

# Architectural and Sculptural Characteristic Features of Ahom Period Nāmdāᅅg H̄ilo H̄āku (Stone Bridge)

Vinay Kumar Rao

Special Centre for the Study of North East India  
Jawaharlal Nehru University, New Delhi  
Email: vinaysrijan@gmail.com

## Abstract

The historical stone bridge of Nāmdāᅅg (built-in 1703 CE) is situated near Sibsagar town in Assam. It was built during the reign of the Ahom king Rudra Singh II, who employed architects from Bengal for this pious work. This bridge is one of the remaining four of the ten stone bridges that were built during the reign of the mighty Ahom kings. It is an Arch bridge, which provides greater strength to the bridge and allows the smooth operation of any heavy transport instead of the usual annual floods in the Nāmdāᅅg River. Besides, the bridge has several sculptural representations of Hindu symbolism, divine elements, and objects of contemporary times, having Ahom sculptural art significance. The architecture and art of this bridge reciprocal relations between the mighty Ahom rulers and other parts of Bhārata. The article gives a glimpse of this bridge's architectural and artistic significance based on field study.

**Keywords:** H̄ilo H̄āku, Nāmdāᅅg, Aqueduct Bridge, Hindu-Triad, Musical-Instruments, Dwārapāla.

The historical stone bridge of Nāmdāᅅg is situated about 15 kilometers from Sibsagar town in the state of Assam. This bridge is located on the Nāmdāᅅg River, on the present-day National Highway 37, which connects Sibsagar town with Jorhat and other western districts of the state. It was built in 1703 CE, during the reign of Ahom king Rudra Singh II, who employed architects from Bengal for this pious work. The bridge is 60 m (200 ft) long, 6.5 m (21 ft) wide, and 17 m (56 ft) in height.<sup>1</sup> Maharāja Rudra Singh II was the illustrious son of the Ahom king Gadādhara Singh and his queen Joymoti Konwārī, under whom the Ahom kingdom took its lead and attained the pinnacle of power and excellence. He is credited with building new political alliances and exercising massive military resistance against Mughal power in the Brahmāputra valley. He is honored to have done many public works in the public interest, which the excavation of Joysāgar, a vast man-made water reservoir spread over an area of 318 acres between Joysāgara to Talātal Ghar, in the memory of his mother, is most significant. He worshiped Lord Śiva and is known for the construction of the Śaiva temple of Ranganātha near the main entrance of Bor-duār. Rudra Singh not only got Nāmdāᅅg bridge constructed to facilitate the ease of movement of the general public but also completed the edifice work of Kharikatiyā Alī going from Kharikatiyā to Titābor.

Architecturally, this bridge is an outstanding masterpiece with many significant features. Notably, this bridge is an entirely rock-cut monolithic structure. The bridge looks like vakrākāra-setu style and is an aqueduct bridge consisting of viaducts carved out from stone blocks to convey easy drain out of water in this water-rich region. Along with the stone block, to give stability to this bridge having a curved structure on its top, rice, urad dal, paddy husk, and duck egg coating along with lime to join the stone blocks in the base part was used. This is why this bridge has been able to maintain its existence even after minimal maintenance and repair, even after natural calamities like floods and earthquakes are common in this area, and there has been continuous and heavy traffic for more than 300 years. This bridge is one of the remaining four of the ten stone bridges built during the reign of the mighty Ahom kings (Satellite image).

Nāmdāᅅg River has not deviated from its former flow path even today. This river is often mentioned in the ancient Ahom period history. This river, considered a significant river in the past, has turned into a small stream today. Today, the flow of this river turns further to the west, and onwards, it is known as the Mitong River. Originating from the foothills of Nāgā hills near Hātipotī village of Gelekī, Nāmdāᅅg flows northwards till Gaurisāgar. Initially, it was associated with the Dikhau River near Gaurisāgar. However, after the colonial rule in Assam, this stream was diverted through the Mitong River to avoid floods. Today, before merging into the Brahmāputra, this river disappears into the Jynājī River.<sup>2</sup>

Arch bridges, such as the Nāmdāᅅg Bridge, provide greater strength to the bridge

surface and the overall structure of the bridge due to their structural curvature. Usually, when a heavy vehicle crosses the bridge, the entire weight of the car is transferred to the bridge's surface and affects the bridge's stability. But for bridges with curved surfaces, such as the Nāmdāng bridge, the structure of the bridge is designed to withstand the operation of any heavy transport. In this case, the deflection force is amplified by displacing the upper surface of the bridge downwards. The pillars of this type of bridge transfer the load on the bridge structure uniformly towards the top, so less stress and load are reflected on the bridge structure, and the bridge gets more strength and life. It is noteworthy in this context that the Nāmdāng bridge has a slight bulge in the middle at the top of its shape, due to which the transport-borne load from this bridge is evenly distributed equally on both ends of the bridge. In other words, due to the curved bulge in the middle of this bridge, the load-carrying capacity of this bridge increases manifold.

