

## Symbolism of Sacred Art in Water Conduits

**Sandhya Khanal, PhD**

Associate Professor, CD Culture, TU  
Sandhya.khanal999@gmail.com

### Abstract

*Nepal is a country with abundance of traditional art, architecture and culture. Almost every monument comprises faith, belief, devotion and sacredness which are initiated to be expressed through symbolic representation. Historicity of water conduit of Kathmandu valley can be traced back to early Cristian Era. They were installed to fulfill basic need of water. Flowing water is compared to goddess Ganga. Thus, every water conduit is equated to goddess Ganga with depiction of a crocodile, her vehicle. Cent percent water conduits of the valley consists of sculptural art associated to Hindu or Buddhist deities and a few with architectural monuments. It also comprises sculptural art of several creatures as; serpent, fish, frog, chameleon, mongoose. These deities, monuments and creatures are found to be a symbolic expression of theme associated with religious belief and faith. In this context, finding out the theme of an art expressed in a water conduit, chief feature of sacred sculptural art of water conduits and symbolic representation of sculptural art of water conduits of Kathmandu valley have been focused as an objective of this research. This qualitative research is based upon historical fact. Thus, the facts are collected from historical monuments through survey, interview, collection of photographs and are analyzed in a descriptive way. Related literary sources have been consulted as a secondary source. From several references, it is to be considered that water conduits of the valley have been basically set up for social and religious utility with installation of several deities according to their faith. Art of each conduit as well as image portrays specific features belong to related historical age. Besides this, each sculptural art depicted on the conduit conveys symbolism of goddess Ganga and several pilgrimages composed within a precise pious abode.*

**Keywords:** dhungedhara, hiti, yachu ti, Bagirath, astha naga, lokeshwora

## Introduction

Water conduits since an ancient time were established in Kathmandu valley to fulfill basic need of drinkable water evading people to fetch water from river and rivulets around. Water conduits are locally known as *dhungedhara*. They are mostly famous as *hiti* among locals, which is derived from Newari term *yachu ti* or *yiti*, meaning pure water. Water conduits were the main source of pure water for social and religious deeds during the past. They were installed with artistic exquisiteness along with expression of religious belief. Thus, in this context, how are the theme of art expressed in water conduits of the valley? What are the chief features of sculptural art of water conduits? And what are the symbolic representation of sacred sculptural art of water conduit? These themes have been identified as an objective of this research.

Antiquity of water conduits of Kathmandu valley have been traced back to early Kiranta period. Kirantas were perfect in making ponds through preventing leakage of water from its base channeling water from natural source nearby or rain water to their settlement at the ridges of hills (Tiwari, 2012). Sunken bath known as *snanagar* are found to be established in Indus valley civilization linked with well (Wheller, 1998). It has been assumed that this technology developed by Aryans was handover through generations to early Licchavis and further. Water conduit of Patan famous as Na *hiti* of Chysal with an ancient sculpture of goddess Gajalakshmi belonging to 1<sup>st</sup> century BC is supposed to be the ancient water conduit of Kathmandu valley. It has been mentioned in Gopalrajvamsabali, that king Vrishadeva established a chaitya in Sinagu Mahabihar (Swoyambhu) and constructed water conduit for lord nearby (Vajracharya & Malla, 1985). Several water conduits were established during Licchavi period by kings and the commons as they were expert in making canals. The mixture of ancient technology of pond introduced by Kirantas and Licchavi's expertise on canal would have eased them to construct number of water conduits in Kathmandu valley with reliable source of water and best elaboration of art.

Water conduits are not merely a means of providing water but a specimen of grand traditional technology of the time, a marvelous architectural remain of the past and a means of expressing religious faith. They are found to be installed with an abundant traditional filtration technology along with channeling of water from far distance to make it pure and drinkable. They are also found to be set up with magnificent architecture with sunken base designed to serve a large crowd at a time with sufficient space and splendid distribution of water. Not a single water conduit of the valley has been traced without an installation of image of deity or art that are linked with religious theme. Likewise, each water conduit through its structural plan, the spout that flows water, deities that are positioned on the top of a conduit or around its premise comprises striking peculiarities. These elements easily reflect features of their legacy belonging to specific historical phase.

