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► To cite this version:

David Cornélius Andolfatto. Preliminary remarks on some artefacts discovered in a 19 th century Newari stūpa. 2019. halshs-04438122

HAL Id: halshs-04438122

<https://shs.hal.science/halshs-04438122>

Preprint submitted on 5 Feb 2024

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Preliminary remarks on some artefacts discovered in a 19th century Newari stūpa

David C. Andolfatto

*You cannot take with you what you like,
nor can you stay on in this world as long as you like.
You will be taken to the door of Yama.
Parents cannot hinder the messenger of Yama,
nor friends, nor wealth, nor riches.*
Traditional Newari song.¹

The magnitude 8.1 “Gorkha Earthquake” that hit Nepal on 25th April 2015 caused severe human and material damages in the country’s central part. Thousands of historic monuments, particularly within the Kathmandu Valley’s seven World Heritage Monument Zones, were affected. Svayambhū, a central place of devotion for Buddhists and Hindus of Nepal, India and Tibet, lost many priceless buildings. Among them is the Maṅgal Bahudvāra Caitya, which collapsed completely (fig. 1 and 3). In charge of the monument’s protection, the author, together with the local community and Nepal’s Department of Archaeology (DoA), decided to excavate the stūpa until a solid level of foundations (that would allow its reconstruction) could be identified. This paper presents some preliminary remarks on clay artefacts (Tib. *tsha tsha*) discovered during the protection and excavation campaigns carried on the monument. These objects shed lights on rituals executed during the different construction phases of the structure. They also provide valuable information about the donors’ cultural environment.



Fig. 1: The Maṅgal Bahudvāra Caitya, or Tashi Gomang Stūpa, in 2013.
View from the south.

Written sources (Level 1)

The first reference to the Maṅgal Bahudvāra Caitya was made by one the first western scholars of Buddhism, Brian Houghton Hodgson. A British Assistant Resident and then Resident in Nepal, Hodgson resided in Nepal from 1829 to 1843. The period corresponds to the late part of Bhīmsen Thāpā’s rule as Prime Minister (Nep. *mukhtiyār*). At that time the position of British Resident at the court of Nepal meant

¹ Published in Lienhard 1984, 23.

to be restrained to the confines of the residency, with occasional excursions, mostly in the Kathmandu Valley. Hodgson kept himself busy by studying the fauna, flora and cultures of Nepal. In order to document his researches, he hired the services of artists, of whom the most famous is probably Rajman Singh (who later worked for Henry Ambrose Oldfield as well). He also received Buddhist teachings from Amritananda, a scholar from the neighbourhood of Mahābaudha in Patan and collected religious texts. From this intellectual setting emerged an impressive body of works that would constitute a corner stone for the then emerging Buddhist studies.

In 1857, Hodgson wrote a short essay from his Darjeeling cottage. Titled “Architectural Illustrations of Buddhism” and supplemented by a set of line drawings, the essay was only published in 2005 (Hodgson 2005 [1857]). In this paper Hodgson enumerates a list of twenty-two different types of *caityas* that were explained to him by Amritananda. The listing also contains fourteen “*kutākāras*” and thirteen *maṇḍalas*. From these documents, drawing 86 catches the attention. It is labelled as “A small Kutagar Chaitya at Gōpūcch” (fig. 2). Gopucchagiri, or Mount Cow-Tail, is one of the names given to the Svayambhū hillock in the mythical narrative of its creation, the *Svayambhūpurāṇa* (von Rospatt 2014, 55). The location and the unique architecture of the monument positively identify the drawing as that of the Maṅgal Bahudvāra Caitya studied here.

Hodgson’s comment on this type of monument is as follow:

“The other modifications (so to speak) of the Chaitya model, as shown in the drawings, result from the blending of the solid structure with others of a wholly different and chambered kind; but these chambered additions, when consisting of several stories still show a tendency to the original solid character of the style by having only their basal story hollow.” (Hodgson *op. cit.*, 117)



Fig. 2: Figure 86 of B. H. Hodgson’s essay. Probably drawn by R. Singh (British Library, IO San 3976f, f.6v.).

The “different and chambered kind” of structures referred to are the *kuṭāgāras*. The Sanskrit term *kūṭa* was broadly translated as “any prominent projection” (Monier-Williams 1964 [1899]). It is used in Indian treatises of architecture, to describe miniature pillared pavilions that are placed on the corners of some temples or as square aediculae (Meister 1989, 278). Niels Gutschow defines it as “a base storey with shrine-like niches” (Gutschow 2011, 685). The term furthermore signifies a “heap” or a “multitude” (Monier-Williams *op. cit.*), which may reflect the stacking of storied niches on the monument’s façades. It is significant that the name of the stūpa is not mentioned and that the represented monument is considered as the canonical example of the so called Kuṭākār type of *caitya*.

Henry Ambrose Oldfield followed Hodgson in his study of Kathmandu Valley’s architecture. Oldfield resided in the Kathmandu Valley between 1850 and 1863 in the position of surgeon to the British Residency. He published his famous *Sketches from Nipal* in 1880. Along the twenty-seven pages describing Svayambhū’s major monuments, no mention is made of a construction that could be recognised as the Maṅgal Bahudvāra Caitya (Oldfield 1880, 219-246). Similarly, the drawings produced by Rajman Singh for Oldfield were done from perspectives that impede sighting the stūpa, located directly to the south-west side of the site’s main stūpa. The second reference to the Maṅgal Bahudvāra Caitya appears in Niels Gutschow and Goetz Hagmüller’s 1989 *Svayambhūnāth Conservation Masterplan*. The authors indicate that it was built in 1923 and refer to it as “Maṅgalabahudvaracaitya” and “Taśogormo” (Gutschow & Hagmüller 1989, 82). The stūpa is then strangely ignored in Gutschow’s later opus on the *caityas* of the Kathmandu Valley (Gutschow 1997). A very precious written reference is made later by Hemraj Shakya. This prolific Nepali author describes the sculptures displayed in the monument’s 124 façade niches as representing postures and gestures of *carya* dances. He mentions that: “while installing the various deities of this *caitya*, Buddhist Vajrācāryas and learned Geshes and Lamas of Tibet have consulted with one another” (Shakya 2004, 486).² However, Shakya does not provide any construction date.

Until today the stūpa is locally referred to as “Tashi Golma”, “Tashi Gorma” or “Tashi Gormo”, which has to be understood as Tashi Gomang (Tib. *bKra shis sgo mang*), a Tibetan term meaning the “(many) auspicious window(s)”. It is translated in Newari as “Bahul Maṅgaldvār Caitya” or “Maṅgal Bahudvāra Caitya”: the *caitya* with many auspicious openings. The Tibetan name is locally believed to predate the Newari one. The term Tashi Gomang also refers directly to the eponymous type of stūpa or *caitya* (Tb. *mchod rten*), which is one of the eight canonical types of Tibetan *mchod rtens*. These rapid etymological comments point to a Tibeto-Newari cultural setting that is also encountered in the various and numerous excavated artefacts.

