani Keshari Munankarmi, Ghatakha tol, Bkt-13- Lila Bhkta Munankarmi)

### 3.7 Conclusion:

The symbolic representation of some kind of visual form is called icon. Religion is a very vague subject which binds many cults under it. In case of Tantric Hinduism as well as Buddhism, meaning of the symbols is kept in secret and only the people who had took *Dikshya* could talk about it.

## Social-religious significance of Dhungedhara

### 4.1 Function of Dhungedhara

Water is the liquid form which always flows from top to bottom. Whenever water gets the slopes it flows and makes its own way to flow ahead. It is a natural process of water. So it is very difficult to stop the flow of water and send water from bottom to top. In case of Nepal, which is a hilly country where valleys are formed in between the hills.

While talking about the resources of water in case of Bhaktapur, many people believe that water comes to ancient spouts through tantric power. So people scared to dig the sources of water spouts believing that bad things may occur if they go further digging. In some cases nearby water source like *Kulo* or *Inar*(well) are made as the source of water. *Rajkulo* is the big and long canal system through which water used to supply in many water spouts. The *Rajkulo* is the main source of water supply and it started from the Mahadev pokhari of Nagarkot(fig-29). It is also in very high level from Bhaktapur. So from there, canals were made till the water spout of Thanthu Durbar and many other spouts of Bhaktapur.

According to Mr Om Dhaubadel (based on interview), in case of the *Luhiti* of Taumadhi tole, the source of water is the *Inar*(Well) which is inside the compound of Bhairav temple. Some people think that this water spout is also connected with the *Rajkulo*. It might be possible, this *hiti* has both two sources of water; *Inar* as well as *Rajkulo*.

### 4.2 Socio-religious and environmental significances:

Water spouts were made with many purposes. Its first purpose is obviously providing water to pilgrims and thirsty people. Some water spouts carry important history, culture and tradition. Some spouts are taken as source of power; some are related to particular gods, goddesses and festival. For example the Bhindhyohiti of Bhimsensthan is used in the temple for all the rituals and to maintain the statue in every 12 years. And pilgrims receive services from that spout in Shivaratri as well as pilgrims in *Naadhara Mela*(nine spouts festival) in full moon day bath. There is a custom to worship Taleju of Bhaktapur by the water of golden spout from inside the Thanthu durbar (Amatya;2003:49). In case of golden spout of Thanthu Durbar, King Jitmitra Malla made the long canal from Mahadev Pokhari to the Durbar area

including his many other spouts. He clearly mentioned in the inscription his wishes of making the *Lün –hiti* to please their *Istadevi* which is a religious side of making the golden spout. Before that some Suwal appointed in the palace, used to go till that Mahadev pokhari to bring pure water to worship goddess Tulaja Bhawani. His work of making a golden spout inside the Thanthu Durbar make it very easy to do worship with less effort. Same inscription shows the social work he did through this act. The rules he inscribed in the inscription showed his free thinking for all his citizens. (Poudyal,2022:44-49)

Environment is the most important thing for settlement. It is very difficult to stay in the places where natural disasters attack frequently. Nepal is a hilly region that there are more chances to have lands slide. Blockage of natural water in outside and frequent inner flow of water from sources might moist soil and may cause the land slide. One of the main reasons of landslide in Nepal is this. By Making water spout on such places can stop the soil being moist and in another side it provide easy water supply to the local people. Landslide might control if waterspouts are made in many places by identifying the natural sources in Hilly region. Such practices were performed in 2030B.S. in S.O.S. Balgram, Thimi in the direction of German citizen Mr. Otto Taucher. At that time new water spouts were made, old spouts were revived and one water source was found out. (Tamot; Madhuparka No:22, Voll pg-6-12)(article titile “Nepali Janajivanma Dhungedhara”)

#### 4.3 Relation of Water spouts with temples:

As history shows that how the civilization developed on the edges of water. Only because of water, civilization became possible at the Mesopotamia, Greek and in around the world. So human need water from born to death ritual ceremonies and temple is also a social junction point of human’s devotion. Water is the most important thing to begin *puja* coz *Snan*(ritual bath) of main god is done with *Jal* (pure water) to begin the *nitya puja*(daily worship). It is necessary to have some water source nearby the temple to make it easy.

Mostly in Kathmandu valley water spouts are made near by the temples or pilgrimage area. The reasons to make water spouts on the main roads of old ways are that pilgrims and visitors could get water easily whenever they get thirsty. So one can noticed that mostly temples are made in the side of rivers from where people can take water easily. For

example the famous Pashupatinath temple of Kathmandu is on the edge of Bagmati River. Most of the *Piths* of mother goddess of Bhaktapur are on the side of River like Bramhayani Pith, Barahi, Maheshwori etc. If the temple is not near by the natural river then for sake of its facility, some water storage or sort of water supplying system are made nearby at the construction time. For example a pond is made at Budhanilkantha, water spout are made in many temples like Suryabinayak, Mahakali, Indrayani, Tripurasundari Pith of Bhaktapur. The concept of being pious own self to worship the god or to touch the sculptures of god and goddesses, people wash their face, hand and legs or some takes bath as well before to entering the temples.

In case of the *Lün-hiti* of Taumadhi while passing through there one can noticed many temples standing around. There are world famous temple Nyatapola, Bhairav temple and Narayan temple. The Bhairav temple is just right side of the *Hiti*. So it is seem that *Lün-hiti* is either made for Bhairav or for the goddess Siddhilaxmi of Nyatapola temple. But it is very strange that the spout was not made for any of them. Cause that *Hiti* was made earlier than those temples. King Yakshya Malla made that *Hiti* in the date Nepal Sambat 560 which has a proof of big stone inscription at the left side of the spout dated Nepal Sambat 560 (Rajbanshi:2020,7).