Almost every water conduit of the valley comprises at least a single image and many conduits are found to be installed with large numbers of deities. Water conduits of Hanumandhoka royal palace of Kathmandu and Patan durbar installed during medieval period are the best manifestation of faith expressed through great number of tantric images. Traditional art of a conduit with Makara, Bhagiratha installed beneath every spout, sculpture of several deities, serpents and water associated creatures, chaityas and miniature of traditional architectures are the chief constituents of water conduits. Each of these element comprise a deep illustration allied with piousness, religious faith, traditional belief and devotion conveyed through symbolic art and sculptures. Thus, how have they been articulated and what are the secret of these symbolic art has been tried to reveal in this article.

## **Methodology**

This research is an explorative one based upon qualitative study. As a subject matter it is a historical study. The facts collected for this study is based upon historical monument that has been analyzed through qualitative method. The facts essential for this research have been collected through primary and secondary sources. As a primary source the water conduits around Kathmandu have been surveyed. The architectural layout setting of water conduits of the valley, the art of water conduits, the images and monuments installed around conduits and its premise were survey and listed. The inscriptions installed around water conduits were collected and photograph of every monument were collected. Experts, locals, priest of related monuments were interviewed. Local belief, faith and practices associated with these monuments were listed. As a secondary source books, journals, Puranas, articles, newspapers were reviewed.

This research has been delimited within the area of Kathmandu valley. There are number of water conduits around Kathmandu valley. Almost every water conduits consists of sculptures and monuments. Amidst several water conduits, as a purposive sampling water conduits that have varieties of sculptures and monuments installed around its premise have been selected. As an objective of this research is to focus on theme of art installed in water conduits, their features and the sacred symbolic representation of them, it has been analyzed in detail. After detail analysis of above mentioned facts a concrete conclusion has been dragged out. The sources that were utilized while analyzing the facts have been cited in the content and its detail at reference section.

## **Main Findings**

Water conduits were mainly established to fulfill demand of pure drinking water for social, cultural and religious purposes. Through utilization of sustainable source, they have been found to be lay out with grand technology. As they comprise numerous sculptures and arts installed around, water conduits are great through their aesthetic value. Every monument

that comprises within it and its premise are valuable from thematic, religious, artistic and symbolic aspect as well. The detail analysis of these facts have been discussed below.

### **Spouts with engraving of crocodile**

Conduit is an essential component of sunken architecture that discharge water. It is found to be inserted within a vertical wall connected with a main source of water. Almost ninety-five percent of water conduits of the valley are engraved with Makara. Creatures as elephant, lion, bull, mouse are worshiped as vehicle of Lakshmi, Devi, Shiva, Ganesh. They are not only worshiped as their vehicle but also a representation of deities with a great faith. Makara is a vehicle of goddess Ganga. As a symbol of Ganga, Makara along with its body are found to be engraved at every spout. The head of a Makara is engraved in almost every conduit that look like a deer and its body similar to the fish with legs. The front side of a conduit contains the face of Makara with elongated eyes, thick eyebrows, plump cheeks, layers of upper and lower teeth with an open mouth, long erected ears as deer and molded horns. The snout of every Makara as a trunk of an elephant is found to be turned upward coiled at its end. They are depicted with or without tongue and are found to be covered with long hair as of a lion at the top of head. A long slim body of Makara are often engraved with a pattern of whirlpool along with flowers and foliage engraved within and consist of two tiny legs at each side. These are chief features generally found on Licchavi water conduits of the valley.

Very few exceptional example of early water conduits have been found to be engraved with tiger, as Bageshwori *hiti* of Bhaktapur and Bagdwar of Shivapuri. Likewise, many creatures as lion, serpent, frog, bull, fish are found to be engraved on the conduit. Basically, these creatures are found to be engraved on a sub conduit. Sub conduits are installed at the premise of water conduit to divert pressure of water during its heavy flow and for proper distribution or management of water for the crowd as well. This verifies that except Makara other creatures are engraved on the conduit. These creatures as Makara represent specific deity or religious significance associated with them.