One may summarise this preliminary assessment by affirming that despite confusing information relating to the monument’s history, Rajman Singh’s drawing (commissioned during Hodgson’s stay in Nepal) remains a likely evidence that the Maṅgal Bahudvāra Caitya already existed during the first half of the 19th century. Nevertheless, as we shall see here, this dating is challenged by discoveries made in the aftermath of the 2015 earthquake.

² A study of this iconographic program will be presented by the author in a forthcoming publication.



Fig. 3: Maṅgal Bahudvāra Caitya after the earthquake, on 2 May 2015. View from the south.

The dead and the donors (Level 1)

On 25 April 2015 the Maṅgal Bahudvāra Caitya (henceforth MBC) was turned into a pile of sandy earth covering a core of bricks (fig. 3). Various artefacts were scattered in the rubbles (clay and stone sculptures, jewellerys, coins, etc.). About a week after the event, an emergency salvage operation was jointly undertaken by the DoA (represented by Debendra Bhattarai), the UNESCO Office in Kathmandu (represented by the author) and Amrit Man Buddhacarya, a volunteer member from Svayambhū's priest community. Objects from MBC and other monuments were photographed, inventoried and safely placed in storerooms. A first excavation campaign was carried in May 2015. This salvage operation aimed at removing unstable elements and preparing the site for a further and more in-depth intervention that took place in 2016. It is while preparing the 2016 campaign, as I was reviewing the stored objects, that I learned about the existence of a copper casket containing ashes and bones fragments (fig. 4).

According to Buddhacarya the object was found among debris of MBC shortly after the earthquake. It was immediately taken to safety, hence explaining why it escaped the archaeologists' notice. Buddhacarya also indicated that the casket was found set on a deposit stone (fig. 5). The deposit stone has nine square cavities. As seen on other Buddhist *caityas*, they probably contained nine gems (Skt. *navaratna*) (Gutschow 1987, 18-20). The copper casket is circular in shape (ø 14,5, H 5,4 cm). It was not opened but its content is partly known because of an opening present on the side of the box. The team decided not to touch the ashes and bones inside. The appearance of the opening leaves little doubts as to the fact that it was intentionally made to inspect the interior. An inscription in Newari is engraved on the lid. Its translation, provided by Kashinath Tamot, goes as follow:

[Siddhi symbol] (May it be) auspicious! The Yantra of Thrice Blessed Maṅgalacaitya has been established³ in the name of his father by Harṣa Ratna, the son of Dharmasiṃha (Dhamasim...), who was descended from the clan of Tāmraḥār (and) who is the incarnation (descendent) of Maṅjuvajra Acarya. Later, if anybody has (needs) to make a change⁴ (in this) place, it should be kept like this (as it is). Witnesses are Blessed Mahākal (and) the family (retinue) of Hārati. If anyone makes (it) different,⁵ he will be viewed with evil eyes. One who builds it as previous, he will be viewed with good eyes, he will get fruit (of it). (It was established in) the Good Era (Nepal Samvat) dated 995 [1875 CE] Jyestha, waning moon 10, weekday 2 (Monday). (Let it be) good!⁶



Fig. 4: Reliquary casket containing bones and ashes. 1875. Copper. Found in the rubbles.

³ Or dedicated, “*dutā*”.

⁴ Lit. small-big or less-more, “*ghatibarhi*”.

⁵ *Ibid.*

⁶ 1. *svasti śrī 3 magalacete,,yā jaṃta śrīśrī maṅjuvajrācāryā,,vatāra,, tāmraḥāra gvatasya utpanna:*

2. *dhamasiṃ(.)se putra harṣaratna thao babuyā nāmana dutā lipa(ta)sa śunāna thva jaṃta thva thāsana ghatibahri yā:*

3. *ya mā(lasā) thoṭhyam tayamāla, sāchi śrī māhākāla hāratigana jula śu(nā)nam ghatibahri yātasā śrīyā kudisti hnāpayā:*

4. *thyam tamyasīyā śudisti,, phala prāpati śubha saṃvat 995 mti jesta kṛṣṇa 10 roja 2 śubham ||*



Fig. 5: Deposit stone in which the reliquary casket was set. Found in the rubbles.

This inscription allows a stimulating confrontation of historical sources with today's oral traditions. The stūpa is referred to as “*maṅgalacete*” (*maṅgala-caitya*, “auspicious *caitya*”) without the mention of niches or windows (*dvār*). It was (allegedly) built by Harṣa Ratna Tāmraḱār to honor the memory of his deceased father, Dharmasiṃha Tāmraḱār, on 28 June 1875. A significant part of the inscription emphasises the fact that future changes on the *caitya* have to be made properly, threatening those involved to be cursed by Hārātī and Mahākāla. Hārātī, the former demoness, has her temple situated some twenty meters north of Tashi Gomang. The Mahākāla mentioned here may refer to the stone image of the god that was formerly placed directly to the south of the stūpa and that is now guarding the left side of the nearby entrance to the Svayambhū Museum. It is noteworthy that despite menacing forthcoming builders by using the wrathful reputation of gods present near the monument, the donors of 1875 consider its future alteration by others as a highly possible event. Even if the inscription partly deals with a divine curse, it does not, however, forbid interventions, as long as they are made properly. And indeed, reconstructions and renovations of religious structures are common in the valley. In this respect it is manifest that the monument was restored after 1875 and that at this occasion the content of the casket was checked, out of curiosity or with more covetous intentions.

Dharmasiṃha Tāmraḱār is mentioned by Hem Raj Shakya, who describes him in the following manner:

“Dhanasiṃha Tāmraḱār, a merchant from Yatkhā Bahā, was sincerely trusted by HM Surendra Vikram Shah. As a proficient diplomat and canny merchant, he was deputed to China on the government job with all necessary arrangements. He spent plenty of time in

China as holder of a high government post. Although he was working as a high government representative, he was indirectly involved with business activities as well, due to his prudence and dexterity in business. Therefore, he was able to amass abundant wealth, and his fame and popularity spread across the country. So it was hardly surprising that he made the acquaintance with many distinguished and outstanding personalities, scholars, merchants and artists in China. When he came back to Nepal, famous and prosperous as he was, his friends naturally rejoiced at his success and prosperity, while his adversaries envied him. [...] After his return, he could not bear to see the colossal Svayambhū caitya in a dilapidated and miserable state. He was earnest and ready to make good use of the wealth he had accumulated in China. With this virtuous resolution in mind, he saw to it that Svayambhū Mahācaitya would be restored to its original state following all the usual procedures and the texts. [...]

Since Dhanasimha had an intimate relationship with China [sic], many skilled artists and workers were summoned from China in VS 1920 (NS 983) [1863 CE] and were employed in the restoration activities with the necessary instructions.

Merchant Dhanasimha was a staunch and steadfast devotee of Vajrayoginī and Svayambhū. This was his daily activity. One day, while he was spinning prayer wheels on his circumambulatory stroll, his heart suddenly stopped beating, he breathed his last, dissolving into the great Svayambhū *caitya* forever. His death was premature, but in the last moment of his life, he was fortunate enough to see with his own eyes the near-complete renovation of Svayambhū.