But the both temples; Nyatapola and Bhairav temple were made very later at period of King Bhupatindra Malla. According Mr Binodraj Sharma (Priest of Taleju, Researcher and culturist), this *Lün-hiti* has relation with a Shivalinga called Mam Pateshwor (*'Mampati'* in Newari) which is located at the place called Mampati at present in the courtyard of Goodwill Finance Company Ltd. And two another Shivalinga at the courtyard of Bhairav Temple. These three Shivalinga are known as 'Lalit Maheshwor'. 'Nao Dhara Mela' is one of the festivals celebrates in Bhaktapur on the day 'Janai Purnima' which lies on the month of Bhadra. There is a culture to take bath or wash face on nine different stone spouts of Bhaktapur facing towards east. The *Hitis* are located at; 1. *Hiti* on the south side of Suryavinayak temple, 2. The middle *Hiti* of Swadhala *Hiti* (Tindhara) west from Suryavinayak, 3. *Hiti* located on the way to Bhaktapur with Peepalbot from Suryavinayak. 4. *Hiti* in front of the Bhagawati temple at Kwanchhen, 5. *Hiti* in front of Duru pwa: dyo inside the courtyard, 6. Bulubulu *Hiti* of Sukuldhoka, 7. *Hiti* inside of Sukuldhoka Tripur Vidhyapith, 8. Bhimdyon *Hiti* of Duttatraya and 9. *Hiti* at the Bhaktapur Campus at Bajigancha. (Dhaobadel:date,28)

One of the old festivals of Bhaktapur is Bisket Jatra which celebrates in the month of Baishakh. This festival is formally starts from Taumadhi tole. So there is always a huge mass of people gathered at the time of Bisket Jatra. So another intention of making this golden spout over there might be to supply water to the people who ever comes at the festival time. In the inscription also the names of Bisketjatra and Indrajatra are mentioned.

Mostly Water spouts which are made near by the temples are made to bring *jal* (water) to perform *Snan* (bath) of main god of the temple and to do *Nitya Puja*.

In case of *Lün-hiti* of Thanthu Durbar, King Jitamitra Malla made the spout to take water to do worship Goddess Tulaja Bhawani, which is mentioned on the inscription dated 1740 B.S. (Poudyal,2022:46)

#### 4.4 *Guthis*

Groups which are formed to organize and run different social purposes are called *Gosthi* or *Guthi*. It is a purposeful group (Regmi;2007:291). The term '*Guthi*' was come from the word '*Gosthi*'. *Guthi* is a trust for maintenance of spouts, ponds and temples. *Gosthi* culture/tradition used to be very common in Lichchhavi society. The main concept of *Guthi* is to do necessary work together (Bajracharya: 2053, 157 and 284-289). Two types of *Gosthis* were there in Lichchhavi period. First one is personal *Gosthi* in which own family members were involved and they have all right to run the *Guthi*. In second one, all the right given to the *Guthiyars* (the members of related *Guthi*). Different *Guthis* were organized to run the different works in temples as well as social groups. The *Gosthi* organized to facilitate the people to drink water is called "*Paniyagosthi*". Such *Gosthis* used to active by distributing water during some festival or during the time while huge mass of people gathered together. Such *Gosthis* are still active at present time like in Machchhendranath Jatra in Patan and Gaijatra in Bhaktapur. At present time also one can see the continuity of *Guthi* in Newari society. Still many functions and festivals are run by *Guthis*. The *Guthi* which take the responsibilities to make *Hitis* in different places and do the maintenance duty is called "*Pranali Gosthi*". *Gosthi* were directly linked to social works of communities.

The concept of making *Gosthi* is to do community works like; religious as well as social welfare make the practice more easy and practical. Because they got income through their source which are donated land in the name of *Guthi*. It is already cleared that property used to donate to *Gosthi* from the Lichchhavi period from the inscription of Lele by Shivadev and Anshuverma in which 8 *Manika* farm was given to *Pranali Gosthi* (Bajracharya:2053,284). In case of Golden spout of Thanthu durbar also King Jitamitra Malla donated 10 *ropani* land in the name of *Rajkulo's Guthi* (Pande, Purnima 01,04). His published inscription about the rules for royal canal will be described later.

#### 4.5 Repair and Present condition:

Nothing remains forever in this world. Everything has their own timing. And after short interval of time, things became old and became damaged. History shows that some big monuments became disappear due to lack of maintenance and ignorance. The lost of palaces like Kailashkut bhawan, Bhadrdivas and many more give the clear concept how the big monuments like those became lost and at this time no one knows about their locations where such ancient palaces of history used to stand. So all the monuments need maintenance after some time or time to time as per need. Only maintenance can preserve the old monument for future generations. In case of Water spouts, they also need maintenance by time to time for its mechanism as well as for their physical appearances.

The first evident found about repairing of *Hiti* is from 633 A.D. in which Vishnu Gupta repaired the Spout which is already made by Bhogaverma (Bajracharya:2053,453). This inscription not only shows the existence of *Hiti* but also clear concept of giving care to the *Hitis* which were made before.

#### 4.6 Maintenance through Sithi Nakha

All the Newars of Kathmandu valley celebrate Sithinakha festival. It lies on sixth day of the bright half of the month of Jeth (in the month of May). It is celebrated as the last festive occasion of the year among Newars. Siti Nakha is considered as the birth day of god Kumar, son of Lord Shiva. Kumar is worshiped as the deity of war. This festival is one of the important day for Newars because on this day, Newars clean all ancient water sources like wells, springs and spouts. This day resembles the day at which the level of water in well, pond and *Hitis* goes to the lowest level in a year. In Newar societies it is taken as the religious and spiritual process. It is believed that in this very day, the *Naga* deities inhabiting in these source come out of water retaining bodies, their habitat, thus paving the way for unhindered maintenance of these water sources (Khaniya: 2005,31). Mostly after cleaning the water spouts and wells it is left for four days. Nobody is allowed to take water from these sources for four days. According to religious myth snake gods of the well and pond goes out for *Devali*(yearly feast) and and worship in that day so it is suitable for cleaning. After the cleaning, one small piece of mica is kept in it (Amatya:2003,65)

## 4.7 Physical Description of Two *Lün-hitis*

### 4.7.1 *Lün-hiti* of Taumadhi

*Lün-hiti* of Taumadhi is one of the oldest water spouts of early Malla Period. This water spout is located at left side of Bhairab temple at Taumadhi. This is rectangular in shaped not so deep from the road level. Only five steps of stairs are there from road level to reach the courtyard of the *Hiti*. This *Hiti* is very simple according to its architectural form. This *Hiti* is facing towards west direction. The stair is in front of the *Hiti*, so one can enters to the *Hiti* Space Facing toward East direction. This *Hiti* is not so big in volume. In the north direction, almost on the middle of the wall of a big *Jaldroni* is installed and above that *Jaldroni*, nine very nicely carved sculptures of *Navagraha* are kept. These sculptures as well as *Jaldroni* are made out of stone. On the top of *Jaldroni* small roof is made which can protect the sculptures beneath from rain. Nine sculptures are carved in a row leaving same gaps on both sides. All the figures are in sitting position except the last one.