Depiction of several creatures along with Makara is found to be introduced during medieval period. During this period several creatures as cow, bull, goat, fish, serpent, tortoise, elephant, lion, tiger, Garuda, duck, horse, deer, wolf are engraved along with Makara. Creatures as; deer, bull, cow, buffalo, dog, goat, elephant, lion, peacock, mouse, serpent, lion and wolf are represented as goddess (Birdwood, 1988, p. 91). As a representation of goddess Ganga all these deities as her symbol might have been installed. A water conduit (*Bhimsen hiti*) established by king Pratap Malla at Bhimsensthan Kathmandu has its spout with engraving of Garuda and serpent along with Makara. A conduit installed by king Jayaprakash Malla in NS 777 (1657 CE) in front of Indrayeni temple Bhaktapur consist a cow coming out of a mouth of a tiger and the tiger from the mouth of Makara. A marvelous

sample of water conduit (*Mechyo hiti*/ buffalo headed spout) of Tamsipakha Kathmandu is made through perfect combination of Makara, elephant and buffalo each coming out through the mouth of a Makara. These are few example of spouts that consist creatures found to be installed through combination with Makara. There are number of such conduits established during medieval period. The best example of several creatures portrayed along with Makara are found to be installed in three medieval palaces of Kathmandu valley. Tusha *hiti* installed by king Siddhinarshima Malla in NS 767 (1647 CE) at Patan Durbar consists fish, tortoise, cow along with Makara. Sundhari hiti and Mohankali hiti installed by king Pratap Malla in NS 770 (1650 CE) and NS 771 (1651 CE) both consists elephant, tortoise, lion, wolf, cat and calf along with Makara and elephant, tortoise, tiger, wolf, frog, crocodile, mouse, cow, calf along with Makara in an artistic way. Likewise, Sundahara installed by king Jitamitra Malla in NS 803 (1682 CE) Bhaktapur comprises duck, sheep, fish, horse, serpent, frog, tortoise, bird, wolf, goat and conch shell. All these creatures from two sides of a spout appears to be peeping out inquisitively.

### **Deities installed at water conduits of Kathmandu valley**

Findings of terracotta figurines belonging to 3<sup>rd</sup> century BC from Kapilvastu and Lumbini proves an antiquity of image worship in Nepal. The earliest example of image of Kathmandu valley is an image of Gajalakshmi from Chysal belonging to 1<sup>st</sup> century BC. There are thousands of image of deities scattered around Kathmandu valley. They are found to be installed in temple, alley, open area, cross road, riverside and water conduits. Daily life of Nepalese starts with worship of deities or offering water to them after purifying oneself. It might be the reason that ancestors selected water conduit to install deities so that after purifying oneself one can offer water to deities from the conduit. An ancient sculpture belonging to 1<sup>st</sup> century BC discovered from Kathmandu valley is found to be installed at Narayan *hiti* of Chysal Patan. Likewise, an image of Vamanswami Vishnu installed at Duga *hiti* Sanku of 538 CE and Padmapani Lokeshwor of Taha *hiti* Ganabahal Kathmandu of 550 CE (Vajracharya, BS 2030) are few earlier examples. This, prove that since an early time sculptures of deities were installed at the premise of water conduit. It also helps to prove the antiquity of water conduit as well. There is numerous image of deities installed in water conduits. Few of them are discussed below.

### **Sculptures of Vishnu**

Lord Vishnu is known as savior among trinity (Brahma, Vishnu and Shiva). He is found to be worshiped in several forms since the ancient time. His images are established alone, along with his consort Lakshmi, with Lakshmi and Garuda known as Shridhar Vishnu, mounted on Garuda known as Garudasan Vishnu, half Vishnu and half Lakshmi known as Basudevkamalaja, sleeping on the coil of serpents known as Seshsayi Vishnu and several forms of incarnation. An ancient image of lord Vishnu is found to be installed at Tapa *hiti* of Patan belongs to 4<sup>th</sup> century CE (Bangdel, BS 2039). The finest example of