Some days after this event, his son Harṣa Ratna Sāhu, following the lofty ideals and great resolve of his father, and wishing to share the merit earned by him from this virtuous act, made all the necessary arrangements and pursued all the due procedures, and in NS 987 [1866 CE] finally completed the renovation in an auspicious manner under the guidance of Śrī Samantaharṣa Vajrācārya, a chief Ācārya of Surataśrī Mahāvihāra; Śrī Puṇyaman Pati; Karmācārya from Lāyku Bahī; and Ratnacūḍāmani from Surataśrī Mahāvihāra.”(Shakya 2004, 296-297).

Newari merchants (New. *urāy*, *sāu* or *sāhu*) hold a position of glorious travellers in oral traditions of Kathmandu Valley (Slusser 1982, 362-63; Lienhard 1984; Lewis 1996, 163-165). Their trans-Himalayan activities, presumably ancient, seem to strengthen around the 17th century, when Pratāpamalla’s minister Bhīmamalla established commercial treaties with Tibet (Slusser, *op. cit.*, 70). Organised in trading societies, Newari merchants are also known as Lhasa Newars. The wealth accumulated by a trader like Dharmasimha Tāmrakār allowed him to take part in a renovation of Svayambhū’s Great Stūpa (Mahācaitya).⁷ Started in 1863, this renovation lasted four years and was marked by the participation of “skilled artists and workers” from China.

According to Shakya’s account it is Dharmasimha’s (also Dhanasimha) son, Harṣa Ratna (also mentioned in the inscription recovered from Tashi Gomang Stūpa), who completed the renovation of the Great Stūpa in 1866, after his father’s death. The circumstances of Dharmasimha’s death (while circumambulating the Mahācaitya) and his religious and economical involvement in Svayambhū thus explain the enshrining of his relics in such an auspicious location. Considering the available information, it

⁷ For a thorough account of the Svayambhūcaitya’s renovations see von Rospatt 2011. The 1863-66 renovation involving Dharmasimha Tāmrakār is not mentioned in von Rospatt’s study. See also Kölver 1992, 107-114 and Lewis 1996.

is possible to postulate that Dharmasimpha passed away between 1863 and 1866. Nevertheless, the consecration date written on the reliquary casket (1875, at least nine years after Dharmasimpha Tāmrakār's death) does not agree with some of the above-mentioned facts. Indeed, if we consider the unusual shape of the structure as we knew it before its destruction in 2015, it is most likely that the monument seen in Singh and Hodgson's drawing and Svayambhū's Maṅgal Bahudvāra Caitya are the one and same. This consequently means that the *caitya* already existed before 1875 and brings us to reconsider the exact nature of the Tāmrakār family's intervention.

Local oral traditions have it that the monument that collapsed in 2015 was a reconstruction of a much earlier one. As explained by Ashok Buddhacharya:⁸

“This *caitya* is the oldest one in Svayambhū. We call it Tashi Golma in Tibetan. There are many gods and goddesses in the stūpa. They are related to the construction of the main stūpa (*mahācaitya*). Since there are many gods and goddesses, the common use is to name them the *tettis koṭi deutā* (thirty-three tens of millions deities). During the construction/renovation of the main stūpa, all the gods of Nepal (*tettis koti deutā*) came and were all put into the [Tashi Gomang] caitya. [...] The space [of Tashi Gomang Stūpa] is encircled by these many gods and that is why we call it Bahul Maṅgaldvār Caitya (the Caitya with Many Auspicious Openings).

The findings from inside the stūpa were restored already. It used to be smaller before. Once, one lama who was the incarnation (*avatāri*) of a great *rinpoche* came to Svayambhū for its renovation. He passed away and since he was a great soul people built a stūpa for him. Inside this stūpa are the bones (*asthidhātu*) of Tashi Lama. Over the small stūpa containing the bones (i.e. relics), another stūpa was built. When people make such a big stūpa they produce ten million clay *caityas*.”

This local story considers two phases of construction. The first one concerns a small monument, dedicated to a Buddhist monk, Tashi Lama. The enlargement of the structure constitutes a second phase and is associated with the making of numerous small clay images (Tib. *tsha tsha*). Taking this oral account for history would present obvious issues. Firstly, the claim that it is the oldest *caitya* in Svayambhū is erroneous for numerous reasons, mainly that the Mahācaitya (or Svayambhūcaitya) is the first monument of the site to be historically attested, from at least the 5th century (Von Rospatt 2011, 161). Secondly, the origin of its Tibetan name, rather than that of a monk, should be explained by the architecture, corresponding to the Tashi Gomang type of stūpa.⁹

Tsha tshas as archaeological objects (Level 1)

We shall now consider these epigraphic and oral facts in the light of the archaeological context

⁸ Ashok Buddhacharya was one of the seven Svayambhū priests trained in archaeological methods by the author. Interview collected in February 2016.

⁹ Although it was codified in Tibet as one of the eight “Tathāgata Stūpas”, examples of Tashi Gomangs may in some respect be identified in Nepalese Licchavi *caityas*. In numerous instances niches are comparably storied, although in a lesser proportion. See for example the Licchavi *caityas* from Teku and Cabahil (Gutschow 1997, 154-155, 162-163 and 168-169). In Ladakh, the Changspa Stūpa may stand as a prototype of the ideal *tashi gomang* type. Still in Ladakh, the Tragkhung Kowache and Diskit stūpas (11th/12th century) are other examples of similar early monuments with niches on the façade. One of the most famous *tashi gomangs* is probably found in Densatil (Tib. *gDan-sa-mthil*). Built in Central Tibet around the end of the 12th, it was destroyed by Chinese troops during the Cultural Revolution (Czaja & Poser 2014). The 15th century Gyantse Kumbum Chörten (*sku'bum*, “one hundred thousand holy images”) is also a Tashi Gomang (Dowman 1988, 270).

revealed during the post-earthquake excavation of the monument. Let us note here that, because of the monument's state of destruction, the exact location of half the artefacts remains unknown. Besides the numerous clay objects (*tsha tshas*), the total of recovered inventoried items amounts to 385. While I am aware that only a comprehensive study of all the artefacts and their architectural context is necessary, for editorial reasons only the clay objects will be considered here.

The Tibetan word *tsha tsha* is a common term used when referring to clay objects produced by pressing a handful of clay into a carved mold. They may be shaped as miniature stūpas or as discs containing images of Buddhist deities, stūpas and *mantras*.¹⁰ Probably derived from a long Indian tradition of clay seals, the earliest *tsha tshas* were produced in India around the 6th century (Namgyal Lama 2013b, 47). In Nepal, the earliest clay seals were found within the Cābahil Stūpa, located in the centre of Kathmandu. They are datable to the 7th-8th century (Darnal 2005). Another Kathmandu stūpa, located in Tukañ Bāhā (or Ratnākara Vihāra), is likely to have been established at the same period. The Tukañ Stūpa occupies the central part of a courtyard now surrounded by concrete habitations. Historical records indicate that the monument was restored in 1614 and 1881 (Shrestha 2002). No *tsha tshas* are reported in the report of excavations carried during its last restoration that took place in the 1990's. The situation at the MBC is quite the opposite.