The stone blocks selected for the construction of this bridge were quarried from the nearby Naga hills, which are called Śīlākuṭī.<sup>3</sup> The bridge arches are made by mutually joining the stone sockets. The building mentioned above has been used for the masonry work. The images engraved on the front side of the pillars of the bridge confirm the prevalence of rich sculptures from the Ahom dynasty. In this context, it is astonishing to see that in the absence of any severe protection and preservation attempts over the years and instead of being submerged under water of the Nāmdāng river floods every year, the bridge has succeeded in proving its existence. Unfortunately, these stone artifacts are in danger. Because of the annual floods in the Nāmdāng river, which is simultaneously eroding this architectural piece of work, having remains of reach Ahom sculptural art.

The triad of Brahmā, Viṣṇu, and Maheśa are considered the three most important deities in the Brahmānical pantheon. Brahmā is considered the creator of this universe, Viṣṇu the organizer, and Mahesh the destroyer so that the whole universe can be created anew. Of these, the first Brahmā is believed to have originated from the lotus flower by himself. Brahmā is usually depicted in sculptural art with four faces (to recite the four different Vedas) and four arms. Contrary to the usual artistic convention, Brahmā is depicted on the Nāmdāng bridge pillar with a golden face, holding a sacrificial offering on his shoulder, prayer beads in one hand, and a lotus (the symbol of nature and the essence of all living beings) in the other. Wearing and sitting on a lotus seat, he has been engraved. In this sculpture, he is depicted with a relatively broad bulge on the face; he is carved with a flat mukuṭa on his head. In this piece of art, he is seated in the posture of padmāsana on a lotus emerging from the water, Brahmā is carved holding a lotus flower in his left hand. He is present here, moving his fingers over beads in a gesture of praying for the well-being of his creation (Plate. 1).

Viṣṇu occupies an important place in the Vaiṣṇava tradition. In this form, He is the master of the entire creation. As believed by his followers, Viṣṇu is known for his Aiśwarya (sovereignty), Śakti (energy), Bala (power), Vīrya (power) and Tejas (glory). In this form, he is described as having the aura of the divine color of a cloud filled with water and thus is depicted with four arms adorned with the Kaustubha ornament around his neck and a dignified mukuṭa (crown) on his head. He is represented in the sculptures with two ear-rings and holding the the pāñjanya conch, the sudarśanaçakra, the mace named kaumudikī, and the Padma (lotus flower). Generally depicted with four arms, Viṣṇu's two hands facing frontwards represent his physical, and two hands at back indirectly represent his spiritual being. Symbolically, Lakṣmī is depicted as the symbol of śrivatsa on his chest. Considering the importance of Viṣṇu and the Sanātana tradition of underlying divinity in the state, Viṣṇu was also deified on the pillar of Nāṃdāṅg. Today, this image has become obsolete and is not present in its original place. This statue in a face-facing posture reveals Viṣṇu in a standing posture in this great form. In this image, he is shown with an elongated face and wearing a huge crown on his head. There is a multi-stranded rosary around his neck, and he is also wearing a kañṭhahāra. His four hands are adorned with armlets and bracelets at his wrists, and the attire he wears covers the part up to his ankles, and the uttariya held at the shoulders hangs obliquely behind the waist. He holds a kaumudikī in his upper right hand, a conch shell in the lower, a çakra (fragmented) in the upper left hand, and a lotus flower with a stem in the lower left hand (Plate. 2).