### 4.7.2 *Lün-hiti* of Thanthu Durbar

*Lün-hiti* of Thanthu Durbar is located at Sundhara chowk. Sundhara chowk is in the east of the Tunthichowk. This rectangular shaped courtyard of Sundhara chowk is surrounded by a part of the Thanthu Durbar in the south, wall and road in the east and the garden of the palace in the north which is using by government offices. This courtyard is surrounding by bricks walls of different heights approximately from 7ft to 10 ft. This courtyard has four entrance doors; main entrance door is at south side where one can enter from temple area. The entrance door is very simple made out of wood as the normal doors of Newari houses. Wall is connected from the left side of the entrance door and one more door is installed at the middle of west wall. This door might not be in natural form since one can sees the arch shaped construction up the door made out of white cement and also two rectangular shaped shapes in two sides which seems as the influence of Rana construction. From this door one can goes to the garden where the horse of Taleju Bhawani is kept and also the army/ police guards are lived. Again this door is followed with bricks till the corner. The corner is followed by brick walls till the middle of north wall. In middle of this north wall two storied *Satal*(fig-30) is constructed. That *Satal* has two windows at ground floor and a door in between the windows. Windows have *Tiki Jhya* (Ankhihyal) and in door also the *Tiki Jhya* is kept. Upper storey is half open and half roofed with *Jhingati*(tiles) as in Newari houses. This house is followed by wall again and connected to one more door which is a little bit higher than the floor are with three stairs. This door is also followed by wall till the corner and east side is completely wall without doors but wall is separated into nine partitions with

a bit embossed ten pillar like walls. Its still followed by walls till the south wall. In this south wall two doors are kept one is approximately in the middle and another one which is used as the main entrance nowadays is at the corner. This wall is connected to the Durbar area. The main entrance wall is little bit coming inward the Sundhara chowk. Four doors are looks similar with the height 6X3 ft made out of wood and inside locking techniques as used in old newari house.

This rectangular shaped courtyard has four tiers of steps on all sides leading to a square shaped pond with the size 18X18 ft. In the first step there is nothing kept. Small three steps stairs are kept to go to second tier in three places. One stairs is at the corners of south and west facing east direction, second stair is at the corner of west and north facing south direction and third stair is at the corner of east and south facing toward west direction. The entire floor is covered with bricks except the edges. On the edges, stones are used.

In the second tier among four sides three sides are closed and only east side is given the semi circle shaped. In both sides of east direction, three steps stairs facing toward west direction to go to third tier. In this semi circle floor of east direction, one stone pillar is installed at right side in which lotus shaped carving is kept at the top and on left side one Shiva Linga facing towards west direction is installed. Four *Naga* are kept in the edges of second tier. Two *Nagas* are facing towards east direction, and two *nagas* are at eastern direction are facing toward west direction. But in present time, the heads of *Nagas* are broken and not in good condition. In the eastern direction from this second tier to till the four tier are aligned. *Hiti* is made in this side too facing towards west direction and only stones are used. The remaining three sides are again separated into two tiers and as in first tier, the edges are covered with stones and the remaining entire parts; all the walls and floor are covered with bricks. In the corner of north-east and east-south three steps stairs are kept facing towards south and north directions. These two stairs reaches the platform of *Lün-hiti*. In all the stairs, stones are used at stepping places.

After the four tiers in the centre the small pond is made and one stone pillar is erected at the center. On the top of the pillar, one *Naga's* head facing toward the east direction is installed which is molded with gold. The pillar is also carved with the texture of snake's body. Just below the head of the snake, round shaped designs like *Kasimo* designs are carved.

Eastern wall is shaped in semi circle shaped. This *Lün-hitiis* kept at the centre of eastern wall. In the eastern direction the beautiful *Lün-hitiis* installed with lots of decoration. This semi circled shaped is again decorated making corner in both sides from the *Hiti*. There are three corners in both sides. Although the whole eastern wall is made out of stone from second tier to the fourth tier or just above the pond, it is separated with different patterns. From top at the second tier, *Naga* head facing toward north direction is erected. This *Naga* is also molded with gold and facing to the *Naga* erected on the pond. *Naga* is in coiled form in back side. On the head of this *Naga* a pair of legs which looks like the bird's leg is carved on a circle which seems that there used to be the image of bird or any other creature was there before which had broken already and only legs are remained. The texture of snake is carved very properly in back side and strives are carved in front part as same in real snake. Below this *Naga* three small miniatures of temples are kept. The right side one is already lost in the middle a temple looks *dom* style temple is kept and in left side *Shikhar* style temple is kept. These temples are based on a stone and below that stone, round shaped design are carved and followed by five niches which are separated with small decorated pillars. Above the niches five small *Torans* are carved. In all *Torans* a hole is carved at the middle in same place. Five miniature temples are kept in the niches which are in ruin form. It is difficult to recognize exact form of the temples which are in two sides but they looks like *Shikhar* style temple, the centre one is *Dom* style temple and another two temples are in Pagoda style. The separating pillars are seems molded with gold in many places but gold molding is not remained in every places. The base stone of these niches is carved with half circled shaped designs.

From these niches thirteen niches are carved in both sides. Niches are placed in symmetrical balance in both sides. From the centre niches in both sides three niches are places in a small curve and one-one corner are created then another curve where three more niches made and again one corner and two niches and in a little bigger curve where five niches are made. The niches are in the shape of *Jwalabali*. The space in between the niches are decorated with leaves patterns and in the edges of both side are decorated with twisted decorative leafs upside down form. The niches used to have the images of different deities at the time of construction but any single images are not left at present. The priest and the one of the culture specialist Mr. Binod Raj Sharma shares his experience that he saw many images of deities at those niches and used to take bath at Golden spout before 2030 B.S. The images started to disappear and stolen after 2030 B.S. He remembers the images on that niches were very simple, not so complicated and Tantric as in the images of Tushahiti of Patan. Unfortunately all the niches are empty at present. One can imagine the beauty of water spouts with all the images on niches and its aesthetic value.