Tsha tshas were found amidst the rubbles of the MBC, indicating their presence in at least some portion of the monument's upper part. As revealed by our excavations, *tsha tshas* were primarily placed in three distinct locations (fig. 6). The central structure of the stūpa is laid out on a maṇḍala plan (fig. 8). A central square made of bricks is adjoined on each face by a rectangular projection in bricks and stones. The plan produces four L-shaped cavities of an approximate height of one meter. These cavities were filled with *tsha tshas* and sealed by large uncarved stones. Above this architectural maṇḍala is a level of nine individual square cavities of 20 X 20 X 20 cm, also sealed with stones (fig. 7). *Tsha tshas*, jewellery and coins were deposited in each cavity. Finally, the largest concentration of clay artefacts was found underneath the central maṇḍala. Below the latter, a rectangular cavity of 90 X 123 X 95 cm was found filled with *tsha tshas*. Five wooden beams showing general marks of incineration were deposited in the middle and oriented east-west (fig. 9).

Considering the three contexts in which *tsha tshas* were found and their volumes, it clearly appears that we are in presence of what may be termed as "mass production". The weight and number of *tsha tshas* present in each of the nine cavities mentioned above are unknown because the latter were hastily emptied during the post-earthquake operation. Unfortunately, their weight assessment was later forgotten. It may nevertheless be mentioned that the cavities, or boxes, were found to contain un-even quantities of *tsha tshas*. Some would contain more than others. The same may be said for the L-shaped cavities occupying the maṇḍala's corners. Different types of *tsha tshas* were placed in all the monument. Fifty-three different types of *tsha tshas* could be identified. Types 1 and 4 are, by far, the most represented ones (fig. 10), while type 40 (a painted image of Vajravarahī) stands as a hapax. Besides types 1 and 4, which represent *caityas* in the round, the gathered weight of other types of *tsha tshas* collected overall amounts approximately to 200 kg. Types 1 and 4, omnipresent, were found in large quantities in the L-shaped cavities: the north-west corner (context 3) contained 64,9 kg of *tsha tshas*, the north-east one (context 4), 42 kg, the south-east one (context 5), 179 kg and the one in the south-west (context 6), 210 kg. The large rectangular structure below (contexts 19, 20 and 21) contained as much as 920 kg of clay objects, which brings a total weight of 1 512, 4 kg. An estimated Minimum Number of Individuals (MNI) thus amounts to 241 707 *tsha tshas*.

¹⁰ See Namgyal Lama 2013b for a thorough study (in French) of *tsha tshas* in Tibetan culture.

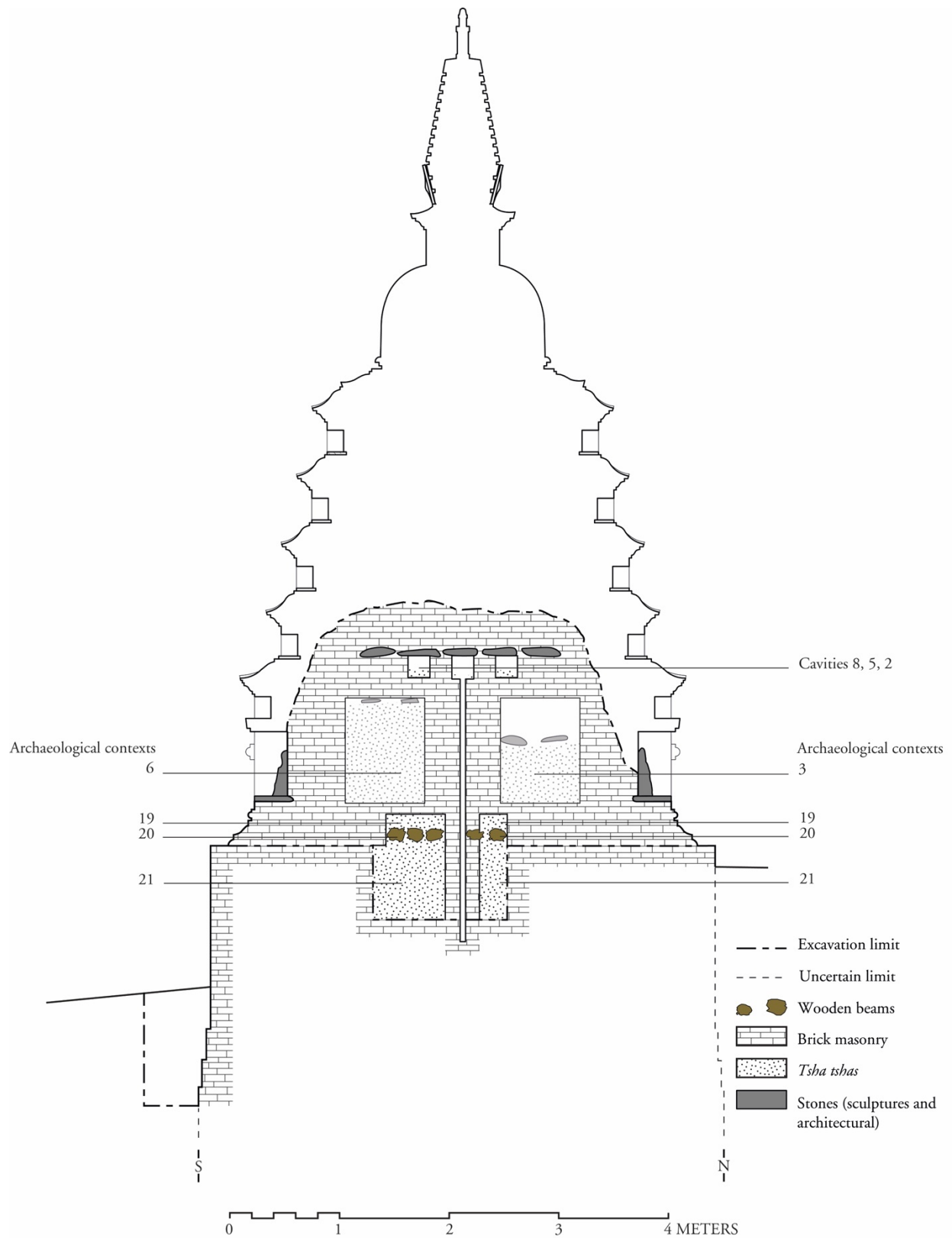


Fig. 6: South-north cross- section of MBC, looking to the west. Contexts 6 and 3 are seen through the masonry to illustrate the chambered architecture of the monument. Drawing: David C. Andolfatto & Thomas Schrom.



Fig. 7: Aerial view of the nine cavities. The north is on the top. Drone image: SkyCatch.



Fig. 8: The maṇḍala structure during its excavation. View towards the north-west.



Fig. 9: The five cremated wooden beams. The dark material below the beams is entirely composed of *tsha tshas*. View towards the north-west.