Śiva, like Viṣṇu, is another important deity in the Hindu pantheon, known for his destructive powers. In Brahṃanical religion, Śiva is taken to represent all the constituent elements of the universe, and he is usually presented with his consort Pārvaṭī, who makes possible the emergence of any new elements in the life of any being or universe. Śiva engraved on the arch-standing pillar of Nāṃdāṅg Ḥilo Ḥāku is presented with two hands. In this image, Śiva is holding his traditional weapon, the Pināka bow, in his right hand and triśūla in the other hand. Although the trident may momentarily give the illusion of being an arrow, given the appearance of the bow, this assumption appears to be unfounded. Śiva, depicted on Nandī from a lateral angle, is wearing a kañṭhikā, maṇi-hāra and a two-strand long pearl rosary on his neck. He is wearing two heavy armlets upwards in his hands and a pair of bracelets in his wrists. The crown sits on his top. With a flared nose, closed eyes in meditation, full lips, and a flattened forehead with the ūṛṇī or third eye, Śiva's body language in this sculpture stands in stark contrast to his killing instinct. Nandī carrying Śiva has been shown moving forward in a calm manner. Nandī wears a paṭṭikā (neck belt) comprising of muktās around his neck, and Śiva, as antarīya, wears a corded lion skin on the sides (Plate. 3).

Bhārata has a long tradition of different types of musical instruments, which are

used for various festivals and ceremonies organized in temples or royal scenarios. In this context of these instruments, the nagārā is an important percussion instrument used in various rituals, folk festivals, and wedding ceremonies. This instrument, belonging to the category of ānadhā-vādyā, is a single-mouthed instrument and has a usual diameter of about 1-2 feet. It is played by striking two curved sticks. It usually consists of a bowl-like structure of copper, brass, or iron, the open part of which consists of leather, tightened with ropes or leather thongs. They are also known as bherī or naḅᅇārā. Also known by the name of dudumbhī, this musical instrument finds mention in Ramāyaᅇa, Mahābhārata, and Purāᅇas.

During the war, nagārā playing was considered raᅇabherī. The instrument was also used in times of peace to announce the arrival of a distinguished person. In fact, as practiced in Indian culture and practice, nagārā is known as synonymous with truth and righteousness-sovereignty. Apart from Raᅇa (war), where there is no compulsion to follow the restrictions, this instrument is also played in two different sizes put together. In the order of these two musical instruments of different small and large sizes, the smaller sized instrument is called nagārī and, and the bigger one is called nagārā. In fact, nagārā is kept in the category of male due to heavy noise and low tone. Whereas, due to the high-pitched and relatively low voice, the nagārī is kept in the female category. Generally, nagārā is made from the skin of a large animal like buffalo or camel, and nagārī is made from the skin of an animal like goat or sheep.

We get the description of many types of musical instruments in the order of ānadhā-vādyas in ancient religious and mundane literature. We do not only find the presence of these instruments in Indian literature, but they can also be easily seen and reflected in Indian sculptures. If we talk about religious literature, then its mention is found in the Sixth Mandal of Rīgveda itself, where it is read in a political context, that - O Rajanya! You keep your armies happy and strong, conquer your enemies by using all the dudumbhī and other instruments, and nourish the masses with proper treats.<sup>4</sup> Mention is made in Śiva Purāᅇa of the playing of this instrument in the context of war. The description of the playing of small and big size drums is found here; they were nagārā and nagārī.

नेदुशंखाश्चभेर्याश्चतस्मीनरणमहोत्सवे|  
महादूदुभ्योनेदुःपतहाददिमिदयः|| 10 ||<sup>5</sup>

In context to epics, we find the mention of bherī or nagārā in both Ramāyaᅇa and Mahābhārata. In the sixty-seventh canto of the Yudhakāᅇᅇa of the Ramāyaᅇa, it is mentioned that to wake up Kumbhakarᅇa by order of Rāvaᅇa, in his sleeping cave, the sounds of conch shells, trumpets, bells, etc., and the mixed noises of the demons were

caused, which make the birds run here and there, and even of falling on the earth even after reaching the sky:

सशंखभेरीपणवप्रणादमास्फोटिक्ख्वेलतिसहिना ।  
दशोद्भवन्तस्त्रदिविम्करिन्तःशरुत्वावहिगाःसहसानपितुः॥३८॥<sup>6</sup>

Similarly, in the Ghaṭotkacchavadhaprakaraṇa of the Droṇa Parva of the Mahābhārata, there is a description of the sounding of musical instruments like bherī, conch, nagārā andanānka, in the event of the death of Ghaṭotkaccha.<sup>7</sup>