lord Vishnu with his Shakti Lakshmi made up of metal with gold gilding is found to be installed by king Siddhinarshima Malla at Tusa *hiti* Patan Durbar. Lord Vishnu with his consort Lakshmi at his right and Garuda at his left is known as Shridhar Vishnu. There are plentiful images of Shridhar Vishnu found to installed at earlier and later constructed water conduits of Kathmandu valley as; Naxal Nandikeshar *hiti* Kathmandu, Chyasal *hiti*, Konti *hiti*, Amrit *hiti* Patan, Bhimdhyo *hiti* Bhaktapur and many more. Garuda is a vehicle of lord Vishnu. According to Mahabharata Garuda was appointed as his vehicle by lord Vishnu due to his loyalty and courage (Poudyal, BS 2056). Image of Garudasan Vishnu can be found at Tusha *hiti*, Chyabahal *hiti* of Patan, Ari *hiti*, Dhokapine *hiti* of Bhaktapur. Vishnu is also depicted in a joint form with his half body and half with Lakshmi. It symbolizes the joint form of *prakriti* and *purush*. A marvelous example of Vashudevkamalaja belonging to 17<sup>th</sup> century CE is at Alok *hiti* Patan belonging to early medieval period which is installed at top of a water conduit. Seshayi Vishnu is that form of lord Vishnu on which he is found to be sleeping on a bed of serpent. Huge image of Seshayi Vishnu is found to be installed at the middle of a pond at Bhandarkhal *hiti* of Hanumandhoka Royal Palace, Kathmandu. Likewise, Seshayi Vishnu is found to be installed above the spout through which water flows, as this form of Vishnu sleep on a bed of serpent on the ocean. Several incarnated form of lord Vishnu as Vamana, Krishna, Balaram, Buddha, Kali are found to installed in many water conduits of the valley.

### **Sculptures of Shiva and Shivalinga**

Lord Siva is worshiped as a destroyer by Hindus. It is believed that he is a cause of creation of all creatures and a destroyer as they assimilate within him after life. Lord Shiva is worshiped in many forms, but his most popular form that are installed and worshiped commonly in Nepal are Umamaheshwor, Bhairava and Shivalinga. These images of lord Shiva are profoundly found around Kathmandu valley. Umamaheshwor is a conjugal form of lord Shiva along with his consort Uma sitting at Kailasha along with his *ganas*. This form of lord Shiva is so favored by Nepalese sculptures that they are found to be installed from 2<sup>nd</sup> century CE. An early image of Umamaheshwor belonging to 3<sup>rd</sup> century CE is installed at Barun *hiti* of Pashupatinath (Bangdel, BS 2039). There are numbers images of Umamaheshwor installed at Thamel Ga *hiti*, Nandikeshwor *hiti* Kathmandu, Konti *hiti*, Chyasal *hiti* Patan, Palikhel *hiti* Bhaktapur and many more in several water conduits. Bhairava is a ferocious form of lord Shiva. He is worshiped with offering of alcohol and sacrifice along with tantric procedure. Lord Bhairava is found to be installed at water conduits especially belonging to medieval period installed by medieval kings. They are installed in several forms along with their consort especially in water conduits of Royal palaces of Kathmandu and Patan.

Shivalinga is a united form of lord Shiva and Uma symbolizing the creation of the world. The upper part of Shivalinga represents male or lord Shiva while the round base part with outlet of water is a representation of female organ or Uma. They are found to be

installed in intangible or symbolic form. Nepalese since an ancient time have been found to be worshipping this form with great devotion. It is one of the most popularly worshipped form and found to be installed in uncountable number. They are found in maximum water conduits of Kathmandu valley. Most of them are found in a simple form without face of lord Shiva engraved on it, while few of them are installed along with four faces.