Fig. 10: *Tsha tshas* type 1 and 4 (left and right), the most encountered ones at MBC. Type 4 contains inscribed *dhāraṇīs*.

Archaeological context	Tsha-tsha type 1		Tsha-tsha type 4		Total	
	Weight (kg)	MNT	Weight (kg)	MNT	Weight	MNT
Unknown (rubble)	-	-	-	-	97	10 777
3	41,4	13 800	23,5	1 566	64,9	15 366
4	37	12 333	5	333	42	12 666
5	129	43 000	50	3 333	179	46 333
6	151,5	50 500	58,5	3 900	210	54 400
19	-	-	-	-	28	3 111
21	-	-	-	-	263,5	29 277
22	-	-	-	-	628	69 777
19, 21 and 22	-	-	-	-	920	102 165
Total	> 358,9	> 119 633	> 137	> 9 132	1 512,4	241 707

Table 1: Weights and minimum number of *tsha tshas* (MNT) types 1 and 4. The MNT is an approximate calculation based on each type of artefact's average weight (type 1 = 3 g, type 4 = 15 gr).

Besides the fifty-three types of *tsha tshas*, six clay moulds (Nw. *thāsā*) were discovered in contexts 21 and 22. Five are for moulding *caityas* in the round and one for a circular tablet with a central image of Tārā. Only one of these moulds seemed to have been fired.¹¹

The amount of *tsha tshas* deposited in the different cavities denotes an activity that must have mobilised a large number of persons. Such an action is still performed nowadays in Nepal for consecrating stūpas and large sculptures but also following an individual's death (Namgyal Lama 2013b). *Tsha tshas* are the receptacles of *mantras* and *dhāraṇīs* written on different types of material or directly printed in the clay. Often translated as “propitiatory spells”, these *dhāraṇīs* originate from the *Dhāraṇīs Sūtras* and consist in short sentences that “contain the essence of the [Buddha's] teaching”. *Dhāraṇīs* therefore “infuse stupas (and images) with the presence of the Buddha, his relics and his teachings” (Bentor 2003, 22-24). As a consequence, *tsha tshas* fabricated in the context of monuments' consecrations provide value and merits to the structure and to those involved in their fabrication (Namgyal Lama 2013b, 164).

In the case of funerary stūpas erected for a deceased, specific *mantras* and *dhāraṇīs* are placed inside *tsha tshas*. Between the 7th and the 13th century the most commonly encountered *dhāraṇī* found on clay seals and objects in a funerary context is undeniably the *Pratītyasamutpādagāthā* (Boucher 1991). Two broken *tsha tshas* of type 4 (the second-most represented in MBC) revealed an inner inscribed part (fig. 10). The inscriptions were stamped in a dome-shaped piece of clay that was further inserted at the base of the *caitya tsha tshas*. The script is written in *devanāgarī* and runs on three circular lines. Only a few letters could be deciphered.

Going back to the industrious fabrication of MBC's *tsha tshas* and their deposit in the monument, it is necessary to note that the objects were all found higgledy-piggledy. The installation of such artefacts was documented by K. Namgyal-Lama in the Kathmandu Valley. As reported by this author, *tsha tshas* are carefully arranged in multiple layers separated by sand (Namgyal Lama 2013b, 157). Despite the fact that

¹¹ A few *tsha tsha* moulds in raw clay were found in India (Chandimao, Bihar, 8th-10th century) and in Central Asia (Namgyal Lama 2013b, 122-123). These objects were all destined to fabricate tablet-like objects and not sculptures in the round. Kashinath Tamot suggested to me that the moulds found in MBC could be intended to be used by future builders in order to produce new *tsha tshas* during a future renovation (personal communication).

this kind of setting may have been employed in Svayambhū, no traces of sand were found in the excavated contexts, leaving the possibility of an apparently disorganised deposit. Another option is that the *tsha tshas* were placed in such a way because they belonged to a previous state of the monument, were collected during a renovation and finally reinstalled in the stūpa. As observed in 2018, during the reconstruction of MBC, bags of *tsha tshas* excavated in 2015 and 2016 were simply poured into the cavities (according to their original location) by Buddhācharya priests. Yet, when excavated the *tsha tshas* showed a high level of humidity, as if they had just been made, and some were even found gathered chaotically in chunks. This fact thus supports the idea that they were not placed in lines, nor by layers separated with sand but rather placed as such. Unfortunately, at this point the absence of archaeological researches on similar monuments prevent us from comparative interpretations of this seemingly odd setting.

The question of the ritual and historical context in which the *tsha tshas* have been produced and placed within the MBC remains. Let us now explore the ritual aspect of it before contextualising it in the monument's history.

The ritual of a Hundred Thousand Caitya (Level 1)

The fabrication of clay *caityas* in a large scale seem to be a relatively ancient custom. The earliest recording of such a practice, although unnamed in the text, can be found in the 7th century account of Hsüan Tsang. He mentions the making of “little *stūpas* of powdered scent made into a paste” as a common practice and tells the story of a Jayasena who produced clay *caityas* on a daily basis and over a period of thirty years. Seventy million of *caityas* were thus produced by Jayasena and placed in seven *stūpas* (Hsüan Tsang 1885, 146-7).

The ritual in image (Level 2)

In Nepal this process is depicted in Newari paintings (Nw. *paubha*) as part of a ritual focused on the meritorious worship of *stūpas*. This important but yet overlooked ritual (Skt. *vrata*) is known as *luchidyaḥ thāyegu* or *luchidyaḥ vrata* (from Sanskrit *lakṣacaityadeva vrata*, one hundred thousand *caityas*) (Vaidya 1986, 127-129).¹² The ritual aims at making an ideal number of 100 000 or 125 000 clay *caityas*. Once this number is reached, the objects are placed inside a *stūpa*. Todd Lewis and Naresh Bajracharya note that the ritual is “known only to Urāy merchants, Śākya, and Vajrācāryas” (Lewis & Bajracharya 2019, 55).

Luchidyaḥ vratas are represented on *paubhas* from the early 15th century on.¹³ Nepal's National Museum features two *paubhas* with *lakṣacaitya vratas* being performed. One of them, dated of 1694 (NS 815) was commissioned by a certain Thākurasimha Tulādhara and his family during the restoration of the Svayambhūcaitya.¹⁴ The center of the *paubha* is occupied by a pyramid of small *caityas*, topped by a large white *stūpa*. As it is usually the case in this type of compositions, the goddess Uṣṇīṣavijayā is represented

¹² The earliest recording of such a practice, although unnamed in the text, can be found in the 7th century account of Hsüan Tsang's. He mentions the making of “little *stūpas* of powdered scent made into a paste” as a common practice and tells the story of Jayasena who produced clay *caityas* on a daily basis and over a period of thirty years. Seventy million of *caityas* were thus produced by Jayasena and placed in seven *stūpas* (Hsüan Tsang 1885, 146-7).

¹³ Pal 1978, 71-80.