After the four different layers of stone from the centre, water spout is ejected. Corners are maintained till the base level. Water spout is made in the centre of half circle. The spout is very decorative with the carvings of many animal figures. As it is called *Lün-hiti*, the stone spout is fully covered by gold plate. As usual the image of *Makars* is there and presence of other animal figures make this spout more interesting and unique. Head of He-goat is coming out side from open mouth of *Makara*. Teethes of *Makara* are clearly carved. The figure of goat is very distinct with horns, ears and also two front legs are coming outside and it looks the remaining body of the goat is inside the *makara*. The mouth of the goat is open from where the water used to dispose. *Makara's* upper part is very curvy with stripes on front part and some designs are on curvy side. Eyes of *Makara* are carved very properly that its eye brows are also very decorative. From these eye brows very decorative curves are coming outside in both sides which seem as horns. The both sides of the *Makara* are carved with different animals. Below the carvings of animals, Newari texts are carved in both sides. And behind the *Makara's* head part and on the top part of the body, one animal looks like squirrel is installed but the tail is not that much long. This animal is on a oval shaped base which edges are carved with petals of lotus. Except on face part whole body is carved with patterns to give the texture of animal. This animal is standing on its four legs and facing toward as same as water spout.

In the right side from the wall to towards the mouth portion, a line of decorative pattern carved which looks similar as patterns used in the *Jwalabali*. This is on the wall and on the side a little bigger pattern followed by a human figure. The figure is carved till belly and rest of the part is merged with the patterns which gives the effect of mermaid. He holding the *Sinhamu*(tika holder used in rituals) with his right hand. That *Sinhamu* has three steps and base. Hair part is very decorative and face looks very muscular. As an ornament; very big round ear ring, necklace, bangles, bajuband and belt are carved. Although the body is not carved half way, face is completely visible. On the left arm side, big bird is carved, a head of tortoise and small bird is carved in front of the human figure. A frog is there on down. Twisted body of snakes is carved on the upper part. The texture of snake looks very lively. In front of bird and tortoise's head front part of horse is carved with front right leg. Horse leg is resting on the cell of another tortoise. In front of horse's face one more animal is there whose leg is stepping on another bird's body. One big animal looks like *bwaso* is there with its head and right hand. Below *bwaso* one another small animal looks like horse is there. Below them a conch is carved in which the leg of horse is stepping. From the twisted body one snake is heading towards west side in front of the *Bwaso*. In the left side also the carvings are similar but the human figures are damaged so it is not distinct to see the object he holding. The gold plate of hand portion till the chest is already damaged. In both side, animals are composed very tightly and it looks some animals are overlapping other. All the animals, human figures as well as water spout also facing west direction.

As similar to other Water spouts a relief of Bhagiratha is kept just below the spout. This relief work is very decorative with patterns.

Just after the half circle there are corners in both sides and on those wall one can see the wholes as in *Jaldroni* in rectangular shape stones and two reliefs are installed one is below the each whole. Those reliefs are facing west direction same as the *Lün-hiti*. In those reliefs image of one muscular male figure is carved in each. In both reliefs the figures are surrounded by plant with very decorative flowers, leaves and birds. Both reliefs are similar but the position of the deities is just opposite to make balance. In the right side, this deity looks in standing position and holding the plant with right hand and left hand is raised above holding one pot which seems as the pot is pouring. The posture looks as the pose of dance, his right leg is down and left leg is folded and stepped on the flower in a little height. Head part is very decorative and as an ornament; two necklace, *bajuband*, bangle, *kali* and wearing *Dhoti*. In the left relief also, composition, decorations are same but the posture is just opposite. According to Dr. Purushottam Lochan Shrestha, such deities are called "*Pode Deuta*" in local language and in the Glossary of 'Water conduit in the Kathmandu valley' (page-95) it is mentioned that the Bhagirath is also called '*pode/pote deuta*'.

This eastern wall and all the floor of fourth tier is made out of stone.

#### 4.8 Source of Water:

For any types of water spouts, *Kuwa* (Dug-well), pond or any water suppliers need source of water. It is very important to have reservation of water or natural sources to flow water from these kinds of manmade water supplies. The flow of water depends on the source it has. So it is very necessary to make good reservation to flow the water continuously from water conduits. While making the water spouts or supplies in Malla period, kings and donors as well as citizens put their collective effort to construct such a pious place.

The stone inscription installed in west side of small waterspout which is located in the east side from the palace mentioned that King Sumati Jitmitra Malla built Golden Water Spout including pond in 1735B.S. King Jitmitra Malla built Thanthu Durbar with the wish to make the *Istadevi* (Tulaja Bhawani) happy, during the reigned of his Prime minister Bhagiram. Copy of these inscriptions is archived in the Bir Pustakalaya (Library) too. In that copy it is mentioned that it was copied from the big garden and also Mr Shanker Rajbanshi also

included it in his "Bhaktapurshilalekhsuchi". So it is assumed that that stone inscription might be in the garden of Thanthudurbar (Pande; Purnima2 -2).

In order to guarantee a sufficient quantity and quality of water for drinking and household purposes as well as for irrigation King Jitamitra Malla issued a strict law on cleaning and maintenance of the water distribution system on his town (Becker-Ritterspach; 1995:14)(Pande;Purnima 2-1)

Translation of the inscriptions

*Dhalape* (officers appointed for canal) have to take half *Dam* per *Ropani* from the people who have to supply water for Paddy plantation. People have to go for one day to work on *Kulo*(canal). Whoever goes for making *Kulo*, has to go on right time and has to maintain the *Kulo* till the evening. *Dhalape* have to give *Nissa* to the person who works for *Kulo*. Punish 3 *Dam* to the people who will not go to work for *Kulo*. *Dhalape* are not allowed to take anything from people. It is not necessary to take wood to *Dhalape*. During supply water for paddy plantation, supply according to source nearby (term wise). Cast system is not counted during water supply. So no one is allowed to cut the water supply. King has to think if anyone does not obey this. Or the appointed officer for this work has to think. In this case if the *Dhalape* makes any mistakes or controversy then they have to punish 6 rupees. Shree Shree Ugra Malla, Shree Shree Bhupatindra Malla Chaotara (Primeminister) Poor Bhagiram. Nepal Sambat 803 (B.S.1740) Jyeshthashukla Mahajyeshthi.

In 1745 B.S. King Jitamitra Malla kept an inscription by giving 10 Ropani farm to the Guthi of water spout of garden and royal canal source.

There might be the chance of having canal at the time of Tularani and King Jitamitra might only renovate the canal system

It is a very courageous work to make *Kulo* and in case of Bhaktapur also King Jitamitra Malla performed this courageous act during his Prime Minister Bhagiram. King Jitamitra Malla made Royal canal to flow water in Thanthu Durbar as well as in many spouts of his town. For he made a long canal from Nagakot to till Bhaktapur and conducted canal with the Golden spouts of Thanthu Durbar and with many other conduits of Bhaktaur town.