Drums, tāṣe, mṛidaṅga, dafalī, and tabalā are were taken in the category of musical instruments along with drums. Generally, in sculptural art, the engraving of ḍholaka, mṛidaṅga, and dafalī is seen on a larger scale than the above instruments. In the Brahmāputraupatyakā, under the Ahom rulers, engravings of the ānaddha series of dāffa, mṛidaṅga, nagārā, and bherī are easily traceable. In a political context, engravings of these musical instruments are seen in Nāmdāṅg, Hilo Hāku as a symbol of royalty, readiness to defeat the enemy, and to show royalty. The carving of these instruments in the sculptures was done artistically in the basin of Brahmāputra. It was not an accidental iconographic presentation, but it was a continuity of a long tradition of presentation of a series of musical instruments for centuries. This tradition can be seen as long as in early Buddhist sculpture, from Sāñcī through Amarāvātī to Nāgarjunakoṇḍā. While two royal servants, in a moving posture, announcing the arrival of the king, are depicted at Sāñcī (Plate. 4). They are also shown giving royal protocol to the relics of the Buddha on the occasion of their arrival in the city of Kuśīnagara (Plate. 5). In Sāñcī itself, one drum player can be seen beating a drum on his shoulder and another striking a drum held in one hand with a stick (Plate. 6). In the continuity of the same, a nagārā player is engraved in Nāmdāṅg Hilo Hāku and affirms the continuity of the musical tradition expressed in Indian sculpture (Plate. 7). In this depiction, a state musician is artistically expressed in a cautious and dignified posture, with both hands placed on a bherī held between his abdomen and thighs, and making a state proclamation. Both his hands are in the same posture, striking the instrument with the sticks held in the hand, creating a sound. His strained neck and emotionless expression on his face only express his commitment and cautiousness. This image can be taken in any context, like the arrival of the king, preparing for any important announcement, or symbolically announcing the inauguration of the bridge.

If we talk about the sculpture engraved in the Kāmakhya temple complex built in the Brahmāputra valley other than Sibsāgara, then an excellent sculptural presentation of nagārā is also accessible from here. Located on the extreme top of the ruined building adjacent to the main temple, this image shows a huge drum with both hands

placed on the ground. With sporting sparkling eyes, big ears, a long mustache, and a very distinctive headdress, the player appears to be extremely conscientious in his responsibility. The enormous noise produced by the instrument can be easily inferred from the strings stretched on this massive instrument with a broad top and small but flat base, also known as *kalsī* in some parts of the country (Plate. 8).

In a series of *ānaddhavādyā* instruments, the drum is often made by hollowing out a wooden stump in the order of pleasure-seeking activities. Its heads are covered with thin skin, and with the help of thin and dense skin cords, the shell and wood are mutually intertwined with the head. It is often hung horizontally around the neck and played with sticks or hands. This instrument played on joy and gaiety, is shown situated between the two hands of a player on the pillar of *Ḥilo Ḥāku*. Resting the *gamosā* (scarf) around his neck, free to wave on his chest, this player is shown striking the heads of the drum with full tension. Most of the face of this player wearing bracelets on the arms has been corrupted, but his beauty and ornate headgear are paving his aristocracy (Plate. 9).

With respect to Indian sculptural art, the presence of a circular wooden drum-like instrument, with only one top covered with leather, can be seen from the earliest times. This instrument, suspended on a pole slung over the shoulder and played with sticks, is noticed in *Amarāvātī* (Plate. 10) and *Nāgarjunakoṇḍā* by a court musician playing the same instrument in *tūṣhītā* heaven, ushering in the ascension of *Siddhārtha*'s hair to heaven (Plate. 11). An almost weathered sculpture at *Nāmdāng Ḥilo Ḥāku* depicts a player playing a heavy tambourine on his left side (Plate. 12). Tightly tied around the waist but wearing the inner cloth flowing to the knees, this player is depicted in the face-to-face posture with his posture. Examples of expressing joyous feelings through dance for auspicious purposes have been found in Indian sculptural art since earlier times. An example of dance, being an exclusive medium to express the benefit to the common people through the construction of a bridge and good wishes for its long life, is found on the Pillar of *Nāmdāng* (Plate. 13). The dancer depicted in the sculpture rests her right hand, comprising at right angles to her waist and the other towards her head. She is dressed with bangles in her arms and hands and has covered her whole body with tightly worn clothes. A sash is tied around her waist, and the head of the worn garment hangs loosely over the ankles in harmony with the dance posture. The bend tied at the waist is untied in the form of a bunch on the left side of her waist. The intricately carved figure has been largely weathered, but the dancer's well-proportioned breasts (even after dismemberment) complement her feminine identity.