¹⁴ The inscription is as follow:

1. [na]moḥ śrījotirupasvayabhūcaita jīraṇaudhāra yānā || śrī 815 sāla kārṭikaśuklapakṣe aṣṭami tithau jyeṣṭhanakṣatre budhavārasayāta...

2. tolādhara || sajīva || thākurasimha nāma || thākunarasim || bhājūnarasimha || bhājudeva || bhājuma || vyeṣādhana || dhanavirasimha

3. rupasim || velasa dhama nimetyena juyāo thva ptimā duntākā dina juva... || jayamati || dhanamati || lajumati

at the centre of the *caitya* pyramid.¹⁵ Below the deity and to the left and right sides of her are depictions of the different steps involved in the fabrication of *tsha tshas*, from the extraction and preparation of clay to its shaping in *caitya* moulds and the objects' installation by the donors (fig. 11 and 12). In the case described at the National Museum's *paubha*, *tsha tshas* are produced in a commemorative context. It is important to note here that the *paubha* is dated of 1694, while the closest historically recorded renovation of the Svayambhūcaitya took place between 1681 and 1683, under the reign of King Pārthivendra Malla (Ehrhard 1991; von Rospatt 2011, 184-7). If the renovation referred to in the painting's dedication is that of 1681-83, it indicates a gap of nearly ten years between the two events. An alternative and likely possibility is that Thākurasimpha Tulādhara was involved in another renovation that was not recorded.



Fig. 11: Preparation of the clay and moulding of *tsha tshas* by donors during a *luchidyah* ritual. Detail of a Lakṣaiaitya vrata *paubha* of 1694. Paint on cloth. National Museum, Chhauni, Kathmandu (Inv. No. 17.76.180).



Fig. 12: Moulding and piling of *tsha tshas*. Detail of a Lakṣaiaitya vrata *paubha* of 1694. Paint on cloth. National Museum, Chhauni, Kathmandu (Inv. No. 17.76.180).

¹⁵ The well-known *Lakṣaiaitya vrata paubha*, dated of 1808 (NS 929) and preserved at the Los Angeles County Museum, presents a very similar composition (Cat. Inv. B61D10+). For a recent description of this painting, see Kim & Lewis 2019, 197.

Textual prescriptions (Level 2)

The ritual of making a hundred thousand *caityas* is cursory explained in the *Lakṣacaityasamutpatti*, or the Origin of the Hundred Thousand Caitya Observance. It is part of the *Suvarṇavarṇāvadāna*. This Sanskrit Buddhist text was possibly redacted around the 4th-5th century (Roy 1971, 64) and later translated in Tibetan and in Chinese during the 11th century (Rajapatirana 1974, ix). The setting of the *Lakṣacaityasamutpatti* (henceforth *LSP*¹⁶) is a discussion between two monks, Jayaśrī and Jinaśrī. Jayaśrī relates to the latter a conversation between Aśoka (Bindusāra) and Upagupta. Aśoka requests Upagupta to explain the story of the observance relating to *caityas* (*LSP* [a].5). The wise Upagupta tells the story of a wealthy merchant from Rājagṛha named Divākara, who, following the death of his parents, stopped performing his religious (Vaishnava) duties and squandered his fortune. Desperate, Divākara sought the advice of Kaśyapa who in turn, counseled him to “perform the observance pertaining to the hundred thousand *caityas*”, which is a “wish-fulfilling gem in the attaining of desired objects” (*cintāmaṇibhūta*, *LSP* [d]). According to Kaśyapa it was taught by Śakyamuni himself to his disciples.

Śakyamuni was teaching the gods and monks at the city of Padma, in the Campaka park. He manifested a large “stūpa-dome” in the sky. Bringing it down, he “showed them [the assembly] that stūpa established upon the earth in order to awaken the minds of all of them and to enable them to increase their merit. They all venerated that stūpa which was surrounded by a hundred thousand *caitya*[-dome], had the appearance of pure crystal” (*LSP* [f]). Śakyamuni explains to the monk Sucetana that to realise a similar object of worship, one needs to produce “a million, a thousand, a hundred, ten, five, three or one *caitya*-dome”. The fabrication of a hundred thousand clay *caityas* is obviously already a common practice at the moment of redaction of the *Lakṣacaityasamutpatti* as it becomes the central focus of the text. In order to fabricate the hundred thousand clay *caityas*, the Buddha designates the following steps (*LSP* [j]): first is the construction of a hall for reciting religious texts (*dharmasālā*). This is followed by the washing and purification of the site where the ritual is to take place. After a night of fasting, the patrons of the ritual must pronounce the vow of making so and so many clay *caityas* in a given amount of time. The devotees then bring clay from a “pure field” and start shaping the *caityas*. Ten phases of fabrication are each marked by the recitation of a specific *mantra* or *dhāraṇī*. The phases are all associated with specific merits. One of them, taking place once that clay was pressed into the mould, consists for instance in placing “five precious substance, gold or unhusked barley-corn” into the clay. The *Dharmadhātugarbha mantra* is repeated at this occasion. Merits obtained from it are “compassionateness, fulness of body, etc.” (*LSP* [m]). Meditation, music and dances are executed to close the process, which is repeated every day until reaching the required hundred thousand *caityas*. Once that they are made, the *caityas* are brought elsewhere, where they are enshrined in a large built *caityas* or “upon prominences”.

The text of the *Lakṣacaityasamutpatti* does not provide much details on the actual fabrication of clay images as it deals more with the karmic benefits of the *caityas* worship. For this reason, it is possible to suggest that the preparation of *tsha tshas* was locally supplemented with instructions addressing more technical aspects.

The ritual and the objects (Level 1)

Some Indo-Tibetan texts evocate the qualities of the clay that one should use to fabricate *tsha tshas*.

¹⁶ Two translations of the *Suvarṇavarṇāvadāna* were issued in the 1970's, by Sita Ram Roy (1971) and by Tissa Rajapatirana (1974). Only Rajapatirana's PhD dissertation includes the *Lakṣacaityasamutpatti*. The following comments are based on the latter's unpublished work.

It should for instance be absent of bone fragments, plants or grains. To purify it, the clay is mixed with a water prepared with aromatic ingredients such as santal, saffron, musk and incense. Gold, silver and copper may also be added to the clay in the course of the making, depending, as noted by K. Namgyal-Lama, of the context (Namgyal Lama 2013b, 130). As mentioned above, one of them is the funerary context. Although the *Lakṣacaityasamutpatti* is performed for the gain of merits and is nowhere concerned with funerary purposes, the context of MBC's discoveries points to this direction.

In 1873, Charles Horne wrote on mortuary practices observed in Lhasa. The information was originally collected by Major Hay in 1857, from a lama traveling from Lhasa to Lahul. According to this early account, accompanied by drawings, "a portion of the skull of which [the deceased] is preserved and afterwards pounded up, mixed with earth, and formed into small shapes with figures of Triloknāth or Sakya stamped upon them, or moulded into small *Chortens* or Dagobas." (Horne 1873, 32).