About the Royal Canal Construction of Bhaktapur, it is mentioned King Jitamitra Malla made that canal. Just 2 *Kosh* (Km) from Bhaktapur, one hill is there named "Mahadeva dada/Pokhari". There is a famous small pond called 'Mahadev Pokhari' in the lower portion

of that hill. On the way, many big and small water flows gathered with Mahadev Pokhari. Because of collective flow of many small and big water flows, it takes the form of river and flows till the base of Nagarkot hill. There are many *Ghatta* in the edges that is why people called it Ghatta Khola. Dam is tight on Ghattekhola or Talloghatta and flow of river turns to right side. That flow of water leave the Ghatta Khola in the form of canal making a round way on the base of Nagarkot and reaches at the base of Talekot. To avoid the over flow from Telekot, a bridge is made there and the canal functions from that bridge. In this way that canal round the base of Talekot and supplies water to the left land, it arrives at Kharipati. From there by irrigating both side farms in a zigzag way goes to Bansbari. It is risky and chances of bursts of canal while coming down from the Kharipati. So according to the places lands are left. In that "*Parti Jagga*" animals are not allowed to ride and *Dhaddi Ghans* (a kind of grass) is planting. Doing this much still not protecting the land and somewhere it is floated in the *Naka*. So for protection point of view, in such cases, permanent walls are built. Because of making the main road to Nagarkot in the same *Naka*, for the safety of road also canal is made out of cement permanently. In this way, somewhere with permanent form and somewhere with impermanent way that canal comes till the down from Panipokhari called the place "Dugga".

There are two ponds in Dugga. Among them upper one is little bit smaller and lower pond is very big and deep as well. Arriving at Dugga a little water of that canal drops in upper pond and rest of water flows to farm for irrigation through canal.

Water dropped in upper pond of Dugga flows down to the lower pond. From that big pond, water flows through pipe made out of burnt clay and bricks. Directly from this pipe water reaches to Bhaktapur. After reaching Bhaktapur town, that canal generates the golden spout of Thanthu Durbar, water spout of Khaomatol, water spout of Nasamana tole and Golden water spout of Bhairabnaath(Pande,43,45)

Conclusion:

The importance of *Hiti* is in many aspects like Socially as well as religious way. Many linkage are found in between temples and near by water spouts. *Pranali Guthis* were made to maintain the water related functions. They take care of the repairing and cleaning purposes of the *Hitis*. Source of water are maintained with different water resources like *Rajkulo* and *Inars* etc.



## Chapter V.

### Summary and Conclusion

#### 5.1 Summary:

In this research work researcher tried to study in detail of two stone spouts of Bhaktapur. Both spouts are called “*Lün -hiti*”. Though both spouts; *Lün-hiti* of Thanthu Durbar and *Lün-hiti* of Taumadhi are from the Malla period, there are differences between them.

The brief introduction of the Bhaktapur city is given with its historic background. To clarify the reason to do this study statement of problem about the subject how the ancient and historical spouts are drained and their condition at present are described. The objective of the research where researcher writes the aspects of study like architectural point of view, iconography etc. In the topic justification the reasons are given the necessity to do this study for documentation as well as for preservation. Some methods of research format are also written to clarify how this research is performed. As the part of research methodology, some reviews of books, as well as published and unpublished articles are done to make a clear vision of the subject.

Researcher gives clear vision of artistic city Bhaktapur with different artistic monumental presence. To clarify any topic, history is always important so a short historical background of water spout is mentioned. The names of the *hitis* of Bhaktapur are also listed with address. Art and architectural view of water spout is also described. The materials which are necessary to build the *Hitis* are mentioned. Very brief of the development of the *Hiti* in the context of Nepal is mentioned. Legends are another part of history which also briefs the condition, some religious aspect as well as moral parts too, whether in some cases it is believable and sometime not. The mythical story and legends related with water gives the link among moral, religious, social and nature.

With realization of the importance of the icons and symbols which carry religious philosophy as well as aesthetic value, researcher writes about the importance of iconography, the significances of iconography with relating the elements of *Hitis*. The description of patterns used in the water spouts.

The mechanism is the major part which makes the water spouts function. The natural functioning with filtrations is the most important mechanism of Dhungedhara. The process of this mechanism is described. The socio-religious and environmental significances are also described by explaining the *Guthi* system, cleaning system in the festival *Sitinakha*. By conducting with history and with present physical condition of both *hitis* are described with observing the each and every element present in physical condition. In detail the review of the *hitis* are done.

In the fifth chapter researcher writes the summary of the previous chapters as well as analyze them in different perspectives and some suggestions are given for the conservation and with the point of tourism.

## 5.2 Conclusion

The foremost and essential component of human life is water. It is a fact that two-thirds of Earth's surface is covered by water however only 3% of it is freshwater.

Water spouts are the places which have religious importance with social need, water fulfilling capacity with scientific functions. According to the religious point of view it is a very pious place where one can worship many god and goddesses with the pure water flow Ganga from the mouth of *Makara*. Many religious status/ sculptures kept at the courtyard of Waterspout added its values in artistic way as well as religious aspect. Because of its artistic display it can be taken as open gallery. Kings from history showed their religious deed by making water spouts and sculptures of their respected deities at its courtyard.

The presence of sculpture of Bhagirath at the bottom of the spouts reminds his myth how he brought water in earth for the salvation of his ancestors. Everyone can get inspiration from his strong determination and how it is important to take determination to reach the goal. So by philosophical way, it is a place of inspiration too.

According to social aspect it is a junction point of different places, as well as peoples. From early in the morning to the evening time people go there with their different purposes. In the morning time they go there to become fresh; to wash faces, some of them take bath and they offer water to the deities over there. So in this way in ancient time they started their day from water spouts. Ladies come there with same purpose and also take water as *chokho pani* (pure water) for worship and household usages. In the day time or anytime

people from different places pass through there to fulfill their thirst, while walking through the way.