### **Sculptures of Buddha and Boddhisatva**

The theory of Buddha is spread worldwide. Buddha was worshiped through symbolic illustration as wheel, deer, elephant, pipal tree, horse, lion during early days. He was worshipped through making of an image during the reign of Saka and Parthiyans and mainly the Kushanas of India. Image of Buddha and Boddhisatva are found during the excavation of Kapilvastu and Lumbini of Nepal belonging to earlier period. Boddhisatva is believed to be a representation of Buddha. It is believed by Mahayanas that a devotee through following the path of Buddha can attain Boddhisatva. To make realize wisdom to other after realizing itself is Boddhisatva (Aryal, BS 2059). The images of Buddha and Boddhisatva are found from 5<sup>th</sup> century CE in Kathmandu valley. Buddha is worshipped as a founder of Buddhism by Buddhist. Whereas, he is worshiped by Hindus as one of the incarnation of lord Vishnu. Bhagwat Purana mentions Buddha as a ninth incarnation of lord Vishnu (Rao, 1997). Thus, he is worshipped with same devotion by Hindus and Buddhists. Many Hindu temples consists an image of Buddha and Boddhisatva. Several water conduits of the valley have presence of Buddha and Boddhisatva images. Especially the water conduits that are located near monasteries comprise these images. Taha *hiti* Ganabahal has an image of Padmapani Boddhisatva belonging to 5<sup>th</sup> century CE. Thamel Ga *hiti* Kathmandu, Ilane *hiti*, Tapa *hiti*, Alok *hiti* Patan has images of Buddha.

### **Creatures installed at water conduits**

There are several images of water related creatures found to be installed at water conduits. Serpent, fish, frog, Chamaeleon, mongoose, frog are established as a sub spout or on the lid of a spout. Serpents are locally known as *nagas* and worshipped in Nepal as deity. Kathmandu valley was huge lake during the ancient time and it was abode of *nagas*. When water of the valley was let to flow by Manjushree, Kortaka the chief of *nagas* tried to flow along with water. Manjushree requested him not to leave the valley, so on request of Manjushree *nagas* lived at Taudaha (lake) of Kathmandu valley (Wright, 1972). Before construction of water resources or any infrastructure and after completion of it, *nagas* are worshipped, as the land of the valley is believed to be their possession. As *nagas* are related with water, they are seen at the premise of water conduits of the valley till the date. Thus, many water conduits of the valley consist the image of *nagas*. There are some unique traditional practices linked with these creatures. It is believed that the misuse of conduits, entry of women during monthly cycle, usage of soap and honey would annoy them and they cause to block the outlet of water and people are still conscious regarding these issues.

Thus, following the rules strictly they are often found to be worshipping the image of *nagas* installed at premise of conduits. There is an images of Basuki *naga* at Thamel Ga *hiti*, Naxal Nandikeshwor *hiti* Kathmandu, Dhaba *hiti* of Bhaktapur and in many more spouts. Amazing images of *Astanagas* protected by hundreds of hoods in an anthropomorphic form are established at Mohankali *hiti* and Tusa *hiti* of Kathmandu and Patan Durbar. Fish is found to be installed as a sub conduit or on the lid of water conduit. Fish are associated with water and considered to be a sign of good luck. Likewise, Chamaeleon, mongoose reside at the lower level of ground near to water sources. It has been described in Vrihat Samhita that, these creatures signify the possibility of finding water where there is a scarcity of water. Thus, they are indicator of water. Kathmandu valley have plenty of up and down hills. It is not possible to find water in all location with same volume and flow. So, these creatures help in tracing out a sustainable source for construction of water conduits in such areas. Frogs are indicator of rain. It is believed that the arrival as well as croak of these creature invites heavy rain indicating good sign for agriculture and with recharge of ground water. Many water conduits that rely upon rain water discharge during rainy season. Thus, in respect of these creatures there is a unique tradition of feeding rice to frog on the full moon day of Shrawan among Nepalese.

### **Features of traditional art and architecture of water conduits**

The sculptures of early Nepal (3<sup>rd</sup> century BC - 4<sup>th</sup> century CE) are unique through its distinct features as; muscular bodies, unclear face, use of less ornaments, heavy anklets, sideways shawl. Licchavi sculptures (5<sup>th</sup> century CE – 8<sup>th</sup>/9<sup>th</sup> century CE) are found to be the finest one with perfect facial and physical expression, transparent clothes, use of proportionate ornaments, beautiful hair design and special use of polish locally known as *leph*. Medieval art along with tantric influence entered from Bengal of India during 7<sup>th</sup>/8<sup>th</sup> century. Thus, the art of this period (8<sup>th</sup>/9<sup>th</sup> -17<sup>th</sup> century CE) portrays heavy images with several number of hands and legs with numbers of emblems and Mongolian facial feature. They are found to be decorated with layer of ornaments and presence of several theme in a single image with heavy adornment. All these features are chief element to identify art belonging to specific historical age.