In the context of Indian architecture and sculptural art from the earliest times, the depiction of *dwārapālas* (door guards) was a quiet phenomenon, irrespective of time and space. The *dwārapālas* with formidable physiques and fearsome expressions, equipped with weapons like *khaḍga*, *baglama*, and *gadā*, were marked at the door. Symbolically, these *dwārapālas* not only guarded the structure but also brought



unpleasant consequences to anyone who cast an evil eye on them. There are relatively few examples of the appointment of archers and sword-bearers, But on the pillars of Nāmdāṅḡ Hīlo Ḥāku, they can be seen shaped into deeply incised images. A miniature archer with royal influence is depicted from the side angle. He is holding a bow in his right hand, and he is moving forward to shoot arrows from the tuṅīra held in his left hand. While his straightened ears affirm his alertness on the one hand, the expression and tension-freeness prevailing on his face artistically express his patience and self-confidence (Plate. 14). A khadga-dhālahartā wearing a flat top headdress of low height has also been marked in Nāmdāṅḡ. Exhaling the upper part of the waist, this protector is holding a sword in his right hand and a shield parallel to his chest in his left hand. His sparkling eyes stiffened ears, and tensed forehead reflects his conscientiousness. A sash tied diagonally across the side of his neck provides liveness to his image (Plate. 15).

There is unmistakable evidence of the use of gunpowder in South India from the first half of the fifteenth century CE, and at the same time, there are instances of its use in warfare by the Mughals. Evidence of the use of firearms by the Ahom rulers in the struggle for power with the Ḥutiyā rulers is well known in the context of Assam. Even examples of the use of cannons are not rare from Assam under the Ahom rulers. In such a context, in an engraving from Nāmdāṅḡ, a soldier is shown vested with the defense of his kingdom, loading gunpowder into a gun held in his hand (Plate. 16). The sentinel is holding this broad-barrelled gun from below with his left hand, and he has rested its butt right in the middle of his chest. This sentinel with a round and largemouth and a bald head, with his left leg resting on a rock and crouching on the other, is carefully shooting at the target in front of him.

The bridges not only provided the facility of movement to the citizens living under the subordinate state of a ruler but were also helpful in maintaining the authority of the state intact by helping in commercial and military activities. Before the construction of these bridges, various aspects related to their applicability and feasibility were specially considered. After the selection of the economic condition and suitable place, according to the advice of the priests and astrologers, construction-related traditions were followed. The movement of people through the bridge was not only helpful for the activities of the state but also of special consideration for the safety of the people passing through it. In addition to many architectural norms, organizing many auspicious rituals for this was a common practice in this context. Therefore, in order to avoid all kinds of evils in the future, where demonic and inauspicious powers were rectified by Bhoomi-worship, many other hands, many auspicious motives, artistic combinations of divine and semi-divine elements, and marking of state symbols were made on the idols. This tradition prevalent in the rest of India was followed by the Ahom rulers as well, And this can be easily reflected in Nāmdāṅḡ Hīlo Ḥāku located



in Sibasāgara. In this way, strong evidence of the Ahom rulers following the Indian tradition in matters related to the various purposes of construction, even after having a separate political power, is easily available by looking at the sculptures engraved on the pillars of Nāmdāng Hilo Hāku.

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Namdang (Setallite image)



Plate. 1. Brahma, Nāmdāng Ḥilo Ḥāku



Plate. 2. Vishnu, Nāmdāng Ḥilo Ḥāku



Plate. 3. Shiva, Nārdāng Hīlo Hāku



Plate. 4. Sanchi, Royal Procession



Plate. 5. Sanchi, transportaion of relics



Plate. 6. Sanchi, defeat of Mara and attainment of Buddhahood





Plate. 7. Nagada Player, Nāmdāng Hīlo Hāku



Plate. 9. Dhola Player, Nāmdāng Hīlo Hāku



Plate. 8. Nagara Player, Kamakhya



Plate. 10. Nat Amaravati



Plate. 11. Worship of hair locks,  
Nagarjunakonda



Plate. 12. Daaf Player, Nāmdāng Hīlo Hāku



Plate. 13. Nartaki, Nāmdāng Hīlo Hāku



Plate. 14. Archer, Nāmdāng Hīlo Hāku





Plate. 15. Sword bearer, Nārdāng Ḥilo Ḥāku



Plate. 16. Gunner, Nārdāng Ḥilo Ḥāku