Because of water spouts are being the junction place for all people with different cast, at ancient and Medieval period, kings used to issue inscriptions at the area of water spout to flow the information about rules and to let people know when and who made the monuments. Many inscriptions are found in the area of water spout like King Jitmitra Malla kept the inscription on the left side of the water spout which mentioned about importance of water donation and reason why he put this water spout there to fulfill the thirst of visitors passed by. Also King Jitmitra Malla kept the inscription at the area of *Lün-hiti* area mentioned about the rules and the donation for *Guthi*. Now days it is also the visiting place for foreigners. It is a place of tourism sector as well. The skilled carvings and religious images always attract foreigners. So such places became the open museum for all.

Installation of different deities at the area of water spout showed the artistic development of past. The first sculpture of mother goddess Gaja-laxmi is also found in the Chyasalhiti, Patan. Lain Singh Wangdel gave the date 1<sup>st</sup> century A.D for that sculpture, which shows the trend of installing the religious images in the spout. The presence of such an old sculpture on the area of the water spouts shows the time of construction of the spout too. Almost all stone spouts in the valley are highly decorative with religious images and from philosophical inspiration. One cannot be stayed without being fascinated with the mechanism which was developed in that time and many of them are still functioning. It is really a big challenge for the present condition to to make such mechanism.

At present one can face scarcity of water in many places of Kathmandu valley. From day by day the problems are increasing still having many modern technologies. But while studying the history one found well management of water distributions. The natural water was supplied in many aspects to public like; pond, deep well and stone water spouts in many places. Water spouts were made in many places, which separate the Toles of the valley. They are also made in the paths where the old festivals celebrate, so that people can get water easily whenever they get thirsty. And the installation of *Jaldroni* also shows their pious thought. Their vision to manage and supply water to the visitors whoever pass by the path shows their pious thought. Their management through *Guthis* for all the acts from supplying water, maintenance and many more are still the role model for present time also.

The *Guthi* system is also a role model for present time that they used to do all the works with the rules which used to be fixed by the *Guthiyars* (members of *guthi*) and the functions are continued till now. It is really amazing to know that the festival '*Sitinakha*' was celebrated in which they do cleaning job of all the water sources and that is very environment friendly too. The festival *Sitinakha* is celebrated on the month of 'Jestha' of Nepali calendar when due to summer season water level goes lower and it became easier to clean and the religious belief also match that in this season, snakes of the water leave the water. While thinking practically it is true that if any water animals or snakes are there in the sources when the water level is high but they have to go somewhere else when the water level goes down.

According to culture experts of Bhaktapur Dr. Purushottam Lochan Shrestha and Mr. Binod Raj Sharma both of them share that the *Lün-hithi* of Thanthu is not in their original condition except the pillar with snake and the *Hiti* position. All the surrounding had changed with time. May be there were many reasons behind that it might be natural disaster like earthquake or might be the reason to restoration. It is changing and come to present condition. Mr Binod Raj Sharma share his memory, whole place was he saw made out of clay and later on bricks and stones were used. Also Dr. Purushottam Lochan Shrestha recalled his child days when he used to play and took bath; the place was open without walls. He gave the reason that the earthquake happened in 1990 B.S. might changed its form. One can noticed the highly skilled carvings of *Hiti* but the doors are not matching with them. It might be installed very later. Since it is a palace area, so there used to be more decorative doors instead of that.

So it is very important to preserve such monument since Bhaktapur is enlisted in "World Heritage Site". It will be very worthy if it regenerate its water flow. Because of the unplanned urban development, most of the water supply canals are blocked by construction of concrete buildings. So it is the real challenge for presence to make them regenerate and conserve them.