Makara engraved in water conduits belonging to early and Licchavi period as its artistic feature are simple with no presence of heaviness and adoration along with polish. But the Makara of medieval period are found to be engraved with excessive heavy adoration as; heavy plump cheeks, embossed eyes and eyebrows, decorated ears and horns, layers of uneven pointed teeth, open mouth with a presence of bunch of rice plant and decorated long tongue as burning fire. Their body with whirlpool are found to be engraved with several deities, flowers and foliage with presence of huge paws. Almost all Licchavi water conduits are found to be installed with presence of only Makara on a spout, whereas it has been found to be portrayed with mixture of several creatures along with Makara during medieval period.



Likewise, Bhagirath in almost every Licchavi water conduits are depicted as a dwarf with short hands and legs with a big belly. They are locally known as Pote deity due to its big belly. They are often depicted in twin form each supporting the load of a conduit with their hand. Coming to the medieval period the artistic theme of Bagirath has been changed. He is found to be depicted as a man with conch shell in his hand ready to blow either with two or four hands. In case, of four hands, his two hands are supporting the load of cloud in the sky, the representation of Ganga.

Same features are applied in making of sculpture which are found to be installed within the premise of water conduits. Very few water conduits of the valley consist of inscriptional record. Likewise, few sculptures installed on the top of a conduit or its premise comprise inscription. Hence, in absence of inscriptional record, the above mentioned features are the key elements for tentative dating of water conduit as well as sculptures. Besides, the polish prevalent in a sculptural art is an authentic stamp to identify a monument belonging to Licchavi period.

As art, there are some specific character of architecture of water conduits through which they can be distinguished that they belong to certain historical period. Water conduits are only the remaining architecture of Licchavi period which have been serving people since thousands of years. No any architectural remaining belonging to Licchavi period except these are prevalent. However, these infrastructures have severally been renovated, yet many water conduits of the valley have been discharging from an ancient source since the time till the date without any renovation. And these sources are still the mystery for archaeologists. Licchavi water conduits generally consist square or rectangular architectural design with deep sunken base along with the establishment of deity on the top of a conduit with shrine. While medieval conduits are found to be structured with a combination of multiple semicircular design mixed with square or rectangular shape. Mostly they are found to be made from decorated stones and deities installed inside a decorated shrine made up of stone on the top of a conduit.

### **Scared theme and Symbolic Representation of images installed in water conduits**

It is believed by Hindus that every creature is in souled and have a presence of divinity within it. Thus, the art engraved on the spout and its premise conveys a great value. Makara that are engraved on the conduits reveals great symbolical, philosophical as well as religious value. It is strongly believed that a bathe in Ganga would wipe out greatest sin. It is further believed that Ganga will liberate human beings on earth, serpents at underworld and deities at heaven. Thus, Ganga is also known as *tripath gamini*, or a greatest resource of providing liberation to three states of the world (Joshi, BS 2070). It is mentioned in Vishnu Purana that, pronouncing the name of Ganga, having water of Ganga, touching the water of Ganga, bathing in Ganga or just a glance of Ganga would free a person from all sins

(Joshi, BS 2070). People since the ancient time have been following the instruction as well as theme linked with religious texts as Puranas for making of images. Thus, following the instruction, in order to indicate that every spout is a representation of pious Ganga, Makara are engraved on it. They have been engraved also with a strong belief that the social and religious deed they conduct through use of such pious conduits would be worthy to gain merit. Thus, water conduits along with deities are found to be worshipped daily and many people gather in several occasions to have bathe in water conduits get same merit as bathing in Ganga. They reveal religious as well as philosophical value associated with. Depiction of several creatures as a symbolism as bull, buffalo, fish, serpent, tortoise, goat and many more along with Makara are found in water conduits. These creatures represent specific deity as well. Nepal is a country where there is great harmony between several religion and religious sects with a same faith. Bull is a representation of lord Shiva, fish, serpent, and tortoise are the representation of lord Vishnu. Elephant, lion, tiger as goddess Devi. The depiction of these creatures along with Makara proves water conduit as the abode of several deities at a single place. Thus, water conduits are such a pious place where several deities are worshiped at a single location expressed through symbolism.