The smashing of bones and remains of the deceased's pyre into dust and their incorporation into the clay is described in some texts and the Svayambhū priests also mentioned to me that it was most likely involved for the fabrication of MBC's *tsha tshas*. The process itself often involves previous manipulations of the bones such as their ritual purification and washing by a ritual specialist, followed by a drying, before the actual crushing (Namgyal Lama 2013b, 131, n. 45). In some instances, the body of the deceased can also be represented by a substitute made of paper. This substitute image is also cremated, and the ashes integrated in the clay (Namgyal Lama 2013b, 131).

Therefore, the clay is first purified and (ideally) cleaned of any unwanted elements, before being supplemented with a potentially large array of elements. Additionally, once that the clay was pressed in a carved mould, grains are pressed in the back or at the base of *tsha tshas*. These grains (barley, rice, etc.) intervene during the *tsha tshas*' consecration phase, from which moment the objects become embodiments of the *dharma* (Namgyal Lama 2013b, 143).

With these elements at hand, it was relevant to enquire the composition of our *tsha tshas*'s clay and especially if human remains were incorporated in it.

The *tsha tshas*' material analysis (Level 2)

In 2017, after the placing of all recovered artefacts in the newly built stūpa, it appeared that two *tsha tshas* escaped the team's attention. The two artefacts are tablets presenting a central sited four-armed deity (fig. 13). The larger one (no. 2) could be a representation of the goddess Prajñāpāramitā. These types of *tsha tshas* were especially found in the maṇḍala's L-shaped cavities of the south-east and south-west corners (contexts 5 and 6). On the back they both show oval marks (of ≈ 4 mm) that correspond to grains (fig. 14). Pressed into the clay at the end of the ritual fabrication, they must have felt or decayed over time.

The two objects were analysed with a Hirox 3D binocular microscope.¹⁷ The results yielded no traces of human remains. Only fragments of plants fibres and pollens that still remain to be identified were observed.

¹⁷ I am thankful to Philippe Charlier for running these analyses.



Fig. 13: The two *tsha tshas* that were analysed (no. 1, left, and no. 2, right). Uncooked clay.



Fig. 14: *Tsha tsha* no. 2. View of the back.

Rituals, objects and time. Some concluding remarks (Level 1)

Now, considering the reliquary's claim that the monument was erected in 1875 for a person that passed away between 1863 and 1866, and the fact that, in Newari culture, clay *caityas* are produced in various circumstances (funerary, commemorative, etc.), it is possible to question the relationship between the excavated *tsha tshas* and the donors of 1875. The enquiry is justified by our initial deduction that the monument predates the recorded date of 1875. Rajman Singh's drawing was made during the first half of the 19th century. The only difference between his drawing and the monument known to us is that the former has one additional level of niches.

Further elements adding to the plausibility of this suspicion are brought by artefacts discovered inside the monument. First of all, one of the five partially burnt beam discovered in the large rectangular cavity (beam no. 2, context 20, fully surrounded by *tsha tshas* of contexts 19 and 21), was radiocarbon dated. According to Ian Simpson, who was in charge of the dating, the beam has a 95 % probability of dating between 1445-1632. Among the multiple possibilities explaining the presence and origin of these beams, one may propose that it originates from another structure that was renovated. Stūpas are constituted of a central beam (Skt. *yaṣṭi*). Restoration works carried on stūpas often consist in ritually replacing this symbolic and architectonic element. On these occasions, the old beam is cremated in fashions very similar to those given to human bodies (von Rospatt 2013, 278). Our beams' dimensions and the presence of a volute carving on beam no. 2 support the idea that they originate from a pillared structure and discredit the hypothesis of an old *yaṣṭi*. Alexander von Rospatt also suggested to me that they may come from the “elaborate woodwork of the thirteen rings (Skt. *cakravalī*) enclosing the *yaṣṭi* above the *harmikā*”. This would make sense if one considers that Dharmasimha Tāmrakār was indeed involved in a renovation of the Svayambhūcaitya, although no record of it has come to our knowledge. In any cases, it may the enshrining of these beams in MBC point to their sacralisation as relics from an older structure. If they originate from the Svayambhūcaitya, they could be associated with no less than nine historically documented restorations carried between the early 16th century and the early 19th century,¹⁸ and the 1863-1866 renovation by Dharmasimha Tāmrakār. Hence, these artefacts do not provide any clear dating as to their date of deposit within the MBC nor to the monument's antiquity.

Next, 94 coins from various origins and dates were excavated. A few ones could be identified. From Nepal we count a small copper coin (*ani*) of Rana Bahadur Shah (r. 1777-1799), six copper coins of King Surendra Bikram Shah (r. 1847-1881), two of King Mahendra Bikram Shah (r. 1955-1972) and four (of 2, 10 and 25 *paisas*) of King Birendra Bikram Shah (r. 1972-2001). From outside Kathmandu Valley: thirteen silver coins with Arabic scripts (often cut in half or showing marks of cutting), two quarter annas from British India, dated of 1862, and three Chinese coins. The thirteen silver coins are very similar to those minted by Moghul emperors during the 18th century and to those issued in Garhwal between 1804 and 1815 (the period of its annexation to Nepal under the Gorkhas). As for the Chinese coins, only one piece could be identified with certitude. It bears the inscription *Qian Long Tong Bao* (乾隆通寶), which ascribes it to Qing Emperor Qianlong (r. 1736-1795). The reverse bears mint marks identifying a coin issued by the Board of Works in Peking. The dimensions and weight (ø 2,3 cm, 4 gr) situate it amongst coinages made between 1754 and 1800 (Hartill 2005, 301-2).¹⁹

The coins' archaeological contexts are significant. Out of the 94 artefacts, only nine were found while excavating the structure's remains. These nine coins were placed in four of the nine cavities already mentioned above. While most of them were highly rusted, two coins could be identified. We have one copper *ani* minted during the reign of Rana Bahadur Shah (i.e. between 1777 and 1799) and a two *paisa* copper coin issued under King Surendra Bikram Shah of 1868 (dated of Śaka Samvat 1790) (Rhodes *et al.* 1989). The 85 remaining coins were discovered amidst the tons of rubbles spread around MBC (these rubbles were about to be dumped in the nearby hill slope). They evidently come from the monument's superstructure.

¹⁸ The dates of these renovations are: 1504, 1530, 1591-1595, 1601-1604, 1636-1640, 1681-1683, 1710, 1751-1758 and 1814-1817 (von Rospatt 2011).

¹⁹ Two Chinese coins with a central hole were also found by Nepalese archaeologists while renovating Kathmandu's Tukañ Stūpa (Shrestha 2002). They were probably inserted in the monument during its restoration of 1880.