Appendix

Photographs



Fig-1 Sundhara Mohan Chowk, Hanumandhoka, Kathamndu



Fig-2 Sundhara of Dharahara, Kathamndu



Fig-3 Tushahiti of Patan



Fig-4 Sundhara of Patan



Fig-5 Sundhara of Thanthu Durbar, Bhaktapur



Fig-5 Detail of right view



Fig-5 Detail of left view



Fig- 6 Sundhara of Taumadhi tole, Bhaktapur



Fig- 6 Detail of right view



Fig- 6 Detail of left view



Fig-7Gajalaxmi of Chyasalhiti, Patan



Fig-8 Bhimsenhiti, Bhaktapur



Fig-9 Mangahiti, Patan



Fig-10 Bhagirath from Sundhara, Thanthu durbar



Fig-11 Kasimo design from the Sundhara of Taumadhi



Fig- 12: Jaldroni of Taumadhi with Navagraha



Fig-13 Surya



Fig-14 Chandra



Fig-15 Mangal



Fig- 16 Buddha



Fig- 17 Brihaspati

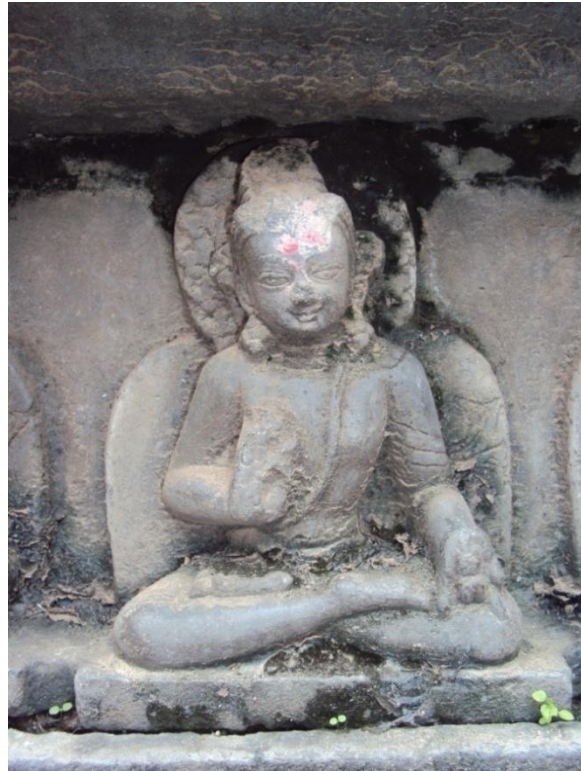


Fig- 18 Sukra

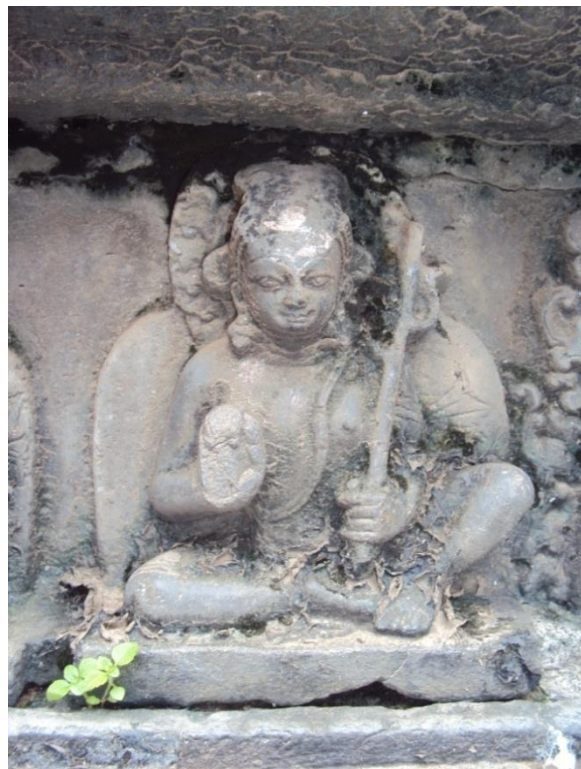


Fig- 19 Shani



Fig- 20 Rahu



Fig-21 Ketu



Fig-22 Bhagirath of Sundhara Taumadhi



Fig-23 Shiva Parvati, Taumadhi, Bhaktapur



Fig-24A Pote Devatal (right side of Sundhara)



Fig-24B Pote Devata II(left side of Sundhara)

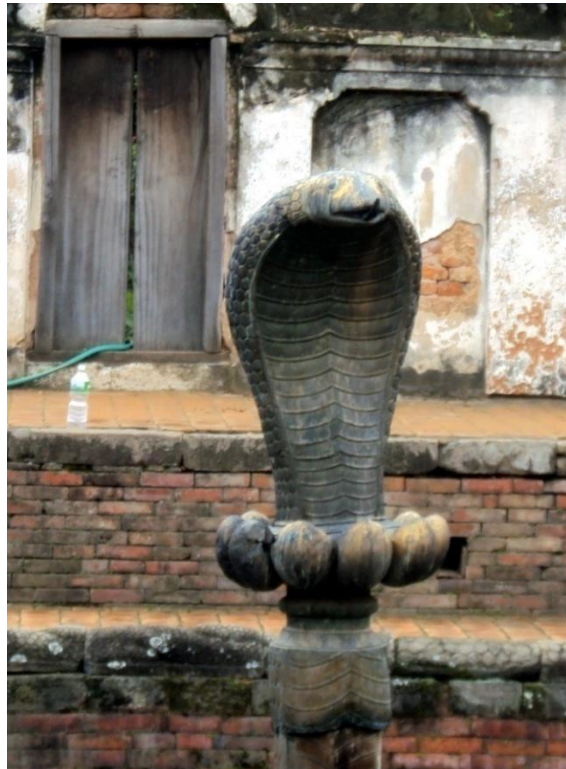


Fig- 25A Golden Naga(Infront of Luhiti)



Fig-25B Golden Naga (above the Luhiti)



Fig-26 Miniatures of temples above the Luhiti



Fig-27 Niches of Luhiti, Thanthu durbar



Fig- 28 Inscription of Yakshya Malla from Taumadhi







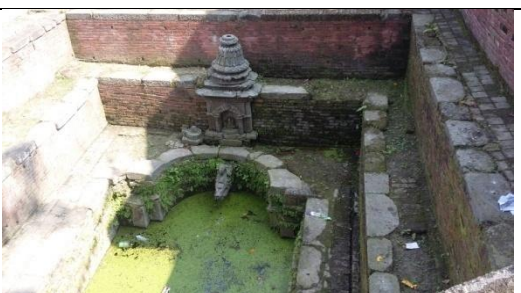




Fig-29 Mahadev Pokhari, Nagarkot



Fig-30 Satal of Luhiti in Thanthu durbar

Photos of Water spouts of Bhaktapur:

	
<p>1, Photo: Mangalachhen2-14</p>	<p>2, Photo: BarahiPith-16</p>
	
<p>3, Photo: Onthe slope of Ganesh SS, Bharwacho-17</p>	<p>4, Photo: Right side of Ganesh SS, Bharwacho-17</p>
	
<p>5, Photo: Infront of Hanuman pati, Vanshagopal-17</p>	<p>6, Photo: Infront of ShahidsmritiPark-15</p>
	
<p>7, Photo: Behind Indrayani Pith, Byasi- 15</p>	<p>8, Photo: Infront of Indrayani Pith-15</p>
	
<p>9, Photo: Sano Byasi-10</p>	<p>10, Photo: Sano Byasi on the road-10</p>



11, Photo: Thulobyasi-10



12, Photo: on the way to Byasi to Kalighat-10



13, Photo: At Kalighat-10



14, Photo: Inside Byasi Gate-10



15, Photo: At the corner of pond, Byasi-10



16, Photo: Thulo Byasi-10



17, Photo: Leftside of Indrayani Dyochhen, Khauma2-15



18, Photo: Bulucha-

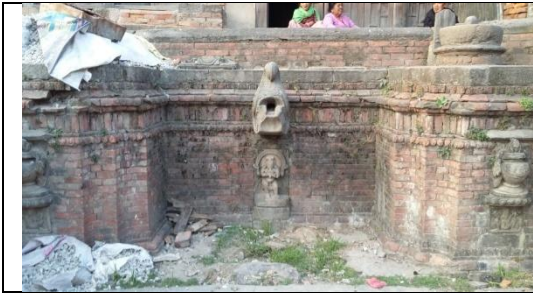


19, Photo: Taumadhi-11



20, Photo: Infront of Shiva Guest House, Durbar Square-11

	
<p>21, Photo: At the side of Vidhyarthi Niketan School, Balakhu-8</p>	<p>22, Photo: Side of Sharada School-Yalachhen10</p>
	
<p>23, Photo: Baha Hiti, Chochen-9</p>	<p>24, Photo: side of Chhuma Ganesh Temple-9</p>
	
<p>25, Photo: Tripusundari, Tulachhen-8</p>	<p>26, Photo: Karmacharya chowk, Tulachhen2-8</p>
	