There are numbers of sculptures of deities established at water conduits of Kathmandu valley. Each of them have their specific representation and a symbolic meaning to be installed on the top of the conduit or within its premise. It is mentioned in Matshya Purana that Ganga was evolved from the feet of lord Vishnu when lord Tribikrama Vamana, an incarnation of lord Vishnu extended his feet to touch the heaven. This made to flow Ganga from heaven. Hence, Ganga is also known as *Vishnavi* or *Vishnupadi* (emerged from feet of Vishnu) (Matshya Purana, BS 2070). Likewise, lord Krishna has mentioned in Bhagwat Purana that among several rivers, he is a Bhagirathi Ganga (Komalnath, 1970). It is known from these facts that several forms of images of lord Vishnu have been installed at water conduit for this reason that Ganga is one of the form of lord Vishnu. Hence, images of Vishnu are found to be installed at water conduit. It is also mentioned in Roopamandana that, installation and worship of Shridhar Vishnu is beneficial for so called lower caste. Nepalese society during early and medieval period strictly followed the instruction instructed by religious text. Caste system and concept of touchable and untouchable was strictly followed by the society. Thus, it is the reason that maximum number of image of Shridhar Vishnu are found to be installed at water conduits at outer skirt of the valley, as such areas were the inhabitant of lower caste during the time. They might have been installed by washer men, sweeper or other caste.

Likewise, many images related to lord Shiva in a form of Umamaheshwor, Bhairava and Shivalinga are found to installed at water conduits. King Bhagirath did a hard penance to bring Ganga down to earth for salvation of his deceased ancestors. Ganga was pleased with his devotion but she advised him to urge lord Shiva in order to protect earth from being

drown through the force of her landing. As suggested by Ganga king Bhagirath pleased lord Shiva to handle her load. At last lord Shiva accepted to bear the heavy flow of Ganga in his matted hair. As Shiva retained Ganga on his hair, she is considered as a consort of lord Shiva. Thus, it is remarkable to find an image of lord Shiva and Shivalinga nearby his consort Ganga in water conduits. There is also a great significance to install Shivalinga at maximum water conduits of the valley. During the ancient time when there was no means of transportation people visited from to destination on foot. They sheltered in *patis* and *sattal* which were often established along with water conduit. It made them ease to rest as well as to prepare food. The lower part of Shivalinga, a representation of Uma with an outlet of water is always faced towards north. This helped travelers to find out direction in an unknown settlement or the route as well. Similarly, almost every water conduit of Kathmandu valley consists an image of Bagirath beneath its spout. It symbolizes a hardship and challenges that one has to face during establishment of water conduit. Likewise, as a ninth incarnation of lord Vishnu along with harmony and great faith image of Buddha are found to be installed as well as worshipped by Hindu and Buddhist at water conduits. They might have been installed to spread peace and wisdom through the holy site of his image every morning to guide people in his path.

Several creatures installed at the premise of water conduit conveys specific significance. *Nagas* associated with Kathmandu valley are worshipped in each conduit as they are believed to be linked with discharge and drainage of water. Lord Krishna in Bhagwat Gita has declared himself as Basuki *naga* among the serpents (Komalnath, BS 1970). Likewise, during the heavy rainfall king of *nagas* name Muchalindra with his hood protected Buddha when he was meditating at the forest (Slusser, 1998). Lord Shiva is ornamented by *nagas*. Thus, *nagas* as a symbol of lord Vishnu, Buddha, Shiva, Buddha are found to be established at water conduits. *Nagas* are often found to be used as an ornament of several deities. Likewise, an installation of fish as a sub spout or on the lid of water conduit signifies the abundance of water of the valley and a good sign to bring good fortune to its user. As Chamaeleon, mongoose reside at lower level of ground water the installation of images of these creatures on the top of a lit indicates that water searched out with lots of labor and effort and discharged through spout should not be wasted and best utilized. Frogs are worshiped and fed rice by the locals of the valley. They are indicator of rain. The arrival of them increases water level of ground to make discharge in dried spout, thus as an indicator of good rainfall and water resource they are found to be installed at water conduit. Installation of these creatures also symbolizes that human beings are ever linked with nature and can never keep detached from them.