None of the coins can be directly associated with the date of 1875. The closest one is that of King Surendra Bikram Shah of 1868. The analysis of the available *tsha tshas* do not show traces of bones. This absence prevents connecting the clay objects to the death of Dharmasimpha Tāmrakār. Furthermore, the reliquary casket of the latter was found in the rubble, indicating that it was placed in some upper part of the structure, probably inside or around the dome area. This brings us back to the fact that, compared to the monument that was standing up until 2015, the one in Singh's drawing has one extra level of niches. All these elements are likely to be explained by the fact that a renovation of MBC took place around 1875, possibly after the earthquake of 1869.²⁰ At this occasion the remains of a generous donor of Svayambhū were encased inside the newly restored *caitya*. It must have been decided to make the monument smaller and so the upper storey of niches was simply removed. The numerous *tsha tshas* witness the observance of a *Luchidyah* ritual but it remains unclear, at this point, if this ritual took place in honour of Dharmasimpha Tāmrakār or if it pre-dates him. In any case, the monument and the *tsha tshas* ultimately appear as the symbolical and physical layers protecting the cremated vestiges of an unknown structure. The placing of Dharmasimpha Tāmrakār's remains in a monument so close to the Svayambhūcaitya and, deliberately or not, together with sacralised architectural vestiges, illustrate the continuity of what Gregory Schopen already identified during the Early Indian Buddhism as "burial *ad sanctos*" (Schopen 1997).

Bibliography (Level 1)

- Bentor, Y. (2003) The Content of Stūpas and Images and the Indo-Tibetan Concept of Relics, *The Tibet Journal*, 1/2, 21-48.
- Boucher, D. (1991) The *Pratītyasamutpādagāthā* and its role in the medieval cult of the relics, *The Journal of the International Association of Buddhist Studies*, 14/1, 1-27.
- Czaja, O. & Poser, A. (2014) *Golden Visions of Densatil. A Tibetan Buddhist Monastery*, New York.
- Darnal, P. (2005) Cābahil sthita dhando caitya jīrṇodhvārbāre kehī carcā, *Ancient Nepal*, 35-78, Kathmandu.
- Dowman, K. (1988) *The Power-places of Central Tibet: The Pilgrim's Guide*, London & New York.
- Ehrhard, F.-K. (1991) Further renovations of Svayambhunath Stupa (from the 13th to the 17th centuries), *Ancient Nepal*, 10-20, Kathmandu.
- Gutschow, N. & Hagmüller, G. (1989) *Svayambhūnāth Conservation Masterplan*. Kathmandu.
- Gutschow, N. (1997) *The Nepalese Caitya: 1500 Years of Buddhist Votive Architecture in the Kathmandu Valley*. Stuttgart.
- Hartill, D. (2005) *Cast Chinese Coins*.

²⁰ According to the available information, this earthquake, of magnitude 6.5, caused the capital to be "almost completely destroyed" and "A great part of the population was buried under the ruins" (Perrey 1870, 89).

- Hodgson, B. H. (2005 [1857]) Architectural Illustrations of Buddhism, *The Origins of Himalayan Studies. Brian Houghton Hodgson in Nepal and Darjeeling 1820-1858*, D. M. Waterhouse (ed.), 111-133, New York.
- Horne, C. (1873) On the methods of disposing of the deads at Llasa, Thibet, etc., *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, 6/1, 28-35.
- Hsüan Tsang (1885) *Si-yu-ki: Buddhist Records of the Western World*, S. Beal (tr.), Vol. 2, London.
- Kim, J. & Lewis, T. (2019), *Dharma and Puṇya. Buddhist Ritual Art of Nepal*, (ed.), Leiden-Boston
- Kölver, B. (1992) *Re-Building a Stūpa. Architectural Drawings of the Swayāmbhūnāth*, Bonn.
- Lienhard, S. (1984) *Songs of Nepal: an Anthology of Newar Folksongs and Hymns*, Honolulu.
- Lewis, T. (1996) A chronology of Newar-Tibetan relations in the Kathmandu Valley, S. Lienhard (ed.), *Change and Continuity: Studies in the Nepalese Culture of the Kathmandu Valley*, 149-166, Torino.
- (2008) Himalayan Frontier Trade: Newar Diaspora Merchants and Buddhism, C. Ramble *et al.* (eds), *Anthropology of Tibet and the Himalaya*, 165-178, Kathmandu.
- Lewis, T. & Bajracharya, N. (2019) Notes on rituals depicted in Newar art, *Dharma and Puṇya. Buddhist Ritual Art of Nepal*, J. Kim & T. Lewis (ed.), Leiden-Boston, 48-61.
- Meister, M. W. (1989) Prāsāda as palace: Kūṭina origins of the Nāgara temple, *Artibus Asiae*, Vol. 49, No. 3/4, 254-280.
- Monier-Williams, M. (1964 [1899]) *English-Sanskrit Dictionary*, Delhi.
- Namgyal Lama, K. (2013a) *Tsha tsha* inscriptions: a preliminary survey, *Tibetan Inscriptions. Proceedings of a Panel Held at the Twelfth Seminar of the International Association for Tibetan Studies. Vancouver 2010*, K. Tropper K. & C. Scherrer-Schaub (eds), 1-41, Leiden.
- (2013b) *Les Tsha-tsha du Monde Tibétain : Études de la Production, de l'Iconographie et des Styles des Moulages et Estampages Bouddhiques*, PhD dissertation, Paris.
- Oldfield, H. A. (1880) *Sketches from Nipal, Historical and Descriptive*, London.
- Perrey, A. (1870) Note sur les tremblements de terre en 1866 et 1867, avec suppléments pour les années antérieures, de 1843 à 1865, *Mémoires Couronnées de l'Académie de Belgique*, 21, 1-223.
- Rajapatirana, T. (1974) *Suvarṇavarṇāvadāna. Translated and edited together with its Tibetan translation and the Lakṣaṭīyasamutpatti*, PhD dissertation, Canberra.
- Rhodes, N. G. *et al.* (1989) *The Coinage of Nepal, from the earliest times until 1911*, London.

Roy, S. R. (1971) *Suvarṇavarṇāvadāna. Decipherment and historical study of a palm-leaf Sanskrit manuscript-an unknown Mahāyāna (avadāna) text from Tibet*, Patna.

von Rospatt, A. (2011) The past renovations of the Svayaṃbhūcaitya, T. P. Gellek & P. D. Maitland (eds.), *Light of the Valley. Renewing the Sacred Art and Traditions of Svayambhu*, 157-206, USA.

(2013), Buddhist strategies of keeping its sacred images and shrines alive: the example of the Svayambhū caitya of Kathmandu, *Art of Merit: Studies in Buddhist Art and its Conservation*, D. Parks et al. (eds), 275-285, London.

(2014) The mural paintings of the Svayambhūpurāṇa at the shrine of Śāntipur, and their origins with Pratāpa Malla, *Himalayan Passages. Tibetan and Newar Studies in Honor of Hubert Decleer*, B. Bogin & A. Quintman (eds.), 45-68, Boston.

Schopen, G. (1997) *Bones, Stones and Buddhist Monks. Collected Papers on the Archaeology, Epigraphy and Texts of Monastic Buddhism in India*, Ann Arbor.

Shakya, H. R. (2004) *Śrī Svayaṃbhū Mahācaitya*, Kathmandu.

Shrestha, S. S. (2002) Tukan Bahal Stupa, *Ancient Nepal*, 20-38, Kathmandu.

Slusser, M. S. (1982) *Nepal Mandal. A cultural study of the Kathmandu Valley*, Princeton.