<p>27, Photo: Golmadhi-7</p>	<p>28, Photo: Parikhel-7</p>
	
<p>29, Photo: Inacho-6</p>	<p>30, Photo: Bhimsen Hiti, Duttatraya-3</p>



31, Photo: Side of Sala Ganesh (pondarea)-3



32, Photo: At the corner of Ganesh Pokhari-3



33, Photo: Near Tony Hagen House, Gachhen2-3



34, Photo: Navadurgasthan, Gachhen-3



35, Photo: Pond area, Kwakhandao-4



36, Photo: On the way to Kuthu Math, Kwakhandao-4



37, Photo: Prashannashil Mahabihar2-4



38, Photo: Nagancha2-4



39, Photo: Infront of Saraswati Vidhyagriha S S,Lamgal-3



40, Photo: At Bramhayani Pith-1



41, Photo: On the way to Bramhayani Pith, Degaena-1



42, Photo: At Chyamhasinga-1



43, v Near the Hanumante river( Sought of Sun Shine school)-17



44, Photo: At Ratnavawan, Sakotha-8



45, Photo: Bulbulhiti, Sukuldhoka-8



46, Photo: On the way to Kamalvinayak from Mahakali(left side)-4



47, Photo: On the way to Kamalvinayak from Mahalaxmi, Mooldhoka( Right side)-4



48, Photo: Mahalaxmi on the road near by Pati-4



49, Photo: At the compound of Mahalaxmi Temple-4



50, Photo: Nagpokhari, Thalachhen-4



51, Photo: At Chorcha-6



52, Photo: At Yachhen-5



53, Photo: Lalachhen-5



54, Photo: Gapali-12



55, Photo: At Bhimsensthan opposite



56, Photo: Dhaobhari Hiti, Adarsha-11

	
<p>57, v Wasikacha, Jagati-7</p>	<p>58, Photo: On the way to Golmadhi from Hanumanghat-7</p>
	
<p>59, Photo: On the way to Maheshwori, Inacho-6</p>	<p>60, Photo: On the premises of Wakupati Narayan Temple-1 (2)</p>
	
<p>61, Photo: At Suryamadhi-1</p>	<p>62, Photo: On the way to Chyamhasinga, at the slope(Right side)-1</p>
	
<p>63, Photo: Side of Mahakali, close to Khyapukhu-5</p>	<p>64, Photo: Premises of Matchhye Narayan, Khyapukhu-5</p>



65, Photo: Down to Mahakali Pith-5



66, Photo: Bholachhen-5



67, Photo: Nasamana near Pati-14



68, Photo: Mangal Kunda, Nasamana-14



69, Photo: Nearby Bhagawati Temple, Taumadhi-11



70, Photo: Velukhel-11



71, Photo: On the way to Suryavinayak, Suryavinayak Nagarpalika-2



72, Photo: Near the stairs of Suryavinayak, Suryavinayak Nagarpalika-6






73, Photo: Suryavinayak Temple,



74, Photo: Near Army Barek,

Suryavinayak Nagarpalika-6	Suryavinayak Nagarpalika-5
	
75, Photo: Gundu, Ananta Lingeshwor Nagarpalika-14	76, Photo: Near Peepalbot, Anantalingeshwor Nagarpalika-14
	
77, Photo: Near Subarneshwor L.S.S., Suryavinayak Nagarpalika-4	78, Photo: Tindhara, Katunje, Suryavinayak Nagarpalika2-4
	
79, Photo: At Sallaghari down of Chonga Ganesh-17	80, Photo: Etapako, Sallaghari-15

	
81, Photo: Hakufwa Hiti, Kalopati, Sallaghari-17	82, Photo: Near to Yatu Mahadev temple, Manjushree Nagarpalika-2

	
<p>83, Photo: At premises of Dwarika Temple at Durbarsquare</p>	<p>84, Photo: Sundhara of Thanthu Durbar, Bhaktapur</p>
	
<p>85, Photo: At Bhatedhikur on the way to Saga.</p>	

# Bibliography

1. Tamang, Mikma(2063BS) "Aitihāsik Shahar Bhaktapur ka Dhungedharaharu ko Bisheshta". Hamro Sampada, National Monthly (unit-10, yr-6, 2063 Falgun) page155-157
2. Munankarmi, Lila Bhakta(1993) "Bhaktapur ka Dhungedharahauko Bikash Byabastha",Ancient Nepal (No-135, Oct-Nov1993) page17-24
3. Amatya, Saphalya (2003) "Water and Culture" Kathmandu" (published book)
4. Khaniya, Ganesh(2005) "Traditional Water Management Practices: A Case Study Of Bhaktapur City" submitted to Jalsrot Vikas Sanstha(JVS),Nepal(February,2005)
5. Kafle, Binod (M.A.) 'Ancient Water Spout'  
Source:<http://www.everestnews.com/stories2006/anc030220o6.htm>
6. Bhujū, Ukesh(2069) "Hiti Heritage", Nuwagi(unit-5 yr-1 Bhādra 2069) page 34-37
7. Becker-Ritterspach, Raimund O.A.(1995) "Water Conduits in the Kathmandu Valley" India: Munshiram Manoharal Publisher Pvt. Ltd
8. Tamot, Kashinath(No-22)"Nepali Janajivan ma Dhungedhara", Madhuparka:6-12
9. Mackdonald, A.W. and Stahl, Anne Vergati(1979) "Newar Art" England: Aris and Phillips Ltd.
10. Ancient Nepal (No-139, June 1996) page 1-10
- 11.Bhattarai, Surendra(2057) "Kathmandu Upatyakaka Dhungedharaharu", Nepal:12-
12. Poudyal,Bholanath(2022) "Bhaktapur ko Rajkulo", Purnima:44-49
13. Dhaubadel,Omprasad "Jala Sanrachana ma Utkrista Vastu- Dhungedha" ,Prabidhi
14. Poudyal, Beena(20) "Ved Puran ka Kehi Anmol Ratna", Pulchowk, Sajha Prakashan
15. Poudyal, Beena(2067) "Ved Puran ka Kehi Anmol Ratnall", Pulchowk, Sajha Prakashan
16. Majupuria,Trilok Chandra and Majupuria, RohitKumar(2009) "Gods, Goddesses and Religious Symbols of Hinduism, Buddhism and Tantrism",Gwalior,M Devi

17. Shrestha, Purushottam Lochan and Vaidya, Tulsi Ram(2002) "Bhaktapur Rajdarbar"Kirtipur,CNAS
18. Pradhan, Riddhi(1990) "Dhunge dhara: A Case Study of the Three Cities of Kathmandu Valley" Ancient Nepal:10-16
19. Lamsal, Devi Prasad(1969) "Jalabugyan" Ancient Nepal:38-41
20. Shrestha, Sukra Sagar(1996) "Tusa Hiti" Ancient Nepal:1-10