## **Discussion and conclusion**

Water conduits are found to be established in Kathmandu valley from Kiranta period. They were multiplied as per expansion of settlement during Licchavi and Medieval period

with sustainable source and elaborated art. Almost all water conduits of the valley consists of Makara as a symbolic illustration of Ganga. It is engraved to ascertain that each water conduit is not merely a source of water but a pious symbol of goddess Ganga. It is uniqueness of Nepalese art to depict Makara through traditional art along with a fusion of deer, fish and crocodile. Water conduit made through the traditional technology by skilled ancestors with grand filtration procedure and a great layout plan reveals an exceptional architecture of the world that can't be equated to the modern technology.

Makara are generally found to be engraved on Licchavi water conduits, while medieval arts are found to be implemented through mixture of several creatures along with it. The features as simplicity, flexibility with less ornamentation along with polish in spout and sculpture is a special character to identify earlier water conduits. Whereas, spout and sculpture with heavy art and adoration easily reveals the medieval art. And installation of deities on top of a conduit its premise portray the religious theme expressed through symbolism. Deities as lord Vishnu installed with his consort, along with his vehicle or join form, Shiva with his consort, in a ferocious form or in an intangible linga form or Buddha are found to reveal the fact these gods are linked with Ganga as a part of Vishnu, as a consort of lord Shiva and with several theme but all with greatly religious faith. And the most striking element of Nepalese religion is that they not ever deny any deity and worship all with same devotion and harmony. Likewise, the presence of Bagiratha in water conduit represents his great contribution, patience and devotion to bring down Ganga to earth. His sculpture is a resemblance of his great tribute by the architects. It also signifies that making of a conduit is not an easy task and is equivalent to the effort of Bagirath. The creatures mixed with Makara embodies as deities assembled along with Ganga and numerous sculptures of deities at water conduit represents it as an enclosed shrine.

As Kathmandu valley was abode of *nagas*., the land of the valley as well as water resources are linked with *nagas*. The establishment of water conduit, discharge and drainage of water in it is believed to be associated with them. The obstacles in discharge and blockage of drainage is solved through worship of them till the date. They are even associated with several deities as a representation of deities and ornaments to them. Hence, almost every conduit comprises *nagas* in tangible or intangible form. The installation of fish and frog as a sub conduit and on cover signifies abundance of water and good luck whereas, Chameleon and mongoose symbolizes a tough approach to water resource. It represents that making of water conduit at every location of the valley was not so at ease. So the source of water channeled as well as these historical monuments should be taken care. Thus, a great reflection of social life, religious belief, philosophy and dependency on nature can be scanned through the monuments found to be set within water conduits. Besides, this each water conduit is a representation of pious pilgrimage site where several deities in tangible or intangible form are found to reside together along with Ganga.

Hence, water conduits to fulfill the basic need of water were established since the ancient period. They were installed at several locations to provide easy access to it. As flowing water is compared to goddess Ganga, each water conduit to symbolize it as a Ganga is found to be depicted with her vehicle Makara. Makara along with mixture of several creatures and sculptures of several deities represents the faith and devotion. The art articulated in Makara and sculptures of each conduit containing specific feature is a major measure to definite its historical age. Besides this, different creatures depicted in spout, sub spout and cover reveals the importance of water, whereas, several sculptural arts depicted on the conduit conveys that this architecture established for utilization is not merely a water resource but a pilgrimage site within a precise place.

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**Tusa Hiti installed by king Siddhinarshima Malla in NS 767 (1647 CE) with tantric deities**



**Cameleon and Frog installed at the top of artistic Layaku hiti belonging to Bhupatindra Malla NS. 818 (1697 CE), Bhaktapur**